

## 2006-07 Annual Report



# *Ventura Countywide Stormwater Quality Management Program*



*A cooperative project of the County of Ventura,  
the cities of Ventura County and the  
Ventura County Watershed Protection District*

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- Appendix 2 Illicit Discharge and Illicit Connection Database
- Appendix 3 Water Quality Monitoring Report

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## EXECUTIVE SUMMARY

The purpose of this document is to comply with NPDES Permit No. CAS004002/Order No. 00-108, which requires submittal by October 1, 2007 of an Annual Storm Water Report (Report). This Report discusses the Co-permittees' Second Term Permit compliance activities for the period of July 1, 2006 to June 30, 2007, includes a description of all activities conducted during the reporting period, and an assessment of Ventura Countywide Stormwater Program's effectiveness. The Co-permittees through implementation of various comprehensive program elements have achieved compliance with all requirements of the Permit.

The organization of the Report reflects the organization of the 2001 Stormwater Management Plan (SMP). The implementation portion of the SMP consists of the following elements, with this Report containing a section on each element: 2. Management, 3. Program for Residents, 4. Programs for Industrial and Commercial Businesses, 5. Programs for Planning and Land Development, 6. Programs for Construction Sites, 7. Programs for Public Agency Activities, 8. Programs for Illicit Discharges/Illegal Connections, 9. Stormwater Quality Monitoring.

For this year's annual Program Effectiveness Assessment (PEA), the Co-permittees utilized a series of measures (both *direct* and *indirect*) to verify program implementation and ultimately validate achievement of Program goals. The identified measures are designed to assess the effectiveness of the Program to improve stormwater water quality.

Compared to the previous reporting periods this year's PEA shows strong evidence of increasing program effectiveness:

1. Measurable increase in public understanding of watershed based pollution prevention and concern over keeping storm drains and gutters clear. In addition, survey respondents claim to have adopted new watershed protection practices.
2. Better coordination between Stormwater Program and the countywide Household Hazardous Waste programs;
3. Decrease in the number of complaints (thus decreased illegal activity) investigated by the Co-permittees; and
4. Decreased need for enforcement tools provided by the Co-permittees' local Water Quality Ordinances due to increased compliance and public awareness.

In addition, key baseline data has been compiled on a watershed and countywide basis for future comparative assessment and trends analysis in the areas of municipal activities, new and existing development, and construction.

Notable accomplishments that occurred during this reporting period include:

- A. The achievement of over 9,500,000 impressions in the countywide public outreach effort. Spanish language advertising accounted for 28% of total media placed by Principal Permittee or 1,813,890 gross impressions.
- B. Completion of an awareness survey in which participants claim to have adopted, on average, 3 watershed protection practices in the past 2 years.
- C. Over 1300 restaurants inspected for stormwater compliance.
- D. 582 automotive service facilities inspected for stormwater compliance.
- E. Over 500 industrial facilities were visited for stormwater quality education.
- F. 155 development projects identified within one or more of the SQUIMP categories were conditioned for stormwater quality controls.
- G. 122 development projects that were not one of the SQUIMP categories were also conditioned for stormwater quality controls.

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- H. 311 stormwater quality inspections were made on 107 active construction sites.
- I. Over 16000 tons of debris was removed by public works crews by cleaning 13752 catch basins, 336 miles of channels and ditches, and sweeping over 100,000 miles of curbs and gutters.
- J. Inspectors responded to 784 reports of Illicit discharges, a 17% reduction of observed illegal activity over last year, resulting in 598 enforcement actions taken.
- K. In the past five years both reports of illicit discharges and illicit discharges due to cleaning activities have trended down signaling a change in the public's behavior.

With respect to water quality monitoring, the Co-permittees continued to implement a very comprehensive monitoring program. Key points are highlighted below:

- A. The Ventura Countywide Stormwater Monitoring Program met the monitoring requirements of its Permit.
- B. Water quality monitoring data were collected during four wet weather and two dry weather events monitored by the Stormwater Monitoring Program except Event 2. A composite sample taken at the Mass Emission site ME-CC (Calleguas) was lost due to bottle breakage.
- C. All environmental and QA/QC water chemistry data thoroughly evaluated and accepted by VCWPD staff using *Data Quality Evaluation Plan* and *Data Quality Evaluation Standard Operating Procedures* guidance documents.
- D. Acute toxicity of *Ceriodaphnia dubia* (water flea) was observed during the first wet weather event at the agriculture dominated Receiving Water sites W-3 and W-4, as well as at agricultural Land Use site A-1.
- E. Chronic toxicity of *Strongylocentrotus purpuratus* (Purple Sea Urchin) was observed during one wet weather event and one dry weather event at Mass Emission stations ME-SCR and ME-VR2.
- F. Elevated pollutant concentrations were observed at all monitoring sites during one or more monitored wet weather storm events, as well as at all Mass Emission sites during one or more dry weather events. See Section 9 for details and an explanation of monitoring results.

## SECTION 1.0 INTRODUCTION

The Watershed Protection District (subsequently referred to as the Principal Co-permittee), the County of Ventura and the incorporated cities of Camarillo, Fillmore, Moorpark, Ojai, Oxnard, Port Hueneme, Ventura, Santa Paula, Simi Valley, Thousand Oaks, (collectively known as Co-permittees) operate municipal storm drain systems and discharge stormwater and urban runoff pursuant to the countywide NPDES permit. This permit, administered by the Los Angeles Regional Water Quality Control Board (RWQCB), requires an Annual Storm Water Report and Assessment (Annual Report).

The first permit was adopted in 1994, and on July 27, 2000, the second permit was adopted. This permit is currently on administrative extension awaiting renewal.

### 1.1 Purpose and Organization of Report

In accordance with the requirements of the permit, the primary purpose of the report is to document:

- The status of the general program and individual tasks contained in the Stormwater Management Plan(SMP)
- Results of the monitoring and reporting program CI 7388; and
- Compliance status and effectiveness of the implementation of permit requirements.

The organization of the report reflects the organization of the Program's 2001 SMP. In each section a review of the following co-permittee program activities and detailed descriptions of the 2006-2007 permit year are presented:

- Program management framework (committee and subcommittee structure) and a fiscal analysis report (**Section 2.0**)
- Status and effectiveness of the public information dissemination and pollution prevention outreach program (**Section 3.0**)
- Activities directed at effectively prohibiting non-stormwater discharges in order to reduce stormwater pollution to the maximum extent practicable. (**Section 4.0**)
- Efforts to minimize the impact of new development and significant redevelopment on stormwater quality.(**Section 5.0**)
- Construction site practices to ensure the protection of stormwater quality to the maximum extent practicable (**Section 6.0**)
- Efforts to reduce the adverse effects that municipal activities may have on water quality (**Section 7.0**)
- Status of the control measures established under the Illicit Discharge/Illegal Connections elimination program (**Section 8.0**)
- A summary and analysis of the monitoring results from the water quality monitoring program (**Section 9.0**) and (**Appendix 3**)
- An overall evaluation of the Co-permittees efforts to meet SMP Performance Criteria and a discussion of future program goals (**Section 10.0**)

### 1.1 Major Program Accomplishments

Notable accomplishments that occurred during the reporting period include:

- Development of a countywide strategy to address funding needs for urban runoff programs;
- Implementation of a new public education campaign on the use of pesticides;
- Survey of county residents on their awareness, understanding and behavior regarding stormwater quality issues;
- Cooperation and commitment to SCCWRP to aid in a hydromodification effects study;
- Cooperation and commitment to the Stormwater Monitoring Coalition of Southern California to a Low Impact Development Guidance and Training Project for Southern California;
- Stormwater Quality Monitoring (6 events);
- Ventura River Macro-invertebrate Bioassessment Monitoring;

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- TMDL participation;
- CASQA Participation;
- Santa Clara River Enhancement and Management Plan (SCREMP) Participation;
- Calleguas Creek Watershed Management Plan Participation;
- Southern California Coastal Water Research Project (SCCWRP) Participation;
- Integrated Regional Water Management Plan (IRWMP) Participation.

Because the permittees have anticipated adoption of a new NPDES permit and there is an expectation that permit would substantially change program elements and strategies they have been conservative in starting and amending programs. Permit Year 7, reporting Year 13 included extensive dialogue redefining the relationship between the Co-permittees and the Principal Co-permittee, and revision of responsibilities, roles and accountability for each.

### 1.2 Effectiveness Assessment Strategy

The SMP recognizes a number of separate, but nonetheless related, water quality planning processes. These processes are countywide, jurisdictional and watershed based water quality management tools. Each process is iterative and incorporates phases of assessment to determine whether programmatic goals are being achieved.

#### 1.3.1 Measurable Goals

Measurable goals are a primary implementation tool of the SMP. They are described by USEPA as BMP design objectives or goals that quantify the progress of program implementation and the performance of BMPs. They are objective markers or milestones that track the progress of the co-permittees in implementing the provisions of the permit and the SMP to the Maximum Extent Practicable (MEP).

Measurable goals may be categorized in a variety of ways. In this report, two categories are acknowledged: (1) the shorter-term confirmation of BMP implementation (Implementation or Process Measures, also termed Programmatic Indicators) and (2) the longer-term verification of environmental improvement (Validation or Results Measures, typically actual indicators of environmental change). These two categories of measurable goals reflect two basic assessment questions:

- Are program elements being implemented correctly?
- Are desired outcomes (i.e. environmental improvements) being achieved?

Programmatic and environmental indicators may be constructed into a hierarchical relationship (See **Table 1.1 Hierarchy of Indicators**). This relationship helps to illustrate the fact that environmental outcomes rest on, or follow from, jurisdictional program implementation. Moreover, it points to the reality that scientific evidence of changing ecosystem quality will follow program implementation over time, and should not be expected to be evident concurrently.

**Table 1.1 Hierarchy of Indicators (USEPA, 1998)**

<b>Environmental Indicators (Direct Measures)</b>	6	Ultimate Impacts: Ecological Health Welfare
	5	Body Burden/Uptake
	4	Ambient Conditions
	3	Discharge/Emission
<b>Programmatic Indicators (Indirect Measures)</b>	2	Actions by Regulated Community
	1	Actions by Regulators

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In the context of evaluating stormwater management program implementation, the distinction is also often made between *direct* and *indirect* measures. Direct measures are typically environmental indicators such as determinations of water quality. Indirect measures are essentially non-water quality indicators, such as reductions in pesticide use, from which improvements in water quality can be inferred.

A number of Performance Measures have been identified based upon the following selection criteria:

- **Relevance:** It has demonstrable relation to the strategy and objectives;
- **Reliability:** The measure will help identify the strengths and weakness of the program area/process;
- **Clarity of Naming System:** It is readily understandable by its name; and
- **Availability of Data:** The data are available at reasonable cost.

These Performance Measures comprise process and result (direct and indirect) measures that are used to highlight the progress of the Co-permittees in implementing water quality management, protection and enhancement requirements of the Permit. The Performance Measures are defined in the SMP and presented in **Table 1.2**

Program Element	Performance Measure	Type of Performance Measure	
		Process Measure	Result Measure
Program Management	Participation in Management Committee	X	
	Participation in subcommittee meetings	X	
	Submittal of Co-permittee Self-Audit	X	
	Submittal of the Annual Report	X	
	Annually submittal of Co-permittee program evaluation results	X	
	Stormwater program budget updates	X	
	Review and adopt or amend legal authority to implement stormwater management plan	X	
Public Outreach	Identify program contact person(s)	X	
	Catch basin stenciling	X	
	Signs prohibiting illegal dumping at designated public access points to creeks and channels		X
	Educational activities and participation in countywide events		X
	Household Hazardous Waste Collected		X
	Used Oil Collected		X
	Educational material distribution		
	No. of outreach contacts	X	
Industrial/ Commercial Businesses	No. of site education/inspections to automotive, food service and other targeted businesses	X	

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<b>Table 1.2 Performance Measures</b>			
<b>Program Element</b>	<b>Performance Measure</b>	<b>Type of Performance Measure</b>	
		<b>Process Measure</b>	<b>Result Measure</b>
	No. of follow up inspections	X	
	No. of additional businesses targeted based on Pollutants of Concern (POCs) as appropriate	X	
	No. of facilities identified as potentially subject to the General Industrial Permit given educational materials	X	
	No. of targeted employees trained	X	
Planning & Land Development	No. of Projects reviewed and conditioned for stormwater	X	
	Area to which BMPs have been applied		X
	No. of BMPs implemented		X
	Stormwater quality conditions included in environmental checklists, initial studies or EIRs required by CEQA and/or NEPA	X	
	Watershed and stormwater management considerations in Co-permittees' General Plan	X	
	Technical Guidance Manual	X	
	Environmentally Sensitive Areas	X	
	Development Community Outreach		X
	No. of targeted employees trained	X	
Construction Sites	No. of SWPCPs/SWPPPs developed and implemented		X
	No. of NOIs filed with the State		X
	No. of sites inspected	X	
	No. of follow up inspections	X	
	No. of enforcement actions	X	
	Construction Community Outreach		X
	No. of targeted employees trained	X	
Municipal Activities	Co-permittee corporate yard SWPCP		X
	Drainage System Operation and Maintenance		X
	Roadway Operation and Maintenance		X
	No. of Facilities Inspected	X	
	Solid Waste Collected		X
	Pesticide, Herbicide and Fertilizer Protocols		X
	Reduction in Total Pesticide Application		X
	Reduction in Total Fertilizer (Nitrogen) Application		X
	Reduction in Total Fertilizer (Phosphorus) Application		X
	No. of targeted employees trained	X	

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Program Element	Performance Measure	Type of Performance Measure	
		Process Measure	Result Measure
Illicit Discharge/Illegal Connections	No. of complaints		X
	No. of enforcement actions	X	
	Educational material distribution		X
	No. of targeted employees trained	X	

### 1.3.2 Effectiveness Assessment

Effectiveness assessment requires the establishment of a set of baseline conditions. Thereafter, effectiveness can be evaluated by comparisons of indicator information against the baseline data over the years. Where the period of evaluation is characterized by the implementation of new program requirements, determinations of program effectiveness will initially be limited to confirmation of program implementation. Indeed, it must be recognized that direct measures of program effectiveness may not be available within the history of the Stormwater Quality Program. This challenge arises because:

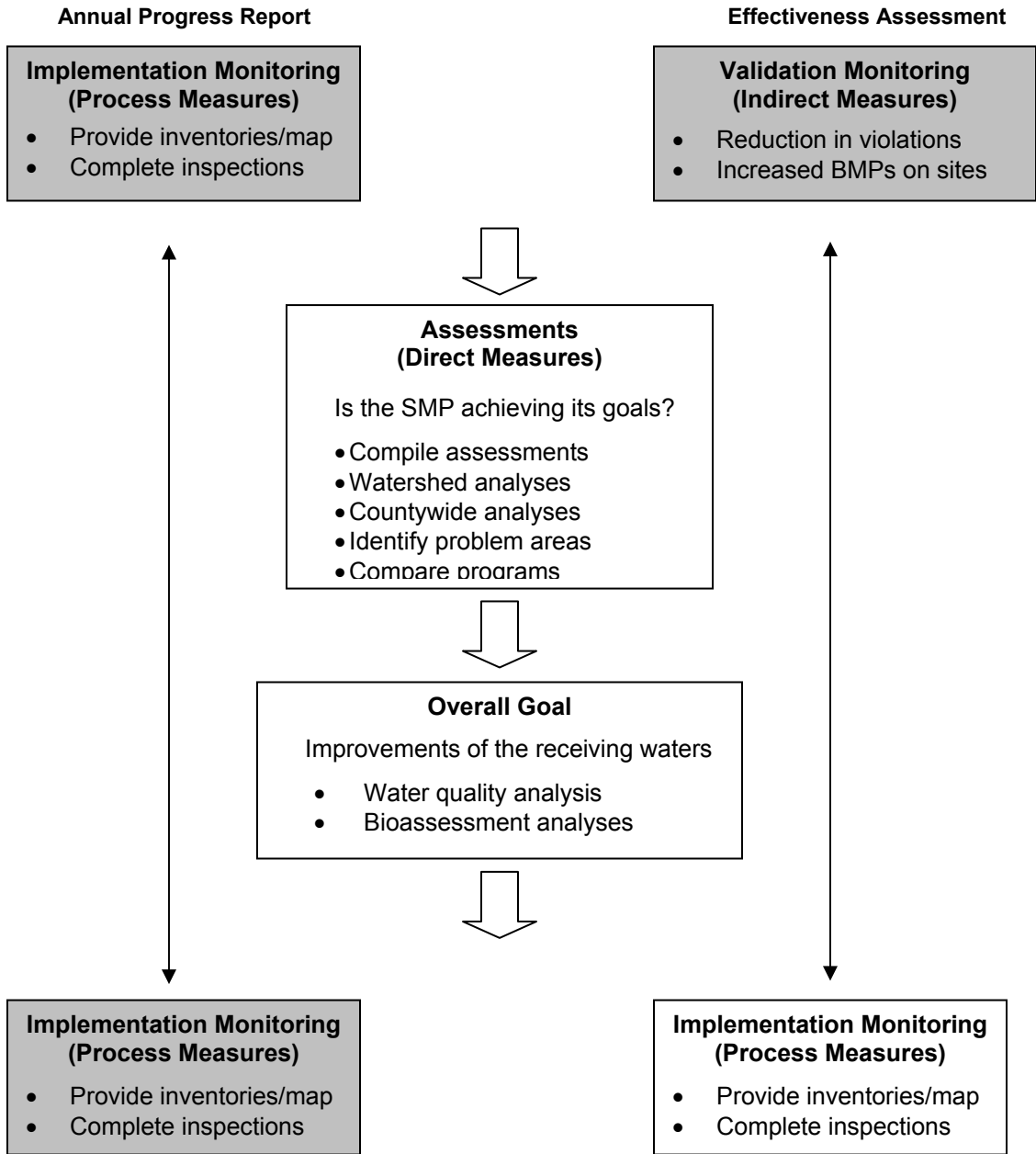
- Baseline water quality conditions are not readily established;
- Water quality changes in response to program implementation are likely to be slow and may be marked by changes due to extreme weather events;
- Establishing a link between receiving water condition and program activities is difficult at the watershed scale when program elements are being implemented incrementally with the development/redevelopment cycle;
- The watersheds of Ventura County are not predominantly urbanized, so in-stream measurements cannot isolate changes due to urban or other sources.

The evaluation of stormwater program effectiveness assessment is also conducted at two levels. At the jurisdictional or Co-permittee level, the assessment is conducted annually and focuses on program implementation. Inferences about the connection of management program elements to water quality improvements made in these assessments will be drawn from the assessment of programmatic indicators and indirect measures of progress. The Co-permittees' program assessments are presented in **Sections 3.0 – 8.0**.

At the countywide program level, the major assessment is done principally on a permit cycle basis with an emphasis on using indirect measures of progress. The Annual Progress Report strategy is illustrated in **Figure 1-1**.



Figure 1-1 Annual Progress Report



## SECTION 2.0 PROGRAM MANAGEMENT

### 2.1 Responsibilities

The responsibilities of the Principal Co-permittee and Co-permittees are defined within the Permit and the Implementation Agreement. These roles and responsibilities are outlined below.

#### 2.1.1 *Principal Co-permittee*

The role of the Principal Co-permittee is similar to the other Co-permittees with the addition of certain overall programmatic and facilitation responsibilities. These responsibilities are not to ensure the compliance of the Co-permittees as the Principal Co-permittee has no regulatory authority over the Co-permittees. These responsibilities include the following:

- Coordinate Permit activities;
- Establish uniform data submittal format;
- Set time schedules;
- Prepare regulatory reports;
- Forward information to the Co-permittees;
- Arrange for public review;
- Secure services of consultants as necessary;
- Implement activities of common interest;
- Develop/prepare/generate all materials and data common to all Co-permittees;
- Update Co-permittees on RWQCB and US Environmental Protection Agency (USEPA) regulations;
- Convene all Management Committee and Subcommittee meetings;
- Manage the countywide educational outreach program; and
- Manage the countywide stormwater quality monitoring program

#### 2.1.2 *Co-permittees*

Each Co-permittee is responsible for implementing the NPDES Stormwater Program within their jurisdiction. The main responsibility of each Co-permittee includes:

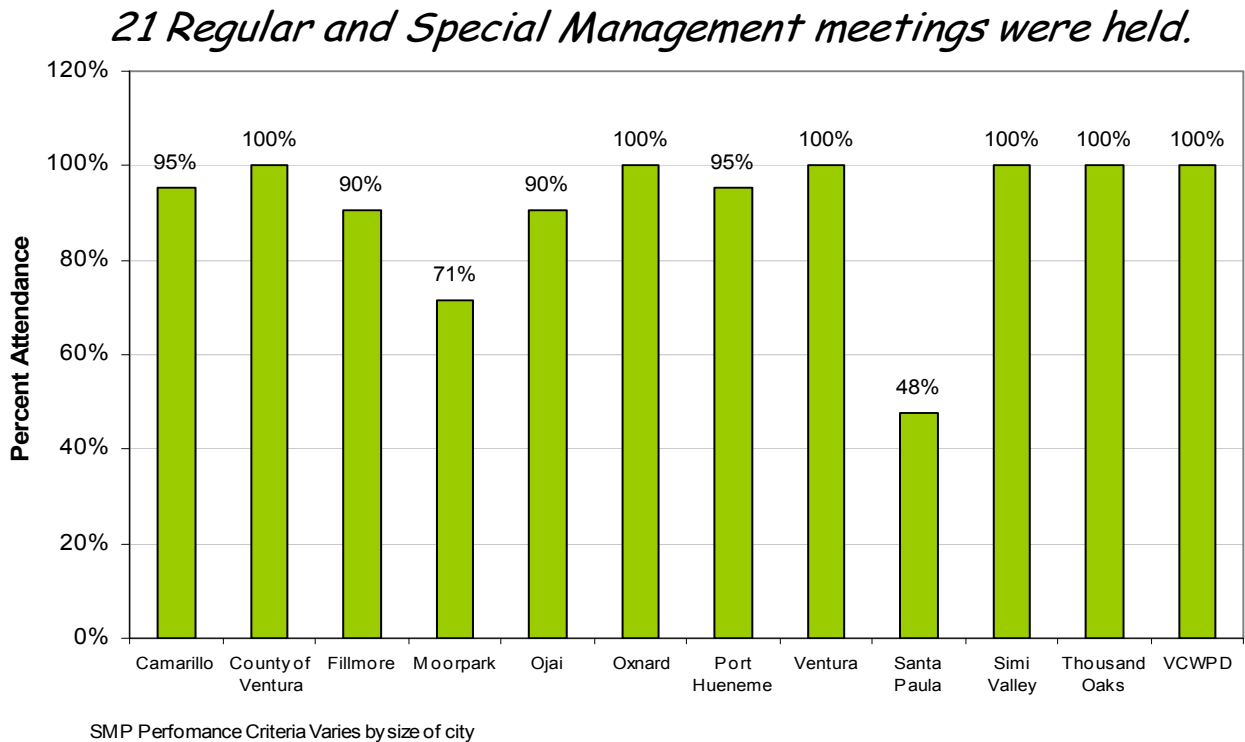
- Review, approve and comment on budgets, plans, strategies, management programs and monitoring programs developed by the Principal Co-permittee or any subcommittee;
- Implement the various stormwater management programs outlined in the Permit and the Stormwater Management Plan (SMP) within its jurisdiction;
- Establish and maintain adequate legal authority;
- Take appropriate enforcement actions as necessary within its jurisdictions to ensure compliance with applicable ordinances;
- Coordinate among internal departments and agencies, as appropriate, to facilitate the implementation of the Permit and the SMP;
- Respond to/or arrange for response to emergency situations, such as accidental spills, leaks, illicit discharges/illegal connections, etc., to prevent or reduce the discharge of pollutants to the storm drain systems and waters of the U.S. within its jurisdiction;
- Conduct inspections of and perform maintenance on municipal infrastructure within its jurisdiction;
- Conduct and coordinate any surveys and source identification studies necessary to identify pollutant sources and drainage areas;
- Participate in the Management Committee meetings and subcommittee meetings as outlined in the SMP; and
- Prepare and submit all reports or requests of information to the Principal Co-permittee in a timely fashion.

## SECTION 2.0 PROGRAM MANAGEMENT

### 2.2 Management Activities

#### 2.2.1 Management Committee

The NPDES Management Committee is the Principal forum for directing the Program's development and implementation. This Committee is attended by senior staff from all Co-permittee agencies and meets monthly to assure Program continuity. In addition, this committee periodically evaluates the need to create ad hoc committees or workgroups as required in order to accomplish the objectives of the NPDES Stormwater Program. Participation in the NPDES Management Committee is a specific requirement of the Permit. Co-permittee participation in the NPDES Management Committee is noted in **Figure 2-1**.



**Figure 2-1 Co-Permittee Management Committee Meeting Attendance**

#### 2.2.2 Subcommittees

The Subcommittees provide a forum for discussion of particular program elements and are attended by the staff with the appropriate expertise from each Co-permittee. These meetings create a more uniform approach to program management countywide and allow the Co-permittees to learn from each other. The subcommittees are tasked principally with the following program material responsibilities:

- **Residential/Public Outreach Subcommittee**  
To help provide regional consistency and oversight for the stormwater public education program efforts. Select specific Pollutants of Concern in which public education can potentially make a difference.
- **Business and Illicit Discharge Control Subcommittee**  
Oversee the development of the model industrial/commercial and illicit discharge/illegal connections programs. Create regional consistency to business inspections and reporting of discharges.
- **Planning and Land Development Subcommittee**

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To help provide regional tools for design, review and conditioning of new development and redevelopment projects, and promote regional consistency in their application.

- **Construction Subcommittee**

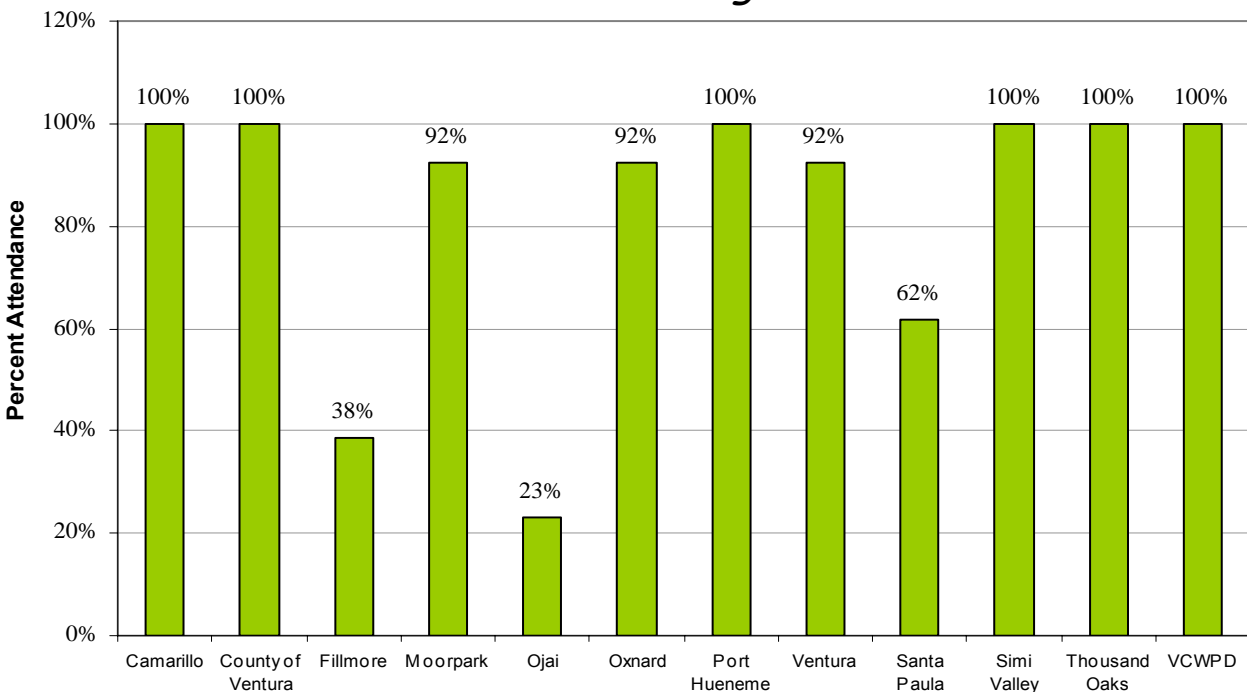
To provide regional consistency to inspections, share solutions to common problems and the development of model new development and construction programs.

- **Public Infrastructure**

The development of the model municipal activities program, corporate yard inspections, and integrated pesticide management, pesticide and fertilizer programs.

Co-permittee participation in Subcommittees is noted in **Figure 2-2**.

*13 Subcommittee meeting were convened.*



**Figure 2-2 Co-Permittee Subcommittee Meeting Attendance**

### 2.2.3 Other Regional Committees/Work Groups

Many of the Co-permittees additionally participate in various watershed management advisory groups. These groups include: the Ventura County Integrated Resources Water Management Plan (IRWMP), Ventura River Watershed Planning Committee, Santa Clara River Enhancement and Management Committee, Wetlands Recovery Project, Calleguas Creek Watershed Management Committee, Matilija Dam Ecosystem Restoration Study, Channel Islands Beach Park Action Plan for Improving Water Quality, Malibu Creek Watershed Management Committee, Steelhead Restoration and Recovery Plan, Beach Erosion Authority for Clean Oceans and Nourishment (BEACON), Southern California Coastal Water Research Project (SCCWRP) and the Ormond Beach Task Force. These watershed and regional groups focus their activities and discussions on specific concerns such as water quality, habitat restoration and flood control, as well as short, medium and long-term solutions.

### 2.2.4 Management Framework – Program Implementation

## SECTION 2.0 PROGRAM MANAGEMENT

In addition to the countywide and watershed management frameworks for program development, the Co-permittees at a jurisdiction level have formally identified which departments and staff have responsibility for implementation of each program elements within their jurisdictions.

### 2.3 Legal Authority

Although adequate legal authority existed for most potential pollutant discharges at the inception of the stormwater program in 1994, the Co-permittees determined that a Model Stormwater Quality Ordinance should be developed to provide a more uniform countywide approach and to provide a legal underpinning to the entire Ventura Countywide NPDES Stormwater Program.

Subsequently, all of the Co-permittees adopted largely similar versions of the model Stormwater Quality Ordinance. In addition, each Co-permittee has designated Authorized Inspector(s) responsible for enforcing the Ordinance. The Authorized Inspector(s) is the person designated to investigate compliance with, detect violations of and/or take actions pursuant to the Ordinance.

The detection, elimination and enforcement activities undertaken by the Co-permittees during 2006/07 are described further in **Section 8**. In addition to prohibiting un-permitted discharges, the Stormwater Quality Ordinance in conjunction with the SQUIMP also provides for requiring BMPs in new development and significant redevelopment. A Stormwater Quality Ordinance has been adopted in each Co-permittees' jurisdictions as indicated in **Table 2.1**

<b>Table 2.1 Ordinance Adoption Dates</b>		
<b>Co-permittee</b>	<b>Adopted Date</b>	<b>Amendment Date</b>
Camarillo	3/25/1998	
County of Ventura	7/22/1997	
Fillmore	12/27/1998	
Moorpark	12/3/1997	
Ojai	2/9/1999	
Oxnard	3/24/1998	
Port Hueneme	4/1/1998	2/1/2001
Ventura	1/11/1999	
Santa Paula	11/16/1998	
Simi Valley	7/23/2001	4/22/2002
Thousand Oaks	9/14/1999	

### 2.4 Watershed Protection Stormwater Program Representation

The Principal Co-permittee represents the Co-permittees participating in the following organizations and associations:

#### 2.4.1 *California Association for Stormwater Agencies (CASQA)*

The California Association of Stormwater Quality Agencies (previously California Storm Water Quality Task Force) serves as advisory body to the State Water Resources Control Board (SWRCB) on stormwater quality program issues. CASQA is primarily comprised of agencies, organizations, businesses and individuals responsible for and/or interested in the implementation of municipal stormwater management programs in California. Since its inception in 1989, CASQA has evolved into the leading organization in California dealing with stormwater quality issues.

#### 2.4.2 *Southern California Coastal Water Research Project (SCCWRP)*

The Southern California Coastal Water Research Project (SCCWRP) is a joint powers agency focusing on marine environmental research. SCCWRP's mission is to gather the necessary scientific information so that member agencies can effectively and cost-efficiently protect the Southern California marine environment. In addition, SCCWRP's mission is to ensure that the data it collects and synthesizes effectively reaches decision-makers, scientists and the public.

## SECTION 2.0 PROGRAM MANAGEMENT

### 2.4.3 California Coalition for Clean Water (CCCW)

The California Coalition for Clean Water (CCCW) is an alliance of local governments and public agencies, labor, agriculture, business, housing and development interests working together towards the development and implementation of water quality standards that protect water quality while balancing economic and social needs of local communities and the State. CCCW's mission is to assist the California Regional Water Quality Control Boards and SWRCB to adopt and implement sound water quality standards that reflect the intent and spirit of state and federal clean water laws.

### 2.4.4 National and Global Organizations

As Principal co-permittee, the Watershed Protection District (District) participated jointly with SCCWRP and various other federal and international organizations such as the Society of Environmental Toxicology and Chemistry (SETAC). SETAC is a nonprofit, worldwide professional society comprised of individuals and institutions engaged in the study, analysis, and solution of environmental problems. SETAC's mission is to support the development of principles and practices for protection, enhancement and management of sustainable environmental quality and ecosystem integrity.

SETAC promotes the advancement and application of scientific research related to contaminants and other stressors in the environment, education in the environmental sciences, and the use of science in environmental policy and decision-making.

### 2.4.5 Southern California Agencies

Beginning in 2003, and continuing through 2007 the District began participating in the Storm Water Advisory Team (SWAT) meetings. SWAT was created by stormwater-regulated agencies who believed that coordination amongst the regulated community would be beneficial to not only providing a unified voice to the Regional Board but would also encourage regional consistency in pollution prevention efforts. Meetings are held to discussions various issues such as TMDL development and progress permit negotiations, and regional monitoring opportunities.

### 2.4.6 Local Involvement

Watershed Protection District staff participates in various watershed-specific local subcommittees and groups that are focused on water quality and TMDLs. For example, staff regularly attends Calleguas Creek water quality subcommittee meetings and is involved in developing appropriate methods for monitoring water quality. Similarly, in the Malibu Creek watershed, staff provides technical expertise for the water quality monitoring technical advisory committee, reference water quality study workgroup, and bacteria compliance monitoring workgroup.

## 2.5 Fiscal Analysis

This Section presents a summary of the costs incurred by the Co-permittees in developing, implementing and maintaining programs in order to comply with permit requirements and includes information on the funding sources used by the Co-permittees. The total cost to each Co-permittee is the sum of *shared* costs and *individual* costs.

### 2.5.1 Program Costs for Permit year 2006/07

In 2006/07 the projected cost of the activities undertaken by the Co-permittees implementing the stormwater program within their jurisdictions are estimated to be \$19,158,359 This total compares to \$14,205,276 in 2004/05 and \$15,429,018 in 2005/06 reporting periods. In 2007/08 the total cost of implementing the countywide stormwater program under the current permit is estimated to be \$16,739,303.

## SECTION 2.0 PROGRAM MANAGEMENT

### 2.5.2 Fiscal Resources

Each Co-permittee prepares a stormwater budget annually and allocates resources to be applied to the stormwater program. **Table 2.2** presents the projected stormwater budget for each Co-permittee for Fiscal Year 2007/08 and **Figure 2-3** shows how the countywide budget is divided among the various programs. As expected, there is some variability between the stormwater program budgets reported by the Co-permittees. This variability is due in part to the accounting practices utilized by each Co-permittee and the allocation of activity costs amongst programs implemented by each Co-permittee.

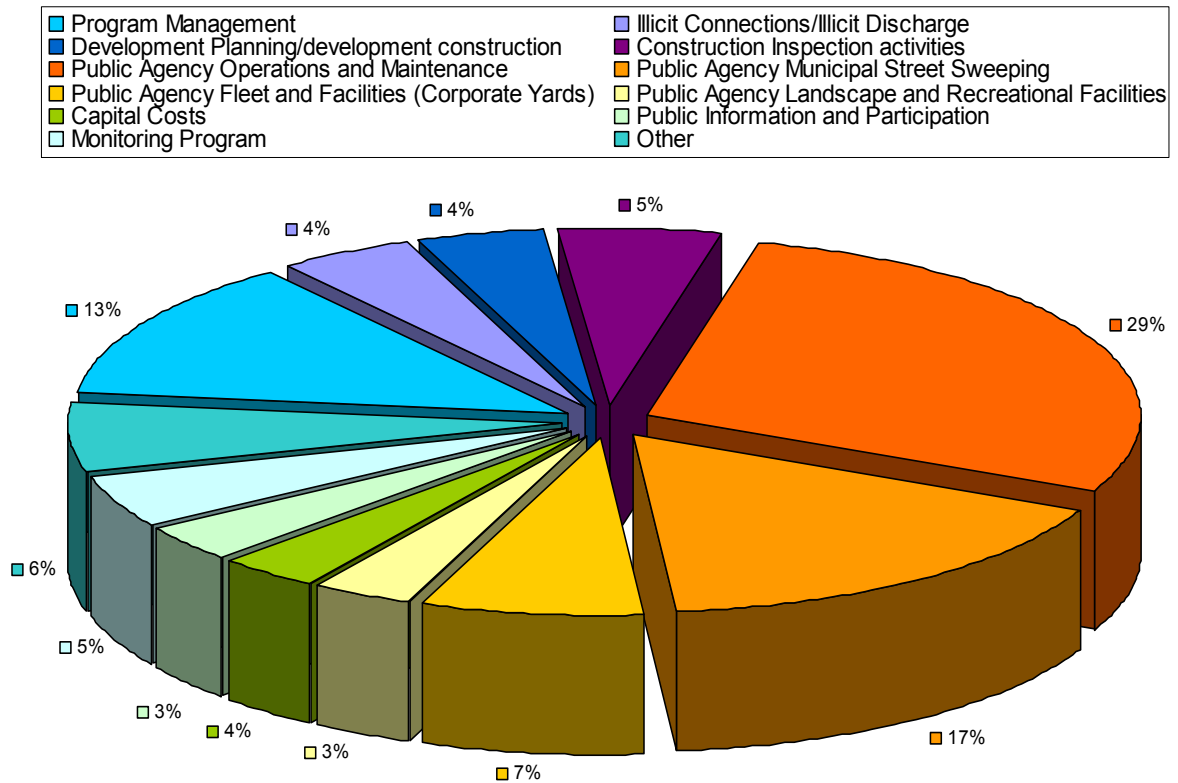


Figure 2-3 Countywide FY 2007-2008 Stormwater Program Budget

## SECTION 2.0 PROGRAM MANAGEMENT

<b>Agency Annual Budget Update for Stormwater Management Program - Fiscal Year 2006-2007</b>														
	Item	Co-Permittee												
		Camarillo	County of Ventura	Fillmore	Moorpark	Ojai	Oxnard	Port Hueneme	Ventura	Santa Paula	Simi Valley	Thousand Oaks	VCWPD	Principal Co-Permittee
I.	Program Management	\$211,940	\$506,817	\$32,266	\$101,400	\$12,000	\$260,523	\$25,000	\$156,342	\$34,456	\$205,420	\$111,655	97,604	\$371,961
II.	Illicit Connections/ Illicit Discharge	\$46,990	\$37,336	\$27,180	\$22,660	\$1,000	\$85,058	\$9,000	\$95,108	\$78,845	\$231,780	\$97,897	4,692	\$6,937
III.	Development Planning	\$34,776	\$100,838	\$51,475	\$150,000	\$7,000	\$91,404	\$5,000	\$77,749	\$10,412	\$30,690	\$72,348	5,741	\$56,344
IV.	Construction Inspection Activities	\$71,159	\$18,668		\$100,000	\$5,000	\$180,894	\$5,000	\$160,091	\$8,155	\$195,610	\$110,564	14,454	\$6,748
V.	Public Agency Activities													
V.a.	Operations and Maintenance	\$152,475		\$112,073	\$37,000	\$40,800	\$467,809	\$30,000	\$141,677	\$148,160	\$428,500	\$219,529	2,984,353	\$4,321
V.b.	Municipal Street Sweeping	\$270,000		\$64,737	\$104,000	\$48,000	\$525,000	\$63,600	\$486,733	\$142,346	\$447,660	\$657,412	NA <sup>1</sup>	NA <sup>2</sup>
V.c.	Fleet and Public Agency Facilities (Corporate Yards)	\$4,877	\$9,334		\$2,130	\$1,000	\$33,581	\$5,000	\$5,000	\$3,831	\$1,058,400	\$2,125	57,588	\$0
V.d.	Landscape and Recreational Facilities	\$10,317		\$133,478	\$1,065	\$35,000	\$8,179	\$354,700	\$0	\$2,015	\$3,690	\$1,500	NA <sup>1</sup>	NA <sup>2</sup>
VI.	Capital Costs	\$130,000				\$0	\$390,000	\$5,000	\$0	\$0	\$62,830	\$0	0	\$0
VII.	Public Information and Participation	\$15,903	\$9,334	\$24,085	\$6,400	\$1,000	\$17,294	\$5,000	\$54,394	\$4,087	\$52,550	\$38,386	0	\$289,934
VIII.	Monitoring Program	\$60,000	\$9,334	\$10,000			\$29,144	\$0	\$8,000	\$0	\$6,300	\$0	0	\$696,430
IX.	Other	\$39,575	\$24,334				\$185,998	\$0	\$18,500	\$0	\$794,510	\$0	0	
	Totals	\$1,048,011	\$715,995	\$455,294	\$524,655	\$150,800	\$2,274,884	\$507,300	\$1,203,594	\$432,307	\$3,517,940	\$1,311,416	3,164,432	\$1,432,675
	Percent Benefit Assessment	18%	8%	5%	0%	22%	24%	5%	21%	0%	3%	35%	0%	87%

**Table 2.2 Agency Annual Budget Update for Stormwater Management Program - Fiscal Year 2006-2007**



## SECTION 2.0 PROGRAM MANAGEMENT

In addition, the Co-permittees vary significantly in their jurisdictional area and population (**Table 2.3**), which may explain some differences in resources dedicated to various program areas. Yet, a review of the annual budgets produces some nominal findings. In general, Co-permittees with the largest populations tend to have budgets greater than the budgets reported by Co-permittees with the smallest populations. However, within the group of cities with the largest populations and within the group with the smallest populations, there is still variation in program budgets.

<b>Table 2.3</b>		
<b>Ventura County Statistics</b>		
<b>Co-permittee</b>	<b>Population</b>	<b>Area (Sq. Mi.)</b>
Camarillo	61,746	19.6
County of Ventura	46,328	10.7
Fillmore	15,128	2.7
Moorpark	34,887	19.2
Ojai	8,097	4.4
Oxnard	186,122	25.3
Port Hueneme	22,137	4.3
Ventura	104,952	21.7
Santa Paula	29,121	4.6
Simi Valley	118,793	39.4
Thousand Oaks	126,081	57.2

### 2.5.3 Funding Sources

Funding sources to implement the stormwater program, including pre-existing programs that meet permit objectives, include both general and specific funds, taxes, maintenance and user fees and grants. Volunteer groups like Surfrider Foundation implement some stormwater program elements and thus no fiscal value was attributed to these contributions.

The funding sources used by the Co-permittees include: Watershed Protection District Benefit Assessment Program, General Fund, Utility Tax, Separate Tax, Gas Tax, Special District Fund, Others (Developer Fees, Business Inspection Fees, Sanitation Fee, Fleet Maintenance, Community Services District, Water Fund, Grants and Used Oil Recycling Grants).

## SECTION 3.0 PROGRAM FOR RESIDENTS

### 3.1 Program Development

Public Education is an essential part of a municipal stormwater program because changing public behavior can reduce pollutants. When a community has a clear understanding of where the pollution comes from, how it can affect them and what they can do to stop it, they will be more likely to support and participate in program implementation.

The Co-permittees are building upon the many successes of the current program. As a starting point for these discussions, early in the permit year, the Co-permittees identified those key elements crucial to establishing a successful outreach campaign. These elements include:

- Watershed Awareness
- Public Awareness Surveys
- Identification of general and specific goals of the program
- Identification of target audiences and key messages for those audiences
- Development of program strategies and plan overview
- Pollution prevention program using a unified “brand name”
- Development of a watershed based outreach program
- Identification of opportunities to reach out to regulatory agencies
- Development of a model public education/public participation strategy for localization at the Co-permittee level
- Development and implementation of a school-aged children education outreach program
- Development and implementation of food facilities outreach program materials
- Development and implementation of automotive facilities outreach program materials
- Development and implementation of industrial facilities outreach program materials

### 3.2 Countywide Outreach Efforts

The **Community for a Clean Watershed** program was established in 2005 by the Ventura Countywide Stormwater Quality Management Program. Through the development of educational public outreach campaigns, brochures and the Clean Watershed website, the Community for a Clean Watershed program has successfully raised awareness among Ventura County residents on the issues impacting the health of Ventura County’s watersheds.



#### 3.2.1 Background

The Co-permittees first embarked on improving the effectiveness of the public outreach efforts by gaining a better understanding of public perception of stormwater pollution, storm drains and watershed protection. The research data, collected through a series of English and Spanish focus groups, revealed a clear direction to take in order to obtain the behavioral changes desired from the community including:

- Clearly define the *watershed* and begin to bring it into the mainstream
- Differentiate the message from ‘don’t litter’ and ‘water pollution’ ads
- Make an emotional, visual connection
- Appeal to the ‘local pride’ of Ventura County residents
- Provide enough information to empower residents to ‘make a difference’
- Provide a place for residents to act, i.e. dedicated website

The objectives of the Community for a Clean Watershed program continue to be to:

## **SECTION 3.0 PROGRAM FOR RESIDENTS**

- Create and build awareness
- Educate residents
- Change negative behavior
- Develop a consistent message throughout all cities and areas in Ventura County
- Attempt a year-round effort to increase top-of-mind awareness of the watershed

### *3.2.2 Public Outreach Campaigns*

Significant progress has been made toward these goals. Additionally, through a coordinated effort the Co-permittees are committed to continuing their long-term, multi-media countywide municipal NPDES public education outreach activities to increase the overall effectiveness of the program. Community for a Clean Watershed campaigns reach the community several times a year through a variety of media. This repeated exposure to key messaging reminds residents that watershed protection is a year-round activity. Furthermore, it increases overall understanding of stormwater pollution prevention. By building a basic understanding of watershed protection in Ventura County, the Co-permittees believe they will be better-positioned to tackle public outreach challenges pertaining to specific pollutants of concern targeted in the new third term permit.

In 2005, the VCWPD enlisted the Agency, a full-service advertising and public relations agency in Ventura County, to develop and implement Community for a Clean Watershed campaigns and related research. The 2006-07 year's efforts include the following key public outreach initiatives:

#### **cleanwatershed.org**

To educate residents year-round, the Community for a Clean Watershed launched a website that provides information regarding the Ventura County watershed and stormwater pollution prevention. The site includes educational resources, watershed protection best practices and tips, key watershed protection contacts and more detailed information on each of the watersheds in Ventura County. Most importantly, cleanwatershed.org provides the Co-permittees with a venue for new and evolving information regarding stormwater pollution prevention.

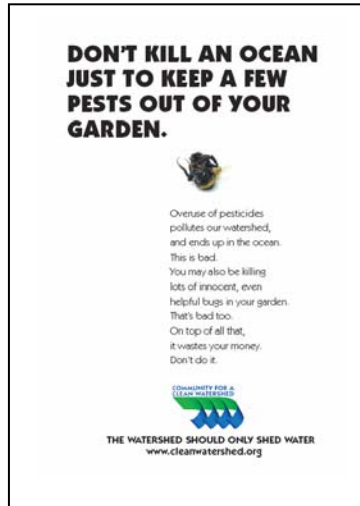
#### **Coastal Cleanup Day September 2006**

Kicking off the year with a volunteer event that visually demonstrates the direct effect of watershed pollution, Community for a Clean Watershed lent their support to Coastal Cleanup Day 2006. As a primary sponsor, the Co-permittees negotiated and facilitated 12 newspaper placements.

#### **Season #1 November 2006: Expanding the Focus**

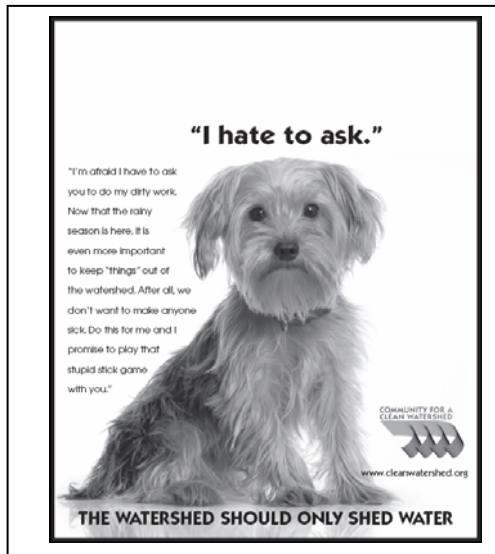
The goal of our pre-winter campaign period was to reinforce understanding of watershed protection established in the Community for a Clean Watershed campaign launched in fall 2005. Existing radio and TV spots were featured and new print, online and outdoor ads were developed to augment the broader message and begin focusing on key pollutants of concern: residential fertilizers and pesticides.

## SECTION 3.0 PROGRAM FOR RESIDENTS



### Season #2 March 2007: Reinforce Watershed Protection Awareness

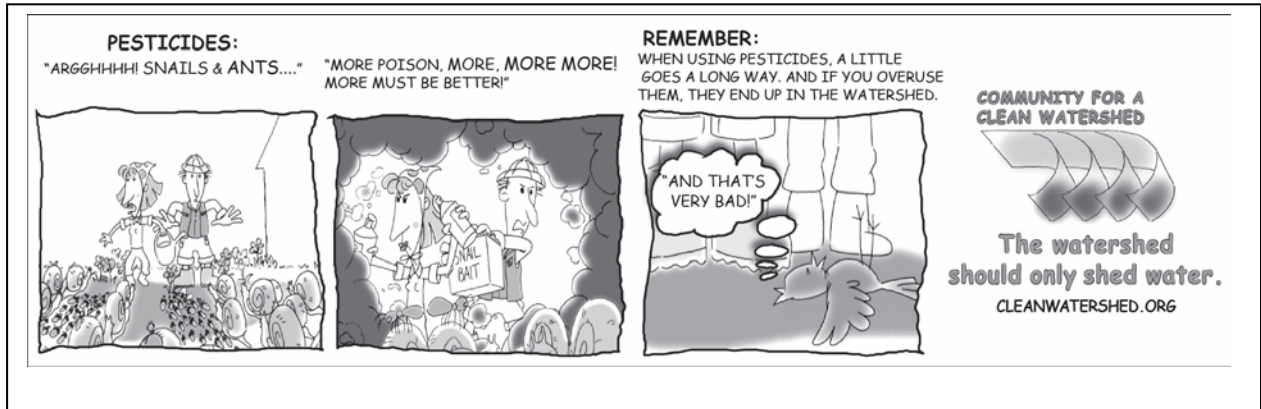
The 'wet' season campaign sought to reinforce key stormwater pollution messages during a time when runoff is an obvious factor. In addition to utilizing existing 'rainy' season radio spots, new online and print ads were developed to target another specific pollutant of concern: pet waste.



### Season #3 June 2007: Targeted Pollutant of Concern

The pre-summer outreach campaign period targets residents/homeowners as school releases for the summer and key yard projects often begin. The 2007 campaign was devoted solely to reducing the use of residential garden pesticides. To break through the clutter, a new animated TV spot, dramatically illustrating the watershed trials and tribulations due to the overuse of residential pesticides. Corresponding new radio commercials and print ads were also created to support this very focused message.

## SECTION 3.0 PROGRAM FOR RESIDENTS



### Radio Interviews/Publicity: June 2007

To add impact to the pesticide message, several Co-permittee representatives participated in a series of English and Spanish radio interviews that focused on the overuse of residential pesticides and fertilizers. A press release was issued and a bylined article was placed in Ventura County's primary newspaper focusing on residential pesticide use best management practices.

### Bilingual Public Outreach

With an eye toward reaching all Ventura County residents, every campaign includes Spanish language materials in print, outdoor (when applicable) and broadcast. Targeting segments of the Hispanic community, clearly identified in earlier focus group research, as speaking only, or primarily Spanish, is a key component of each campaign period.

#### *3.2.3 Media Outreach Strategy*

Media objectives and strategies were developed to maximize effective delivery of each campaign's message. Local media were evaluated based on their ability not only to reach the target, but also on their willingness to negotiate added-value elements to stretch the dollars. Through educating the media on the importance of this public service campaign, the Agency was able to consistently obtain bonus elements, including additional commercials in radio and television plus outdoor billboards. These added value elements, along with obtaining the lowest rates available, allowed for maximum exposure available within the budget.

The Community for a Clean Watershed media plan achieved a total of 6,503,093 gross impressions broken out as follows:

- Print Advertising – 2,760,202 Impressions
- Radio Advertising – 1,143,900 Impressions
- Local Television – 377,202 Impressions
- Cable Television – 777,292 Impressions
- Outdoor Advertising (bus shelters) – 1,123,720 Impressions

### Spanish Media Outreach

Spanish language advertising accounted for 28% of total media placed or 1,813,890 gross impressions.

## SECTION 3.0 PROGRAM FOR RESIDENTS

### 3.2.4 Panel Survey

Two web surveys or 'panels' were used as the method for data collection to measure public outreach effort effectiveness in the 2006 -2007 permit year. Immediately after the Pesticide Campaign, June 2007, a total of 330 completed surveys were obtained from represented samples in all cities and unincorporated areas of Ventura County for comparison to the previous panel of August 2006.

Study participants had to be involved in decision making for their home and were required to have lived in Ventura County for at least two years. In addition, they were recruited according to specific demographic criteria paralleling both the media targeting strategy and county census characteristics. Responses were measured against a baseline survey conducted in the previous year. The following summarizes significant changes in responses regarding key Watershed Protection public outreach messaging.

- Significant Increases in Watershed Protection Message Recall
  - 25% of the sample mentioned hearing or seeing something regarding watershed protection in the previous year (a 5% increase).
  - 27% of the sample was able to recall at least one of the marketing messages in the June Pesticide use campaign.
- Increases in Perceived Seriousness of Problems Facing Ventura County Waterways and Beaches
  - 52% viewed the seriousness of local lakes, creeks, and river pollution as extremely serious; a significant 10% increase over 2006. A 20% increase over original 2004 phone survey.
  - Perceived seriousness of litter in waterways was 43%, and beaches 50%; an 8% increase compared to 2006.
- Growing Understanding of the Definition of the Watershed
  - 68% (+11%) understanding/agreeing with an accurate watershed definition.
- Recognition of Residential Pesticides & Fertilizers as Having Significant Negative Impact on Local Environment.
  - 7% increase in perception of garden pesticides (72%) and +9% lawn fertilizers (53%) as having the worst negative impact.
  - 62% reported overall reduced usage of garden pesticides!
- Continued Growth of Concern Over Keeping Storm Drains and Gutters Clear
  - Significant increase in concern expressed about keeping gutters/storm drains clear 77%, a +7% increase over 2006.
- Understanding Translates into Behavioral Changes
  - Respondents claim to have adopted, on average, 3 watershed protection practices in the past 2 years!

### Summary of Effectiveness

After the second year of implementation of the Community for a Clean Watershed public outreach campaign, we have been able to:

- **Unify** efforts by creating a program theme that facilitates usage by any public or private organization wanting to sponsor watershed protection efforts.
- **Provide** the community with an easily understood concept that made the emotional connection necessary for residents to take ownership of 'watershed protection'.

## SECTION 3.0 PROGRAM FOR RESIDENTS

- **Develop** media targeting strategies that connect with audiences who have the greatest potential for generating measurable results.
- **Maximize** media dollars through negotiation and added value placements.

### 3.2.5 Public Reporting

Each Co-permittee has identified staff serving as the contact person(s) for public reporting of clogged catch basin inlets and illicit discharges/dumping. Designated staff is provided with relevant stormwater quality information, including program activities and preventative stormwater pollution control information. Contact information is updated as necessary and published in the government pages of the local phone book and other appropriate locations. In addition, this information is available on the Program's website at [www.vcstormwater.org](http://www.vcstormwater.org).

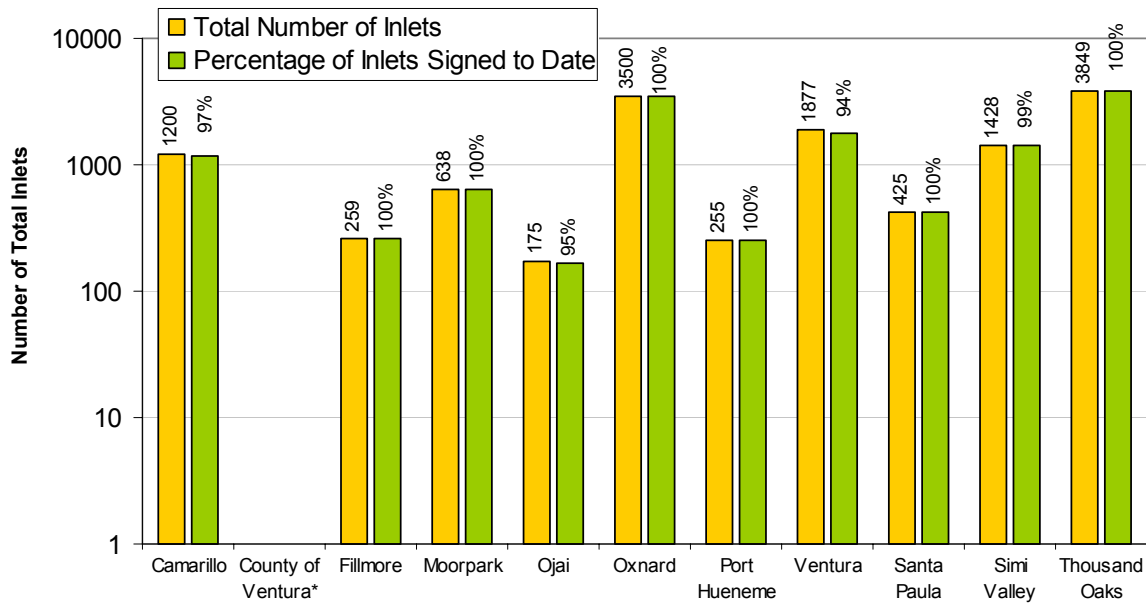
	<b>General Information</b>	<b>Reporting Illicit Discharges</b>
Ventura County Watershed Protection District	805/650-4064	805/650-4064
City of Camarillo	805/388-5338	805/388-5338
County of Ventura	805/650-4064	805/650-4064
City of Fillmore	805/524-1500x109	805/524-3701
City of Moorpark	805/517-6257	805/517-6257
City of Ojai	805/658-6611	805/640-2560
City of Oxnard	805/488-3517	805/271-2220
City of Port Hueneme	805/986-6556	805/986-6507
City of Ventura	805/652-4582	805/667-6510
City of Santa Paula	805/933-4212	805/933-4212
City of Simi Valley	805/583-6462	805/583-6400
City of Thousand Oaks	805/449-2386	805/449-2400

### 3.2.6 Curb Inlet Stenciling

As required by the Permit, most Co-permittees have completed labeling or marking the curb inlets to their entire storm drain system. During the reporting period, some Co-permittees maintained their inlet signs by reapplying stencils/markers as they wore out and applying stencils/markers to new inlets as they were installed. **Figure 3-1** depicts the progress the Co-permittees have made in their efforts to install and maintain their curb markers.

## SECTION 3.0 PROGRAM FOR RESIDENTS

*99% of catch basins countywide are marked with a no dumping message.*



**Figure 3-1 Catch Basin Inlet Signage**

\* No updated information on this task for this year

The percentage of inlets signed to date meets the performance criteria established in the SMP for all Co-permittees. Signs at curb inlets have varying useful lives due to the materials from which they are constructed (e.g., paint, thermoplastic), their position (e.g., on top of curb, on face of curb), and wear factors (e.g., traffic, street sweeping, sunlight). As a result, the Co-permittees have different programs to maintain curb inlet signage within their respective jurisdictions. Some Co-permittees replace a portion of their signs each year whereas others re-sign all inlets every few years. Regardless of the specific inlet signage practice, all Co-permittees understand the importance of signage to the education component of their program and are committed to installation and maintenance of signage that meets both the educational goal of the program as well as the 90% performance criteria set forth in the SMP.

### 3.2.7 Access Points to Designated Creeks & Other Water Bodies

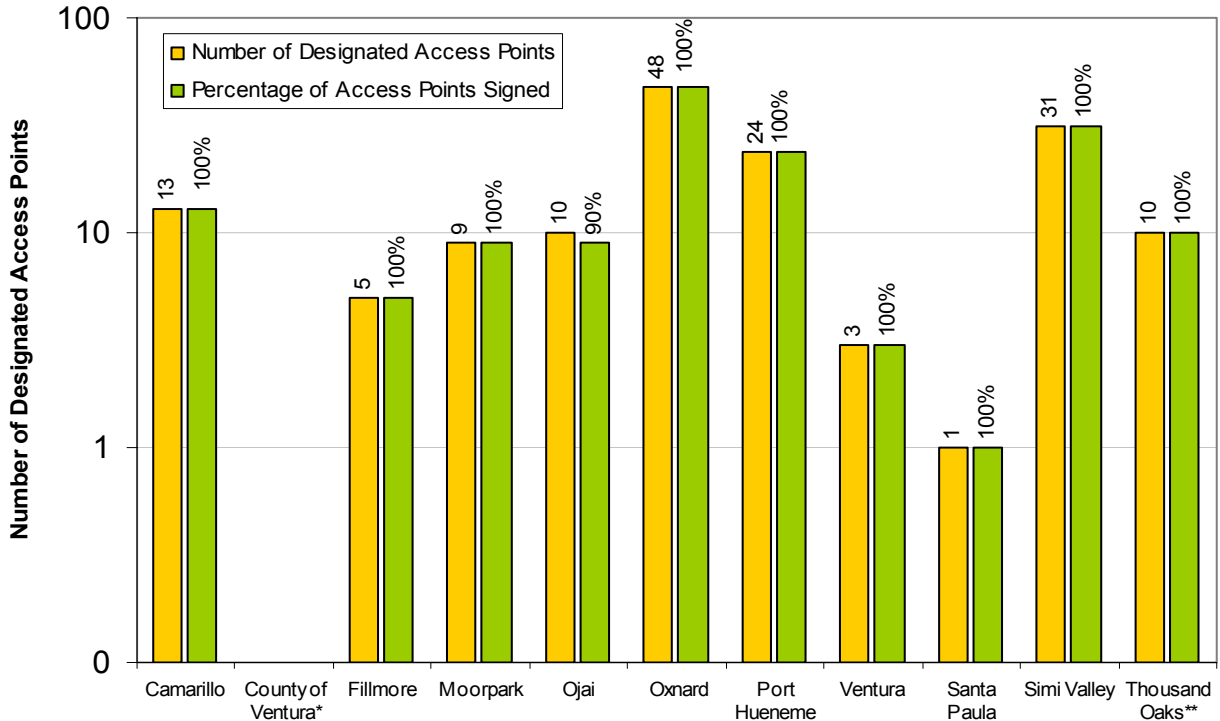
In addition to the Storm Drain Inlet Stenciling Program, the Co-permittees are required to designate appropriate access points to the creeks and channels within their jurisdiction for the placement of signs with prohibitive language to discourage illegal dumping. Each Co-permittee is responsible for designating the appropriate access points to creeks and channels within their jurisdiction, which requires some field verification and mapping. This program element also required in some cases, the cooperation between the City and special districts outside the City's jurisdiction.

**Figure 3-2** depicts the progress the Co-permittees have made in their efforts to post their signs at appropriate access points to creeks and channels. A review of **Figure 3-2** shows that all the Co-permittees met the performance criteria that 90% of the designated public access points be posted with signs regarding the prohibition of illegal dumping.



**SECTION 3.0 PROGRAM FOR RESIDENTS**

*99% of all public access points to creeks and other waters have been posted with no dumping signs.*



**Figure 3-2 Signage of Public Access Points to Designated Creeks and Channels**

\* No updated information on this task for this year

\*\* The designated public access areas to creeks within the City are under the jurisdiction of the Conejo Recreation and Parks District.

**3.2.8 Local Community Outreach Efforts**

Each of the Co-permittees organized community-oriented outreach events, training and other activities on stormwater quality within their jurisdiction. The Co-permittees emphasized the importance of using environmentally safe practices at home and work to prevent stormwater pollution. Outreach efforts included community newsletters, small group learning activities and other media to deliver a stormwater message that educates and informs the general public.

One such effort is demonstrated by the City of Camarillo. The city regularly publishes *City Scene*, a newsletter for City of Camarillo residents, providing local community and neighborhood focused information. In a recent edition, readers were provided city specific information how they could help prevent stormwater pollution from harming their community's watershed. **Figure 3-3** indicates the number of educational contacts made by the Co-permittees at local community outreach events/activities during this reporting period.

**What is Stormwater Pollution Prevention?**

**Stormwater and Urban Runoff Pollution**  
Stormwater and urban runoff result from rain and other water sources that do not soak into the ground. The runoff flows from rooftops, over-paved areas, impervious bare soil and sloped lawns, collecting and transporting pollutants in its path into the local storm drain system. Storm drain pipes transport the runoff and its pollutant load into creeks where it travels—untreated—into the ocean. Some of these harmful pollutants include:

- Pesticides and fertilizers
- Automotive fluids (oil, grease, gasoline, antifreeze)
- Dirt, sand, silt and construction spoils
- Pet waste
- Grass clippings, leaves, and other yard waste
- Metals
- Household chemicals such as paint & solvents
- Litter such as plastic bags, bottles, fast-food wrappers and cigarette butts

**Preventing Stormwater and Urban Runoff Pollution**  
Since stormwater pollution is worsened by everyday activities in a suburban environment, we are all responsible for minimizing its harmful effects. Keep areas around homes and businesses clean and properly dispose of trash in refuse or recycling containers, sweep sidewalks and driveways instead of hosing them down, and never wash debris into the storm drain. Clean up leaks, drip and other spills—especially from automotive fluids immediately and without using water, if possible. Never pour used motor oil or other chemicals into the gutter or storm drain.

**Dispose of grass, tree and garden cuttings in the yard waste barrel; never blow or wash debris into the gutter, street or storm drain. Don't over water. Much of the water that runs into gutters comes from excessive irrigation. If using pesticides, apply strictly per manufacturer's instructions and never apply before spraying or predicted rain.**

**Take pride and action—simple precautions can protect and preserve our watersheds, streams, and beaches.**

**Pool Maintenance**  
It's that time of the year again when swimming pools are being prepared for summertime fun! Pool owners are urged to be aware of proper pool maintenance procedures and the environmental damage that may result from improperly discharged pool water.

Properly maintained pools should require draining no more than once every ten years. Prior to draining a pool, check the chlorine concentration. If the chlorine does not exceed the 0.1 part per million (ppm) level, it is safe to drain the water into the street, gutter or storm drain system.

Chlorine concentrations that exceed 0.1 ppm must be reduced before the water is safe to drain to the street. Dechlorinate the water using one of the following methods:

- Do not add additional chlorine for several days after water water is determined if it is safe to discharge. Repeat as necessary to achieve a safe chlorine level.
- Add chlorine reducers available from pool supply stores.

Regardless of the method chosen, always discontinue pool use when no chlorine is present. The dechlorinated pool water must not pick up pollutants or cause a public nuisance while draining. City of Camarillo water customers should notify the Water Division at 368-5373 before draining at swimming pool.

Never drain acid washing or other waste water generated by pool cleaning or dispose of pool filter media into the street, gutter or storm drain system. If no harmful chemicals are present, discontinuous earth filtered waste should be bagged and placed in the green trash container.

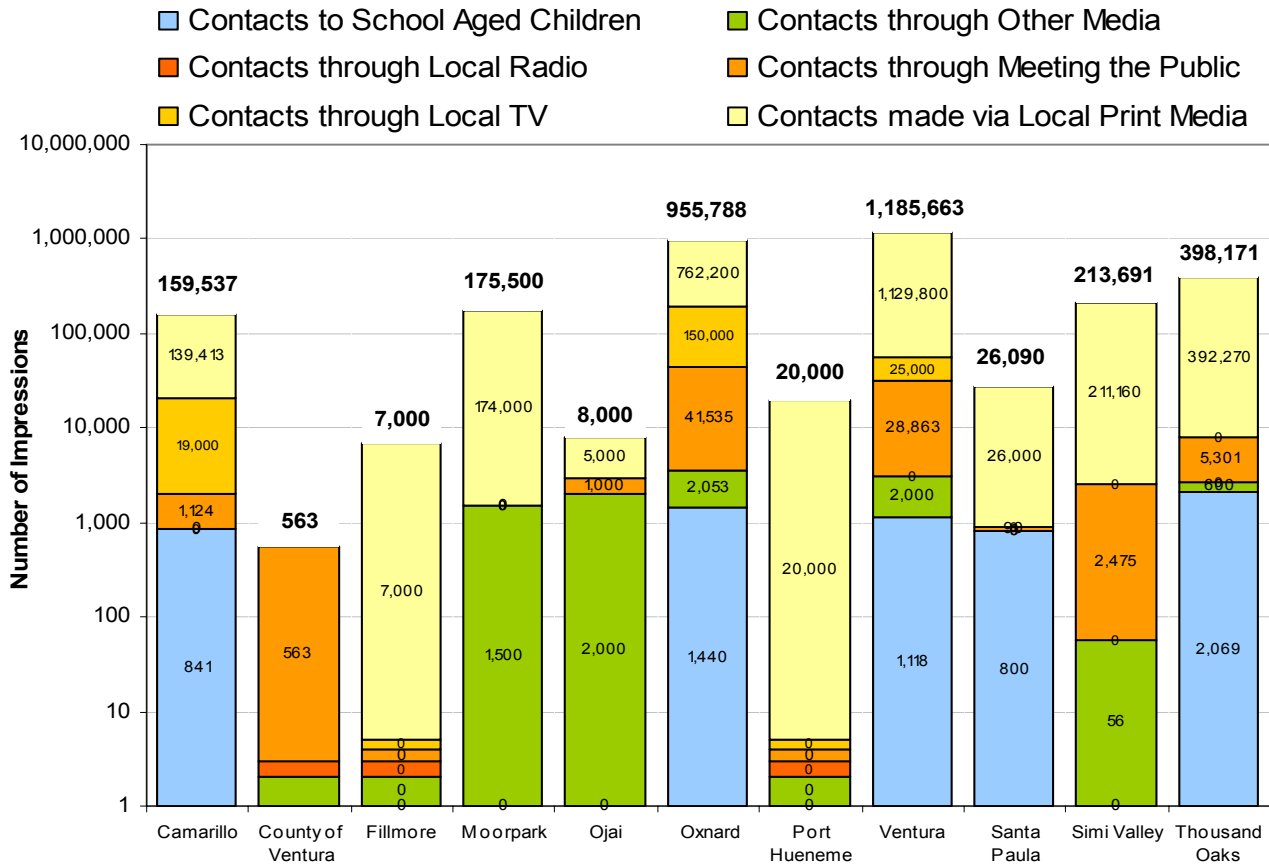
For information regarding urban runoff pollution, call the City Stormwater Coordinator at 368-5658.

**"The watershed should only shed water"**

**"The People Are The City"**

**SECTION 3.0 PROGRAM FOR RESIDENTS**

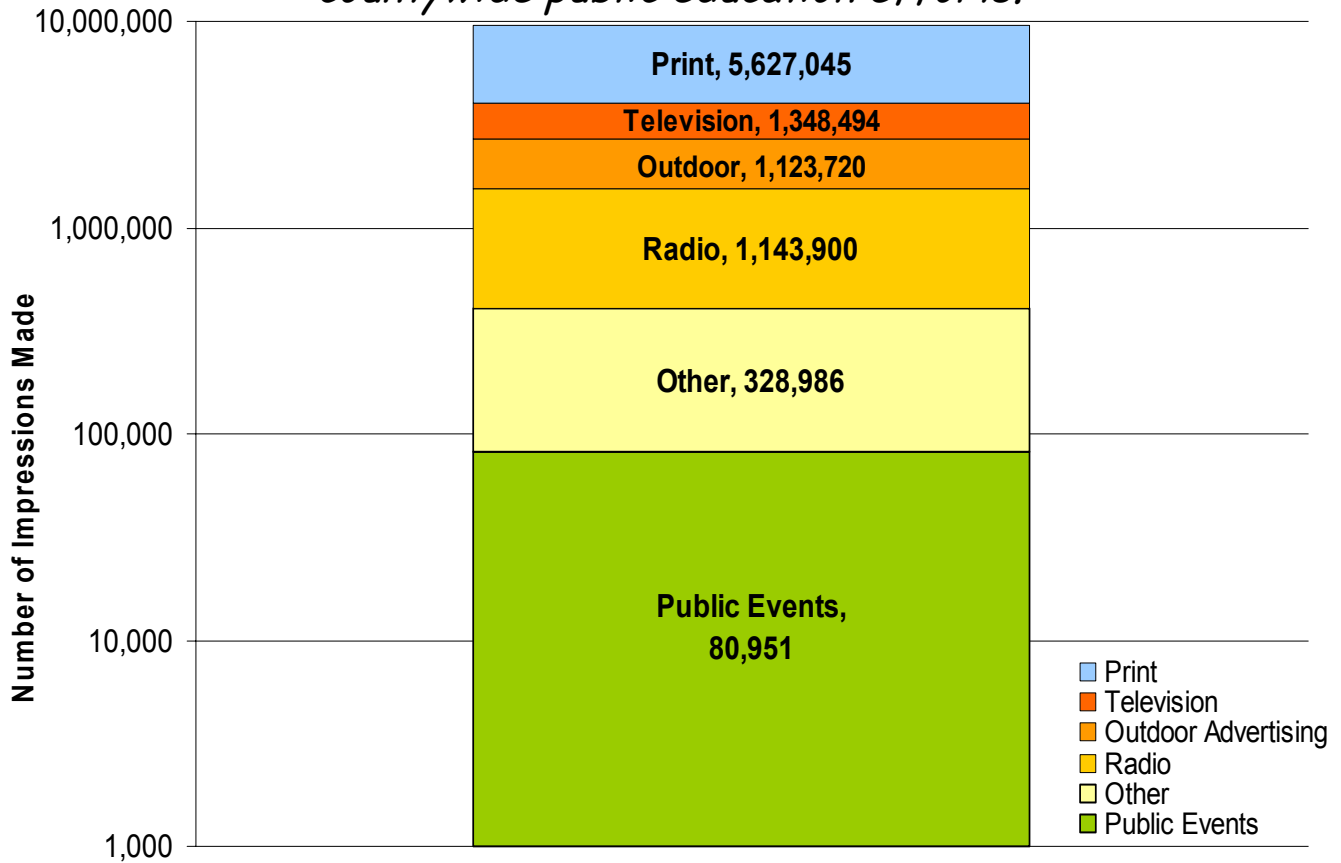
*Over 3 million outreach impressions were made through the Co-permittees' local efforts.*



**Figure 3-3 Local Community Outreach Efforts**

**Figure 3-4** on the next page shows the grand total of impressions created by *both* the media plan advertising campaign and the Co-permittees, totaling 9.5 million impressions during the reporting period.

*Over 9.5 million impressions made through all countywide public education efforts.*



**Figure 3-4 Total Number of Countywide Impressions**

### 3.3 Ongoing Program Accomplishments

#### 3.3.1 Coastal Cleanup Day

California Coastal Cleanup Day is a premier volunteer event focused on the cleanup of beaches and creeks throughout the country. On this day, more than 50,000 volunteers turn out to over 700 cleanup sites statewide to conduct what has been hailed by the Guinness Book of World Records as “the largest garbage collection.” Since the program started in 1985, over 552,000 Californians have removed more than 8.5 million pounds of debris from our state’s shorelines and coast. When combined with the International Coastal Cleanup organized by the Ocean Conservancy and taking place on the same day, California Coastal Cleanup Day is one of the largest volunteer events of the year.

## SECTION 3.0 PROGRAM FOR RESIDENTS

Coastal Cleanup Day is also the highlight of the California Coastal Commission's year round "Adopt-a-Beach" program and takes place every year on the third Saturday of September, the end of the summer beach season and right near the start of the school year. Coastal Cleanup Day is a great way for families, students, service groups and neighbors to join together and take care of our fragile water environments. Together they show community support for our shared natural resources, learn about the impacts of marine debris and how we can prevent them.



Beginning in 1996, the Co-permittees have participated in this extremely successful statewide event. This annual event has been an excellent opportunity for volunteers to help clean and beautify local beaches and inland waterways. Over the past ten years, the Co-permittees have worked hard to encourage more volunteer participation in addition to targeting additional beach and inland areas for cleanup. This volunteer program continues to be a huge success, not only in cleaning local sensitive environments but also in creating a heightened awareness on proper trash disposal and its benefit to stormwater quality. This permit year, approximately 2,000 volunteers removed over 20,000 pounds of trash and recyclables from 47 miles of inland and coastal shorelines in Ventura County.

### 3.3.2 *Pet Waste Program*

The Pet Waste Program began in 1999 by the Co-permittees to educate pet owners on bacterial contamination to our ocean and streams from pet waste. There are now hundreds of pet waste bag dispensers throughout the county encouraging pet owners to pick up after their pets. This program has been a huge success with the demand for more dispensers and pet waste bags growing annually.

### 3.3.3 *Swimming Pool Owner Outreach*

The City of Simi Valley through their Pool Program this year handed out 285 brochures on pool BMPs and had dialog with residents to make sure they understand how they affect the stormwater system and the environment.

### 3.3.4 *Solid Waste Collection/Recycling*

The Co-permittees have solid waste collection programs for public, residential, commercial and industrial areas. The Co-permittees recognize the public needs education and encouragement to properly dispose of their trash in order to reduce the chance storm drains will be used as waste receptacles. The Co-permittees promote these events through a variety of methods including community newsletters, radio and television public service announcements, brochures and utility bill inserts. Many Co-permittees have combined recycling, litter control and hazardous materials disposal messages.

## SECTION 3.0 PROGRAM FOR RESIDENTS



### 3.3.5 *Mobile Satellite City Hall Event*

The City of Oxnard continues to host their Helen Putnam award winning Mobile Satellite City Hall events in centralized city locations in an ongoing effort to educate a greater number of local residents in stormwater pollution prevention methods and in the importance of taking ownership of their local environment. These events provide the Oxnard residents with the opportunity to voice their water quality concerns to the city's department/division appointed representatives, the citywide enhancement staff, city council members, and neighborhood council executive boards. This innovative approach of providing educational

outreach to the general public has been extremely successful in promoting a positive environmental awareness, sound stormwater pollution prevention practices, and illicit discharge identification/abatement throughout the city's targeted demographic areas.

## SECTION 4.0 PROGRAMS FOR BUSINESSES

### 4.1 Program Implementation

The daily activities of many businesses create a potential for pollutants to enter a storm drain system. The Co-permittees have developed programs to address this source of pollutants through educational outreach and inspections of targeted businesses. These efforts include providing information on the potential for illicit discharges and illegal connections from businesses, the selection and use of proper BMPs, and the potential for enforcement action and fines if environmental rules are ignored.

The Co-permittees use the Business and Illicit Discharge/Illegal Connection Subcommittee meeting to coordinate and implement a comprehensive program to control pollutants in stormwater discharges to municipal systems from targeted commercial facilities. The Subcommittee is comprised of representatives of the Co-permittee cities and other municipal staff from various departments (Environmental Health, Environmental Services and Wastewater Services). Each Co-permittee has implemented an Industrial/Commercial Business Program, which includes the following components to meet the goals and objectives of the program:

- Tracking Critical Sources
- Inspecting Critical Sources
- Ensuring Critical Sources

The Business Program provides a framework and a process for each Co-permittee to develop its own commercial/industrial program consistent with Permit and SMP requirements. Key program components include:

- Pollution Prevention
- Source Identification and Facility Inventory
- Prioritization for Inspection
- Implementation of Best Management Practices
- Site Education/Inspections
- Enforcement
- Non-compliant Industrial Site Identification and Regional Board Notification Procedures
- Program Reporting

#### 4.1.1 Business Community Site Education/Inspection Program

The goal of the site education/inspection program is to confirm that stormwater Best Management Practices (BMPs) are effectively implemented in compliance with state law, county and municipal ordinances. During site visits, the Co-permittees:

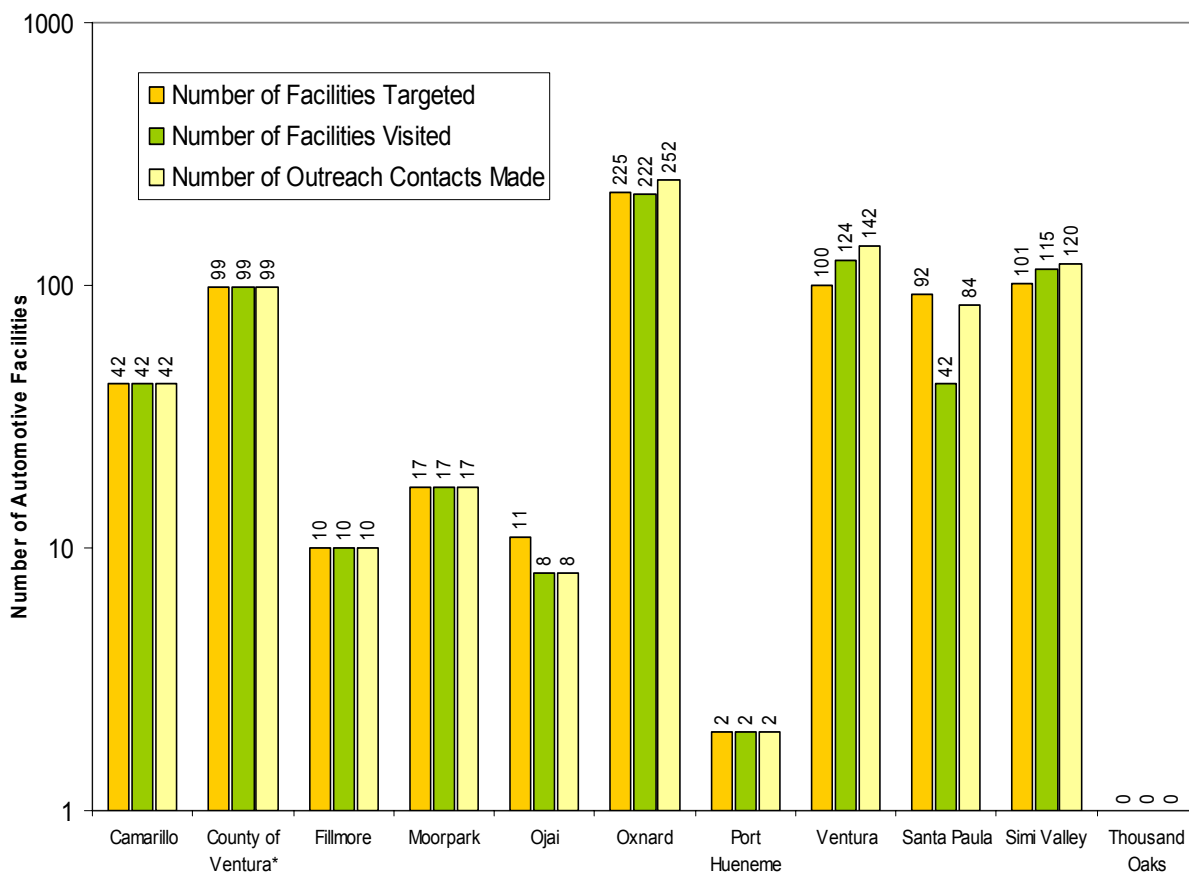
- Consulted with a representative of the facility to explain applicable stormwater regulations;
- Distributed and discussed applicable BMP fact sheets and educational materials; and
- Conducted a site walk-through to inspect for evidence of illicit discharges and illegal connections, appropriate stormwater BMPs, and stormwater quality management education programs for employees.

**Figure 4-1** shows the total number of targeted automotive service facilities and the total number visited within each Co-permittee's jurisdiction. **Figure 4-2** shows the total number of food service facilities targeted and the total number visited within each Co-permittee's jurisdiction. In some cases the number of facilities visited exceeded the number of targeted for inspection. This situation may result from changes in facility ownership, businesses that move requiring site visits to a facilities new location as well as the one vacated. In many cases the Co-permittees were exceeding their targets in

## SECTION 4.0 PROGRAMS FOR BUSINESSES

order to assure compliance with the permit requirement to inspect all these facilities once every two years. Note that these data reflect the number of facilities visited in this reporting period only; which is the first year of a two-year reporting period.

*97% of targeted automotive service facilities were inspected,  
582 total countywide.*



**Figure 4-1 Automotive Service Facilities Visited**

\* Data not submitted for this Permit Year

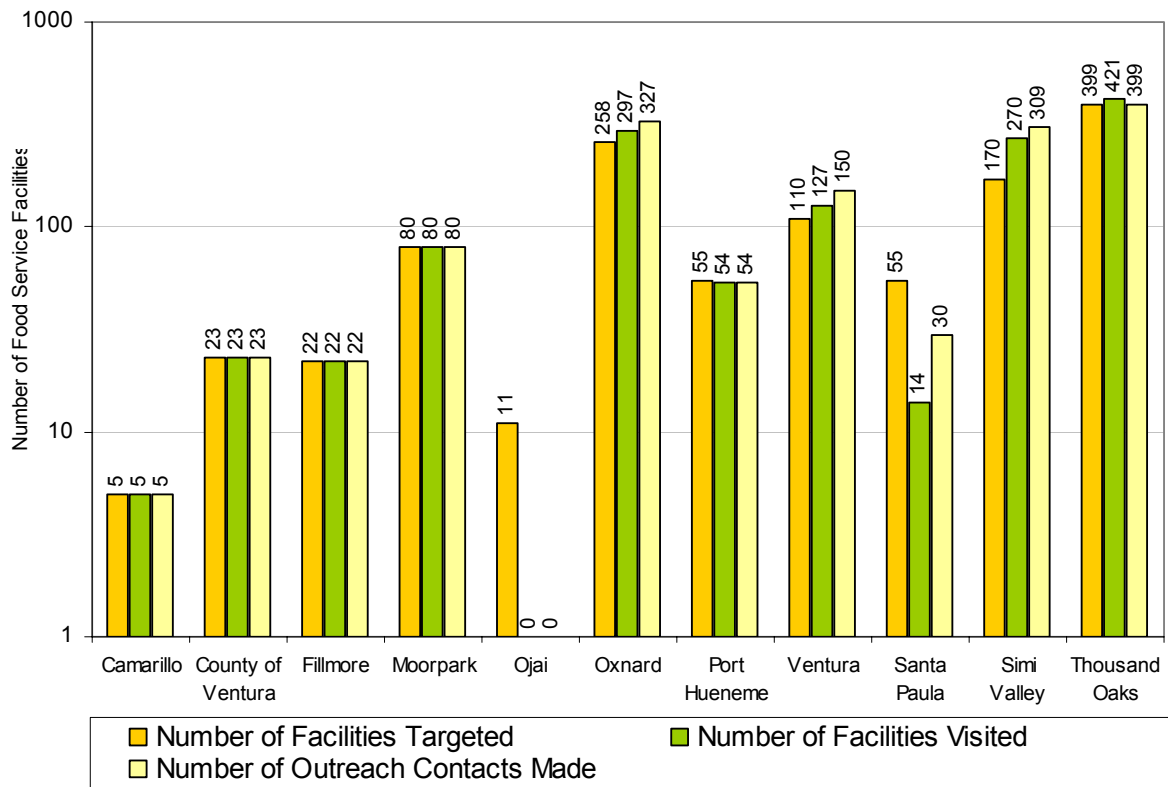
The vast majority of site visits were unannounced providing the inspectors with an honest look at daily activities of the facility. During these site visits, Co-permittee inspection staff would meet with the business owner/manager to review the objectives of the inspection. After performing a walk-through of the facility, inspection results were discussed with the business owner/manager. In the event a Co-permittee determined a facility's stormwater BMPs were insufficient, the Co-permittee provided their recommendations to the facility owner/manager. Source control BMPs were recommended as a first step in BMP implementation before requiring the facility to implement costly structural BMPs. In addition, inspection staff informed facilities' owners/managers that BMP implementation does not guarantee compliance nor relieve them from additional regulations.

Whenever evidence of an illicit discharge was found, facilities were scheduled for follow-up visits within six months of the inspection. If continued stormwater violations were found, another visit was scheduled and/or enforcement actions initiated. Enforcement actions may include any of the following: Warning Notice, Notice of Violation(s), Administrative Civil Liability actions and monetary fines. These actions are reported in Section 8 - Programs for Illicit Discharges.



**SECTION 4.0 PROGRAMS FOR BUSINESSES**

*Over 100% of targeted restaurants were inspected, 1300 total countywide.*



**Figure 4-2 Food Service Facilities Visited**

In addition, the Co-permittees maintain a database of inspected automotive and food service facilities that includes the following information for each facility:

- Name of Facility
- Site Address
- Applicable SIC Code(s)
- NPDES Permit Coverage
- SWPPP Availability
- Facility Contact

A print out of the Co-permittees' database is attached in Appendix 1. The Co-permittees annually update the database with their activities for the current reporting period and provide a copy as part of this Annual Report.



Site Inspection of a Commercial Facility



## SECTION 4.0 PROGRAMS FOR BUSINESSES

### 4.1.2 Targeted Business Outreach Program based on Pollutants of Concern

Individually, the Co-permittees have concentrated their efforts on businesses with the greatest potential to contribute known Pollutants of Concern (ammonia, bacteria, etc.). Businesses that have been targeted for education and outreach include agriculture-related facilities, commercial equestrian stable facilities, car washes, and mobile businesses such as vehicle detailers and concrete pumpers.

- The Cities of Camarillo and Thousand Oaks both educate and inspect mobile businesses identified in the field as time permits during their normal inspection duties.
- The City of Simi Valley concentrated their efforts this year on requiring Stormwater Pollution Prevention Plans (SWPCPs) from their major industrial, food, and auto services facilities (160 SWPCPs were received and approved this year). They also perform geographically concentrated pretreatment inspections and issue permits to restaurants to reduce the POCs associated with sanitary sewer overflows (SSOs.)
- The City of Ventura educates and inspects mobile businesses as part of their program, concentrating efforts to make sure that mobile businesses do not discharge to storm drains. They also have established a hotline for illicit discharge reporting that has enabled easy reporting and improved response. Through this they have experienced a drop in reported illicit discharges from mobile businesses this year. Also, as part of their pretreatment inspections they require pumping records for grease traps and interceptors from each restaurant inspected, and hand out educational materials on problems with improperly maintained grease trap/interceptor and sanitary sewer overflows. Consequently, there were no overflowing grease traps/interceptors this last year. In addition, Ventura is using educational materials to target the residential community in regards to discharging fats, oils, or grease from their kitchens to the sanitary sewer.

### 4.1.3 General Industrial Permit Facility Site Visit Program

The Permit requires each Co-permittee to identify industrial/commercial facilities potentially subject to the General Industrial Permit and target these facilities for education and outreach. Targeted facilities include wastewater treatment plants, landfills, large transportation yards and airports that may be publicly-owned by Co-permittees. However, this does not include public facilities such as municipal maintenance yards that may contain industrial types of activity. Co-permittee-owned facilities are not subject to the Industrial/Commercial Business Program (with the exception of the City of Thousand Oaks' Municipal Service Center). Requirements for these public facilities are discussed in the Section 7 - Program for Public Agency Activities. Inspection and enforcement of the General Industrial Permit is accomplished by the permitting agency, either the SWRCB or the RWQCB.

Co-permittees use a variety of methods to create their lists of facilities subject to this program element. Some of the resources used to facilitate identifying facilities included:

- State Water Resources Control Board (SWRCB) database of facilities covered by the General Industrial Permit;
- Hazardous materials inventories maintained by fire or environmental health departments;
- List of facilities subject to local wastewater utility's industrial pretreatment programs;
- City business license records;
- Commercially available business listings (e.g., the Dun & Bradstreet database);
- Telephone book business listings;
- Non-filers database; and
- Letters/Use surveys/Mailer with response requested/checklist, etc.

## SECTION 4.0 PROGRAMS FOR BUSINESSES

Once the list of facilities was compiled, the Co-permittees implemented an education outreach effort that provided an introduction of stormwater pollution prevention to those business owners/operators.

The Co-permittees strongly believe most business representatives are conscientious and want to do the “right thing” after they are made aware of what they need to do and how easy compliance can be achieved with simple changes. An informational site visit, in which an agency representative walks the site with the facility owner/operator, provides useful information about stormwater requirements and BMPs. These efforts have proven to be an effective approach for education and outreach.

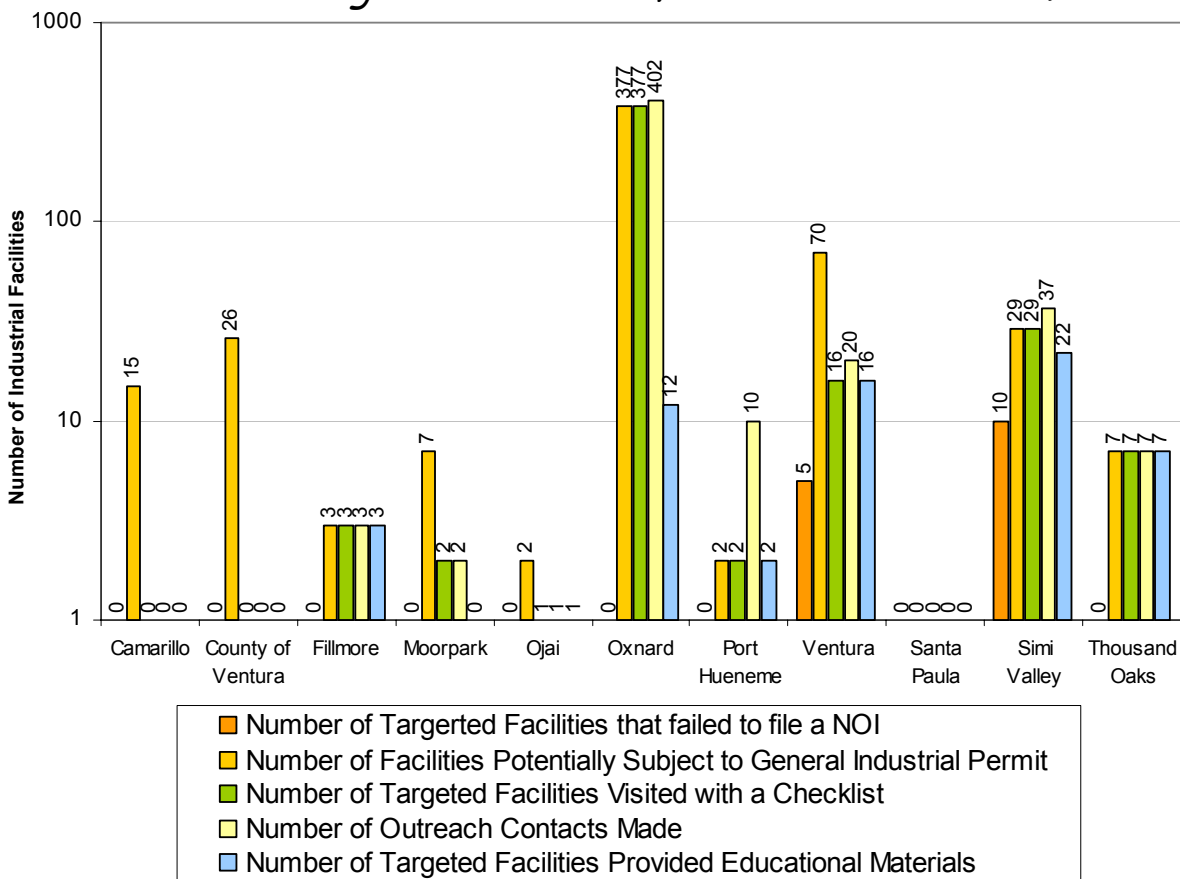
In addition to the Co-permittees’ efforts, the RWQCB has performed a number of industrial site inspections in Ventura County. This has greatly increased the number of facilities educated about stormwater regulations and requirements. The RWQCB has also indicated an interest in coordinating with VCWPD to host a training workshop on the General Industrial Permit and its requirements. The Co-permittees look forward to this opportunity to work with RWQCB staff.

Due to the efforts of the Co-permittees during the last reporting period, many of the facilities targeted through this program have applied for permit coverage and have developed and implemented Storm Water Pollution Prevention Plans (SWPPPs).

**Figure 4-3** shows the total number of facilities targeted for an outreach contact and how many were provided educational materials within each Co-permittee’s jurisdiction. Note that the data reflect the number of facilities contacted in this reporting period only, the first year of a two-year performance criterion.

**SECTION 4.0 PROGRAMS FOR BUSINESSES**

*Over 500 targeted industrial facilities were visited.*



**Figure 4-3 Targeted Business facilities potentially subject to General Industrial Permitting**

**4.1.4 Stormwater Quality Staff Training**

Each Co-permittee identified inspection staff and other personnel for training based on the type of stormwater quality management and pollution issues that they might encounter during the performance of their regular inspections or daily activities. Targeted staff may include those who perform inspection activities as part of the HAZMAT, and wastewater pretreatment programs as well as staff who may respond to questions from the public or industrial/commercial businesses.

Staff was trained in a manner that provided adequate knowledge for effective business inspections, enforcement, and answering questions from the public or industrial/commercial operators. Training included a variety of forums, ranging from informal “tailgate” meetings, to formal classroom training, and self-guided training methods. When appropriate staff training included information about the prevention, detection and investigation of illicit discharges and illegal connections (ID/IC). See **Section 8** for more information regarding ID/IC training.

During this reporting period, the Co-permittees trained 58 inspection staff in stormwater pollution prevention. **Figure 4-4** depicts the number of staff trained in the program area for each Co-permittee. All eleven Co-permittees exceeded the performance criterion established in the SMP and by training more than the required 90% of targeted employees. Some cities such as Santa Paula uses the County Environmental Health Department for their inspections and therefore did not target any of their employees.

## SECTION 4.0 PROGRAMS FOR BUSINESSES

The Co-permittees continued to emphasize consistency among inspection programs, both in terms of stormwater requirements and inspection procedures countywide. The Co-permittees realize the importance of providing a “level playing field” for the business community and of requiring compliance in a similar and clear manner. In order to facilitate countywide consistency, the Co-permittees met regularly to coordinate efforts and devise strategies for the inspection program at the Business & Illicit Discharge/Illegal Connection Subcommittee. As a part of this effort the Co-permittees encouraged the participation of the County of Ventura Environmental Health Department (EHD) in these discussions and to provide comments and guidance in the development of educational materials.

EHD continues to play an important role in the Co-permittees’ efforts to inspect and assure compliance with stormwater regulations in the business community. EHD conducts stormwater inspections of automotive service facilities on the behalf of several Co-permittees, and also performs inspections for the County unincorporated program for food service facilities. Implementation of these program elements required the Co-permittees to spend significant time and resources on communication, coordination and comprehensive training, both for Co-permittee staff as well as EHD inspection staff.

Although the Co-permittees need the flexibility to develop inspection programs that are appropriate for local conditions, the Co-permittees have worked hard to incorporate similar baseline elements in their individual programs.

The Co-permittees will continue to work on coordination and providing the business community of Ventura County a fair, but effective, inspection program.

*100% of targeted staff were trained.*

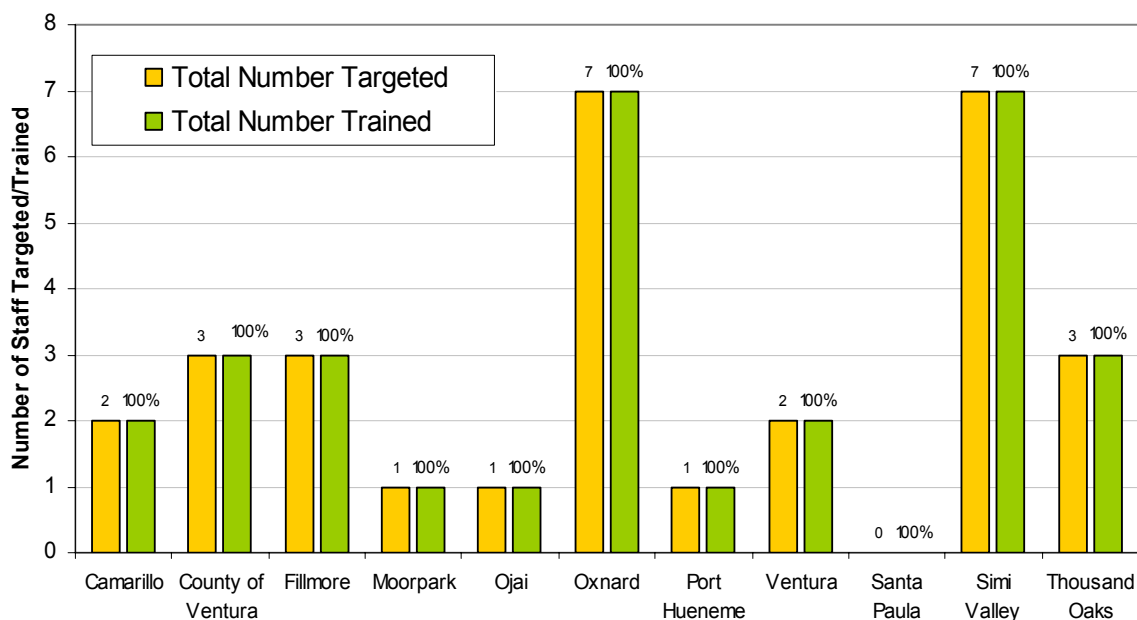


Figure 4-4 Business Inspection Staff Trained

### 4.1.5 Educational Brochure for Industrial Facilities

## SECTION 4.0 PROGRAMS FOR BUSINESSES

Early on, during the 2001-02 reporting period, the Business & Illicit Discharge/Illegal Connection Subcommittee formed a small work group to develop an educational brochure for the General Industrial Permit Facility Site Visit Program. The work group spent considerable time and effort collecting information on the state's permit and closely examined what other municipalities have done to educate industrial facilities.

The work group consolidated this information and developed a tri-fold brochure that still has valuable use today. It includes the following specific requirements of the General Industrial Permit:

- Facilities subject to the General Industrial Permit must file a Notice of Intent (NOI) with the SWRCB; and
- A Storm Water Pollution Prevention Plan (SWPPP) must be developed and available on site.

### 4.1.6 Watershed Protection Tips for Business

In addition, the Co-permittees provided information on prohibited discharges, illicit discharges, preventative methods for controlling illicit discharges, what to do in the event of an illicit discharge and penalties that can be assessed for non-compliance. These brochures were created as part of the *Community for a Clean Watershed* campaign and are distributed during site visits.

<b>Table 4.1 Permit Required Activities Industrial/Commercial Business Program</b>	
<b>Required Activity</b>	<b>Performance Criteria</b>
Site Education/Inspection	Each Co-permittee will conduct site education/inspections of 90% of automotive, food service and other targeted businesses in their jurisdiction every two years.
	Businesses will be scheduled for a follow-up visit whenever evidence of an illicit discharge is found, within six months of the education site inspection.
Targeted Businesses/POCs	Co-permittees will target additional businesses based on Pollutants of Concern (POCs) as appropriate.
General Industrial Permit Facility Visits	Co-permittees will distribute educational materials to 90% of facilities identified as potentially subject to the General Industrial Permit and perform site visits as locally determined necessary to complete a checklist every two years.
	The checklist will include the SIC Code of the industrial user; indicate whether an identified site has obtained coverage under the State General Industrial Permit, and if a SWPPP is available on site.
Stormwater Quality Staff Training	Co-permittees will train 90% of targeted employees by January 27, 2001 and annually thereafter.

## SECTION 5.0 PROGRAM FOR PLANNING & LAND DEVELOPMENT

### 5.1 Program Description

The Co-permittees have developed and implemented a Program for Planning and Land Development to address stormwater quality in the planning and design of development and redevelopment projects. This program, outlined in the Stormwater Quality Management Plan (SMP), describes the minimum standards the Co-permittees are to follow to implement their own development planning programs in compliance with the Permit. The term “development project” as used in this Program encompasses those projects subject to a planning and permitting review/process by a Co-permittee. A development project includes any construction, rehabilitation, redevelopment or reconstruction of any public and private residential project, industrial, commercial, retail and other non-residential projects, including public agency projects.

To meet the goals and objectives of the Program, the Co-permittees attend Planning and Land Development Subcommittee meetings to coordinate and implement a comprehensive program to mitigate impacts on water quality from development projects to the maximum extent practicable (MEP). However, the Co-permittees may modify their programs to address particular issues, concerns or constraints unique to a particular watershed such as local geology or topography.



Predevelopment Meeting

### 5.2 Program Implementation

#### 5.2.1 *Project Review and Conditioning*

Development and redevelopment projects have the potential to discharge pollutants that could contribute stormwater runoff pollution. Recognizing this potential and addressing it throughout the development process can control these impacts. The Co-permittees approach stormwater concerns early in the project development process when the options for pollution control are greatest and the cost to incorporate these controls into new development and redevelopment projects is least.

In planning and reviewing a development project, the Co-permittees consider three key questions with respect to stormwater quality control: (1) what kind of water quality controls are needed?; (2) where should controls be implemented?; (3) what level of control is appropriate? During the planning and review process, the Co-permittees document the method used to identify potential stormwater quality problems, develop design objectives, and evaluate the plan for the most appropriate alternatives and design.

#### 5.2.2 *Stormwater Quality Urban Impact Mitigation Plan (SQUIMP)*

The Permit requires the implementation of the Stormwater Quality Urban Impact Mitigation Plan (SQUIMP) for new development projects that fall into one or more of the following categories:

- Single-family hillside residences;
- 100,000 square foot commercial development;
- Automotive repair shops;

## SECTION 5.0 PROGRAM FOR PLANNING & LAND DEVELOPMENT

- Retail gasoline outlets;
- Restaurants;
- Home subdivisions with 10 or more housing units;
- Locations within, or directly adjacent to or discharging to an identified Environmentally Sensitive Area (ESA); and
- Parking lots of 5,000 square feet or more with 25 or more parking spaces and potentially exposed to stormwater runoff.

In addition, redevelopment projects of one of the SQUIMP categories that result in the creation or addition of 5,000 square feet or more of impervious surfaces are subject to SQUIMP requirements. If a redevelopment project creates or adds 50% or more impervious surface area to the existing impervious surfaces, then stormwater runoff from the entire area (existing and additions) must be conditioned for stormwater quality mitigation. Otherwise, only the additional area of the redevelopment project requires mitigation.

The SQUIMP lists the minimum required BMPs that must be implemented for new development and redevelopment projects subject to the SQUIMP. The minimum requirements include the following BMPs:

- Control peak stormwater runoff discharge rates
- Conserve natural areas
- Minimize stormwater pollutants of concern
- Protect slopes and channels
- Provide storm drain stenciling and signage
- Properly design outdoor material storage areas
- Properly design trash storage areas
- Provide proof of ongoing BMP maintenance
- Meet design standards for structural or treatment control BMPs
- Comply with provisions applicable to individual priority project categories, which include the following: 100,000 square foot commercial development; restaurants; retail gasoline outlets; automotive repair shops; and parking lots.

### 5.2.3 *BMP Selection and Design Criteria*

The Co-permittees require project proponents to follow the countywide Technical Guidance Manual for Stormwater Quality Control Measures. This manual addresses the SQUIMP requirements of the NPDES permit, specifying design storm volumes and flows to be treated. Also, it identifies Pollutants of Concern from certain types of projects and provides various site, source and treatment control BMPs applicable to Ventura County and the SQUIMP project.

The Co-permittees consider site-specific conditions of development projects when determining which BMPs are most appropriate for a site. Prior to selecting BMPs, the staff conditioning the project evaluates post-construction activities and potential sources of stormwater pollutants. The project proponent is required to consider BMPs that would address the potential pollutants reasonably expected to be present at the site once occupied. BMPs for the project during the construction phase are not a part of this conditioning process and are addressed through the grading permit process through the Construction Program.



## SECTION 5.0 PROGRAM FOR PLANNING & LAND DEVELOPMENT

In order to achieve appropriate stormwater quality controls, the Co-permittees use the following common criteria in screening and selecting, or rejecting BMPs during the planning stage with a priority given to non-proprietary designed BMPs:

- Project characteristics;
- Site factors (e.g., slope, high water table, soils, etc.);
- Pollutant removal capability;
- Short term and long term costs;
- Responsibility for maintenance;
- Contributing watershed area; and
- Environmental impact and enhancement.

The BMP selection criteria listed above is applied by the Co-permittees in accordance with the overall objective of the Planning and Land Development Program, i.e., to reduce pollutants in discharges to the MEP. Some BMPs will clearly be more appropriate and effective in some site-specific situations that others and BMP selections reflect this variability.



Low Impact Development Grass Swale at an Industrial Site in Oxnard

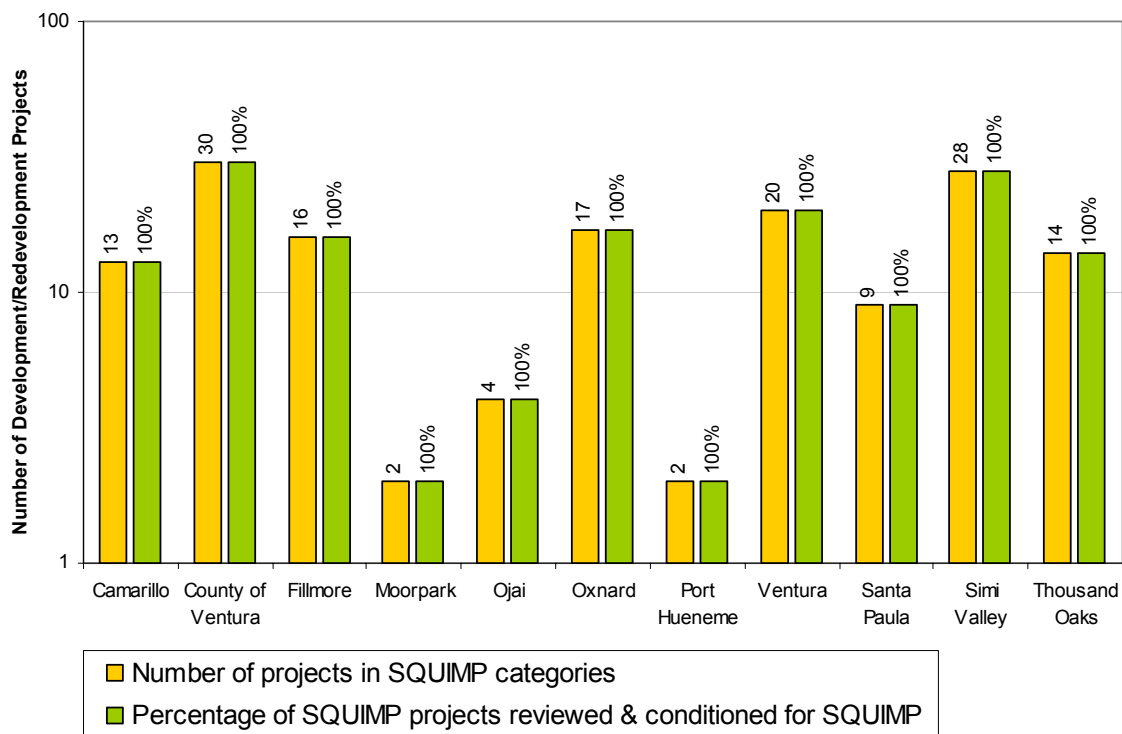


## SECTION 5.0 PROGRAM FOR PLANNING & LAND DEVELOPMENT

### 5.2.4 SQUIMP Implementation

**Figure 5-1** indicates the number of SQUIMP category projects that were reviewed and conditioned to meet stormwater and SQUIMP requirements by each Co-permittee. 100% of all development and redevelopment subject to SQUIMP requirements were appropriately conditioned. These results exceed the performance criterion of 90% established in the SMP. Besides the projects subject to SQUIMP requirements, the Co-permittees reviewed and conditioned 112 additional development projects for stormwater quality. These projects included structural improvement projects that did not qualify as one of the SQUIMP categories, but the Co-Permittees saw a need to protect stormwater quality through the design of the projects. **Figure 5-2** illustrates the total number of projects reviewed by each Co-permittee and how many were conditioned for stormwater quality as SQUIMP or non-SQUIMP.

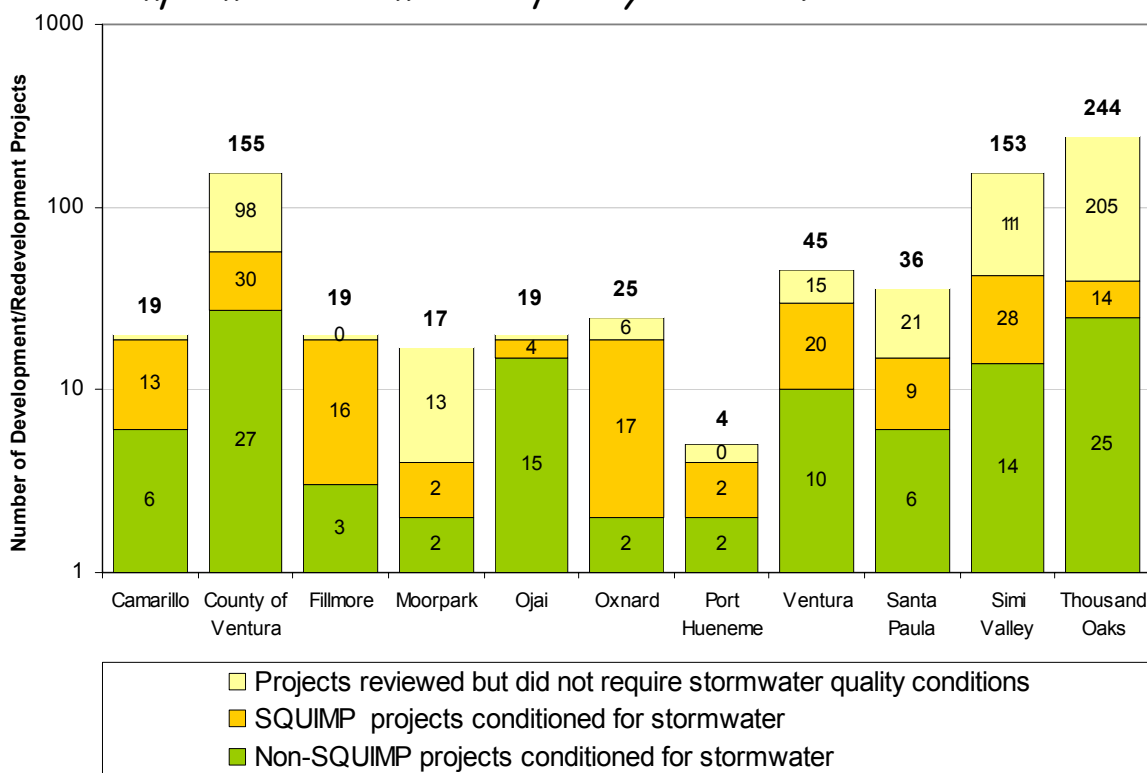
*100% of projects subject to SQUIMP were conditioned to meet Permit requirements, 155 total countywide.*



**Figure 5-1 Percentage of SQUIMP projects conditioned for stormwater quality**

## SECTION 5.0 PROGRAM FOR PLANNING & LAND DEVELOPMENT

*122 Non-SQUIMP projects were also required to implement stormwater quality controls.*



**Figure 5-2 Total projects reviewed and conditioned for stormwater quality**

Note: Due to the wide range of number of projects across the different Co-permittees it was necessary to present this on a logarithmic scale. This does not allow accurate visual representation of values of one or zero.

### 5.2.5 Environmental Review

The California Environmental Quality Act (CEQA) sets forth requirements for the processing and environmental review of many projects. The Co-permittees use the CEQA processing and review as an excellent opportunity to address stormwater quality issues related to proposed projects early in the planning stages. The National Environmental Quality Act (NEPA) comes into play less often than CEQA, but may be included on projects involving Federal funding. Like CEQA, NEPA processing and review provides opportunities to address stormwater quality issues related to proposed projects early in the planning stages.

Each Co-permittee has reviewed their internal planning procedures for preparing and reviewing CEQA (and NEPA when applicable) documents and has linked stormwater quality mitigation conditions to legal discretionary project approvals. In addition, when appropriate, the Co-permittees consider stormwater quality issues when processing environmental checklists, initial studies and environmental impact reports.

### 5.2.6 General Plan Revisions

The Co-permittees' General Plans provide the foundation and the framework for land use planning and development. Therefore, the General Plan is a useful tool to promote the policies for protection of stormwater quality. The Co-permittees will include watershed and stormwater management

## SECTION 5.0 PROGRAM FOR PLANNING & LAND DEVELOPMENT

considerations in the appropriate elements of their General Plans whenever these elements are significantly rewritten. **Table 5.1** indicates the scheduled date of a significant rewrite to the Co-permittees' General Plan. Note that some Co-permittees have already modified their General Plan to include stormwater requirements and thus no date is provided.

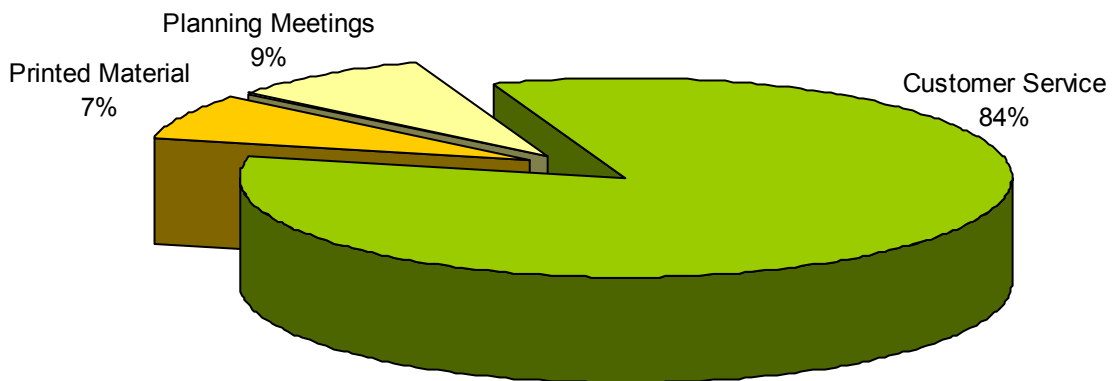
Co-permittee	Date of General Plan	Scheduled date for significant rewrite of General Plan
Camarillo	10/2003	Plan already updated to include stormwater
County of Ventura	10/1997	
Fillmore	4/2003	Plan already updated to include stormwater
Moorpark	1/1984	N/A
Ojai	5/1997	Plan already updated to include stormwater
Oxnard	1/1990	Ongoing
Port Hueneme	8/1997	2015
Ventura	8/2005	Plan already updated to include stormwater
Santa Paula	1/1998	2009
Simi Valley	10/1988	7/1/2008
Thousand Oaks	7/1996	Plan already updated to include stormwater

**Table 5.1 Co-permittees General Plan**

### 5.2.7 Community Outreach Development

During the reporting period, the Co-permittees made over 4800 contacts to development community representatives through customer service (counter assistance, phone conversations, discussions, etc.), professional society presentations, community group presentations, workshops/seminars, and educational outreach materials. These numbers are reflected in **Figure 5-2** which indicates the percentage of outreach methods used, and **Figure 5-3** shows the number of contacts made by each Co-permittee.

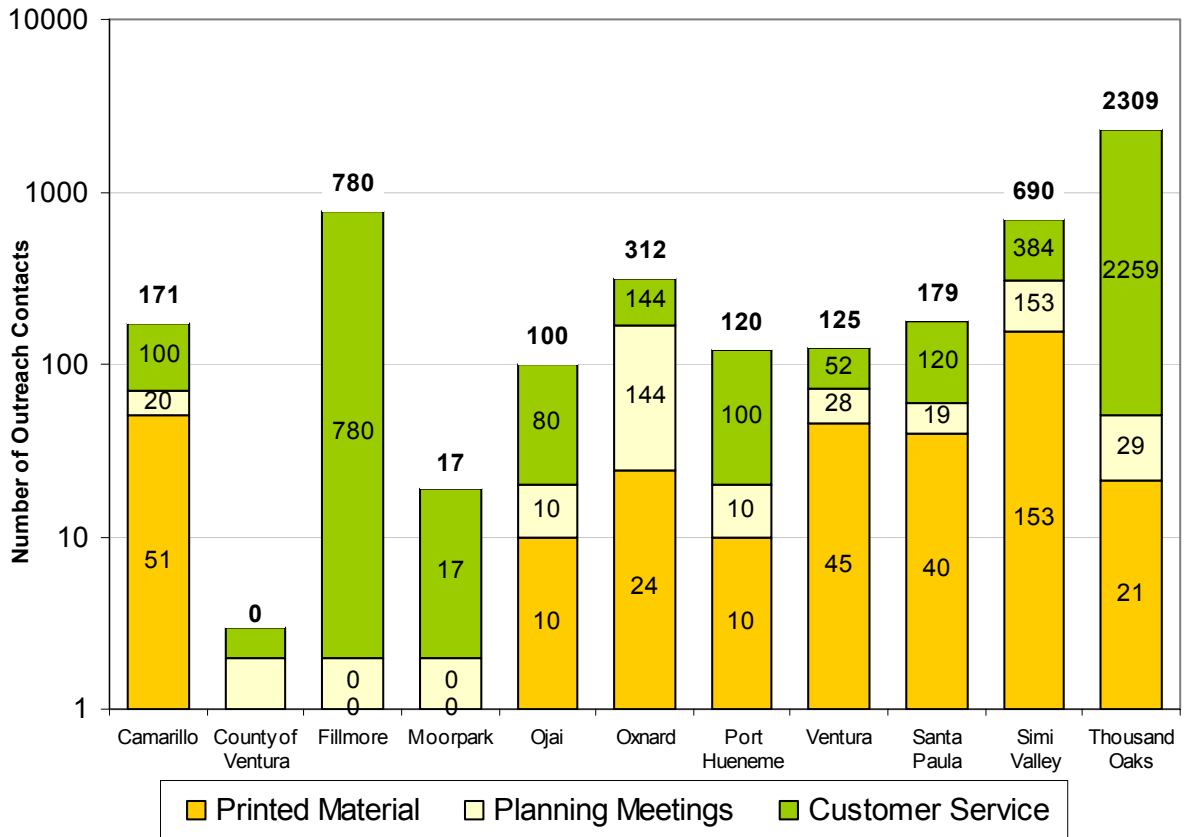
*Countywide Development Outreach Contacts = 4803*



**Figure 5-3 Land Development Outreach Activities Used Countywide**

**SECTION 5.0 PROGRAM FOR PLANNING & LAND DEVELOPMENT**

*Each Permittee used a variety of outreach methods.*



**Figure 5-4 Land Development Outreach Contacts**

Note: Due to the wide range of number of contacts made across the different Co-permittees it was necessary to present this on a logarithmic scale. This does not allow accurate visual representation of values of one or zero.

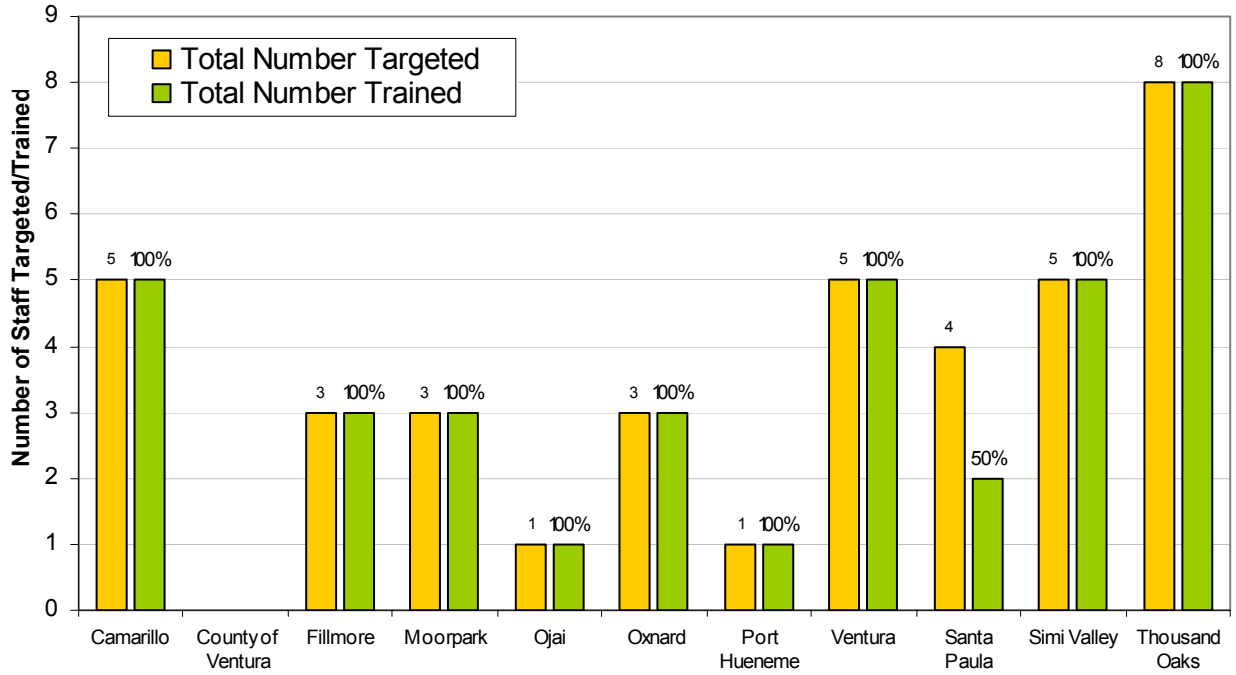
**5.2.8 Stormwater Quality Staff Training**

The Co-permittees identified employees for training regarding the requirements of the Planning and Land Development Program and SQUIMP requirements. Targeted employees include staff involved with planning, review, conditioning, permitting of development projects and administration of departments that conduct these activities.

Training methods varied amongst the Co-permittees and ranged from informal meetings to formal classroom training or self-guided training. During the reporting period, the Co-permittees trained over 50 development staff in stormwater management, plan review and SQUIMP requirements. **Figure 5-4** depicts the number of staff trained in the program area for each Co-permittee. The majority of the Co-permittees exceeded the performance criterion established in the SMP and trained more than the required 90% of targeted employees.

**SECTION 5.0 PROGRAM FOR PLANNING & LAND DEVELOPMENT**

*96% of targeted staff were trained.*



**Figure 5-5 Land Development Staff Trained**

## SECTION 6.0 PROGRAM FOR CONSTRUCTION SITES

### 6.1 Program Implementation

Reducing pollutants from construction activities has been a focus of the Co-permittees' compliance program since the permit's inception. The Co-permittees regulate construction activities and also have responsibility for the construction and renovation of municipal facilities and infrastructure. Major components of the Co-permittee's Construction Program include:

- Inspect sites required to submit SWPPPs for storm water quality requirements a minimum of once during the wet season;
- Develop and implement a checklist for inspecting storm water quality control measures at construction sites;
- Require proof of filing a Notice of Intent (NOI) for coverage under the State General Construction Permit prior to issuing a grading permit for all projects requiring coverage.

Additionally, the Construction Program provides construction site owners, developers, contractors and other responsible parties information on the requirements and guidelines for pollution prevention/BMP methods. To ensure construction sites are implementing the SWPPPs properly, each jurisdiction conducts inspections during the rainy season to verify the appropriateness and implementation of BMPs, taking enforcement action as necessary. Furthermore, training and outreach is done regularly to make certain implementation occurs consistently throughout Ventura County.

The Co-permittees attend Construction Subcommittee meetings to coordinate and implement a comprehensive program to mitigate impacts on water quality from construction sites to the maximum extent practicable (MEP). In order to facilitate effective inspections and to document compliance with this requirement the Construction Subcommittee developed a Stormwater Quality Checklist for Co-permittee use. The checklist and the meetings create countywide consistency in the programs, however, the Co-permittees may modify their programs to address particular issues, concerns or constraints that are unique to a particular watershed or to an individual municipality. The Subcommittee is comprised of representatives of the Co-permittees cities and other municipal staff from various departments (Engineering Services, Planning and Land Development and Inspection Services).

#### *6.1.1 SWPCP/SWPPP Preparation, Certification and Implementation*

Prior to receiving a grading permit, the Co-permittees require a Storm Water Pollution Prevention Plan (SWPPP) be submitted for projects greater than one acre. Additionally, as is mandatory for all construction related activity disturbing one or more acres, Co-permittees require proof of filing an NOI for projects subject to the General Construction Permit. The SWPPP remains in effect until the construction site is stabilized and all construction activity is completed. The SWPPP includes identification of potential pollutant sources and the design, placement and maintenance of BMPs to effectively prevent the entry of pollutants from the construction site to the storm drain system. In addition, the Co-permittees require construction projects to include the following requirements:

- Sediments generated on the project site shall be retained using structural drainage controls
- No construction-related materials, wastes, spills or residues shall be discharged from the project site to streets, drainage facilities or adjacent properties by wind or runoff;
- Non-stormwater runoff from equipment and vehicle washing and any other activity shall be contained at the project site;
- Erosion from slopes and channels will be eliminated by implementing BMPs, including but not limited to, limiting grading during the wet season, inspecting graded areas during rain events, planting and maintaining vegetation on slopes and covering erosion susceptible slopes.

The Co-permittees have also incorporated SWPCP provisions in their own construction projects resulting in soil disturbance of one acre or more, located in hillside areas, or directly discharging to an ESA. The Co-permittees include provisions delineating contractor responsibilities for SWPCP

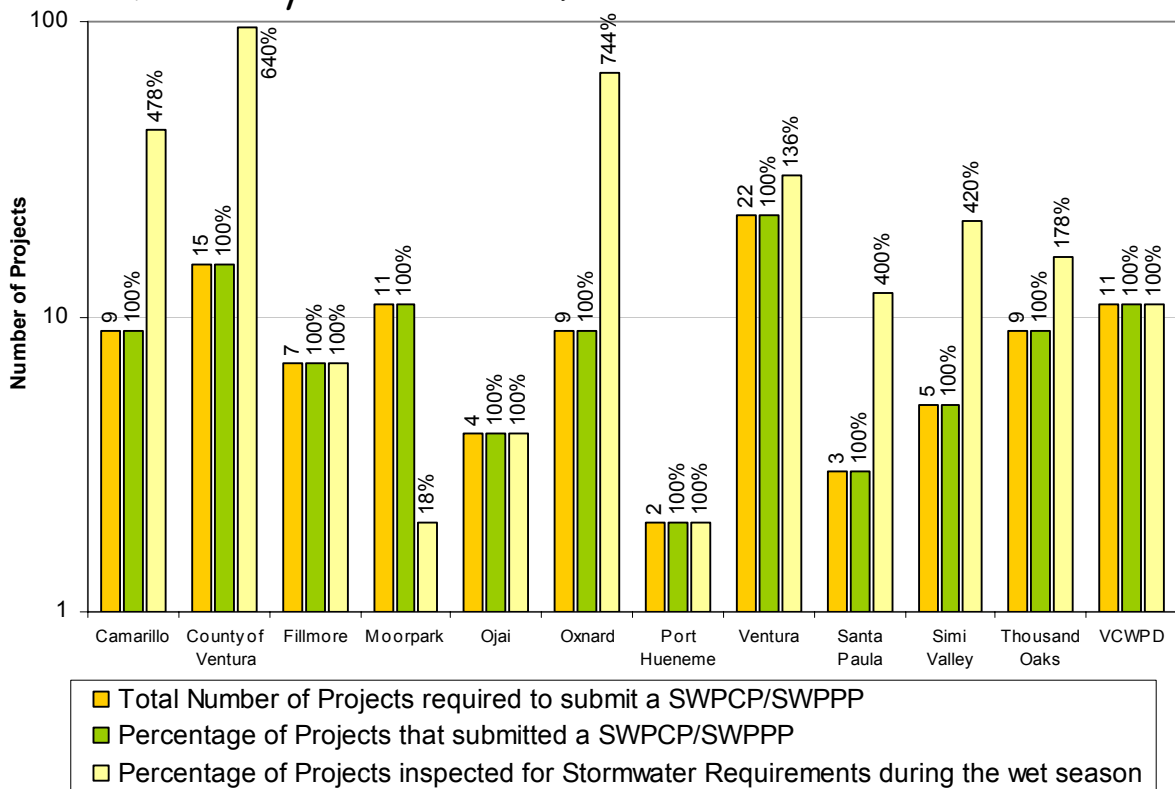
## SECTION 6.0 PROGRAM FOR CONSTRUCTION SITES

preparation, implementation and for performance of the work and ancillary activities in accordance with the SWPCP approved by the Co-permittee for the project.

**Figure 6-1** indicates the number of construction projects required to submit a SWPCP/SWPPP and the number of projects that submitted a SWPCP/SWPPP. This figure reflects the number of grading permits issued during this reporting period and does not necessarily reflect the number of active construction projects. The Co-permittees have consistently required projects to submit SWPCPs (and SWPPPs when required) with most Co-permittees exceeding the 90% performance criteria established in the SMP. In some jurisdictions, SWPCPs were required and submitted for nearly all projects including those not exceeding Permit thresholds. This conservative approach underlines the importance the Co-permittees place on ensuring implementation of stormwater controls at construction sites.

**Figure 6-1** also details the number of inspections conducted at construction sites with a SWPCP during the wet season. The number of active projects requiring inspection does not always match the number of grading permits granted. A project may be operating under a grading permit granted the previous year, or the grading permits may have been granted after the wet season so there was no opportunity for a wet season inspection. Most of the Co-permittees met or exceeded the 90% performance criterion established in the SMP. Most Co-permittees inspect more construction sites than were required to submit a SWPCP, and inspect them more frequently than the permit requires.

*Many construction projects were inspected much more than once per wet season.*



**Figure 6-1 Construction Projects Required to Submit a SWPCP**

### 6.1.2 General Construction Permit

## SECTION 6.0 PROGRAM FOR CONSTRUCTION SITES

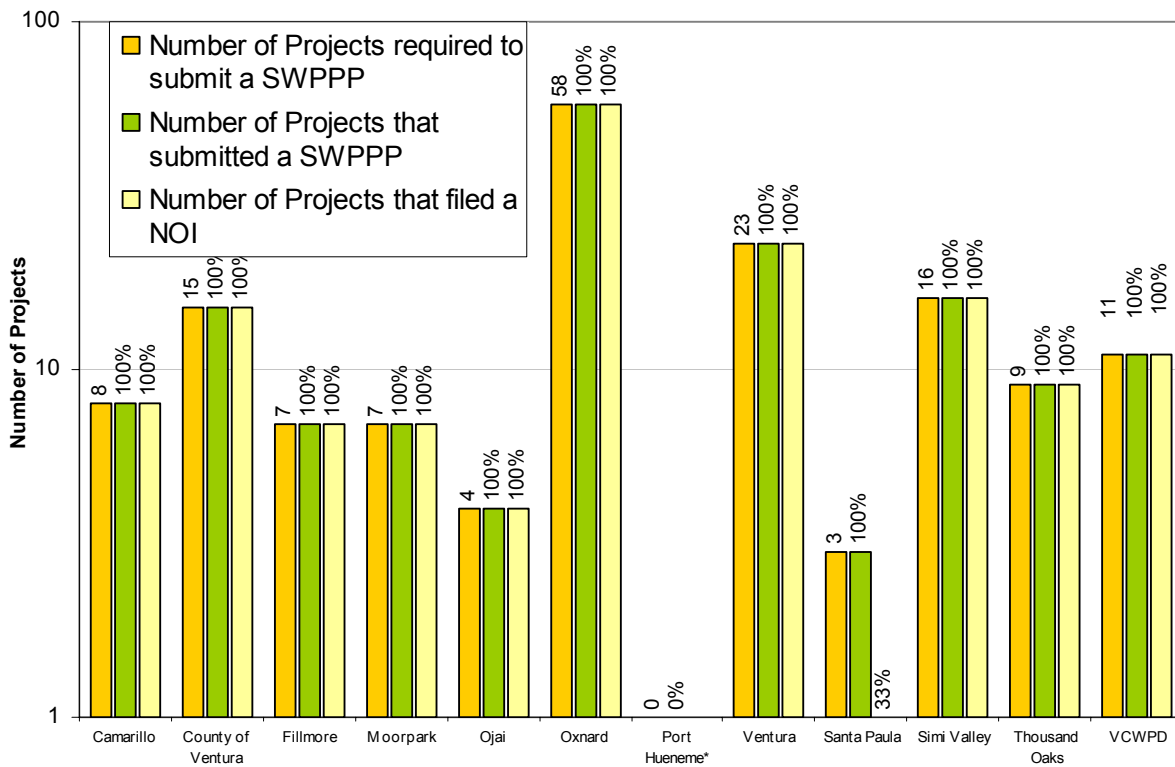
As mentioned above, the Co-permittees require all construction projects subject to the General Stormwater Permit for Construction Activities to submit proof of filing a Notice of Intent (NOI) prior to issuing a grading permit. Proof of filing a NOI may include a copy of the completed NOI form and a copy of the check sent to the State Water Resources Control Board (SWRCB) or a copy of the letter from the SWRCB with the Waste Discharge Identification Number (WDID) for the project.

In addition, the Co-permittees file NOIs with the SWRCB and pay the appropriate fees whenever Co-permittee construction projects qualify for coverage under the General Construction Permit. The NOIs and appropriate fees are filed prior to the commencement of any construction activity covered by the General Construction Permit. A copy of the NOI is kept with the project files and in the SWPPP for the project.

Projects subject to the requirements of the General Construction Permit currently include those involving clearing, grading, or excavation resulting in soil disturbances of at least one acre. Co-permittee emergency work and routine Co-permittee maintenance projects do not require preparation of a SWPCP/SWPPP, but are instead performed in accordance with the Program for Public Agency Activities.

**Figure 6-2** presents the number of construction projects that required coverage under the General Stormwater Permit for Construction Activities and prepared a SWPPP. All co-permittees exceeded the 90% performance criterion for verifying the filing of a NOI established in the SMP.

*100% compliance for projects required to file an NOI and submit an SWPPP.*



**Figure 6-2 Construction Projects Required to Submit a SWPPP**

No projects that required an NOI this permit year.

\*



## SECTION 6.0 PROGRAM FOR CONSTRUCTION SITES

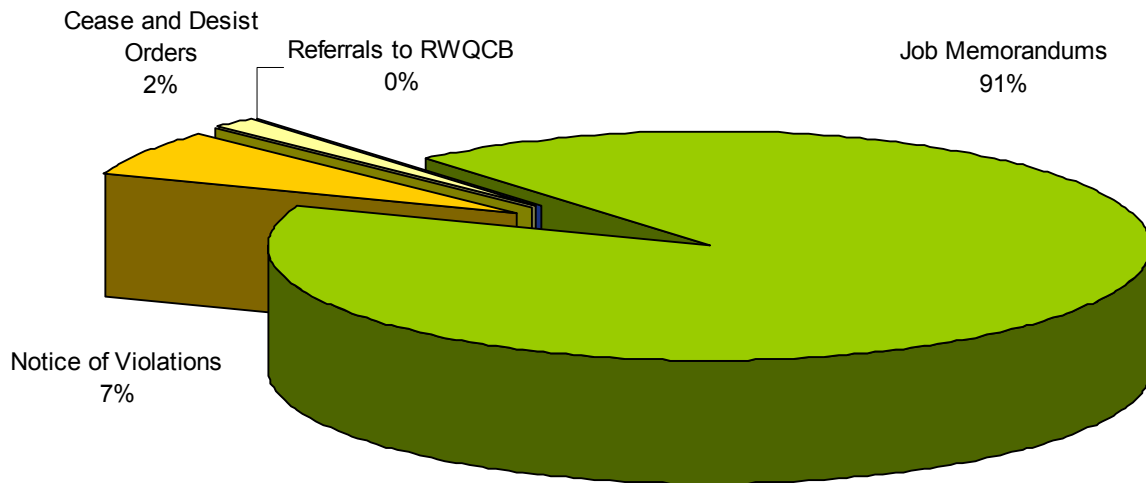
### 6.1.3 Construction Site Inspection Program

The Co-permittees inspect all construction sites with SWPPPs a minimum of once during the wet season to determine if the SWPPP is adequately implemented. During this site inspection, a checklist is completed to document inspection results. If it is determined the SWPPP is not adequately implemented or when there is evidence of a reasonable potential for sediment, construction materials, wastes, or non-stormwater runoff to be discharged from the project site, the Co-permittees will conduct a follow-up inspection within two weeks, most often much sooner.

When a construction site fails to comply with the SWPCP/SWPPP, a Co-permittee implements the appropriate notification and enforcement procedures. There are five general levels of notification and enforcement for most stormwater related problems for construction projects. These are: Verbal Notification, Job Memorandum, Notice of Violation, Administrative Compliance Order, Stop Work Order. Sites that are permitted under the construction activities general permit are also referred RWQCB if they fail to achieve compliance in two weeks. The decision to use any level of compliance control is based upon the severity of the violation(s). Severe violation may result in all construction activities being stopped at the job site until compliance is achieved.

**Figure 6-3** indicates the number and types of enforcement actions taken by the Co-permittees countywide. A single construction project can be issued multiple violations, ranging from written notices to RWQCB referrals. Job memorandums again increased over the last reporting period, reducing the percentage of the other more serious enforcement actions. There was an increase in total enforcement actions from 807 reported in 2006 to 996 this year.

*Job Memorandums continue to prove effective at achieving compliance at construction sites.*



**Figure 6-3 Construction Site Stormwater Violations**

### 6.1.4 Construction Community Outreach

The Co-permittees discuss stormwater quality requirements and concerns with developers and contractors during pre-construction meetings and inspections. During these meetings, the Co-permittees emphasize compliance with stormwater quality requirements and proper implementation of the project's SWPCP. The Co-permittees continue to stress the developer's responsibility for all

## SECTION 6.0 PROGRAM FOR CONSTRUCTION SITES

discharges from the project site, including discharges from streets and storm drains until final acceptance of the project. The Co-permittees point out this responsibility includes discharges resulting from activities at owner occupied facilities (e.g., landscaping, block wall construction, etc.) conducted by new homeowners and/or individuals or companies hired by the new owner.

In addition, the Co-permittees have made educational material available to the construction community via the Program's website ([www.vcstormwater.org](http://www.vcstormwater.org)). Co-permittees have posted guidance on SWPCP requirements, a checklist for SWPCP preparation, the SWPCP form, a SWPPP template with attachments, guidance on BMPs, and presentations on stormwater regulations and General Construction Permit compliance.

During the reporting period, the Co-permittees made almost 5700 contacts to construction community representatives through meetings, community outreach efforts, public communication efforts, print media, and other outreach methods. This effort is consistent with last year's effort. These numbers are reflected in **Figure 6-4**, which shows the percentage of outreach methods used countywide.

Because of its outstanding NPDES Construction Training program the City of Oxnard Construction Stormwater Program received national recognition as a model National Pollutant Discharge Elimination System (NPDES) compliance program from the American Public Works Association (APWA). The program was highlighted in a live interactive training webcast that was broadcast throughout the nation. A member of their staff was able to share her expertise and experience to the benefit of hundreds of public works professionals across the U.S. and Canada. Additionally, an all day NPDES/Stormwater training seminar was presented by Oxnard staff at the California Water

Environment Association (CWEA) February 2007 Workshop in the City of Malibu. The training received raving reviews from the many professionals in attendance who viewed the presentation as an effective training tool that could be implemented in Santa Barbara, Los Angeles, San Bernardino, and San Diego Counties. Locally this expertise was shared at an annual NPDES Wet Weather Compliance Training Seminar hosted by the City of Oxnard. In November 2006 a double session was held to accommodate as many as possible from the development and construction community.

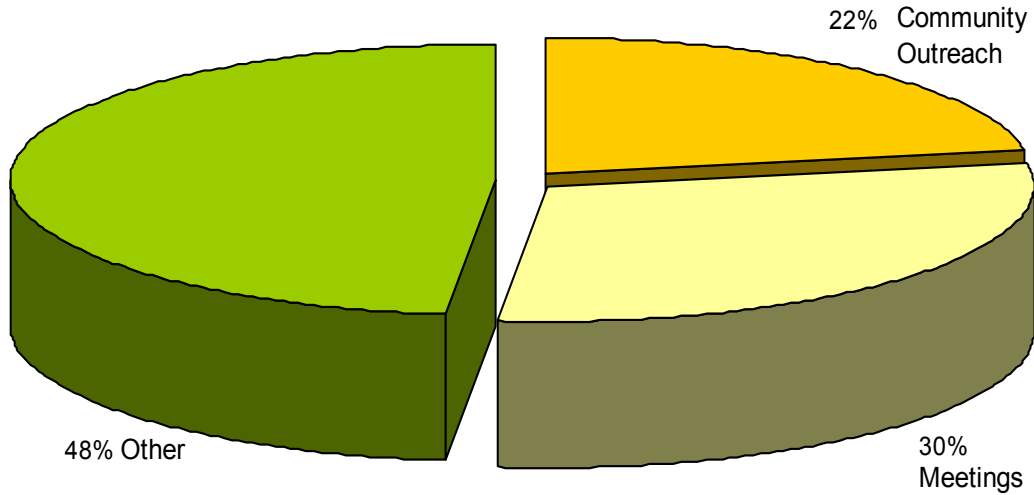


### 6.1.5 Stormwater Quality Staff Training

The Co-permittees targeted employees involved with construction engineering and inspection for training regarding the requirements of the Program for Construction Sites. Training methods varied amongst the Co-permittees and ranged from informal meetings, to formal classroom training or self-guided training. The Co-permittees also trained staff on the prevention, detection and investigation of illicit discharges and illegal connections (ID/IC) associated with construction activities. See **Chapter 8** for more information regarding ID/IC training.

**SECTION 6.0 PROGRAM FOR CONSTRUCTION SITES**

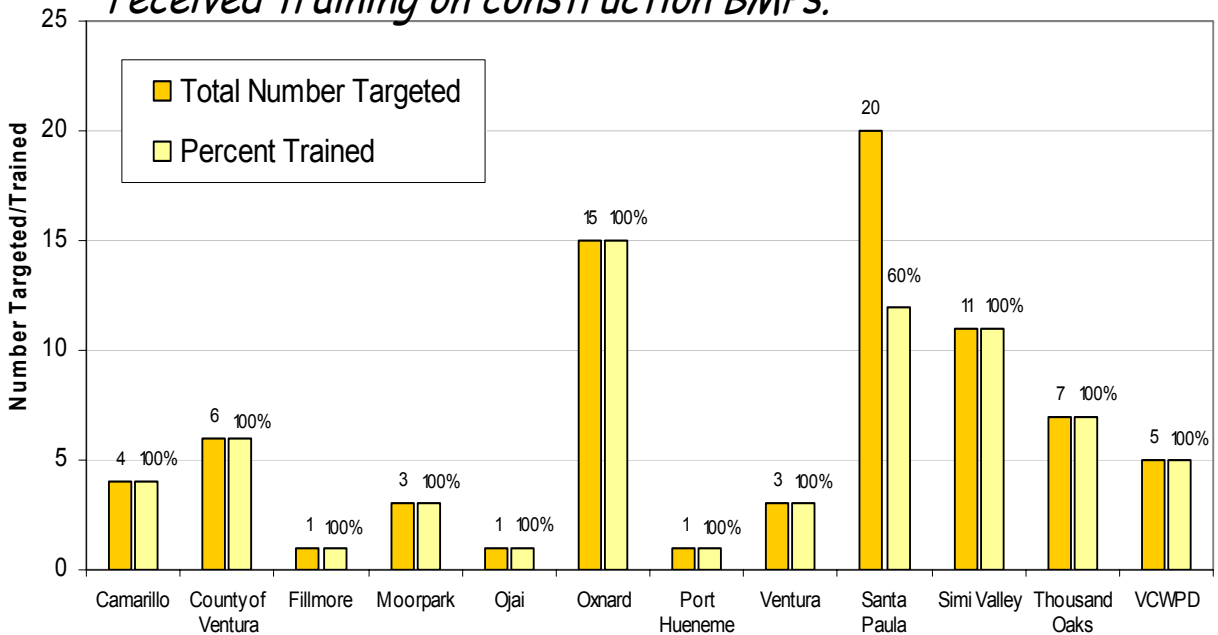
*Total Number of Outreach Contacts = 5692*



**Figure 6-4 Construction Outreach Methods Used Countywide**

During this reporting period, the Co-permittees trained 69 construction inspection staff in stormwater management, construction inspections, SWPCPs, SWPPPs, illicit discharge response, and non-stormwater discharges. **Figure 6-5** depicts the number of staff trained in the program areas for each Co-permittee. All of the Co-permittees exceeded the performance criterion established in the SMP and trained more than the required 90% of the targeted employees.

*100% of targeted employees at most agencies received training on construction BMPs.*



**Figure 6-5 Construction Inspection Staff Trained**

## SECTION 6.0 PROGRAM FOR CONSTRUCTION SITES

<b>Table 6.1 Permit Required Activities Construction Site Program</b>	
<b>Required Activity</b>	<b>Performance Criteria</b>
SWPCP Preparation, Certification & Implementation	<p>Co-permittees will require 90% of construction projects meet the permit requirements, and submit a SWPCP prior to issuing a grading permit.</p> <p>For construction projects that prepare a SWPCP under this program, require implementation of the SWPCP during the entire course of construction.</p>
Incorporating Best Management Practices (BMPs)	<p>For construction sites requiring a SWPCP, Co-permittees will require the inclusion of the statement specified in the Permit from the project architect, or engineer of record, or authorized qualified designee and the certification specified in the Permit from the landowner.</p> <p>For Co-permittee construction projects requiring a SWPCP, Co-permittees will include the statement specified in the Permit from the project architect, or engineer of record, or authorized qualified designee and the Co-permittees certification specified in the Permit from an elected official, ranking management official or the manager of the construction activity.</p>
Notice of Intent Requirement	<p>For construction projects subject to the General Construction Permit, Co-permittees will require proof a NOI has been filed prior to issuance of a grading permit for 90% of all such projects.</p>
Construction Site Inspection Program	<p>Develop and implement a checklist for inspecting stormwater quality control measures at construction sites by January 27, 2001.</p> <p>For construction projects that required a SWPCP, inspect sites a minimum of once during the wet season for stormwater quality requirements and complete a stormwater quality control site inspection checklist.</p> <p>For sites having not adequately implemented the SWPCP or where there is evidence of or a reasonable potential for sediment, construction materials or wastes, or non-stormwater runoff to be discharged from the project site, a written notice (Job Memorandum, Notice of Violation, Administrative Compliance Order, Cease and Desist Order) shall be prepared and delivered to the owner or person responsible for implementing the SWPCP.</p> <p>For sites having not adequately implemented the SWPCP, conduct a follow-up inspection within two weeks to ensure compliance and complete a stormwater quality control site inspection checklist.</p> <p>For sites having not achieved compliance after the follow-up inspection and are covered by the General Construction Permit, Co-permittees will notify the RWQCB.</p>
Construction Community Outreach	<p>During meetings and inspections with developers, contractors, construction workers and others involved in construction projects and activities, discuss stormwater quality controls as appropriate.</p> <p>Notify developers of their responsibility for all discharges from the project site, including discharges from streets and storm drains, until final acceptance of the project by the Co-permittee.</p> <p>Notify developers of their responsibility includes discharges resulting from activities at owner occupied facilities.</p> <p>Co-permittees will develop a "New Owner" brochure and upon request provide these to developers, Home Owner Associations (HOAs), and residents to assist them with their efforts to prevent discharges from owner occupied portions of the project site.</p>
Stormwater Quality Staff Training	<p>Co-permittees will train 90% of targeted employees by January 27, 2001 and annually thereafter.</p>

## SECTION 7.0 PROGRAM FOR PUBLIC AGENCY ACTIVITIES

### 7.1 Introduction

The Co-permittees own and operate public facilities, and build and maintain much of the infrastructure of the urban and suburban environment throughout their jurisdictions. Public agencies have a dual role in preventing pollution in the operation and maintenance of these facilities. Some programs are in place to help remove pollutants before they reach a receiving water, e.g. street sweeping, and others are source control ensuring all the activities performed do not contribute to stormwater pollution to the maximum extent practicable.

Programs the Co-permittees have that remove pollutants are:

- Drainage facilities inspection and maintenance
  - Catch basin inlets
  - Open channels
  - Detention basins
- Roadway Operation and Maintenance
- Emergency Spill Response
- Solid waste and hazardous waste collection

All the other field activities have a potential to contribute to stormwater pollution if they are not performed appropriately. With the adoption of the second term permit, the Co-permittees were required to formally evaluate and revise the municipal activities program to prevent stormwater pollution to the MEP. This evaluation was accomplished through the development and implementation of the Model Municipal Activities Program outlined in the SMP. This program covered all aspects of public agency activities from Corporate Yard SWPCP, infrastructure maintenance and staff training. The objective of this model program is to provide the Co-permittees with:

- A program framework for reducing the adverse impacts that municipal activities may have on water quality;
- An iterative process by which they can effectively monitor and respond to problems as they are discovered; and
- Methodologies to meet permit requirements.

### 7.2 Pollutant Removal Programs

All Co-permittees routinely conduct preventive maintenance activities widely recognized as effective BMPs for pollutant control. These activities include solid waste collection/recycling, drainage facility maintenance, catch basin stenciling and emergency spill response. These efforts work at both removing pollutants from the storm drain system and prevent them from entering it in the first place.

#### *7.2.1 Drainage Facility Maintenance*

As required by the Permit, Co-permittees inspect catch basins and other drainage facilities that are a part of their system. These inspections are scheduled and completed at least once each year before the wet season (Permit-defined wet season begins October 1). Inspections include the visual observation of each catch basin, and open channels to determine if the facility has accumulated trash, sediment or debris requiring removal. All debris removed from the system is disposed of properly and therefore represents pollutants that would have otherwise ended up in a receiving water.

Co-permittees also routinely inspect and clean their drainage facilities during the year on an as-needed basis. "Routine cleaning" for these facilities, means the removal of accumulations of trash, sediment and debris likely be washed downstream with the next runoff event or cause a loss of hydraulic capacity and result in potential flooding. For catch basins, "as-needed cleaning" occurs whenever trash, sediment or debris accumulation is found to be at least 40% of capacity.

## SECTION 7.0 PROGRAM FOR PUBLIC AGENCY ACTIVITIES

Because the design of detention and retention basins includes the accommodation of multi-year accumulations of debris and sediment, “routine cleaning” of these facilities, means the removal of barriers from the inlet/outlet of the facility to restore the operational design and efficiency of the facility. The debris/sediment is cleaned whenever the basin has filled to target levels established in the facility design or subsequently adopted operation and maintenance protocols for the facility. In addition, debris basins designed to capture debris in flows upstream of urban areas are not considered to be detention or retention basins. Debris basins are inspected and maintained in accordance with applicable local policies and procedures appropriate for these facilities. Removal of accumulated debris and sediment is carried out either manually or by mechanical methods and in some cases such as large detention basins require special permits from the Department of Fish and Game or the Regional Water Quality Control Board.

When performing cleaning activities, Co-permittees implement appropriate BMPs to prevent sediments and debris from being washed downstream. By removing this amount of material from the catch basin inlets, open channels and detention basins the Co-permittees make a significant contribution in preventing the passage of these materials in downstream receiving waters. During the reporting period, the Co-permittees tallied the collection of over 146,000 tons of solid debris from drainage facility maintenance activities compared to 59,971 tons of material removed last year.

*100% of catch basins were inspected and cleaned if necessary before the wet season.*

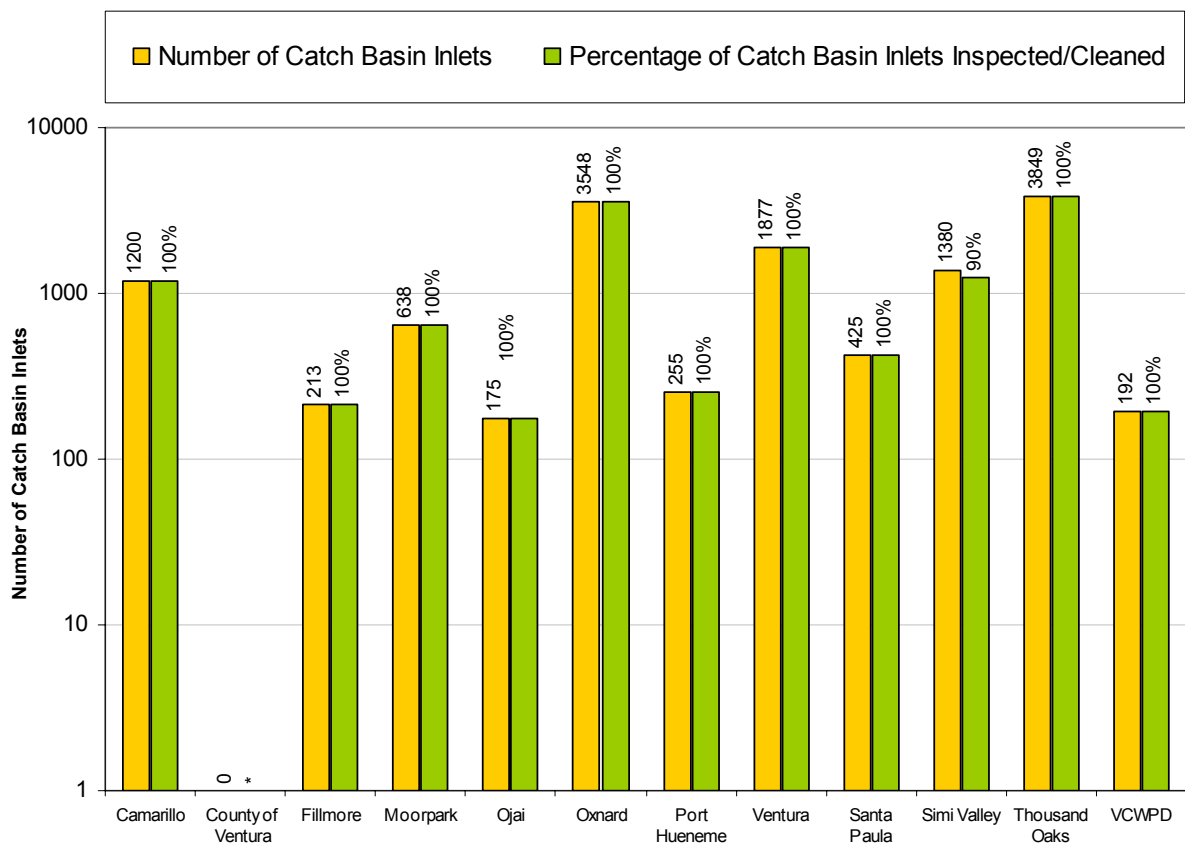


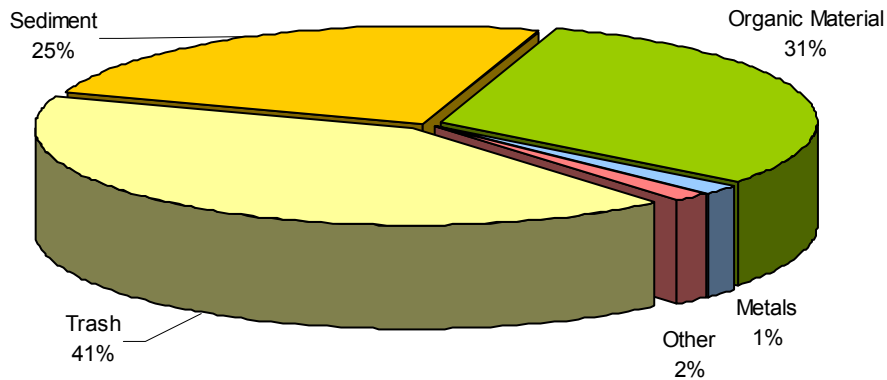
Figure 7-1 Drainage Facilities Cleaned - Catch Basins/Inlets

Figure 7-1 depicts the number of catch basins/inlets inspected and/or cleaned by Co-permittees this reporting period in relation to the total number of facilities. Most of the Co-permittees achieved the

## SECTION 7.0 PROGRAM FOR PUBLIC AGENCY ACTIVITIES

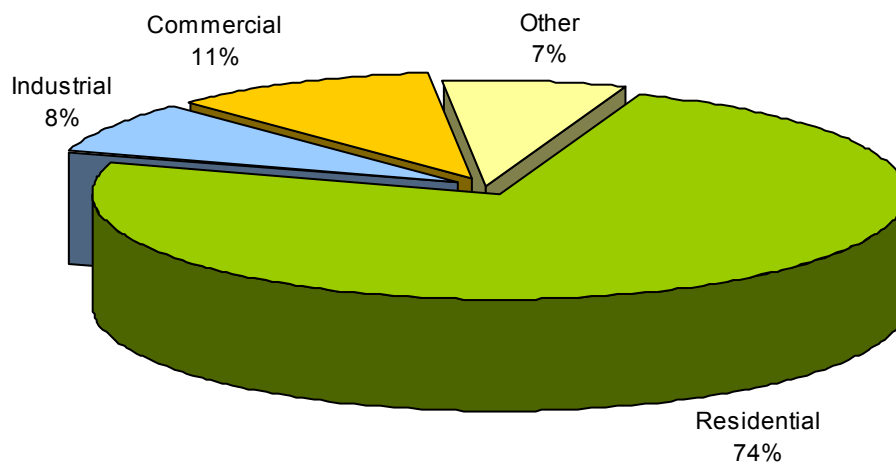
90% performance criteria established in the SMP. The major type of material removed by the Co-permittees is depicted in **Figure 7-2** and the source of this material is depicted in **Figure 7-3**.

*147 tons of debris removed from catch basins countywide.*



**Figure 7-2 Countywide Catch Basin Debris by Material**

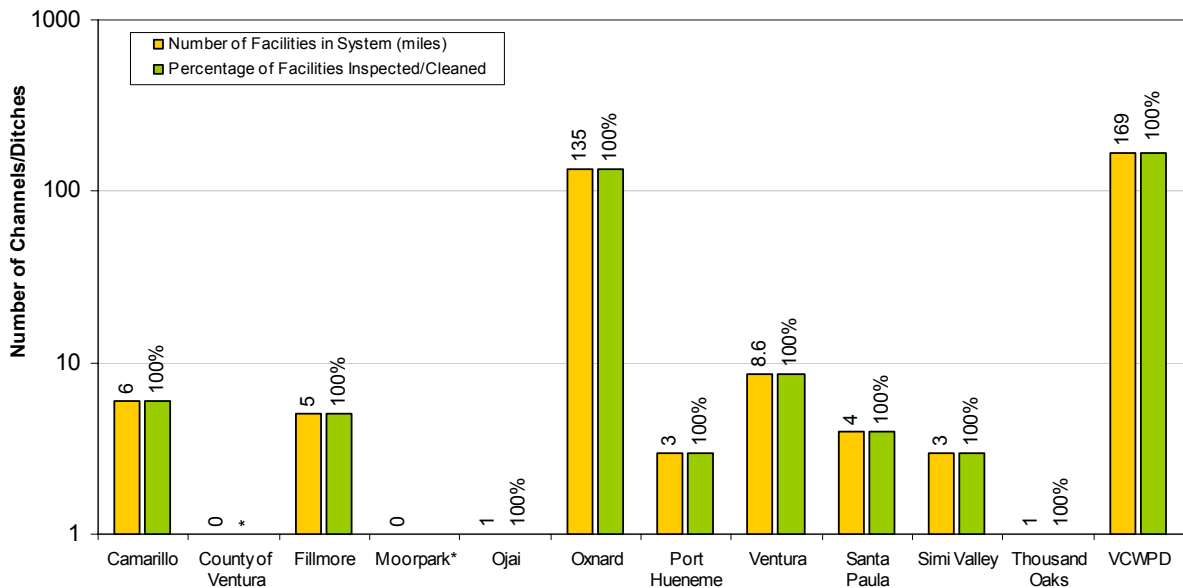
*The majority of debris is from residential sources, where the most catch basins are.*



**Figure 7-3 Countywide Catch Basin Debris by Source**

**SECTION 7.0 PROGRAM FOR PUBLIC AGENCY ACTIVITIES**

*Total Tons of Debris Removed Countywide= 12,754*



**Figure 7-4 Drainage Facilities Cleaned - Channels/Ditches**

\* Note that all channels and/or ditches within the City of Moorpark's jurisdiction are maintained by VCWPD.

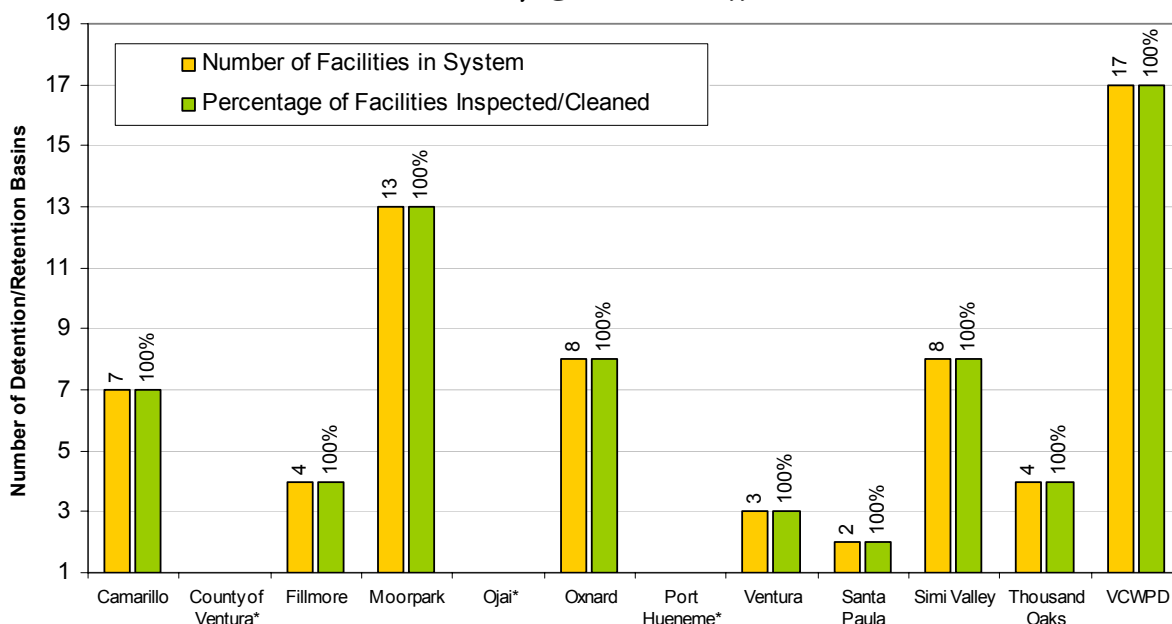
This reporting period the Co-permittees removed 12,592 tons of debris from their detention/retention basins, well above the 1,043 tons removed last year. This variation in debris removal is due to the differing cleaning and maintenance schedules for each Co-permittee.

In addition to the debris removed from catch basin inlets, Co-permittees removed approximately 12,754 tons of debris from their channels/ditches. Variations in the amount of debris removed are to be expected from year to year as storm patterns, population and landscaping differs from year to year. **Figure 7-4** depicts the number of channels/ditches inspected and/or cleaned by Co-permittees this reporting period in relation to the total number of facilities. All of the Co-permittees achieved the 90% performance criteria established in the SMP. **Figure 7-5** depicts the number of facilities inspected and/or cleaned by Co-permittees this reporting year in relation to the total number of facilities. All of the Co-permittees achieved the 90% performance criteria established in the SMP.



## SECTION 7.0 PROGRAM FOR PUBLIC AGENCY ACTIVITIES

### *Over 3500 Total Tons of Debris Removed*



**Figure 7-5 Drainage Facilities Cleaned - Detention/Retention Basins**

\* No facilities within their jurisdiction

### 7.2.2 Roadway Operation and Maintenance

Co-permittees have identified curbed streets within their jurisdiction and have implemented a sweeping program for these streets. At a minimum the streets are swept by the Co-permittees in accordance with the following classifications:

- High traffic downtown areas: sweep at least four times per month
- Moderate traffic collector streets and residential areas: sweep at least six times per year
- Other continuously bermed public streets: sweep at least one time per year prior to wet season

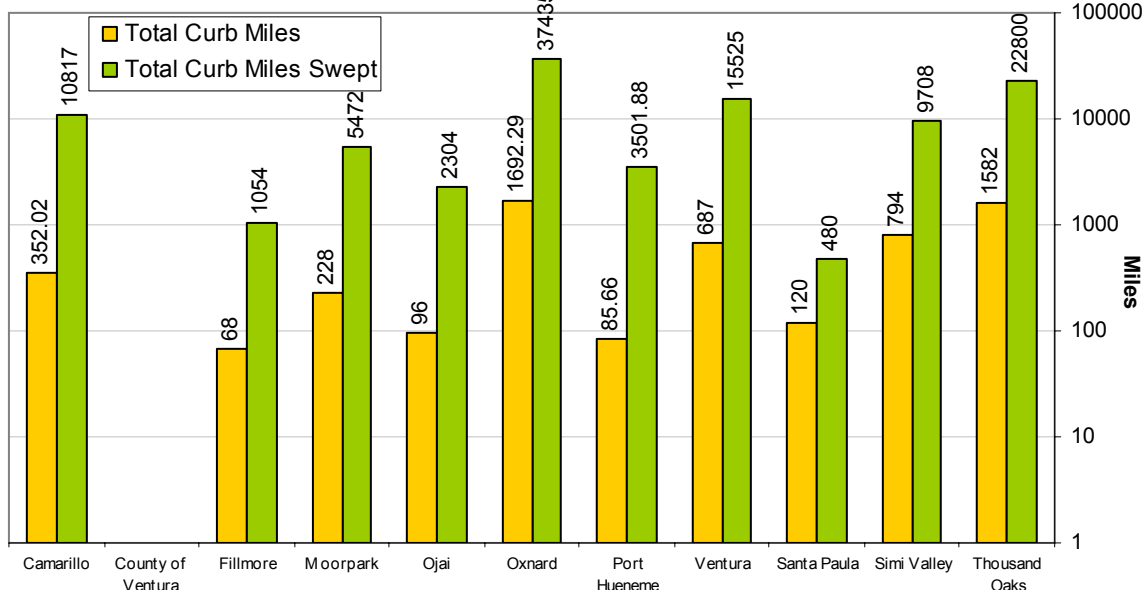
For the purpose of streets in the “other” category, “prior to the wet season” means sweeping the street at least once during the three-month period (July, August, September) immediately prior to the wet season (Permit-defined wet season begins October 1). “Continuously bermed” means a street in the permitted area where a berm exists on both sides of the street without breaks.

To increase the efficiency of the street sweeping, Co-permittees have made an effort to encourage voluntary relocation of street-parked vehicles on scheduled sweeping days. This has been achieved by placing temporary “no stopping” and “no parking” signs, posting permanent street sweeping signs and/or distributing street sweeping schedules to residents and businesses.

**Figure 7-6** indicates the street cleaning effort in total miles cleaned. Co-permittees have made excellent progress in their street cleaning efforts, with most Co-permittees exceeding the performance criteria established in the SMP.

## SECTION 7.0 PROGRAM FOR PUBLIC AGENCY ACTIVITIES

*Over 100,000 curb miles swept countywide.*



**Figure 7-6 Street Cleaning Effort**

\* Note: Total miles swept included sections swept more than once.

### 7.2.3 Emergency Spill Response

All Co-permittees have the authority to control releases to the storm drain system through their individual Water Quality Ordinances and each Co-permittee has designated appropriate staff for enforcing their ordinance. Unfortunately, even with the ordinances in place there are occasions where a spill or release will need to be cleaned up. Cleanup can be as simple as dispatching crew to pick up dumped trash, or a street sweeper or vacuum truck to clean an area or storm drain after a known spill. It could also become a major operation if hazardous or unknown materials are involved.



Emergency responses to water pollution incidents are routinely undertaken by Co-permittee designated staff, and other municipal departments and emergency responders may become involved if the material is a suspected hazard. Although each Co-permittee is responsible for responding to complaints and incidents within their jurisdiction, very often neighboring Co-permittees will coordinate their efforts with either very large events and/or overlapping spills. The Co-permittees focus on responding quickly and efficiently to emergency spills with priority on mitigating the spills that have a potential to adversely impact the environment.

### 7.2.4 Solid Waste Collection/Recycling

The Co-permittees each have solid waste collection programs for public, residential, commercial and industrial areas. Special programs for bulky items and hazardous waste provide the public with legal and economical disposal options and therefore help prevent the illicit disposals that can lead to pollution. The Co-permittees conduct public education outreach on these programs through a variety of methods including community newsletters, radio and television public service announcements, brochures and utility bill inserts. (For more information on solid waste collection/recycling programs see **Section 3**).

## SECTION 7.0 PROGRAM FOR PUBLIC AGENCY ACTIVITIES

### 7.2.5 Dry Weather Diversions

The City of Ventura, with the support of environmental and regulatory partners, obtained Clean Beaches Initiative funding from the State Water Resources Control Board to improve beach water quality at Surfers Point through the design and construction of two dry weather runoff diversions. This stretch of coastline is Ventura's most popular location for body contact with ocean water.

Rather than flowing directly into the ocean, dry weather runoff from the Figueroa Street and California Street storm drains is now being diverted into the sanitary sewer system for treatment at the City's wastewater treatment plant. Initial project activities included the study of field data, and of the existing drainage facilities discharging to beaches within the project area. This effort detailed the drainage system layout, drainage catchment size, average daily discharge volume of dry weather flow, upstream bacteria source areas, and general condition of the storm drain system. A combination weir/screening device was constructed near the end of each drain to intercept dry weather flow from each drain, and a connection to the sanitary sewer was obtained. Construction was completed in December 2006.



*Installation of the two wet wells at the California Street Drain*



*The same site after construction was completed.*

### 7.3 Municipal Activities Program Implementation

A significant portion of the Co-permittees' activities includes the operation and maintenance of municipal infrastructure. These activities have the potential to impact stormwater quality and as such the Co-permittees have implemented a Program for Public Agency Activities. This program addresses the implementation of BMPs to control pollutant discharges to the maximum extent practicable (MEP).

In order to address the Co-permittees' potential impacts on stormwater, the following activities have been targeted:

- Activities at Co-permittee Corporation Yards
- Drainage System Operation and Maintenance Activities
- Roadway Operation and Maintenance Activities
- Pesticide, Herbicide and Fertilizer Application and Use
- Municipal Staff Training

## SECTION 7.0 PROGRAM FOR PUBLIC AGENCY ACTIVITIES

### 7.3.1 Corporation Yards

The Co-permittees utilize corporation yards to support operation and maintenance activities within their jurisdiction. Corporation yards are operated and maintained by the Co-permittees for the following activities or facilities:

- Vehicle and equipment
  - Storage and parking
  - Maintenance
  - Fueling
  - Washing and cleaning
- Sign painting activities
- Bulk material storage areas
- Employee support facilities, such as offices, locker rooms and meeting rooms

**Table 7.1 Co-permittee Corporation Yards**

Co-permittee	Corporation Yard Name	Location	SWPCP Developed & Implemented	SWPCP available on site
Camarillo	Camarillo Corporate Yard	283 South Glenn Drive	Yes	Yes
County of Ventura	El Rio Corporate Yard	682 El Rio Drive	Yes	Yes
	Moorpark Yard	7150 Walnut Cyn. Road	Yes	Yes
	Saticoy Public Works Corporate Yard	11251-A Riverbank Drive Saticoy, CA	Yes	Yes
Fillmore	Fillmore Public Works Yard	711 Sespe Avenue	Yes	Yes
Moorpark	Public Works/Parks Yard	675 Moorpark Avenue	Yes	Yes
Ojai	Ojai Corporate Yard	Signal Street	Yes	Yes
Oxnard	Oxnard Corporate Yard	1060 Pacific Avenue	Yes	Yes
	Regional Recycling Center	111 S. Del Norte Blvd.	Yes	Yes
	Oxnard Water Treatment Yard	251 S. Hayes Avenue	Yes	Yes
Port Hueneme	Municipal Service Center	700B E. Port Hueneme Road	Yes	Yes
	Service Yard Annex	746 Industrial Avenue	Yes	Yes
Ventura	SanJon Corporate Yard	336 SanJon Road	Yes	Yes
Santa Paula	Corporation Street Yard	903 Corporation Street	Yes	Yes
	Palm Avenue Yard	180 South Palm Avenue	Yes	Yes
Simi Valley	Simi Public Service Center	500 W. Los Angeles Avenue	Yes	Yes
Thousand Oaks	Municipal Service Center	1993 Rancho Conejo Blvd.	Yes	Yes
VCWPD	El Rio Corporate Yard	682 El Rio Drive	Yes	Yes
	Moorpark Yard	7150 Walnut Cyn. Road	Yes	Yes
	Saticoy Public Works Corporate Yard	11251-B Riverbank Drive Saticoy, CA	Yes	Yes

## SECTION 7.0 PROGRAM FOR PUBLIC AGENCY ACTIVITIES

### 7.3.2 Storm Water Pollution Control Plan Development

The Permit required the Co-permittees to develop and implement a SWPCP at designated corporation yards by July 27, 2002. As the Principal Co-permittee, VCWPD developed a SWPCP template to be used as a guide by the Co-permittees in the development of their plans for each of the designated corporate yard facilities.

As shown in **Table 7.1 Co-permittee Corporation Yards**, all of the Co-permittees have modified and implemented the model SWPCP to suit their specific site's activities at their corporate yards.

The Co-permittees keep a copy of the SWPCP at the facility site and review it annually to see that information is current and accurate. BMPs that have been implemented are assessed to determine if they are working as planned, and any required changes are noted in the SWPCP.



As specified in the permit and reflected in the SWPCPs all hazardous and toxic waste storage areas are prohibited from discharging untreated stormwater runoff to the storm drain system. Fueling areas, vehicle maintenance and repair areas and temporary street maintenance material and waste areas are also prohibited from discharging untreated stormwater. All vehicle and equipment wash areas are to be self-contained and covered, or equipped with a clarifier and properly connected to the sanitary sewer. These specific site BMP requirements and associated deadlines were discussed and reviewed frequently by the Co-permittees during Public Infrastructure Subcommittee meetings. All of the Co-permittees have met the performance criteria established in the SMP, and have implemented appropriate BMPs to their hazardous and toxic waste storage areas, fueling areas, vehicle maintenance and repair areas, street maintenance material and waste areas.

Once implemented, the SWPCP requires annual inspections of the corporate yards to evaluate the implementation and effectiveness of the SWPCP. In order to facilitate this process, the Public Infrastructure Subcommittee began discussions on what components of the SWPCP should be evaluated and how best to conduct inspections. As a product of these discussions, the Subcommittee developed a model inspection form Co-permittees could implement at their yards. The Co-permittees plan to continue to address SWPCP implementation and annual inspections at the Public Infrastructure Subcommittee and utilize the lessons learned for improvement and inclusion in future inspection activities.

### 7.3.3 Field Maintenance Activities

Street maintenance activities and underground utility work have the potential to discharge pollutants to the storm drain system if appropriate protective measures are not implemented. Therefore, Co-permittees require roadway maintenance staff, roadway maintenance contractors and others to implement BMPs to control discharge of pollutants to the storm drain system as a result of roadway and utility maintenance activities. At a minimum, Co-permittees have included the following BMPs:

- Prohibit saw-cutting during a storm event of 0.25 inches or greater;
- Prohibit the discharge of untreated runoff from temporary or permanent street maintenance material and waste storage areas from entering the storm drain system.

Some Co-permittees contract for their street maintenance work and most issue street cut or similar permits. Co-permittees have addressed work under these contracts or permits by including contract provisions and/or permit conditions requiring street maintenance or repair work comply with the minimum requirements shown above and other BMPs required for protection of water quality. In the

## **SECTION 7.0 PROGRAM FOR PUBLIC AGENCY ACTIVITIES**

event of an emergency and roadway maintenance work must be conducted immediately in order to protect lives or property, Co-permittees make every effort to work in a manner protective of water quality, but public safety is a priority.

### *7.3.4 Pesticide, Herbicide and Fertilizer Application and Use*

The Permit required the Co-permittees to develop and adopt a standardized protocol for the routine and non-routine application of pesticides, herbicides (including pre-emergents) and fertilizers by July 27, 2001. The standardized protocol includes the following minimum requirements to control the discharge of pollutants to stormwater due to pesticide, herbicide and fertilizer application:

- Prohibit the application of pesticides, herbicides and fertilizers during rain events;
- Prohibit the application of pesticide, herbicides and fertilizers within one day of a rain event forecasted to be greater than 0.25 inches except for application of pre-emergents;
- Prohibit the application of pesticides, herbicides and fertilizers after a rain event where water is leaching or running from the application area; and
- Prohibit the application of pesticides, herbicides and fertilizers when water is running off-site from the application site.

In addition, Co-permittees require all staff applying pesticides to be either certified by the California Department of Food and Agriculture, or under the direct on-site supervision of a certified pesticide applicator, as defined in the standardized protocol. Co-permittees have also restricted the purchase and use of pesticides and herbicides to certified staff.

Co-permittees that contract out for pesticide applications have included contract provisions requiring the contract applicator meet all requirements of this program, including compliance with the standardized protocol, the prohibitions and requirements for certification and supervision of pesticide applicators.

### *7.3.5 Aquatic Pesticide NPDES Permit*

In March 2001, the Ninth Circuit Court of Appeals determined that discharges of pollutants from the use of aquatic pesticides to waters of the United States may require coverage under an NPDES permit (General Permit No. CAG990003). Coverage under this General Permit is for public entities that discharge pollutants to water bodies associated with the application of aquatic pesticides for resource or pest management. Ventura County Watershed Protection District obtained coverage under this permit even though they are already covered by a municipal NPDES permit.

During the 2006-07 reporting period, VCWPD contracted with Larry Walker Associates (LWA) for the implementation of an Aquatic Pesticide Application Plan (APAP) to fulfill the requirements of this permit. Also during the reporting year VCWPD filed for and was granted Notice of Termination by the State Water Resources Control Board.

### *7.3.6 Alternative Weed and Pest Management*

Co-permittees often use alternative weed and pest management practices such as beneficial insects, mechanical weed removal and annual tree pruning which helps to reduce disease and insect infestation. Mulch and efficient water management is also used to inhibit the growth of weeds and thereby reducing the need for herbicides. The City of Camarillo has a program to use mulch and wood chips on sloped areas which has the added benefit of reducing erosion.

The City of Ventura employs hot organic foam in place of pesticides from a Waipuna machine that cost \$26,000. The foam solution contains natural plant sugar extracts from corn and coconut heated to 210 degrees. The fully biodegradable, slightly sticky foam is sprayed on weeds and plant beds through equipment that looks like a vacuum cleaner. There are additional costs beyond purchasing

## SECTION 7.0 PROGRAM FOR PUBLIC AGENCY ACTIVITIES

the equipment; applying the hot foam takes more time than chemical sprays and can require repeated applications. The foam can be used in windy conditions unlike chemical sprays, which can drift and pose dangers. Because the foam consists of a nontoxic extract, there's no need to post signs, worry about pets consuming it or file paperwork associated with the use of chemical pesticides. The city of Ventura has pledged to eliminate pesticide use in all its parks within five years.

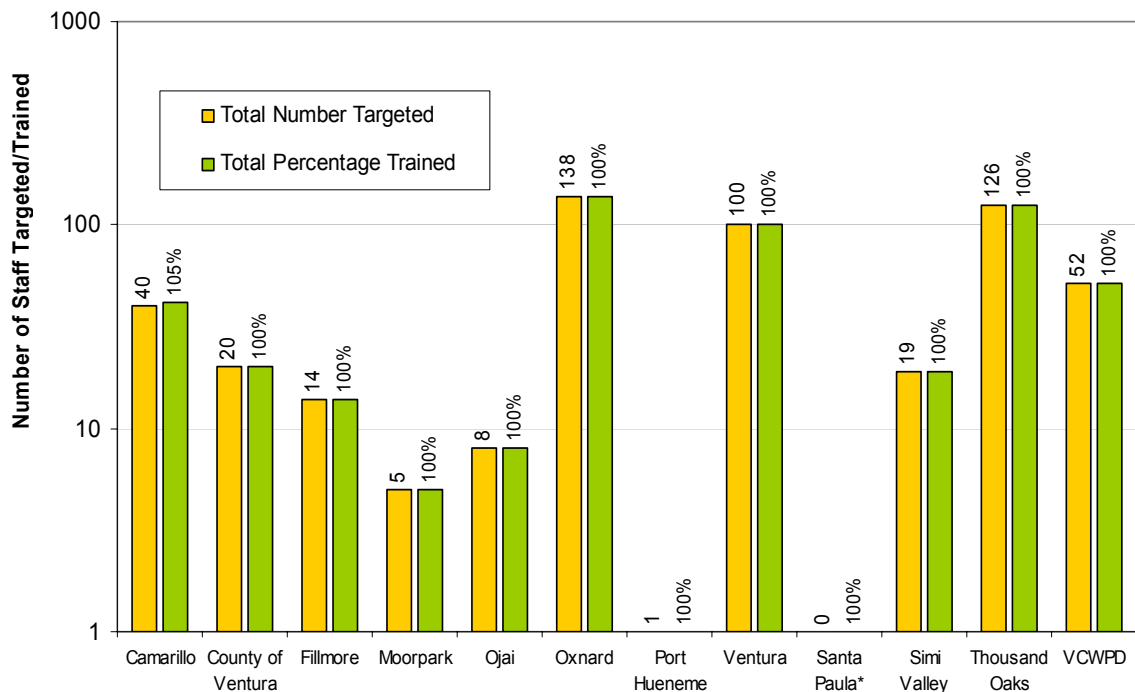
### 7.3.7 Stormwater Quality Staff Training

Each Co-permittee targets staff based on the type of stormwater quality and pollution issues they typically encounter during the performance of their regular maintenance activities. Targeted staff included those who perform activities in the following areas: stormwater maintenance, drainage and flood control systems, streets and roads, parks and public landscaping and corporation yards.

Training methods vary amongst Co-permittees and range from informal meetings, to formal classroom training or self-guided training. The Co-permittees also train staff on the prevention, detection and investigation of illicit discharges and illegal connections (ID/IC). (See **Section 8** for more information regarding ID/IC training).

During the reporting period, the Co-permittees trained 523 municipal staff in stormwater management, SWPCPs, illicit discharge, response and non-stormwater discharges. **Figure 7-7** depicts the number of staff trained in the program area for each Co-permittee. All Co-permittees met or exceeded the performance criterion established in the SMP and trained a minimum of 90% of targeted employees.

*100 percent of targeted staff received stormwater training.*



**Figure 7-7 Public Agency Staff Trained**

\* No targeted staff this Permit Year



## SECTION 8.0 PROGRAM FOR ILLICIT DISCHARGES/CONNECTIONS

### 8.1 Program Description

Illicit discharges and illegal connections can be concentrated sources of contamination to municipal storm drain systems. An illicit discharge is any intentional or unintentional discharge to a municipal storm drain that is either not composed entirely of stormwater, not prohibited in our NPDES permit (Part 1, A, 2, b), or not covered by a NPDES permit. To reduce this source of pollution the Permittees have developed and implemented programs for the identification and elimination of illicit discharges and illegal connections to the municipal separate stormwater sewer system (MS4). Key components of these programs are public reporting, incidence response and enforcement actions.



Example of an Illegal Connection

An illegal connection to the storm drain system is an undocumented and/or un-permitted physical connection from a facility to the storm drain system. An illicit discharge refers to the disposal of non-stormwater materials such as paint or waste oil into the storm drain or the discharge of waste streams containing pollutants to the storm drain system. Categories of non-stormwater discharges not prohibited (exempted or conditionally exempted) under the Permit (and detailed in the SMP) are listed in **Table 8.1**.

**Table 8.1 Discharges Identified as Not a Source of Pollutants by Permit**

<b>Non-stormwater Discharges</b>
Water line Flushing
Discharges from potable water sources
Foundation drains
Air conditioning condensate
Water from crawl space pumps
Reclaimed and potable irrigation water
De-chlorinated swimming pool discharges
Individual residential car washing
Sidewalk washing
Discharges or flows from emergency fire fighting activities

The term “illicit discharges” used in this program includes several categories as follows:

- Incidental spills or disposal of wastes or non-stormwater. These may be intentional, unintentional or accidental and would typically enter the storm drain system directly through drain inlets, catch basins;
- Discharges of sanitary sewage due to overflows or leaks; usually incidental but may be continuous;
- Discharges of prohibited non-stormwater other than through an illegal connection. These typically occur as surface runoff from outside the public right-of-way (e.g., area washdown from an industrial site).

To meet the goals and objectives of this program, the Co-permittees have developed a comprehensive illicit discharge/illegal connection program, which includes the following components:



## SECTION 8.0 PROGRAM FOR ILLICIT DISCHARGES/CONNECTIONS

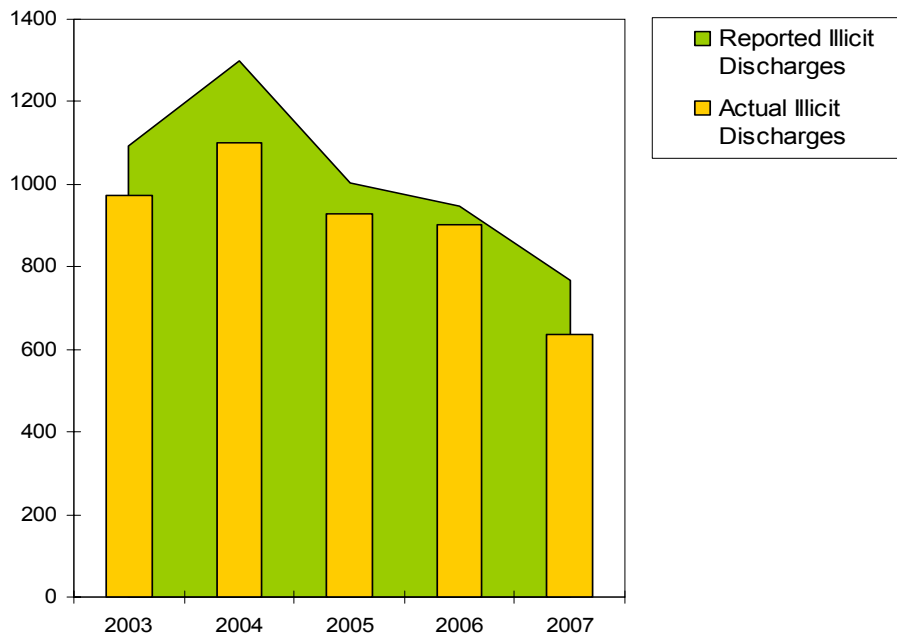
- Public Reporting
- Incidence Response
- Inspections
- Enforcement
- Illicit Discharges/Illegal Connections Staff Training

### 8.1.1 Public Reporting

Many illicit discharges are identified through public reporting of the situation. The goal of this component is to educate the public and facilitate public reporting of illicit discharges and illegal connections. The baseline objectives are:

- Implement a program to receive calls from the public regarding potential illicit discharges and illegal connections, communicate and coordinate a response, perform all necessary follow up to the complaint, and maintain documentation.
- Provide educational material on non-stormwater discharges and why they are harmful to streams, and oceans and how to report them;
- Target the land development/construction community with educational material and provide workshops on stormwater quality regulations and illicit discharge prevention response; and
- Target the industrial/commercial community with educational material and provide workshops on stormwater quality regulations and illicit discharge prevention and response.

*Reports of illicit discharges have gone down in the last five years.*



**Figure 8-1 Illicit Discharge/Dumping Response**

## **SECTION 8.0 PROGRAM FOR ILLICIT DISCHARGES/CONNECTIONS**

### *8.1.2 Incidence Response*

Timely responses to reports of illicit discharges are necessary to have the opportunity to determine the source, identify the responsible party and initiate any cleanup to reduce pollutants from such discharge to the MEP. The baseline objectives include:

- Initiate response within 24 hours of receiving a report of discharge from the public, other agencies or observed by a Co-permittee field staff during the course of their normal daily activities;
- Investigate to determine the nature and source of discharge and eliminate through voluntary termination or enforcement action (when possible); and
- Educate identified responsible parties and initiate enforcement actions as necessary.

Some Co-permittees have prioritized problem areas (where geographical and/or activity-related) for inspection, cleanup and enforcement using the methods defined in the program.

### *8.1.3 Inspections*

The discovery of potential or likely illicit discharges through business inspections will reduce the number of overall illicit discharges. Inspections of infrastructure can also detect and eliminate illegal connections to the MS4 and reduce pollutants discharged through such connections to the MEP. The baseline objectives include:

- Inspect the storm drain system to identify illegal connections during scheduled infrastructure maintenance by personnel;
- Connections to the storm drain system that are suspected or observed to be a source of an illicit discharge will be investigated to determine the origin and nature of the discharge;
- Use business inspections to identify and resolve potential illicit discharges and illegal connections; and
- Educate the business community on the environmental and legal consequences of illicit discharges.

### *8.1.4 Enforcement and Education*

Every time a responsible party is identified for an illicit discharge there is an opportunity for education and enforcement. Enforcement activity begins at the appropriate level as determined by the Co-permittees' authorized representative. For incidents more severe or threatening at the outset, enforcement starts at an increased level. Often times a verbal warning and requiring cleanup of the discharge is effective. Education of targeted audiences occurs through inspections of illicit discharges, businesses and construction activities. The importance of eliminating or mitigating non-stormwater discharges to local streams and channels is emphasized.

### *8.1.5 Illicit Discharge/Illegal Connections Staff Training*

The goal of training is to both have effective inspections and to raise the level of awareness on illegal connections and illegal discharges of other staff in the field. When staff is properly trained on how to identify illicit discharges and/or illegal connections, more non-stormwater discharges and/or connections to the storm drain system will be accurately identified, reported and corrected.

## SECTION 8.0 PROGRAM FOR ILLICIT DISCHARGES/CONNECTIONS

### 8.2 Program Implementation

#### 8.2.1 Source Control

The Co-permittees have a number of programs facilitating the detection of sources of illicit discharges. These programs include business and industrial facility site visits, drainage facility inspection, water quality monitoring and the wide distribution of public education materials that provide phone numbers and web addresses to encourage the reporting of spills.

Staff performing routine maintenance activities within the municipal storm drain system and Co-permittee field personnel are trained to report suspected problems and/or discharges to the system. In addition to inspections, the Co-permittees receive notifications from a variety of sources such as the public and regional and/or local agencies.



Example of Illegal Dumping

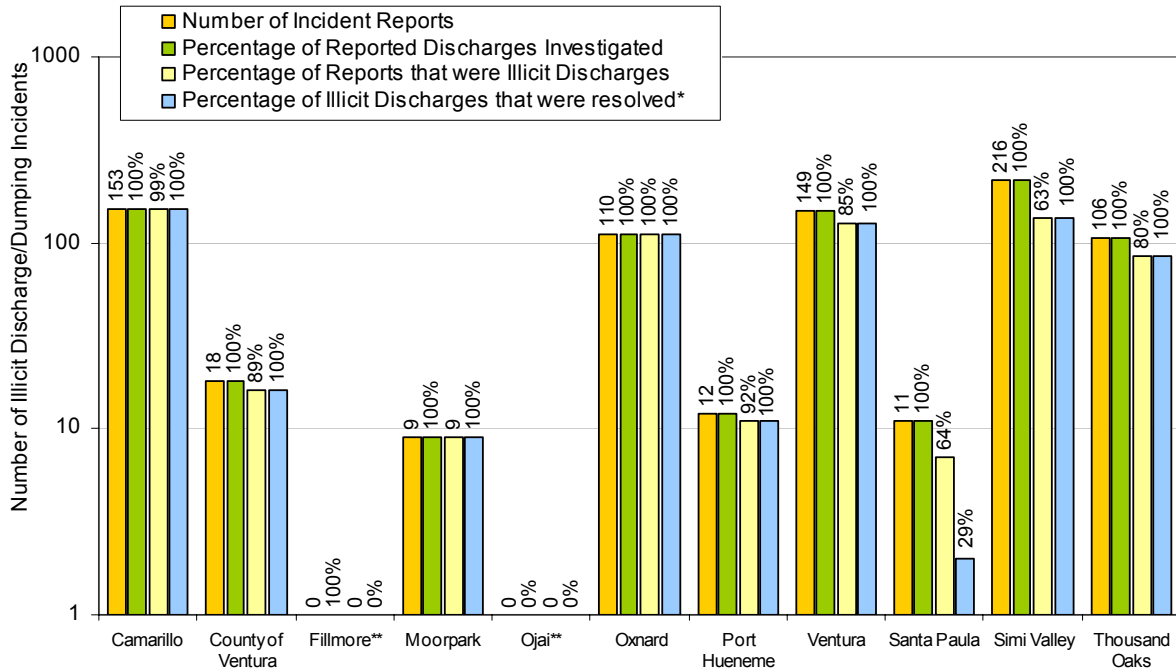
This reporting year, the Co-permittees continued to:

- Investigate the cause, determine the nature and estimate the amount of discharge for each reported illicit discharge/dumping incidents;
- Determine when possible the type of materials and source type for each reported illicit discharge/dumping incidents;
- Determine when possible the probable cause for the illicit discharge/dumping
- Conduct enforcement or educational activities to prevent similar discharges from reoccurring;
- Verify that reported illicit discharge/dumping incidents were terminated and/or cleaned;
- Refer illicit discharge/dumping or illegal connections to other agencies when appropriate;
- Identify and eliminate illegal connections; and
- Provide educational materials and contact numbers for reporting illicit discharge/dumping when conducting stormwater inspections.

**Figure 8-2** and **Figure 8-3** show the results of the Co-permittees' efforts. All of the illicit discharges reported were resolved countywide (meaning they were cleaned up; referred to another agency; and/or educational material was distributed). The number of incidents investigated and addressed by the Co-permittees reporting discharges exceeds the 90% performance criteria established in the SMP. Note: These figures represent incidents Co-permittees responded to as part of the Stormwater Management Program. Incidents addressed by EHD Hazardous Waste Program or local CUPA may not be included in these figures.

**SECTION 8.0 PROGRAM FOR ILLICIT DISCHARGES/CONNECTIONS**

*100% response to reports of illicit discharges and 100% of actual illicit discharges were resolved.*



**Figure 8-2 Illicit Discharge/Dumping Response**

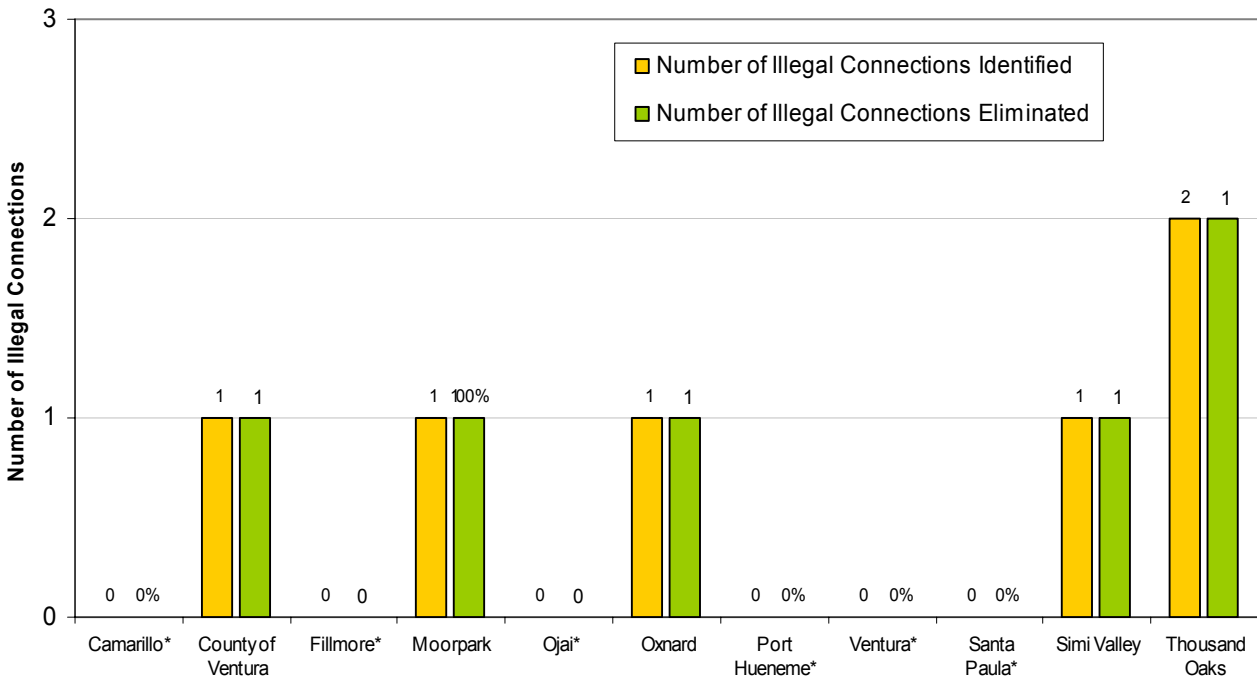
\* No illicit Discharges reported this year.

**Figure 8-3** indicates the number of illegal connections identified and eliminated. Each Co-permittee detects and eliminates illegal connections within its municipal storm drain system. Any illegal connection identified by the Co-permittees during routine inspections or reported by a third party is investigated. Appropriate actions are then taken to approve undocumented connections by permit procedure and/or pursue removal of those connections determined to be illicit connections and therefore not permissible.

If the discharge from an identified connection is determined to consist only of stormwater or exempted non-stormwater, the connection will be allowed to remain and will no longer be considered an illegal connection. Co-permittees may elect to issue a permit for the connection or allow the connection to remain if information on the connection is documented; or the discharge will be permitted through a separate NPDES permit; or the connection will be terminated through voluntary action or enforcement proceedings.

**SECTION 8.0 PROGRAM FOR ILLICIT DISCHARGES/CONNECTIONS**

*100% of illegal connections were eliminated.*



**Figure 8-3 Illegal Connection Response**

\* No illegal connections reported this permit year.

If evidence of an illegal discharge is detected in an MS4 and the source is not apparent, a source investigation may be conducted to determine if the discharge is being conveyed through an illegal connection. Depending on the type of illicit connection detected, the Co-permittees may eliminate the connection by means of appropriate legal procedures. Follow-up compliance is conducted to ensure any required abatement activities have been successfully and adequately implemented.

Owners of existing drains without appropriate permits (including encroachment permits) are notified to comply. For those drains where the owner is unresponsive or cannot be identified, each Co-permittee is responsible for deciding whether to formally accept the connection as part of their public drainage system or cap it off.

**8.2.2 Source Determination**

As part of their field investigation of reported illicit discharges/dumping incidents, the Co-permittees attempt to determine the material's source. This investigation begins at the surface drainage system in the vicinity of suspected illicit discharges. This may include accessible areas in the public right-of-way adjacent to residences and businesses, catch basins, open channels near known points of discharge, and upstream manholes. If the source and responsible party can be determined, Co-permittees take one or all of the following actions when appropriate:

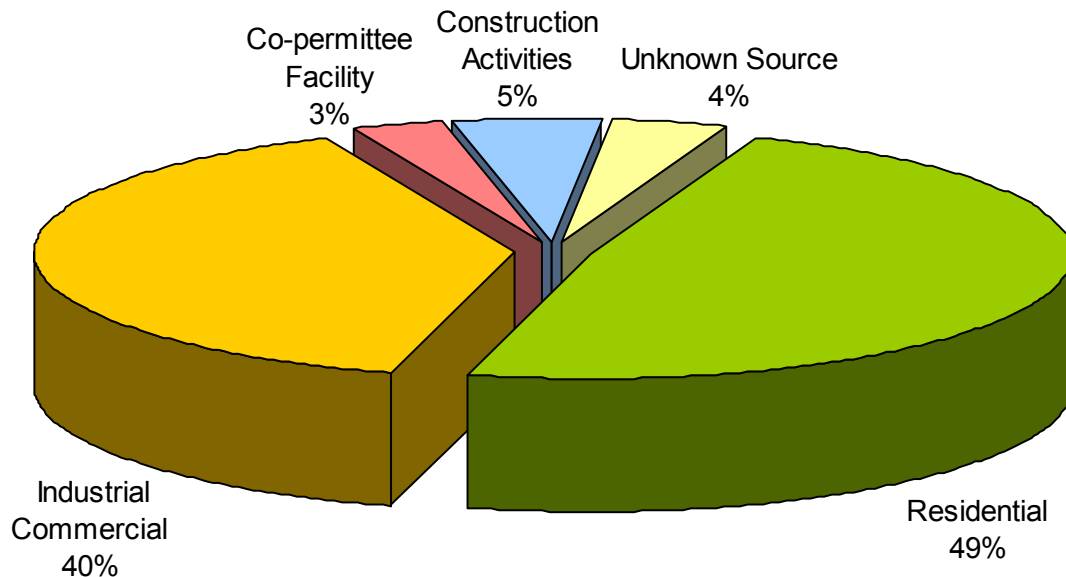
- Voluntary cleanup/termination;
- Initiate enforcement procedures;
- Take steps to prevent similar discharges from reoccurring.

## SECTION 8.0 PROGRAM FOR ILLICIT DISCHARGES/CONNECTIONS

When the source cannot be determined, the appropriate department or contractor will be notified to contain and clean up the material. Because these situations and material can vary, procedures vary as well. The following are steps that in general are taken by Co-permittees to determine sources:

- Verify location of the spill/discharge;
- Containment and cleanup;
- Investigate the cause (look for origin);
- Determine the nature and estimate the amount of illicit discharge/dumped material;
- When appropriate, refer documented non-stormwater discharges/dumping or illegal connections to the proper agency for investigation; and
- If appropriate, notify the RWQCB and/other proper agencies.

*The majority of illicit discharges are from residential and commercial/industrial sources.*

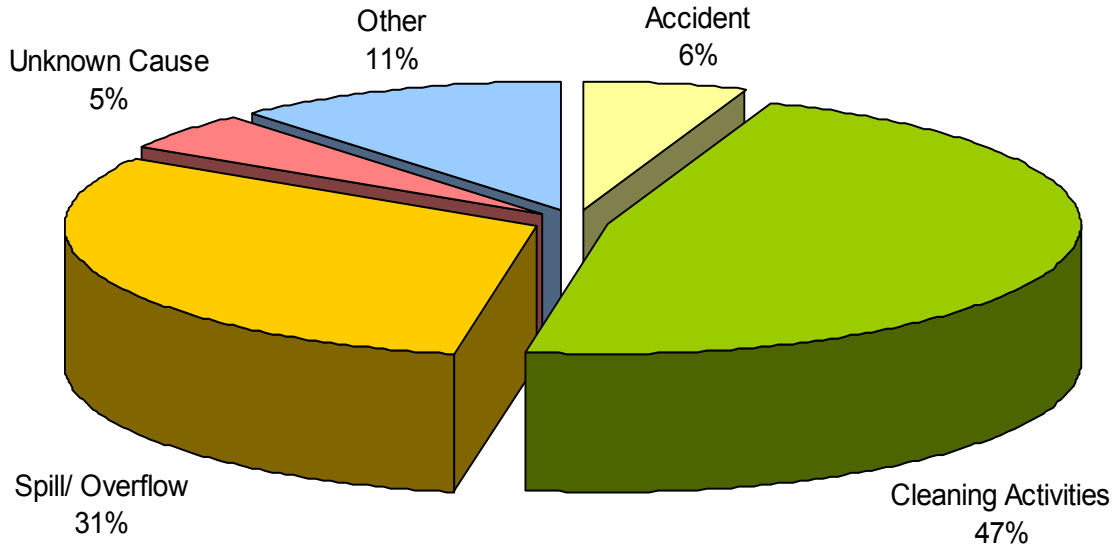


**Figure 8-4 Source of Material Discharged during Illicit Discharge Events Countywide**

**Figure 8-5** indicates the likely cause for illicit discharges countywide. The vast majority of incidents resulted from cleaning activities, which the Co-permittees define as *any activity intended to wash, tidy up or make clean*. In order to reduce the number of illicit discharges and to prevent similar incidents from reoccurring, the Co-permittees have taken a variety of actions. Some Co-permittees provide additional training to field staff (such as Building Inspectors, Engineering Inspectors, maintenance personnel) to look for “potential” discharges. When “potential” discharges are found, Co-permittees provide educational material to the appropriate resident, business owner, etc. In addition, other Co-permittees distribute educational material with all encroachment and building permits. Other Co-permittees publish articles in local magazines regarding pool maintenance, vehicle maintenance and homeowner projects. Some Co-permittees also distribute letters, brochures and informational door hangers directly to homeowners during residential street sweeps in known problem areas.

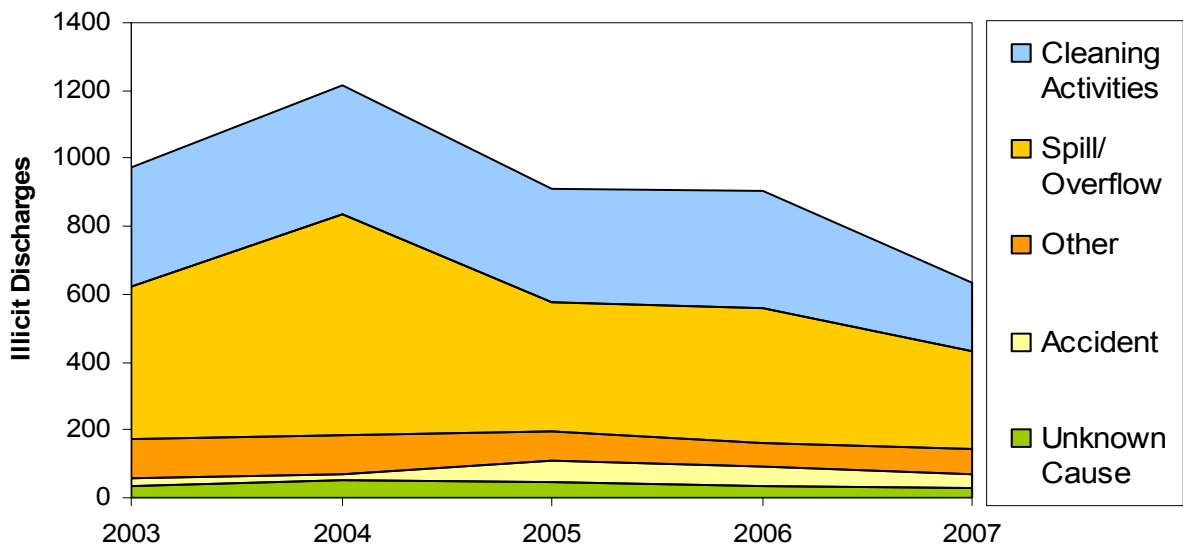
**SECTION 8.0 PROGRAM FOR ILLICIT DISCHARGES/CONNECTIONS**

*Cleaning activities are still a major source of illicit discharges.*



**Figure 8-5 Probable Cause of Illicit Discharges Countywide**

*Illicit discharges due to cleaning activities trends down as public behavior changes.*

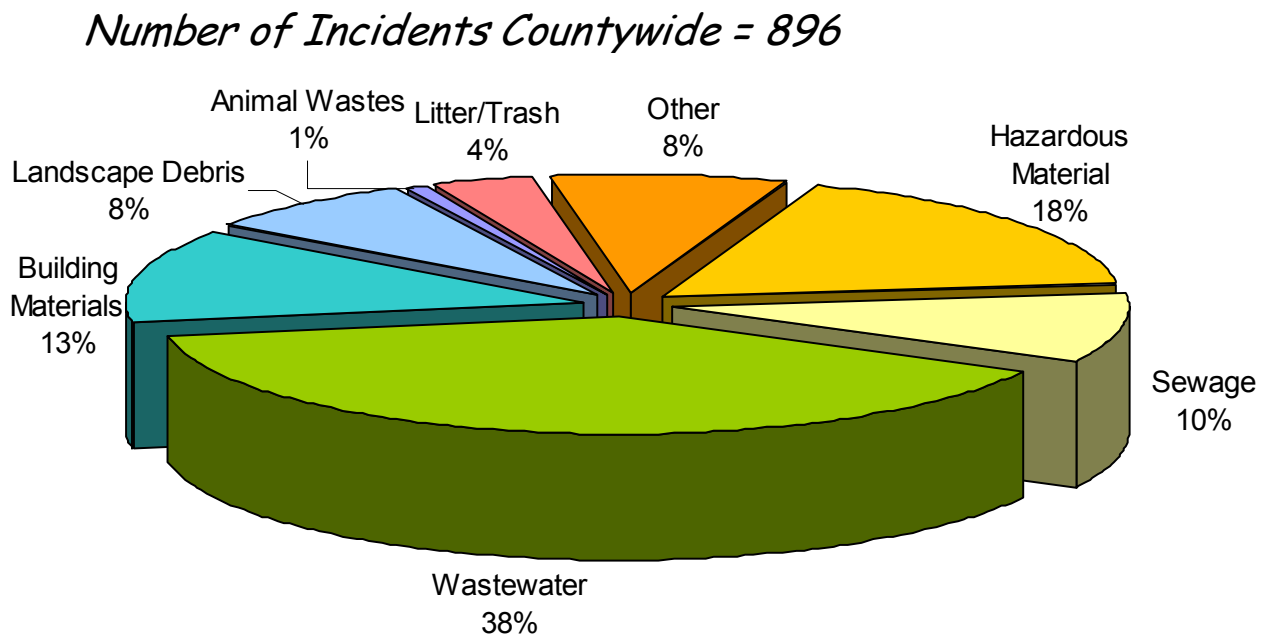


**Figure 8-6 Cause of illicit discharges over past five years**

## SECTION 8.0 PROGRAM FOR ILLICIT DISCHARGES/CONNECTIONS

It is anticipated that over time there will be a shift in the cause of illicit discharges as the public becomes more educated and changes their behavior. The number due to cleaning activities should drop, and that has been observed. Also, the number due to spills and overflows should lower as better practices are employed to prevent them. Ultimately only discharges due to accidents cannot be changed by the program's efforts. **Figure 8-6** shows how the cause of illicit discharges has changed over the years.

**Figure 8-7** shows the type of material discharged. The categories "wastewater", "building materials", and "hazardous material" comprise the majority of material discharged. For more information on categories for material type see **Table 8.2**.



**Figure 8-7 Type of Material Discharged during Illicit Discharge Events Countywide**

Major sources of illicit discharge/dumping incidents were attributed to residential (49%) and industrial/commercial (40%). Since these two sources account for 89% of all illicit discharges, the Co-permittees plan to continue targeting business facilities and residents for comprehensive educational outreach. In addition, Co-permittees continue to cross-train all targeted staff on how to identify and report illicit discharges.

**Table 8.2** details the categories used by the Co-permittees to describe the material type of an illicit discharge. The definitions of these various categories are solely for facilitating the Co-permittees with their characterization of material type for annual report consistency. The Co-permittees are aware these definitions are by no means all-inclusive nor necessarily how another agency or person would define these categories. The Co-permittees used a variety of resources for assistance in defining these categories including the Ventura County Environmental Health and the RWQCB websites, and the Environmental Protection Agency's glossary of terms and educational outreach materials.



## SECTION 8.0 PROGRAM FOR ILLICIT DISCHARGES/CONNECTIONS

Material Type & Definitions	
TYPE	DEFINITION
<b>Hazardous Material</b>	By-products of society that can pose a substantial or potential hazard to human health or environment when improperly managed. Posses at least one of the four following characteristics (ignitability, corrosivity, reactivity, or toxicity), or is identified as a listed waste (e.g., oil, used anti-freeze, hydraulic fluid)
<b>Sewage</b>	The waste and wastewater produced by residential and commercial sources and discharged into sewers, includes the sludge produced by Publicly Owned Treatment Works.
<b>Wastewater</b>	The spent or used water from a home, community, farm or industry that contains dissolved or suspended matter.
<b>Building Materials</b>	Any debris associated with construction activities used to construct a building and/or stand/alone facility, such as plaster, dry-wall, nails, wood, etc.
<b>Landscape Debris</b>	Excessive eroded soils, sediment and/or organic materials.
<b>Animal Wastes</b>	Discharge from confinement facilities, kennels, pens, recreational facilities, stables, show facilities and residential yards.
<b>Litter/Trash</b>	Synthetic consumer by-product
<b>Other</b>	Any remaining materials that do not fit into the above mentioned categories.

**Table 8.2 Illicit Discharge Material Type**

### 8.2.3 Enforcement

Co-permittees continue to implement enforcement procedures to eliminate illicit discharges and illegal connections available through their legal authority of their respective ordinances. Most enforcement processes follow a common sequence. These typically include:

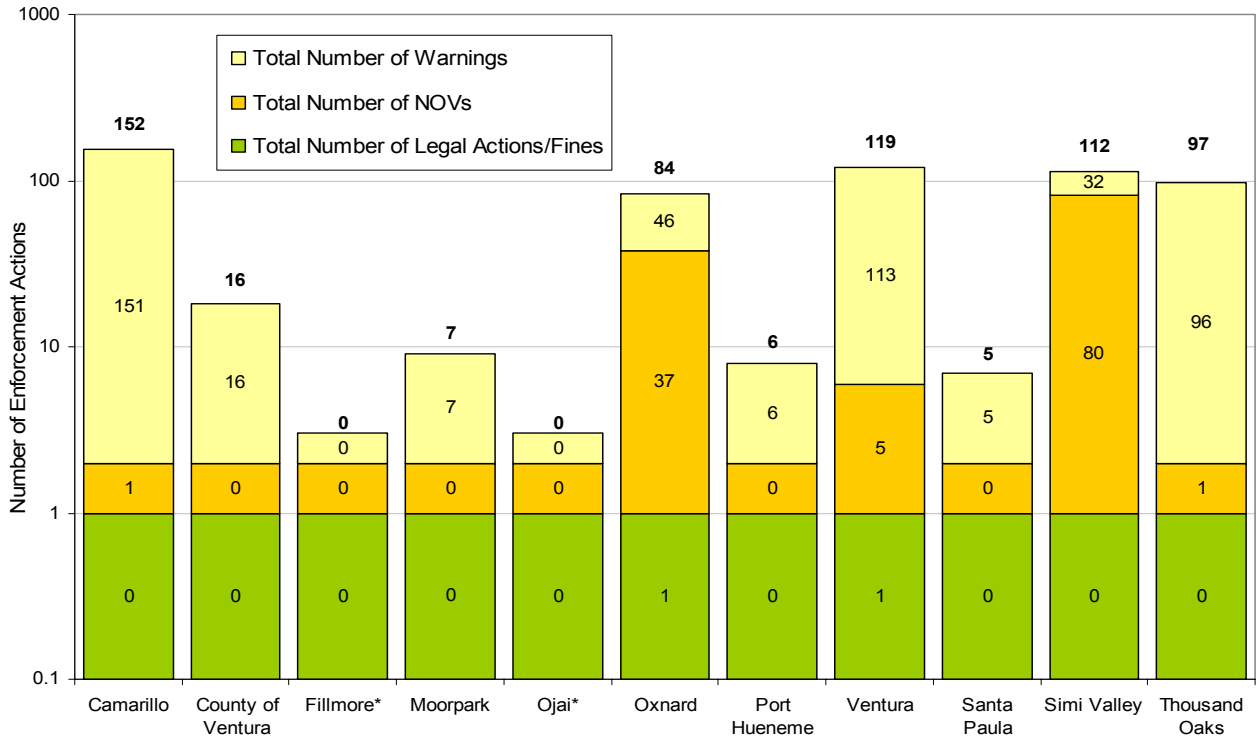
- Verbal or written warnings for minor violations;
- Formal notice of violation or non-compliance with compliance actions and time frames;
- Cease and desist or similar order to comply; and
- Specific remedies such as civil penalties (e.g., infraction), non-voluntary termination with cost recovery, or referral for criminal penalties or further legal action.

Enforcement activity begins at the appropriate level as determined by the Co-permittees' authorized representative. For incidents more severe or threatening at the outset, enforcement starts at an increased level. Enforcement steps are accelerated if there is evidence of a clear failure to act or an increase in the severity of the discharge. Enforcement actions for violating any of the provisions of the Co-permittees' ordinances may include any of the following or a combination thereof:

- Criminal Penalties
- Monetary punishment
- Imprisonment
- Civil Penalties

## SECTION 8.0 PROGRAM FOR ILLICIT DISCHARGES/CONNECTIONS

**Figure 8-8** and **8-9** indicate the number and type of enforcement actions taken by the Co-permittees in response to reported illicit discharge/dumping events during this reporting period. The data presented in **Figure 8-8** indicates most Co-permittees issued some form of enforcement action when resolving an illicit discharge and/or dumping event. A total of 652 verified illicit discharges were reported countywide and Co-permittees issued enforcement actions on 92% of these incidents.



**Figure 8-8 Number of Enforcement Actions**

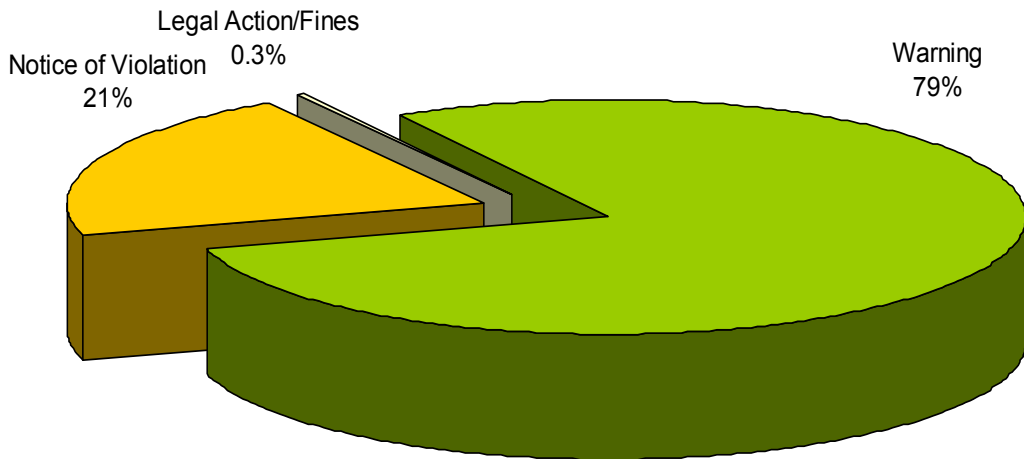
\* No enforcement action taken.

Note: Due to the wide range of number of discharges across the different Co-permittees it was necessary to present this on a logarithmic scale. This does not allow accurate representation of values of one or zero.

As indicated in **Figure 8-9**, the vast majority of enforcement actions consisted of both verbal and written warnings of violation. Last reporting period had more enforcement actions, but this was due to there being more illicit discharges to enforce against. This year, the Co-permittees issued a total of 124 Notice of Violations (21%), 472 warnings (79%) and 2 legal actions. No monetary fines were collected by the Co-permittees this year. This continued enforcement effort underscores the Co-permittees high level of expectations from its residential and business communities. After twelve years of stormwater educational outreach, the Co-permittees believe that additional tools, such as Notice of Violations (NOVs) and fines are appropriate in certain instances to achieve compliance.

## SECTION 8.0 PROGRAM FOR ILLICIT DISCHARGES/CONNECTIONS

### *Number of Enforcement Actions Countywide = 598*



**Figure 8-9 Types of Enforcement Actions taken Countywide**

In addition, the Co-permittees continue to utilize a database of reported illicit discharge incidents that includes the following information for each event:

- Date of initial inspection
- Type of material discharged
- Source type of discharge
- Probable cause of discharge
- Date of follow-up inspection
- Date of conclusion/clean up/removal/follow up/education
- Enforcement taken action

A printed copy of the Co-permittees' database is attached in Appendix 2. The Co-permittees annually update the database with their activities for the current reporting year and provide a copy as part of the Annual Report.

#### 8.2.4 Education and Outreach

Stormwater pollution prevention is most easily and cost effectively achieved through education and awareness. Over the last five years the number of reported illicit discharges and actual illicit discharges has been trending downward as shown in **figure 8-1**. This is remarkable because over that same time there has been countywide outreach materials with reporting phone numbers distributed to educate the public on how to report discharges. This reporting year, Co-permittees continue to distribute educational material describing illicit discharges, and providing contact numbers for reporting illicit discharges during inspections to automotive, food service and construction sites.

Ongoing Co-permittees illicit discharge educational and outreach efforts:

- The City of Ventura implemented an innovative means to provide city employees and residents with a tool to report illicit discharges. The city developed and distributed to all city vehicles a static-cling windshield sticker that displays the city's Illicit Discharge Hotline phone number and a flyer describing illicit discharges and encouraging employee participation in this program.

## SECTION 8.0 PROGRAM FOR ILLICIT DISCHARGES/CONNECTIONS

- The City of Camarillo identified the phone number to report illicit discharges on the catch basin markers designed to discourage dumping. This combination of two permit-required activities (provide an illicit discharge reporting number to the public and stencil storm drains with a “no dump” message) has proven to be an effective approach, and has proven a great success for the city in their efforts to improve illicit discharge reporting. The city plans to implement the markers citywide.
- The City of Simi Valley on several occasions performed sweeps of streets or neighborhoods where illicit discharges were common. They distributed brochures, BMP fact sheets and informational door hangers during these sweeps in an effort to address localized stormwater issues. They have also incorporated stormwater criteria into the pretreatment inspections to aid in identifying illegal connections and stopping illicit discharges before they happen.
- Many Co-permittees host and fund household hazardous waste collection events for their residents. The City of Camarillo operates a monthly program for collection household hazardous waste serving on an average over 200 participants each month and collecting up to 30,000 pounds of toxic waste that may otherwise have been placed in the trash or illegally dumped. Also, the City co-sponsored an Electronic Waste Event in February 2007 and collected 43 tons of Ewaste - this event was open to anyone in the County, not just City of Camarillo residents.

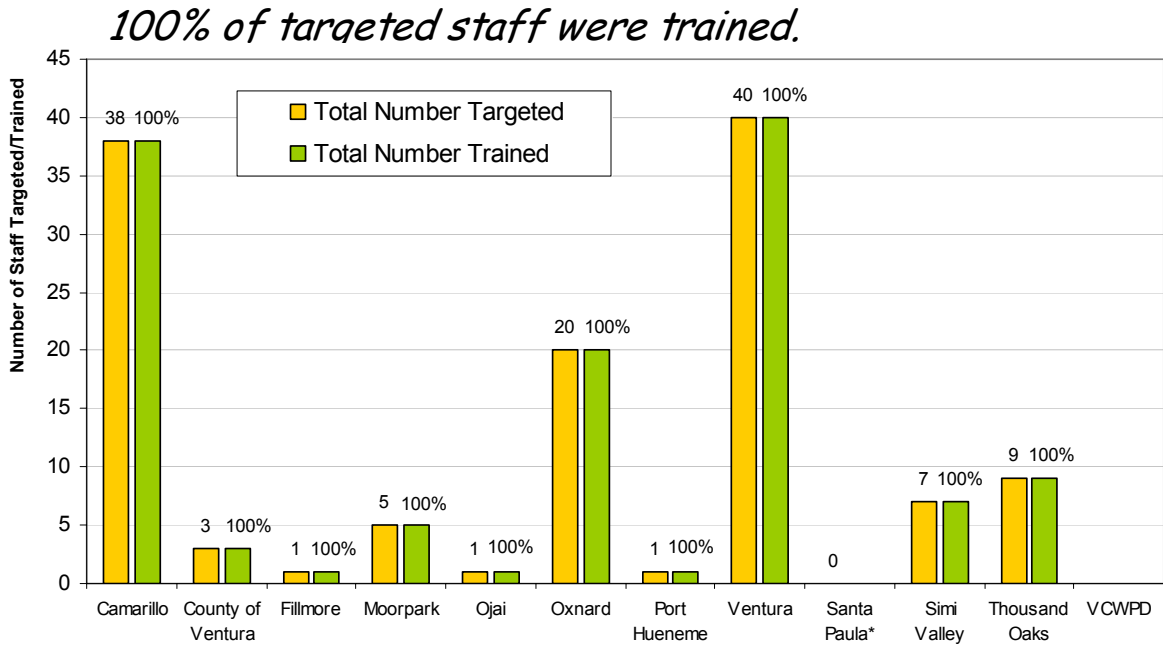
Details on the number of educational contacts made during this reporting period are included in **Section 4** (Program for Industrial/Commercial Business) and **Section 6** (Program for Construction Sites).

### 8.2.5 Stormwater Quality Staff Training

Each Co-permittee targets staff based on the type of stormwater quality and pollution issues they may encounter. Targeted staff included illicit discharge inspectors, drainage, roadway, landscape and facilities staff, industrial pretreatment inspectors and code enforcement officers. Training is incorporated with existing business inspection, construction site, and public agency activity programs.

Staff is trained in a manner that provides adequate knowledge for effective illicit discharge identification, investigation, reporting and/or clean up. Training was achieved in a variety of ways, including informal “tailgate” meetings, formal classroom training and/or self-guided training methods. During this reporting period, Co-permittees trained 162 municipal staff on illicit discharge response and non-stormwater discharges. **Figure 8-10** depicts the number of staff trained. All of the eleven Co-permittees exceeded the performance criterion established in the SMP, and trained more than the 90% of targeted employees.

**SECTION 8.0 PROGRAM FOR ILLICIT DISCHARGES/CONNECTIONS**



**Figure 8-10 Illicit Discharge/Illegal Connection Staff Training**

## SECTION 9.0 WATER QUALITY MONITORING

### 9.1 Program Summary

Pursuant to NPDES Permit No. CAS004002, the Ventura Countywide Stormwater Quality Management Program (Management Program) must submit a Stormwater Monitoring Report annually by October 1<sup>st</sup> summarizing results of water quality monitoring conducted during the monitoring year. Consistent with this requirement the Management Program has prepared this Report to satisfy the permit requirements as well as to assess the effectiveness of the overall Ventura Countywide Stormwater Monitoring Program (Stormwater Monitoring Program).



This report provides an investigation of stormwater program effectiveness, characterizes the surface water quality of Ventura County, and summarizes water quality data for monitoring conducted during the 2006/07 season. Analysis of samples collected at various monitoring sites throughout the watershed provides information to assess the impact of stormwater runoff and helps characterize the status of surface water quality for watersheds in Ventura County. The monitoring aids in the identification of pollutant sources as well as the evaluation of the Stormwater Monitoring Program's effectiveness. Evaluating the Stormwater Monitoring Program's effectiveness allows for changes to be made and continual improvement of the overall Program. This adaptive management strategy improves the quality and effectiveness of the Stormwater Monitoring Program and minimizes the impact of stormwater pollutant discharges throughout the watersheds.

For the 2006/07 monitoring season, several key points have been identified and are highlighted below.

- **This report presents and discusses the water quality monitoring data collected during four wet weather and two dry weather events monitored by the Stormwater Monitoring Program.** The four wet weather events included monitoring at the Stormwater Monitoring Program's Land Use (Event 1), Receiving Water (Event 1), and Mass Emission (all events) sites, collectively representing all three watersheds (Calleguas Creek, Santa Clara River, and Ventura River) in which the Stormwater Monitoring Program conducts its water quality monitoring activities. The two dry weather events included monitoring only at the Mass Emission stations. The Stormwater Monitoring Program conducted a thorough QA/QC evaluation of the environmental and QA/QC results generated from its analysis of water quality samples and found the resultant data set to have achieved a 95.8% success rate in meeting program data quality objectives. Overall, the 2006/07 monitoring season produced a high quality data set in terms of the low percentage of qualified data, as well as the low reporting levels achieved by all laboratories analyzing the Stormwater Monitoring Program's water quality samples.
- **VCWPD employed the services of CRG Marine Laboratories, Inc., in order to achieve low detection limits for the majority of the water quality parameters evaluated by the Stormwater Monitoring Program.** As a means of improving the detection capability of various constituents found in the water quality samples collected by the VCWPD, the

## SECTION 9.0 WATER QUALITY MONITORING

Stormwater Monitoring Program has again employed the services of CRG Marine Laboratories, Inc (CRG). CRG began analyzing the majority of the water quality parameters evaluated by the Stormwater Monitoring Program at the beginning of the 2003/04 monitoring season. CRG is known for their ability to measure analytes at concentrations much lower than most water quality laboratories. During the current monitoring year, CRG was able to achieve detection limits for trace organic compounds (i.e., organics, PCBs, and pesticides) that are 100 – 1000 times lower than laboratories used in the past. Additionally, CRG typically achieved detection limits for metals that are 10 times lower than historic levels for this class of constituent. Additional laboratories used by VCWPD also possess the ability to measure target analytes at very low levels.

- **VCWPD staff evaluated environmental and QA/QC water chemistry data using the *Data Quality Evaluation Plan* and *Data Quality Evaluation Standard Operating Procedures* guidance documents.** The *Data Quality Evaluation Plan* (DQEP) describes the multiple step process used by VCWPD staff to identify errors, inconsistencies, or other problems potentially associated with Stormwater Monitoring Program data. Furthermore, the DQEP describes the various data quality objectives (DQOs) to which environmental and QA/QC data are compared as part of the Stormwater Monitoring Program's quality assurance/quality control program. The *Data Quality Evaluation Standard Operating Procedures* document is a set of written instructions that describes both technical and administrative operational elements undertaken by the Stormwater Monitoring Program in carrying out its DQEP.
- **VCWPD used its water quality database to store and analyze stormwater quality data.** The Stormwater Monitoring Program has invested approximately \$150,000 in the past four years to develop a water quality database to further expedite, standardize, and enhance the Stormwater Monitoring Program's data management and data analysis activities. Key database attributes include automatic importation and cursory evaluation of electronically formatted data, semi-automated QA/QC evaluation, automated comparison of the Stormwater Monitoring Program's data to water quality objectives, and a wide array of hard copy and electronic data reporting features. The database has allowed the Stormwater Monitoring Program to improve its overall data management effort by providing staff with a robust data management tool for the storage, analysis, and reporting of stormwater monitoring data.
- **Event 2 composite sample taken at the Mass Emission site ME-CC (Calleguas) was lost due to breakage.** The automatic sampler was programmed appropriately and water quality samples were taken. However, when VCWPD staff went to retrieve the samples at the completion of the storm, the 20-L composite bottle was broken and the sample determined to be contaminated. Therefore, the only results available for this location for this event are those derived from grab samples. An additional sampling event was planned, but due to this being an extremely dry year, no additional qualifying events occurred.
- **Acute toxicity of *Ceriodaphnia dubia* (water flea) was observed during the first wet weather event at Receiving Water sites W-3 and W-4, as well as at agricultural Land Use site A-1.** In accordance with permit requirements, a TIE was initiated for each of these sites. The toxicity testing laboratory was unable to identify the toxicant(s) for the W-4 (Revolon) sample because the sample's toxicity dissipated by the time the TIE was initiated. For that sample, Aquatic Bioassay & Consulting Laboratories, Inc. (ABC) concluded that "the toxicant was most likely associated with volatile compound(s)." The toxic signal persisted in the samples collected at A-1 (Wood) and W-3 (La Vista), enabling the laboratory to conduct Phase I TIEs for these sites. For the A-1 (Wood) site, ABC concluded that particulate-associated compounds and non-polar organic compounds contributed to the toxicity observed in the A-1 (Wood) sample. For the W-3 (La Vista) site, the analyzing laboratory concluded that particulate-associated compounds, non-polar organic compounds, and

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chlorine or other oxidants contributed to the toxicity observed in the W-3 (La Vista) sample. The land use surrounding both Receiving Water sites W-3 and W-4 and Land Use site A-1 is dominated by agriculture. No toxicity was observed at the other sites.

- **Chronic toxicity of *Strongylocentrotus purpuratus* (Purple Sea Urchin) was observed during one wet weather event and one dry weather event at Mass Emission stations ME-SCR and ME-VR2.** Results from the February 2007 wet event did not trigger TIE initiation because two consecutive wet weather samples did not exhibit toxicity. Results from the May 2007 dry event triggered a TIE, but by the time the baseline test for the TIE was performed, toxicity in both samples was reduced and the TIEs were terminated.
- **Elevated pollutant concentrations were observed at all monitoring sites during one or more monitored wet weather storm events, as well as at all three Mass Emission stations during one or more dry weather events.** Constituent concentrations above Los Angeles Region Basin Plan and/or California Toxics Rule water quality objectives were measured at the following monitoring sites:

### Mass Emission Sites

<b>ME-CC</b>	<b>Anion:</b> Chloride (dry) <b>Bacteriological:</b> <i>E. coli</i> (wet), Fecal Coliform (wet) <b>Conventional:</b> Total Dissolved Solids (dry) <b>Metal:</b> Aluminum, Mercury (wet) <b>Organic:</b> Benzo(b)fluoranthene (wet), Benzo(k)fluoranthene (wet), Bis(2-ethylhexyl)phthalate (wet and dry), Chrysene (wet), Indeno(1,2,3-cd)pyrene (wet) <b>Pesticide:</b> 4,4'-DDD (wet), 4,4'-DDE (wet and dry)
<b>ME-VR2</b>	<b>Anion:</b> Chloride (wet) <b>Bacteriological:</b> <i>E. coli</i> (wet), Fecal Coliform (wet) <b>Conventional:</b> Total Dissolved Solids (wet) <b>Organic:</b> Bis(2-ethylhexyl)phthalate (wet and dry), Hexachlorobenzene (wet) <b>Pesticide:</b> 4,4'-DDD (wet), 4,4'-DDE (wet)
<b>ME-SCR</b>	<b>Anion:</b> Chloride (wet and dry) <b>Bacteriological:</b> <i>E. coli</i> (wet), Fecal Coliform (wet) <b>Conventional:</b> Total Dissolved Solids (wet) <b>Metal:</b> Aluminum (wet), Cadmium (wet), Selenium (dry) <b>Organic:</b> Benzo(a)anthracene (wet), Benzo(b)fluoranthene (wet), Bis(2-ethylhexyl)phthalate (wet and dry), Chrysene (wet)

### Receiving Water Sites

<b>W-3</b>	<b>Bacteriological:</b> <i>E. coli</i> <b>Conventional:</b> Total Dissolved Solids <b>Metal:</b> Aluminum, Cadmium, Mercury <b>Nutrient:</b> Nitrate as N <b>Organic:</b> Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Bis(2-ethylhexyl)phthalate, Chrysene, Hexachlorobenzene, Indeno(1,2,3-cd)pyrene <b>Pesticide:</b> 4,4'-DDD, 4,4'-DDE
<b>W-4</b>	<b>Bacteriological:</b> <i>E. coli</i> , Fecal Coliform <b>Conventional:</b> Total Dissolved Solids <b>Metal:</b> Aluminum, Mercury



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**Nutrient:** Nitrate as N

**Organic:** Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Bis(2-ethylhexyl)phthalate, Chrysene, Dibenz(a,h)anthracene, Hexachlorobenzene, Indeno(1,2,3-cd)pyrene

**Pesticide:** 4,4'-DDD, 4,4'-DDE

Even though receiving water objectives are not directly applicable to constituent concentrations measured at Land Use monitoring stations, the Stormwater Monitoring Program performed comparisons between Land Use water quality data and Los Angeles Region Basin Plan and California Toxics Rule objectives as a means of identifying potential pollutants of concern.

### Land Use Sites

**A-1**

**Bacteriological:** *E. coli*

**Conventional:** Total Dissolved Solids

**Metal:** Aluminum

**Organic:** Bis(2-ethylhexyl)phthalate

### Bioassessment Monitoring

The following were the main findings for the 2006 benthic macroinvertebrate (BMI) survey of the Ventura River Watershed:

- **Physical habitat conditions at the 14 sampling sites ranged from poor to optimal.** The best habitat scores were at the locations on the upper main stem of the Ventura River, upper San Antonio Creek, and Matilija Creek. The lowest scores were at locations on the lower Ventura River and Canada Larga Creek.
- **Based on the Southern California Index of Biological Integrity (So CA IBI), the aquatic health of the Ventura Watershed during 2006 ranged from poor to good.** One site on Matilija Creek ranked in the good range, while two sites on the Ventura River and one site each on Canada Larga and San Antonio Creek ranked in the poor range. The remaining ten sites in the watershed ranked in the fair range. The sites that ranked in the poor range were located in areas of the watershed that were impacted by either a large transient human population on the Ventura River or was located downstream of an erosion control project in the vicinity of grazing and stables.

