

PEÑASQUITOS WATERSHED
URBAN RUNOFF MANAGEMENT PROGRAM

FISCAL YEAR 2004
ANNUAL REPORT

Prepared by:

City of San Diego, Lead Agency (Ended 1/17/05)

City of Del Mar, Default/Interim Lead Agency (Commenced 1/17/05)

*City of Poway
County of San Diego*

TABLE OF CONTENTS

TABLE OF CONTENTS	I
CERTIFIED STATEMENTS	III
EXECUTIVE SUMMARY	iv
1.0 Introduction.....	iv
2.0 Report Organization & Summary	iv
SECTION I INTRODUCTION	1
1.0 Background.....	1
2.0 Program Approach.....	1
3.0 Municipal Permit Requirements	2
SECTION II IMPLEMENTATION.....	3
1.0 Water Quality Activities	3
1.1 Data Collection & Analysis.....	3
1.2 Erosion Control Measures	3
1.3 Los Peñasquitos Watershed Management Plan.....	5
2.0 Land Use Planning Activities.....	6
2.1 Jurisdictional Planning Activities.....	6
2.1.1 County of San Diego – General Plan	6
2.1.2 City of San Diego – General Plan	7
2.2 Watershed-Based Land Use Planning Mechanisms.....	9
2.2.1 Land Use Professional’s Reference Manual: “Stormwater Quality and Watershed Protection - Looking at Alternative Development Policies”	9
2.2.2 Watershed Management Planning	9
3.0 Educational Activities	9
3.1 Summary of Watershed Education Activities.....	9
3.2 Summary of Watershed Education and Outreach Conducted	9
3.3 Education Action Plan	9
3.3.1 Public Presentations & Media	9
3.3.2 Regional Watershed Brochure: What is a Watershed?	10
3.3.3 Regional Watershed Poster: What Watershed Do You Live In?	10
3.3.4 School Presentations: Water Quality and Watersheds	10
3.3.5 Integrated Pest Management Campaign.....	10
3.3.6 Community Events	11
4.0 Public Participation Activities	11

4.1	Copermittee and Stakeholder Collaboration/Public Participation.....	12
4.2	Integration and Participation in Local Planning Activities.....	12
4.3	Project Clean Water – Peñasquitos Watershed Website.....	12
4.4	Stakeholder Workgroups	13
4.4.1	City of San Diego Clean Water Task Force	13
4.4.2	City Council Presentations	14
SECTION III	WATER QUALITY ASSESSMENT.....	15
1.0	2004 Peñasquitos Water Quality Assessment	15
1.1	Constituents of Concern Summary – 2004	15
1.2	Updated List of High Priority Water Quality Issues	17
SECTION IV	EFFECTIVENESS ASSESSMENT.....	20
1.0	Programmatic Assessment	20
1.1.1	Level 1 Effectiveness (Permit Requirements)	21
1.1.2	Level 2 Effectiveness (Changes in Knowledge / Awareness)	23
1.1.3	Level 3 Effectiveness (Behavioral Change / BMP Implementation)	23
1.1.4	Level 4-6 Effectiveness (Load Reduction and Changes in Water Quality).....	23
SECTION V	CONCLUSIONS & RECOMMENDATIONS.....	25
1.0	Conclusions	25
2.0	Recommendations	26
2.1	Recommended Program Improvements.....	26
APPENDIX A.....	A	
APPENDIX B.....	B	
APPENDIX C.....	C	
APPENDIX D.....	D	

CERTIFIED STATEMENTS

Signed certification statements for the following Copermittees are located in Appendix A.1 of this report.

Peñasquitos Watershed Copermittees

City of San Diego, Lead Agency (Ended 1/17/05)

City of Del Mar, Default/Interim Lead Agency (Commenced 1/17/05)

*City of Poway
County of San Diego*

EXECUTIVE SUMMARY

1.0 Introduction

This Annual Report represents the Copermitees¹ efforts during the Fiscal Year (FY) 2004 reporting period (July 1, 2003 to June 30, 2004) to develop and implement the Peñasquitos Watershed Urban Runoff Management Program (Peñasquitos Watershed URMP). This reporting period covers the first full year that the program has been in place. The Municipalities are proud to report that progress has been made and the Copermitees will continue to implement, improve and enhance these programs and activities over the next several years.

2.0 Report Organization & Summary

The Peñasquitos Watershed URMP Annual Report consists of a total of five sections, and is organized as follows. A summary of the highlights from each section is also provided. Issues common to all or multiple watersheds have been moved to the UNIFIED Watershed URMP. This report is organized to focus on activities that are specific to the Peñasquitos Watershed URMP. Responses to the Regional Water Quality Control Board's (Regional Board) October 8, 2004 13267 letter are incorporated within the document, as requested. The first category of comments in the 13267 letter has been addressed within standard sections of the Annual Report. Responses to the second category of comments have been addressed in writing (included as Appendix B).

Section I – Introduction

Section I of the Annual Report provides a summary of the program background, the program approach to improving water quality, the regulatory requirements that the Copermitees must meet and a general overview of the organization and content of the report.

Section II – Activity Implementation

The “Plan of Action” Section of the Peñasquitos Watershed URMP identifies several activities and programs aimed at improving the quality of surface storm water runoff within the watershed. These activities focused specifically in the areas of water quality, land use planning, education, and public participation. Section II of this Annual Report provides a status report of the work completed on these activities and programs.

Section III – Water Quality Assessment

¹ Copermitees refers to the municipalities in the San Diego region subject to the National Pollutant Discharge Elimination System [NPDES] Municipal Storm Water Permit for San Diego Copermitees [Order No. 2001-01, NPDES No. CAS 0108758, “Municipal Permit”]

For 2004, the assessment of the Peñasquitos watershed yielded one constituent of concern with a high frequency of occurrence: total dissolved solids. A potential constituent of concern with a medium frequency of occurrence designation was fecal coliform.

The constituents of concern for the Peñasquitos watershed identified in 2004 were compared to the previous two-year's water quality assessments (2002 and 2003). The following changes were noted for the Peñasquitos Watershed in 2004 as compared to the previous assessments.

- ✓ Total dissolved solids (TDS) is unchanged as an apparent constituent of concern with a high frequency of occurrence.
- ✓ Fecal coliform and copper remain as potential constituents of concern.
- ✓ Oil and grease is a new potential constituent of concern.
- ✓ Diazinon, chlorpyrifos, turbidity and *Enterococcus* are less apparent as constituents of concern.

Updated List of Constituents of Concern

Based on the combined analysis of the 2002, 2003 and 2004 assessments, turbidity/sedimentation, total dissolved solids, diazinon, fecal coliform, chlorpyrifos, copper, *Enterococcus* and benthic community degradation remain as constituents (or conditions) of concern, and oil and grease is identified as a new constituent of concern.

Updated List of High Priority Water Quality Issues

The data set considered to date is too limited to draw strong conclusions about high priority water quality issues and associated actions. In addition, developing an effective list of activities that properly identifies and addresses significant water quality issues requires additional validation. Therefore, the high priority water quality issue identified in the Peñasquitos Watershed URMP remains the same in FY 04: *Limiting recreation opportunities in coastal waters due to potential for pathogens, and limiting habitat value of marine and estuarine habitat.* These high priority issues and the constituents of concern identified in the 2002, 2003 and 2004 watershed water quality assessments will continue to be tracked.

Section IV – Effectiveness Assessment

Section IV provides an initial assessment of the implementation and effectiveness of the Peñasquitos Watershed URMP for FY 2004. This assessment covers the first full year during which the watershed standards of the Municipal Permit (National Pollutant Discharge Elimination System [NPDES] Municipal Storm Water Permit for San Diego Copermittees [Order No. 2001-01, NPDES No. CAS 0108758]) were in effect.

Section V – Conclusions and Recommendations

Section V provides a conclusion of the Annual Report and makes recommendations for improving future reporting efforts, as summarized below.

Between July 2003 and June 2004, the Copermittees in the Peñasquitos watershed continued to implement the FY 2004 actions planned in response to the water quality

assessment identified in the Peñasquitos Watershed URMP. However, mounting fiscal restraints have affected the lead Copermittee to the extent that it is no longer able to fulfill its leadership role. Therefore, the City of San Diego and other Copermittees relied on efforts that maximized water quality benefits, such as regional and jurisdictional education programs that target constituents affecting watersheds rather than specific watersheds, and a consolidated water quality monitoring program for all nine of the region's watersheds. Without specifically identifying the Peñasquitos watershed, these activities benefited water quality in the absence of the copermittees' ability to implement a more focused approach.

These challenges make it clear that a continued, as well as thoughtful, collaboration and integration between regional, watershed and jurisdictional programs are key to the development of quality programs that are cost-effective, innovative, and responsive to the public's needs. However, the copermittees also recognize they can leverage and complement these jurisdictional and regional watershed resources by re-tooling the existing program to adopt a more watershed-specific approach. To begin this task, the copermittees will convene a series of meetings in February 2005 to explore ways to implement a more targeted program while balancing fiscal challenges.

1.0 Background

The National Pollutant Discharge Elimination System (NPDES) Municipal Storm Water Permit for San Diego Copermittees (Order No. 2001-01, NPDES No. CAS 0108758, hereafter referred to as “Municipal Permit”) requires that the Copermittees within the Peñasquitos watershed collaborate in the development of a watershed-based program that addresses surface storm water quality. The rationale for this need is simple; urban runoff does not follow jurisdictional boundaries, and often travels through many jurisdictions while flowing to receiving waters. Therefore, the actions of various municipalities within a watershed regarding urban runoff can have a cumulative impact upon shared receiving waters. The Municipal Permit directs the municipalities who have land use authority within the Peñasquitos watershed to collaborate in developing and implementing a Watershed URMP for the watershed. The purpose of the Watershed URMP is to identify and address the highest priority water quality issues/pollutants in each watershed. In addition, the Municipal Permit requires that the Copermittees develop activities that address education, public participation and land use planning.

2.0 Program Approach

In broad terms, the overall purpose of the Peñasquitos Watershed URMP is to address the surface storm water quality issues and any ongoing degradation within the Peñasquitos watershed. Fundamental to both establishing specific Watershed URMP goals and measuring achievement, is the understanding that long-term solutions to water quality issues will be more effective if the issues are correctly and comprehensively identified and characterized. Based upon the proper identification and targeted characterization, true “watershed-approach” solutions can then be applied.

The Peñasquitos Watershed URMP’s overall program goal and specific objectives that the Peñasquitos watershed Copermittees will strive to meet are listed below.

**TO POSITIVELY AFFECT THE WATER QUALITY OF THE PEÑASQUITOS WATERSHED WHILE
BALANCING ECONOMIC, SOCIAL AND ENVIRONMENTAL CONSTRAINTS.**

- Objective #1: *Develop/expand methods to assess and improve water quality within the watershed.*
- Objective #2: *Integrate watershed principles into land use planning.*
- Objective #3: *Enhance public understanding of sources of water pollution within the watershed.*
- Objective #4: *Encourage and enhance stakeholder involvement within the watershed.*

3.0 Municipal Permit Requirements

The Municipal Permit requires that each Watershed URMP Annual Report shall, at a minimum, contain the following:

- Comprehensive description of all activities conducted by the watershed Copermittees to meet all requirements of each component of Watershed URMP section 'J' of the Municipal Permit;
- Public participation mechanisms utilized during the Watershed URMP implementation process;
- Mechanism for watershed based land use planning;
- Assessment of effectiveness of the Watershed URMP;
- Proposed revisions to the Watershed URMP;
- A summary of watershed effort related data not included in the annual monitoring report (e.g. special investigations); and,
- Identification of water quality improvements or degradation.

The first Watershed URMP Annual Report was due to the San Diego Regional Water Quality Control Board (SDRWQCB) no later than January 31, 2004, and every January 31st thereafter. The reporting period for the Annual Reports must cover the previous fiscal year. As such, the FY 2004 Watershed URMP Annual Report will cover the reporting period from July 1, 2003 to June 30, 2004.

The Plan of Action (Section III) of the Peñasquitos Watershed URMP includes several activities the Copermittees have or are intending to implement over the remaining life of the Municipal Permit in an effort to meet the four primary objectives of the program. Sections 1.0 to 4.0 below summarize the efforts the Copermittees undertook to develop the Peñasquitos Watershed URMP and implement the Plan's activities during the FY 2004 reporting period.

1.0 Water Quality Activities

The Plan of Action Section in the Peñasquitos Watershed URMP identifies proposed activities to address prioritized water quality issues. The sections below provide a status report of work completed to date on those activities.

1.1 Data Collection & Analysis

This activity is discussed in the FY 04 Unified WURMP Annual Report.

1.2 Erosion Control Measures

All four Copermittees within the watershed continued to implement their ordinances or codes to reduce and minimize erosion that can lead to sediment and siltation problems in the receiving waters. The specific (local) activities implemented by each Copermittee that benefit the Peñasquitos watershed are reported in their respective Jurisdictional Urban Runoff Management Plans (JURMP) and JURMP Annual Reports and are not repeated here in detail in the interest of minimizing reporting redundancy. The following examples represent extraordinary efforts by watershed Copermittees to control erosion in the Peñasquitos watershed.

City of Poway

The City of Poway undertook exemplary erosion control measures that contributed significantly to erosion prevention in the watershed and positively impacted water quality during this reporting period. This is an example of a jurisdiction's efforts (as reported in the City of Poway's JURMP) and how they are linked to a watershed without necessarily being planned or coordinated at the watershed level.

In 2003, the Cedar Fire burned over 7,000 acres in the City of Poway, which is a part of the Peñasquitos Watershed. Much of the area that was burned had been open space, consisting of hillsides covered with native vegetation. The fire damage created a number of potential sources of storm water pollution. Keeping these materials out of the storm drain system and receiving waters was a priority for the City.

Within days of the start of the fire, the City of Poway began taking steps to reduce these potential sources of storm water pollution. This effort has been concerted and ongoing throughout the remainder of FY 2003/2004 and continuing to the present time. The City expended more than \$440,000 on this effort during this reporting period to protect the receiving waters in the watershed.

In January 2004, the City of Poway applied for and received Regional General Permit (RGP) 63 from the Army Corps of Engineers to conduct emergency work to prevent flooding and protect public safety. The Regional Water Quality Control Board approved the RGP, and the Best Management Practices (BMPs) to be used while the work was done. The BMPs prevented the discharge of sediment from the dredging activities to the waters of the state, Poway and Rattlesnake Creeks.

Below is a summary of measures taken to protect the Peñasquitos Watershed. For more specific information, please see the JURMP for the City of Poway.

- To prevent pollutants from burned structures from entering the drainage system, homeowners used over 1,175 gravel bags, 157 straw wattles, and 43 straw bales.
- More than a million square feet of bonded fiber matrix was placed throughout the watershed in Poway to prevent soil erosion.
- In November 2003, the City's erosion control contractor installed check dams in Poway Creek, which resulted in a prevention of more than 5,000 cubic yards of silt from entering the City's drainage system.
- When City crews cleaned out drainage inlets in Poway Creek, over 1,500 cubic yards of silt/ash were removed.
- Seventy check dams were installed in Rattlesnake Canyon, resulting in the removal of 850 cubic yards of silt/ash.
- Along Rattlesnake Creek, 660 gravel bags were placed along with 205 straw bales; 117 rebar stakes were used to secure the straw bales to the hill.
- In total, more than 2,800 straw bales and more than 22,000 gravel bags were installed for erosion control throughout the burned areas of the Poway section of the Peñasquitos watershed during this reporting period.
- 23,000 cubic yards of silt/ash were removed from Poway Creeks as a result of the erosion caused by the Cedar fire.

City of San Diego

The City of San Diego requires additional erosion control measures beyond standard City-wide requirements to be implemented for land development at all properties within the Coastal Zone which drain into Los Peñasquitos Lagoon or San Dieguito Lagoon. This requirement is part of the Local Coastal Program pursuant to the Coastal Act of 1976. Erosion control measures required under this City of San Diego Ordinance (City Clerk Document #00-17068) include a grading plan that incorporates runoff control. The grading plan addresses the installation of sediment basins, to ensure that sediment and siltation are prevented from impacting the San Dieguito and Peñasquitos Lagoon areas. This requirement addresses the sedimentation and siltation water quality problem potentially caused by excessive solids (total and/or suspended) discharged to the receiving waters. This activity results in benefits to water quality through reduction of sedimentation and siltation in the lagoon areas. Reduction of sedimentation relates directly to habitat quality for the benthic community, in addition to reducing the potential pollutant load of constituents of concern that tend to associate with fine sediment particles (such as metals, bacteria and organics).

During FY 04, the City of San Diego continued to require the implementation of these erosion and sediment control measures on all applicable development projects in the Peñasquitos watershed. This Ordinance falls within the jurisdiction of the City of San Diego. Similar erosion ordinances were enforced within the other Copermittees' jurisdictions. As requested in the 13267 letter from the Regional Board more detail has been provided about the required erosion control measures. Please see the attached copy of the City Clerk Document #00-17068 for reference (Appendix C).

1.3 Los Peñasquitos Watershed Management Plan

The City of San Diego's Water Department is leading the effort to develop the Los Peñasquitos Watershed Management Plan (Plan) that was initiated during this reporting period. In FY 03 the Plan focused on securing the SWRCB grant, processing the contract, and hiring consultants. In FY 04 Plan preparation was underway and watershed Copermittees had the opportunity to participate in the meetings that took place during the reporting period. The majority of the participation, review and comments to the Plan, an development of future activities has taken place during 2004-05 and will be reported in the next submittal.

Storm water program staff from the cities of San Diego, Del Mar and Poway, and the County of San Diego participated in the Plan effort with the Los Peñasquitos Lagoon Foundation (LPLF), Citizen's Advisory Committee (CAC) and general public for the Los Peñasquitos watershed. The Los Peñasquitos watershed covers 100 square miles and is located in an area subject to pressures from extensive urbanization, including irrigation from agricultural activities, conversion of agriculture to urban uses, and un-maintained catch basins within the watershed. Funding for the project has been provided, in part, through a contract with the State Water Resources Control Board (SWRCB), pursuant to the Costa-Machado Water Act of 2000 (Proposition 13) and any amendments thereto, for the implementation of California's Non-point Source Pollution Control Program.

The Plan will identify and prioritize measures to preserve and/or improve the health of the watershed based on an assessment of existing watershed resources and issues, and include a strategy to ensure the Plan becomes and remains a "living document." The Watershed Plan will cover the following major issues:

- 1) An assessment of resources in the watershed, including identification of resources to be preserved and/or improved;
- 2) An assessment of problems /issues/threats to the watershed, including their causes and locations, as well as their prioritization for being addressed;
- 3) Identification of goals, policies, and potential projects to preserve resources and address problems/issues/threats, including a strategy for implementing the goals, policies and potential projects;
- 4) Identification of potential wetland enhancement and restoration opportunities within the watershed.
- 5) Identification of potential strategies to address changes in stream hydrology and morphology (such as peak flow rates and flow velocity, duration and volumes, as well as resulting erosion and sedimentation). Hydrologic conditions including altered water flow and velocity from encroaching urban development and increased runoff within streambeds have contributed to sedimentation within the watershed.

The Los Peñasquitos Watershed Management Plan is being prepared to complement and be consistent with the Watershed Urban Runoff Management Plan for Peñasquitos required under the City's Municipal Storm Water Permit (Order 2001-01). The Municipal Storm Water Permit requires the development and implementation of Watershed Urban Runoff Management Programs (WURMPs) for each of nine watershed management areas within San Diego County to control non-point discharges from the City's separate storm water conveyance system. The Los Peñasquitos Watershed Management Plan is a non-regulatory document that looks at the current status and integrity of the watershed through a wide range of issues and metrics such as land use planning, biology, water quality/beneficial uses, engineering/hydrology, geomorphology, flooding/drainage, and community interest, as well as storm water conveyance, and provides recommended measures/actions for each participating jurisdiction to consider adopting to improve the health and vitality of the watershed.

The Copermittees have participated, to the extent possible, in the various stakeholder meetings and provided input during the development of the Plan. The Plan, when finalized, will provide the Peñasquitos watershed Copermittees with an additional resource to help update the list of activities relevant to the WURMP's goals and objectives. To the extent practicable, Copermittees will be assessing the potential opportunity to participate in long-term Watershed Management Plan activities that contribute or are comparable to WURMP activities. The Copermittees will discuss and evaluate these options during the next few months. The Copermittees' intent is to identify water quality related activities that correspond to the high priority constituents of concern or issues in this watershed and assess the types of activities to best address them. As part of this effort, Copermittees will seek the most cost-effective implementation (local, watershed or regional).

2.0 Land Use Planning Activities

The Land Use Planning Context & Processes section of the Watershed URMP identifies several different activities and procedures designed to integrate watershed principles into comprehensive planning. The sections below provide a status report of work completed to date on those activities.

2.1 Jurisdictional Planning Activities

2.1.1 County of San Diego – General Plan

The County of San Diego is continuing the process of updating its General Plan through the GP2020 Project. Water quality and watershed protection principals will be incorporated in the updated community plans and General Plan Elements, but there are several steps that still must be taken in order to update the general plan before this can occur.

One of the foundations to the General Plan update is the land-use designation map. At the present time, County Planning Staff are working on the commercial and industrial land use maps, as well as the related portions of the Land Use Element. Acceptance of the residential land use distribution map by the Board of Supervisors has taken nearly two years longer than expected as a result of Board-directed public review and referral process. Once the Land Use Maps and the Land Use Element are completed, the GP2020

Planners will focus their work on completing the road network planning, and the Circulation Element. This will be followed by the development of the additional elements required under state law.

Given the delays in the completion and approval of the land use maps, no work has begun on any of the specific general plan elements, including those that would likely incorporate watershed policies and principals. Although formal policies have not yet been incorporated into the General Plan update, staff is reviewing all land use map changes with respect to watershed-specific protection issues including habitat connectivity, water quality, flood plain protection, and water supply. In addition, the County intends to integrate standardized language on water quality and watershed protection into its community plans. Further, the County intends to develop objectives and policies to address water quality for inclusion in the General Plan elements, as appropriate.

Given the size and scope of the general plan update effort, these activities have been have taken much longer than originally anticipated. At this time, the County anticipates that drafts of the elements will not be available until Summer 2005, at the earliest. Specific updates to the community plans would be developed once the Elements are completed. For further information regarding proposed schedules, updates, and contacts please visit the County of San Diego website at:

<<http://www.sdcounty.ca.gov/cnty/cntydepts/landuse/planning/GP2020/index.html>>.

2.1.2 *City of San Diego – General Plan*

The General Plan is the City's long range plan for growth and development. Its influence is felt throughout City departments, as the plan establishes policies on a broad range of topics, including urban runoff management. The first element of the new General Plan to be adopted was the Strategic Framework Element. The Strategic Framework Element sets forth the City of Villages strategy. This strategy calls for the City's growth needs to be met largely through mixed-use redevelopment of existing commercial areas. The strategy promotes greater use of transit and walking, reduced street widening and fewer surface parking lots, while discouraging the continuation of urban sprawl. All of these principles provide a framework for future development that will be sensitive to the protection of water resources. A Five-Year Action Plan was adopted concurrently with the Strategic Framework Element. It identifies specific actions to be taken to implement the goals and policies of the Strategic Framework Element and includes action addressing storm water and urban runoff and a new Conservation Element of the General Plan. Examples of specific action items include: "use pollution-prevention strategies supplemented by source control and treatment control Best Management Practices to prevent and reduce water pollution," and "support regional funding for water quality watershed planning and management."

Since the Strategic Framework Element was approved in 2002, work has been underway to prepare the Conservation Element along with the rest of the City's General Plan. The Conservation Element expands upon the water quality and watershed principles that were adopted as a part of the Strategic Framework Element. The complete General Plan update is anticipated to be heard by the City Council in late 2005.

General Plan elements currently being drafted relevant to urban runoff include:

1. *Conservation Element*. Work has been proceeding on the Conservation Element. Progress includes the distribution of seven public outreach e-mails, a public forum in December 2003, and several stakeholder group presentations. Staff has prepared a draft element and is presenting it to

stakeholder groups for input. The Conservation Element addresses water quality, wetlands, pollution, and urban runoff. For example, proposed water quality policies are as follows:

- Adopt, amend and/or enforce City policies and regulations to reduce pollution from storm water and urban runoff.
- Minimize large surface parking lots.
- Secure funding to implement programs to protect and improve water quality.
- Apply funding to comply with the Regional Water Quality Control Board (RWQCB) municipal permit regulations to jurisdiction responsibilities related to “new development and significant redevelopment” projects under the rubric of watershed planning and watershed plan implementation.
- Support regional funding for water quality watershed planning and management.
- Support increased funding of federal and state programs that monitor, model, assess, and map ground and surface water resources.
- Support programs that address the causes of water quality pollution.
- Support monitoring programs to better assess the causes and severity of water quality issues.
- Support programs that monitor, model, and assess the environmental values of urban vegetation and open space related to water quality.
- Reduce the number of yearly beach closures.
- Require or encourage development practices through regulation that minimize alteration of natural hydrological conditions, minimize pollutant sources, and where possible, promote the preservation of natural drainage systems.
- Minimize the amount of graded land surface exposed to erosion.
- Improve quality of ocean outfall discharges.
- Strictly enforce regulations concerning sewage discharge from vessels into Mission Bay and San Diego Bay.

The complete Conservation Element draft will soon be available online at www.sandiego.gov/cityofvillages.

2. *Mobility Element*. The draft Mobility Element contains policies to reduce pollution through greater use of alternative modes of transportation, and to reduce large surface parking areas. For example, the Parking Management section of the element states that our parking strategies need to “address parking demand and supply and concurrently help implement General Plan goals (discussed above) for reducing storm water runoff and urban sprawl ...”.

3. *Monitoring Report*. In addition, a General Plan Monitoring Report (dated July 2004) was prepared using data gathered through June 2004. The report monitors progress toward implementing the Strategic Framework Element/City of Villages strategy and serves as a public education tool. The report addresses “Stormwater and Urban Runoff,” and “Environmental Education” efforts. The report also includes a section on San Diego’s “Sustainable Community Program Indicators.” These indicators measure the region’s long-term health, or sustainability, on a variety of topics. Many of the indicators relate to storm water runoff including: #2 Create Neighborhoods We Can Be Proud of (monitor street trees per mile), #3 “Clean Up Our Beaches and Bays,” #5 “Pursue Energy Independence (implement Green Building Policy),” #6 Complete Multiple Species Conservation Program (MSCP) Open Space Acquisition (provides large contiguous tracks of open space) and #7 “Water Conservation.”

2.2 Watershed-Based Land Use Planning Mechanisms

Please refer to the FY 04 Unified WURMP Annual Report for a discussion of the mechanism for integrating watershed monitoring data into each jurisdiction's land use planning process.

2.2.1 Land Use Professional's Reference Manual: "Stormwater Quality and Watershed Protection - Looking at Alternative Development Policies"

This activity is discussed in the FY 04 Unified WURMP Annual Report.

2.2.2 Watershed Management Planning

Refer to Section 1.3 Los Peñasquitos Watershed Management Plan located in Section II Implementation within this Peñasquitos WURMP Annual Report.

3.0 Educational Activities

3.1 Summary of Watershed Education Activities

This activity is discussed in the FY 04 Unified WURMP Annual Report.

3.2 Summary of Watershed Education and Outreach Conducted

This activity is discussed in the FY 04 Unified WURMP Annual Report.

3.3 Education Action Plan

3.3.1 Public Presentations & Media

Public presentations are aimed at professional organizations and industry-specific associations. They incorporate both general watershed principles common to all watersheds and specific best management practices of interest to the particular audience to address pollution prevention. Core watershed concepts and principles are incorporated into public presentations and media opportunities. Refer to Tables II-1 for a summary of the public presentations and media events/releases conducted by the Copermittees during this reporting period. The FY 04 Unified WURMP Annual Report also contains information regarding regional education efforts affecting the Peñasquitos Watershed.

Table II-1. Summary of Public Presentations and Media Events in the Peñasquitos Watershed.

Start Date	Event Title	Specific Audience	Estimated Audience	Location	Jurisdiction
5/2004	Union Tribune Newspaper Article on Beach Cleanup	Various	10,000	Citywide/Watershed	Del Mar/All Jurisdictions
11/25/03	Stormwater and Irrigation Runoff Compliance Inspections	Various	300	Hilton Hotel	San Diego
Jul/Nov 2003 and Feb/April 2004	Poway Today Stormwater articles	Various	19,000 each quarter	Citywide/Watershed	Poway
7/2003	Del Mar Pipeline Newsletter	Various	4,000	Citywide Distribution	Del Mar

The Think Blue FY 2004 Media Buy summary is discussed in the FY 04 Unified WURMP Annual Report.

3.3.2 *Regional Watershed Brochure: What is a Watershed?*

This activity is discussed in the FY 04 Unified WURMP Annual Report.

3.3.3 *Regional Watershed Poster: What Watershed Do You Live In?*

This activity is discussed in the FY 04 Unified WURMP Annual Report.

3.3.4 *School Presentations: Water Quality and Watersheds*

The Watershed Copermittees conducted several activities that reached students throughout the Peñasquitos watershed (See Table II-3).

Table II-2. Summary of School Outreach in the Peñasquitos Watershed.

Date	Event Titles	Estimated Audience	Specific Audience	Location	Jurisdiction
2/27/04	Watershed Presentation	35	School	Valley Elementary School	Poway
4/04	Water Quality Awareness/Keep Del Mar Clean Logo	100	School	Various	Del Mar
Fiscal Year 2003 - 2004	La Vida Del Rancho	50 programs, totaling 1,800 students	School	Los Peñasquitos Canyon Preserve	County of San Diego

3.3.5 *Integrated Pest Management Campaign*

This activity is discussed in the FY 04 Unified WURMP Annual Report.

3.3.6 Community Events

During this reporting period, the Copermittees participated in eleven community events to reach an estimated 44,620 participants, (See Table II-3). Watershed concepts and principles have been incorporated into booth displays and event activities using the tools listed in the school presentations. For future events, the Copermittees will continue to provide participants with the regional watershed brochure and a watershed display.

The City of Del Mar contacted & coordinated with the San Diego County Fair to put up a watershed map during the Fair that highlighted the two Del Mar watersheds (Los Peñasquitos and San Dieguito). The City of Del Mar also provided public information about *Poop Pollutes* in the livestock barn during the Fair and arranged with the organizers of the Fair to post manure information on the website.

The City of Poway created a map of the city that shows the boundaries of the three watersheds which cross the city limits. This map was mounted on boards and is used at community events such as Earth Day and Community Days. The map is also interactive, as staff often has push-pins at the event and residents find their street on the map, and place the pin at their house. This helps the resident to identify which watershed they are in and to take ownership of their watershed. Refer to Table II-3 for an estimated audience.

Table II-3. Summary of Community Events in the Peñasquitos Watershed.

Date	Event Title	Specific Audience	Estimated Audience	Location	Jurisdiction
6/2003	Watershed Awareness Week	General Public	25	Watershed Awareness Calendar Distribution	Del Mar
8/27/03	Chicken Pie Dinner Cruise Night	General Public / Automotive Hobbyists	300	Chicken Pie Dinner	Poway
9/13/03	Community Days – Watershed/Storm Water Booth	Residential	6,500	Community Park	Poway
10/17/03	World Water Monitoring Day	Middle School and High School	135	Peñasquitos Ranch Park	San Diego
10/18/03	Miramar Air Show	General Public	5000	Miramar Air Show	San Diego
4/24/04	Earth Day – Watershed/Storm Water Booth	Residential	1,800	Old Poway Park	Poway

4.0 Public Participation Activities

The following sections summarize the activities and efforts made by the Copermittees to encourage public participation during this reporting period. Please note that this section is not exhaustive and only discusses the activities that were identified in the Public Participation section of the Watershed URMP. Many municipalities have worked with stakeholders on efforts such as the planner’s reference manual, grant applications and water quality data collection. The Copermittees felt that it was not necessary to reiterate these activities in this chapter, if such public involvement and interaction was already discussed in the proceeding chapters.

4.1 Copermittee and Stakeholder Collaboration/Public Participation

Peñasquitos watershed Copermittees did not conduct regularly scheduled group meetings during the reporting period. These Copermittees performed activities primarily as part of the implementation of the local program (JURMP) or at the regional level through participation in the County of San Diego or Copermittee led workgroups (Regional Monitoring, Outreach, etc.). Peñasquitos watershed Copermittees recognize the need and importance of holding regularly scheduled meetings and the need to increase public participation. Regularly scheduled meetings will be initiated in February 2005 and continue through June 2005 in order to develop the leadership and organizational structure necessary for this watershed group to perform the necessary tasks to implement all the components of the WURMP. Watershed Copermittees anticipate having a revised work plan for implementation in FY 06.

Community Events: Several community events were held during the FY 04 reporting period. Each of the education and community outreach provided an opportunity for public participation. A list of these events and the estimated audience numbers can be found in Table II-1, Table II-2 and Table II-3.

Direct Interaction: In addition to those methods already described, the Copermittees continued to rely heavily on the interaction of staff with members of the public during their regular job duties. As described further in the Jurisdictional URMPs, municipal staff with program implementation responsibilities received targeted training to increase their understanding of urban runoff issues. Staff interaction with the general public provides an additional avenue for obtaining direct feedback from the public. Feedback and interaction were conducted during the discretionary permit review process, building permitting process, building inspections and public presentations and outreach campaigns.

4.2 Integration and Participation in Local Planning Activities

Watershed planning has become an issue of increasing importance over the past few years. Various local planning efforts provide forums for exploring both the development of watershed and jurisdictional activities and programs. The relationship of these efforts to the Watershed URMP development and implementation cannot be overstated since both efforts address complementary issues that rely on public participation for success.

Stakeholders within the Peñasquitos watershed are in the process of developing a watershed management plan that will target various watershed issues, including water quality. As part of plan development, stakeholders within the watershed attended regular meetings and provided valuable input on plan direction. For more information on the watershed management plan, please refer to Section 1.3 Los Peñasquitos Watershed Management Plan located in Section II Implementation within this Peñasquitos WURMP Annual Report.

4.3 Project Clean Water – Peñasquitos Watershed Website

During this reporting period, Project Clean Water provided a venue for public participation and involvement in local watershed activities. The relationship of these efforts to Watershed URMP development and implementation cannot be overstated since they address complementary objectives and all rely on public participation for success.

The Project Clean Water watershed website (http://www.projectcleanwater.org/html/ws_map.html) was revised in March 2002 to provide watershed-based resources. The Watershed Map page is the starting point of the watershed website. Visitors wishing to learn more about a particular watershed can simply “click” on a desired watershed in the Watershed Map. Once selected, the visitor is linked to the watershed’s summary page and provided with additional link options. The visitor can view multiple informational pages on the Peñasquitos Watershed which include:

- ✓ Peñasquitos Watershed Summary Page (main page)
- ✓ Peñasquitos Watershed Plan Page
- ✓ Peñasquitos Watershed Project Page
- ✓ Peñasquitos Watershed Activities Page

During FY 04, the Peñasquitos watershed web page received a total of 1,315 hits while the WURMP website received a total of 326 hits. A monthly breakdown of the hits can be found in Table II-4 and II-5 below.

Table II-4: Number of ‘Hits’ on the PCW Peñasquitos Watershed Web Site.

<u>July</u> <u>'03</u>	<u>Aug.</u> <u>'03</u>	<u>Sept.</u> <u>'03</u>	<u>Oct.</u> <u>'03</u>	<u>Nov.</u> <u>'03</u>	<u>Dec.</u> <u>'03</u>	<u>Jan.</u> <u>'04</u>	<u>Feb.</u> <u>'04</u>	<u>Mar.</u> <u>'04</u>	<u>April</u> <u>'04</u>	<u>May</u> <u>'04</u>	<u>June</u> <u>'04</u>	<u>Total</u>
83	116	134	116	106	104	127	111	108	99	96	115	1315

Table II-5: Number of ‘Hits’ on the PCW for the Peñasquitos WURMP Web Site.

<u>July</u> <u>'03</u>	<u>Aug.</u> <u>'03</u>	<u>Sept.</u> <u>'03</u>	<u>Oct.</u> <u>'03</u>	<u>Nov.</u> <u>'03</u>	<u>Dec.</u> <u>'03</u>	<u>Jan.</u> <u>'04</u>	<u>Feb.</u> <u>'04</u>	<u>Mar.</u> <u>'04</u>	<u>April</u> <u>'04</u>	<u>May</u> <u>'04</u>	<u>June</u> <u>'04</u>	<u>Total</u>
21	28	32	27	23	29	42	25	27	22	21	29	326

4.4 Stakeholder Workgroups

4.4.1 City of San Diego Clean Water Task Force

The Clean Water Task Force met one time during the 2004 fiscal year, and sought public comment on all agenda items, in addition to reserving time for public comment on non-agenda items. Some of the significant items discussed included:

- Sewer Spill Reduction Program Update (MWW, City of San Diego)
- Update on Mission Bay Water Epidemiology Study Evaluation and Testing (City of San Diego)
- Low Flow Diversion Program Status Report (City of San Diego Transportation & Drainage Design Division)

- Mission Bay Contaminant Dispersion Study (Scripps Institute of Oceanography)
- Water Quality Project Funding (City of San Diego)

4.4.2 *City Council Presentations*

City of Del Mar discussed the storm water program as part of the FY 05budget approval process.

This section provides a brief summary of the assessment of the water quality constituents of concern in the Peñasquitos watershed conducted by MEC for 2004². To review the complete water quality assessment report, please refer to Section 8 of the *2003-2004 San Diego County Municipal Copermittees Urban Runoff Monitoring Report* prepared by MEC posted on the Project Clean Water website. In addition, based on the 2004 assessment data and constituent of concern results, this section provides an updated assessment of the high priority water quality issues in the Peñasquitos watershed (an initial list of high priority and potential high priority issues was established in the Peñasquitos Watershed URMP). Information regarding program implementation that is applicable to all watersheds has been moved to the FY 04 Unified WURMP Annual Report.

1.0 2004 Peñasquitos Water Quality Assessment

1.1 Constituents of Concern Summary – 2004

A discussion of the methodology for this topic is located in the FY 04 Unified WURMP Annual Report. Refer to the table below for a summary of the constituents of concern for the Peñasquitos Watershed during FY 04.

Table III-1. Summary of constituents of concern assessment comparison.

	Fecal Coliform	TDS	Oil & Grease	Diazinon	Chlorpyrifos	Turbidity	Copper	Enterococcus
Los Peñasquitos Creek 2002	◆	◆◆◆		◆◆				
Los Peñasquitos Creek 2003	◆◆	◆◆◆		◆◆◆	◆	◆	◆	◆
Los Peñasquitos Creek 2004	◆◆	◆◆◆	◆	◆			◆	
◆◆◆- Higher frequency of occurrence ◆◆- Medium frequency of occurrence ◆- Lower frequency of occurrence								

The constituents of concern for the Peñasquitos watershed identified in 2004 were compared to the last two year's water quality assessments, as shown in Table III-1. The following changes were noted for the Peñasquitos Watershed in 2004 as compared to the previous two yearly assessments.

² Note: the analysis was based on water quality monitoring data gathered between July 2003 and June 2004.

- ✓ Total dissolved solids (TDS) is unchanged as an apparent constituent of concern with a high frequency of occurrence.
- ✓ Fecal coliform and copper remain as constituents of concern.
- ✓ Oil and grease are more apparent as constituents of concern.
- ✓ Diazinon, chlorpyrifos, turbidity and *Enterococcus* are less apparent as constituents of concern.

Based on a combined analysis of the 2002, 2003 and 2004 assessments, potential sources of the constituents of concern are identified in Table III-2. The Copermittees will continue to develop greater certainty of the sources of the constituents of concern as additional years of data are gathered.

Table III-2. Potential sources/causes of constituents of concern in the Peñasquitos Watershed.

Constituents of Concern:	Potential Sources / Activities:
Bacterial Indicators: Fecal Coliform bacteria, <i>Enterococcus</i>	Human sewage from failed septic systems, sewer spills or homeless encampments; wildlife including birds, dogs, coyotes, raccoons, etc; domestic animals-including livestock and pets.
Diazinon	Pesticide used residentially, agriculturally, and/or commercially.
Chlorpyrifos	Pesticide used residentially, agriculturally, and/or commercial.
Copper	Automobiles and industrial wastes.
Total dissolved solids	Fertilizers/pesticides, construction activities, groundwater, imported water.
Turbidity	Erosion, suspended sediment/solids, construction, sewage, fertilizers.

The Copermittee's Illicit Connection Illicit Discharge (ICID) programs track and inspect sources of pollutants from dry-weather monitoring data as well as complaint referrals. These efforts have identified some specific sources of pollution that have been mitigated. However it is unknown to what extent the reduction or elimination of these constituents of concern can be correlated to a significant reduction of loading to the receiving waters. Additionally, the high concentration of Total Dissolved Solids (TDS) for three consecutive years are most likely from a multitude of sources within the Peñasquitos Watershed.

The Peñasquitos Watershed has seen a notable improvement for its constituents of concern. Most notably during this reporting period, three (3) of the eight (8) constituents that were previously noted for low occurrences were undetectable during testing; and diazinon, went from a high frequency of occurrence to a low frequency of occurrence. Although it may be too early to draw firm conclusion, this positive change may due to the education the general public has received from the Copermittees, most likely from the "Think Blue" television and radio ads that educate the public on how their actions affect waters downstream. The dramatic decrease in diazinon may be due to the public's gained knowledge that diazinon is harmful to the environment and have stopped using it, or if they are, they are administering it properly and according to the manufacturer's directions. It should also be noted that diazinon is in the process of being phased-out.

Two constituents have remained consistent for the past two reporting periods, Fecal Coliform and TDS. The Peñasquitos Watershed Copermittees will discuss a course of action to work to lower the occurrences of those constituents over the next several months. The occurrence of Oil and Grease during this reporting period needs to be taken with caution, as it may be a one-time occurrence and not persistent.

1.2 Updated List of High Priority Water Quality Issues

The high priority water quality issues as well as other salient constituents of concern identified in this section are tracked and reassessed through the yearly assessment and reporting process.³ The updated constituents of concern and high priority water quality issues lists, and the justification for how these lists were developed, follows.

Table III-3. Summary of Evaluation of Stressors and/or Constituents of Concern – Year 3 (2004)

POTENTIAL WATER QUALITY ISSUE(S)	CONSTITUENTS OF CONCERN, AND/OR STRESSORS OR CONDITIONS ADDRESSED	HIGH PRIORITY?	COMMENTS AND PROPOSED ACTIVITIES (Watershed URMP section numbers provided in italics)
Limiting habitat value of marine and estuarine habitat	Sedimentation Siltation	Yes	<p>Total suspended solids and turbidity were found at very low levels in the mass loading station (MLS) in 2001-2002, 2002-2003 and 2003-2004. However, rainfall totals were very low during the 2002 and 2003 rainy seasons, which may have contributed to the low measurements of total suspended solids. In addition, Los Peñasquitos Lagoon is listed for sedimentation and siltation in the 2002 303(d) list. No correlation was found between the 303(d) listing and the MLS levels for total suspended solids and turbidity. Comprehensive evaluation of data and other existing information may address the need to develop an understanding of sedimentation sources and appropriate remedial actions (including integration of this effort with others intended to protect and enhance the Lagoon such as those of the Los Peñasquitos Lagoon Foundation).</p> <p>Activities: Implementation of the Erosion Control Measures for North City Areas Draining Into Los Peñasquitos or San Dieguito Lagoons (City of San Diego Clerk Document No. 00-17068) (<i>Section 4.2.5</i>); Ambient Bay and Lagoon Monitoring Program (<i>Section 4.2.2</i>); Data Collection and Analysis (<i>Section 4.2.3</i>); Watershed Management Plan (<i>Section 4.2.4</i>).</p>

³ For information regarding the Copermittees methodology for assessing constituents of concern and high priority water quality issues, refer to the FY 2004 Unified WURMP Annual Report.

POTENTIAL WATER QUALITY ISSUE(S)	CONSTITUENTS OF CONCERN, AND/OR STRESSORS OR CONDITIONS ADDRESSED	HIGH PRIORITY?	COMMENTS AND PROPOSED ACTIVITIES (Watershed URMP section numbers provided in italics)
Potential Impact on Municipal and Domestic Water Supply.	Total Dissolved Solids	No	<p>Total dissolved solids have been identified as a constituent of concern based on data from the last three consecutive watershed assessments. Municipal and domestic water supplies can be compromised by a variety of factors that include urban runoff, imported water sources, naturally occurring salinity and minerals. However, there are no drinking water reservoirs in the Peñasquitos watershed that receive urban runoff. Therefore, the total dissolved solids in the watershed would not significantly impact drinking water supplies. To address the issue regionally, the City of San Diego's Water Department is integrating efforts with other partners in order to develop a better understanding of the constituents of concern to water supply issues.</p> <p>Activities: Data Collection and Analysis (<i>Section 4.2.3</i>); Watershed Management Plan (<i>Section 4.2.4</i>).</p>
Limitation to habitat value of water bodies	Diazinon	No	<p>Diazinon levels were exceeded on three occasions in the first two season of testing at the mass loading station. Diazinon had a higher frequency of occurrence based on the 2003 assessment, and was identified as a constituent of concern. In 2004, diazinon and other pesticides were below the benchmarks during all three monitoring events at the mass loading station.</p> <p>Based on the data collected in other watersheds, Copermittees have addressed the use of pesticides in the region as an important component of proactive storm water runoff management activities. Although it may be premature to conclude that the outreach efforts have generated a positive impact on behavior, the 2003-2004 data collected at the MLS and dry weather stations, appears to indicate a reduction in contributions. Continued, long-term monitoring will allow for confirmation.</p> <p>Activity: Integrated Pest Management Campaign (<i>Section 4.2.6</i>)</p>
Limiting recreation opportunities in coastal waters due to potential for pathogens	Bacterial Indicators	Yes	<p>Copermittees and the Regional Board have identified bacteria as a priority in the region. Bacteria are identified as a pollutant in the 2002 303(d) list. Addressing water quality issues which limit recreational opportunities is of paramount importance to all watershed residents both as a quality of life issue and to ensure the long term economic health of the region. Future efforts should be concentrated in developing a better understanding of bacteria sources as well as compilation and analysis of data relevant to this issue within watershed and region at large.</p> <p>Activity: Data Collection and Analysis (<i>Section 4.2.1</i>)</p>

POTENTIAL WATER QUALITY ISSUE(S)	CONSTITUENTS OF CONCERN, AND/OR STRESSORS OR CONDITIONS ADDRESSED	HIGH PRIORITY?	COMMENTS AND PROPOSED ACTIVITIES (Watershed URMP section numbers provided in italics)
Limitation to habitat value of water bodies	Benthic Community Degradation	No	<p>Benthic communities are an indication of ecological trends and aid the evaluation of the appropriateness of watershed programs. The current assessment indicates moderately to substantially impacted conditions to be used as a baseline from which trends can be developed and the impact of watershed programs assessed.</p> <p>Activities: Data Collection and Analysis (<i>Section 4.2.3</i>); Watershed Management Plan (<i>Section 4.2.4</i>)</p>

One of the most important components of a successful program is the development and implementation of a comprehensive program evaluation. The intent of the 2003-2004 evaluation is two-fold: 1) assess the effectiveness of the management and implementation of the Watershed URMP at a programmatic level; and 2) assess the effectiveness of the activities conducted to meet the program goals and objectives. This section of the annual report discusses the status of these assessments and meets the requirements of Section J.2.i. of the Municipal Stormwater Permit by identifying and reporting on measures to assess the effectiveness of the Peñasquitos Watershed URMP.

1.0 Programmatic Assessment

The Peñasquitos Watershed URMP's overall program goal and implementing objectives are:

TO POSITIVELY AFFECT THE WATER QUALITY OF THE WATERSHED WHILE BALANCING ECONOMIC, SOCIAL AND ENVIRONMENTAL CONSTRAINTS.

- Objective #1: *Develop/expand methods to assess and improve water quality within the watershed (Water Quality Activities);*
- Objective #2: *Integrate watershed principles into land use planning (Land Use Planning Activities);*
- Objective #3: *Enhance public understanding of sources of water pollution within the watershed (Educational Activities).*
- Objective #4: *Encourage and enhance stakeholder involvement within the watershed (Public Participation Activities).*

Achievement of these objectives was measured through the development, implementation, and completion of activities targeted for each objective. The status of these activities and how they related to the Watershed URMP goals and objectives is outlined below.

Activities conducted by the Peñasquitos Copermittees also have been incorporated into the six hierarchical levels of targeted outcomes described in the Framework Document. The six levels are as follows:

- Level 1: Compliance with Activity-Based Permit Regulations
- Level 2: Changes in Knowledge / Awareness
- Level 3: Behavioral Change / BMP Implementation
- Level 4: Load Reductions

Level 5: Changes in Discharge Quality
Level 6: Changes in Receiving Water Quality

Documentation of Levels 1-3 is fairly straightforward, whereas documentation of Levels 4-6 requires the development and implementation of scientific studies designed specifically to detect these issues. Moreover, the detection of changes in discharge quality and, in particular, changes in receiving water quality require the collection of data over several years to detect and change. Although the Copermittees have very few data sets that span several years, we are working to collect this information and improve the process. Conclusions from existing data will be conducted when possible, but documentation of changes in water quality throughout the Peñasquitos watershed cannot yet be determined.

1.1.1 Level 1 Effectiveness (Permit Requirements)

The Peñasquitos Copermittees made efforts to fulfill the requirements of the Municipal Stormwater Permit during the 2003-2004 reporting period. It can be assumed that the Copermittees efforts have had a positive effect on water quality. Table IV-1 outlines Level 1 Targeted Outcomes by relating each activity conducted by the Peñasquitos Copermittees to one of the four objectives and the requirements specified in the Municipal Permit.

Table IV-1. Level 1 targeted outcomes

Permit Requirements (J.2)	Objective	Activities	Status
(a) An accurate map of the watershed	#2	<ul style="list-style-type: none"> Los Peñasquitos Watershed Management Plan 	Preparation is underway w/Draft Plan out for review
(b) Assessment of receiving water quality	#1	<ul style="list-style-type: none"> MEC 2003-2004 Urban Runoff Monitoring Report 	Complete for 2003-2004
(c) Identification and prioritization of major water quality problems	#1	<ul style="list-style-type: none"> MEC 2003-2004 Urban Runoff Monitoring Report Revisit major water quality problems and prioritize during February-June 2005. 	Complete for 2003-2004 Additional assessment and prioritization by June 30, 2005 for FY06
(d) Implementation time schedule of short and long-term recommended activities for highest priority water quality issues	#1	<ul style="list-style-type: none"> Data Collection & Analysis 	Ongoing
		<ul style="list-style-type: none"> IPM Campaign 	Ongoing
		<ul style="list-style-type: none"> Develop long-term recommended activities under new watershed organization to be developed February-June 2005 	Due to be completed June 30, 2005
		<ul style="list-style-type: none"> Assess the feasibility of joint program management and implementation with the San Dieguito watershed Copermittees 	Due to be completed June 30, 2005
(e) Identification of the Copermittee responsible for implementing each recommended activity, selection of Lead permittee,	#1-#4	<ul style="list-style-type: none"> New program management structure and organization to be developed February-June 2005 to identify leadership roles, resources, and funding. 	Revised workplan to be developed by June 30, 2005.

Permit Requirements (J.2)	Objective	Activities	Status
and time schedule for implementation		<ul style="list-style-type: none"> Time schedule provided in WURMP and updated as necessary. 	Completed for 2003-2004
(f) Mechanism for public participation	#4	<ul style="list-style-type: none"> Copermittee and Stakeholder Collaboration /Public Participation (meetings, e-mail and web) 	Ongoing Copermittees will reassess the methods used to encourage public participation as part of the program's reorganization effort.
		<ul style="list-style-type: none"> Direct Interaction 	Ongoing
		<ul style="list-style-type: none"> Project Clean Water 	Ongoing (website is updated as new information warrants)
		<ul style="list-style-type: none"> City of San Diego Clean Water Task Force 	Temporarily Suspended
		<ul style="list-style-type: none"> See Table II-3 for a Summary of Community Events 	Completed for 2003-2004
(g) Watershed-based education program	#3	<ul style="list-style-type: none"> Public Presentations and Media/Watershed Element 	Ongoing
		<ul style="list-style-type: none"> See Table II-2 for a Summary of School Outreach 	Completed for 2003-2004
		<ul style="list-style-type: none"> Project Clean Water 	Completed (updated as new information is made available)
		<ul style="list-style-type: none"> Reassess education efforts in the watershed and determine activities for FY06 in consideration of funding and resource limitations as well as local and regional efforts 	Complete by June 30, 2005
(h) Mechanism to facilitate collaborative "watershed based" land use planning	#2	<ul style="list-style-type: none"> County General Plan Update 	Ongoing
		<ul style="list-style-type: none"> City of San Diego General Plan Update 	Completed (proceeding with GP components)
		<ul style="list-style-type: none"> Assess additional opportunities for watershed-based planning activities. 	To be completed by June 30, 2005

1.1.2 Level 2 Effectiveness (Changes in Knowledge / Awareness)

The following programs implemented by the Peñasquitos Copermittees may have contributed to an increase in knowledge and/or awareness of program participants.

- Project Clean Water
- Watershed URMP Workgroup local and regional participation
- IPM Campaign
- Watershed Survey in the unincorporated areas of the County
- See Summary of Public Presentation Table II-1
- See Summary of School Outreach Table II-2
- See Summary of Community Events Table II-3

Many of the programs listed above address multiple program strategies (i.e., development of a monitoring program coupled with an educational outreach campaign). As such, these programs provided education on general watershed concepts, as well as information on specific priority pollutants within the Peñasquitos watershed. Please see Section II Implementation for specific information on each of these programs.

1.1.3 Level 3 Effectiveness (Behavioral Change / BMP Implementation)

Based on several programs it can be assumed that the Copermittees efforts have had a positive effect on water quality. It is likely that changes in behavior occurred through implementation of the programs listed below. Changes in implementation of BMPs were documented through the following programs:

- Erosion Control Measures
- SUSMP Implementation

Activities associated with the programs listed above involved stakeholder participation in activities and decision-making processes, as well as the implementation of BMPs to reduce the impacts of urban runoff. These programs also provided information on general watershed concepts, as well as information on specific priority pollutants within the Peñasquitos Watershed. Please see Section II Implementation for specific information regarding the erosion control and the individual JURMPs for specific information regarding Erosion BMP and SUSMP implementation.

1.1.4 Level 4-6 Effectiveness (Load Reduction and Changes in Water Quality)

The calculation of pollutant load reductions and the determination of water quality changes is a regional effort and requires the collection of rigorous scientific information over several years. The Copermittees currently are analyzing existing information and have provided in this Annual Report a general assessment based on the most current knowledge of the constituents of concern and issues. Results of a more comprehensive analysis are likely to be included in the Report of Waste Discharge to be submitted to the RWQCB in August 2005.

Copermittees in this watershed will also be assessing the current water quality data and information in the last two quarters of FY05 to determine additional activities based and prioritizing them based on available resources and funding in FY06.

1.0 Conclusions

Between July 2003 and June 2004, the Copermittees in the Peñasquitos watershed continued to implement the FY 2004 actions planned in response to the water quality assessment identified in the Peñasquitos Watershed URMP. The Watershed has seen marked improvement for constituents of concern, most notably three (3) constituents previously detected were non-detectable during this reporting period, and diazinon was tested at a low frequency of occurrence for the first time since testing was implemented.

The Copermittees in the Peñasquitos watershed continued to implement the FY 2004 actions planned in response to the water quality assessment identified in the Peñasquitos Watershed URMP. However, mounting fiscal restraints have affected the lead copermittee to the extent that it is no longer able to fulfill its leadership role. Therefore, the City of San Diego and other Copermittees relied on efforts that maximized water quality benefits, such as regional and jurisdictional education programs that target constituents affecting watersheds rather than specific watersheds, and a consolidated water quality monitoring program for all nine of the region's watersheds. Without specifically identifying the Peñasquitos watershed, these activities benefited water quality in the absence of the Copermittees' ability to implement a more focused approach.

These challenges make it clear that a continued, as well as thoughtful, collaboration and integration between regional, watershed and jurisdictional programs are key to the development of quality programs that are cost-effective, innovative, and responsive to the public's needs. However, the Copermittees also recognize they can leverage and complement these jurisdictional and regional watershed resources by-retooling the existing program to adopt a more watershed-specific approach. To begin this task, the Copermittees will convene a series of meetings in February 2005 to explore ways to implement a more targeted program while balancing fiscal challenges.

Above all, the Peñasquitos Watershed URMP and Annual Reports should be considered part of overall program development. The Copermittees have responded well to meet the challenges of implementing new and aggressive Municipal Permit requirements in a very short period of time. The Copermittees have made significant strides in developing a comprehensive storm water program that could serve as a model for other regions. It is also recognized that improvement and refinement is an important part of all program areas and the Watershed URMPs will need to be augmented over the long term as the Copermittees continue to develop a better understanding of the complex issues affecting the Peñasquitos watershed and incorporate the valuable information being developed under the Watershed Management Plan. During the development and initial implementation of this program, the Copermittees have identified a few lessons learned over the past year that deserve mentioning.

- Evaluating program costs and identifying funding sources will continue to be a key focus.

- Activities and efforts should be addressed at the most efficient scale-- regional, watershed, or jurisdictional-- depending on the activity.
- Lastly, the region should continue to strive for more efficient collaboration among watershed stakeholders and efforts.

2.0 Recommendations

Based upon the updated water quality data discussed in Section III of the Annual Report and the activity effectiveness assessment completed in Section IV of the Annual Report, the Copermittees propose only two amendments to the Watershed URMP program: deletion of the SUSMP and the Source Water Protection Guidelines in response to Regional Board comments. The following improvements are recommended for consideration:

2.1 Recommended Program Improvements

The Peñasquitos watershed Copermittees have developed an interim, short-term plan to comply with the WURMP permit requirements. The Copermittees are committed to meeting over the next five months to discuss and find mechanisms to resolve the leadership, funding and resource issues. We are committed to identifying solutions and a workable and implementable plan for FY 06 (including WURMP activities) by June 30, 2005.

The most meaningful and significant change to the watershed urban runoff management program efforts during the current and upcoming fiscal year (2005-06) will be to re-assess management and organizational responsibilities for the WURMP and Annual Report. Identifying leadership and task responsibility roles, resources, and funding will be the focus of the Peñasquitos watershed Copermittees in the remaining five months of FY05. A preliminary list of short- and long-term activities to be refined and prioritized for FY 06 is provided below:

Short-Term Activities (February 1, 2005 – June 30, 2005):

- a. Develop a meeting schedule and work plan for the period 2/1/05 – 06/30/05
- b. Reassess overall watershed organization, including public participation opportunities
- c. Continue participation in the Peñasquitos Watershed Management Plan effort.
- d. Review existing water quality data; identify and review additional data, including jurisdictions' dry weather data
- e. Re-examine and prioritize/validate pollutants of concern
- f. Consider potential/likely pollutant sources
- g. Develop pollutant-focused water quality activities (short- and long-term) based on available data and resources
- h. Develop a watershed-based education program outline
- i. Determine feasibility of combining common watershed efforts with the San Dieguito Watershed Copermittees

Long-Term Activities (July 1, 2005 – next permit):

- j. Continue, revise and/or expand above short-term water quality activities based on Copermittee and stakeholder collaboration and available resources
- k. Implement short- and long-term activities collaboratively developed and adopted by the Copermittees based on available resources

It should be noted that activity implementation schedules are directly tied to the availability of funding. Copermittees will focus on the development of the activity list and the available funding for FY06 when drafting the revised plan.

Additional areas of program improvements:

- The Peñasquitos watershed Copermittees will seek to identify areas of mutual program management and activity implementation to maximize the available resources. Under consideration is collaboration with the San Dieguito watershed Copermittees (of which four Copermittees are the same in both watersheds). But will also seek to identify the water quality problems or issues that are exclusive to this watershed and address them accordingly.
- The City of San Diego has dedicated significant resources to the development of the Los Peñasquitos Watershed Management Plan and the Copermittees have participated in stakeholder meetings and provided comments. The Watershed Management Plan, when completed, will provide additional information and data for the Copermittees to consider that is relevant to the WURMP. The Copermittees will be assessing the potential opportunity to participate in Watershed Management Plan activities that contribute (or in lieu of) WURMP activities. The Copermittees will discuss and evaluate these options during the upcoming meetings.

APPENDIX A

A. Signed Certification Statements

APPENDIX B

B. Responses to Regional Board 13267 Letter

APPENDIX C

- C. Revision to remove SUSMP and Source Water Protection Guidelines from the Peñasquitos Watershed Urban Runoff Management Plan

APPENDIX D

- D. City of San Diego Erosion Control Ordinance (City Clerk Document No. 00-17068)