Appendix 13

Summary of the Regions
Local Water Management Plans
### APPENDIX 13
### SUMMARY OF THE REGION'S LOCAL WATER MANAGEMENT PLANS

<table>
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<tr>
<th>Santa Margarita River HU (902)</th>
<th>PLAN: Santa Margarita WURMP</th>
<th>LEAD GROUP: County</th>
<th>2003</th>
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**OVERVIEW:** This WMP is a guide for stakeholders to continue watershed planning efforts, and is intended to be updated periodically to include new research and findings, to revise land use plans as they are adopted, and to modify the actions recommended for action.

**DESCRIPTION:** Numerous studies document the Santa Margarita River as the single largest, finest example of a riparian system and estuary in Southern California. The watershed is the least disturbed along the Southern California coast, and the Santa Margarita River is the longest free-flowing, undammed river in this region. The Santa Margarita River and its estuary have largely escaped typical development and channelization of its lower 27 miles and as such it supports the largest populations of seven federally- or state-listed endangered species. The relatively intact functioning physical features of the river’s floodplain and estuary make this diversity of habitats and abundance of wildlife possible. Historically, the Santa Margarita River has acted as the conduit for the movement of sand from the upper reaches in the mountains to the coastal beaches. Alterations of the river hydrology, particularly reservoirs and other hydromodifications, have resulted in a loss of natural beach replenishment. The sand and rock in the upper watershed that would have flushed through the system, cleansing the system of debris and carrying nutrients, now are captured and do not reach the beaches. Additionally, the watershed contains five water bodies listed as “impaired” under the Clean Water Act. Impairments to beneficial uses from sedimentation and erosion, and nutrient enrichment have been historically identified in the watershed. Possible sources for these impairments include agriculture, urbanization, and natural background conditions.

**PRIORITIES OR GOALS:** Promote interagency coordination, organizational efficiency and consistency by coordinating research, planning, and monitoring efforts, sharing information, and identifying mandated, priority, and time-sensitive issues; Promote community awareness of, and interest and participation in, stewardship of the natural, cultural, recreational, agricultural, water, and open space resources of the watershed; Balance public and individual landowner interests with resource protection goals; Reduce dependence on imported water without damaging local water resources; Minimize the risk of loss of life and property from flooding while protecting floodplain values; Promote land use practices that reduce excess erosion, minimize negative water quality impacts, and conserve water and natural resources; Manage stream corridors and floodplains for multiple uses including wildlife habitat, recreation, flood attenuation, water quality improvement, groundwater recharge, aesthetics and open space; Maintain, sustain, and restore the key natural and cultural resources of the watershed; Provide compatible recreational and public access opportunities; Ensure the viability of critical ecosystems.

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<tr>
<th>Santa Margarita River HU (902)</th>
<th>PLAN: Santa Margarita WURMP</th>
<th>LEAD GROUP: County</th>
<th>2005</th>
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**OVERVIEW:** The final Santa Margarita River Watershed Urban Runoff Management Plan was prepared by the County of San Diego. The Plan meets the requirements of the National Pollutant Discharge Elimination System (NPDES) Municipal Storm Water Permit for San Diego Copermittees (Order No. 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 including the Santa Margarita River watershed.

**DESCRIPTION:** The Watershed Urban Runoff Management Program (WURMP) prepared for the Santa Margarita River Watershed includes material that describes the intended approach to meeting the watershed-related obligations of the Municipal Permit. The Santa Margarita River Watershed encompasses approximately 750 square miles in northern San Diego and southwestern Riverside Counties. Of the total watershed area, approximately 27% is within San Diego County and is the area of focus for the Santa Margarita River WURMP. The County of San Diego is the sole Copermittee in the Santa Margarita River Watershed. The Santa Margarita River WURMP identifies and prioritizes water quality related issues within the watershed that can be potentially attributed (wholly or partially) to discharges from the municipal storm drain systems and may be addressed through a cross-jurisdictional approach. Existing data suggests that the principal water quality issues found in surface runoff for this watershed include nitrogen, phosphorous, eutrophication and bacterial indicators. The Santa Margarita River WURMP has been developed as an iterative process of watershed assessment, setting priorities, monitoring, and implementation. At the conclusion of each yearly cycle, the process begins anew, allowing participants to respond to changing conditions or adjust strategies that have not performed as anticipated. This framework establishes mechanisms for the participants to evaluate priorities, improve coordination, assess program goals, and allocate finite resources in a cost-effective manner. As part of the yearly cycle, the County of San Diego submits WURMP Annual Reports to the RWQCB documenting the program’s progress.

**PRIORITIES OR GOALS:** To positively affect the water quality of the Santa Margarita River 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.
<table>
<thead>
<tr>
<th>San Luis Rey River HU (903)</th>
<th>PLAN: Agua Hedionda WMP</th>
<th>LEAD GROUP: City of Vista</th>
<th>2008</th>
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<tr>
<td><strong>OVERVIEW:</strong> The City of Vista in coordination with the Cities of San Marcos, Carlsbad, and Oceanside and the County of San Diego is implementing a Proposition 40 planning grant to develop a watershed plan to protect and enhance the Agua Hedionda Watershed (AHW) and associated beneficial uses. This project is a key component to integrating the management of the watershed functions. This project is also consistent with the vision, goal, and objectives of the San Diego Regional Water Quality Control Board Basin Plan (Basin Plan), Carlsbad Watershed Management Plan (CWMP), and the Carlsbad Watershed Urban Runoff Management Plan (CWURMP). This project falls within the jurisdiction of the San Diego Regional Water Quality Control Board and is in the Carlsbad Hydrologic Unit (904.10) and the Agua Hedionda Watershed Area (904.3). Water bodies covered by this project include Agua Hedionda Creek, Buena Creek, Calavara Creek, and Agua Hedionda Lagoon.</td>
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<td><strong>DESCRIPTION:</strong> The Agua Hedionda Watershed faces substantial bank erosion problems in the upper watershed and excessive sedimentation in the lower watershed. These problems have led to 303(d) listings in both Agua Hedionda Creek and Lagoon for sedimentation. Other issues in the watershed are elevated bacteria levels, eutrophication and elevated pesticide levels. Trash is also a high priority within the watershed. The Agua Hedionda Watershed Management Plan (WMP) will address these issues through the following activities: 1. improve the health of the watershed by developing a watershed management plan to provide water quality, hydrology/drainage and biological information; 2. develop scopes of work and cost estimates for bioengineering projects to address the watershed impairment issues discussed within the management plan; 3. identify land areas within the watershed eligible for acquisition and restoration; 4. develop a watershed hydrologic model for sediment tracking; 5. conduct water quality analysis to determine overall watershed health; 6. acquire a Watershed Coordinator to oversee grant management and restoration activities within the watershed.</td>
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<td><strong>GOALS:</strong> The goal of this project is to increase the health of the Agua Hedionda Watershed by addressing existing issues. The entire project is consistent with the goals and objectives of the overarching Carlsbad WMP and the Carlsbad WURMP.</td>
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<tr>
<th>San Luis Rey River HU (903)</th>
<th>PLAN: Pilgrim Creek WMP</th>
<th>LEAD GROUP: CALTRANS</th>
<th>1997</th>
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<tbody>
<tr>
<td><strong>PLAN GOALS:</strong> The purpose of the Pilgrim Creek Watershed Management Plan is to provide an integrated framework to provide flood control, aid water quality and protect existing habitat areas of a number of species in the Plan area.</td>
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<tr>
<th>San Luis Rey River HU (903)</th>
<th>PLAN: San Luis Rey River Water Quality Assessment &amp; Management Plan</th>
<th>LEAD GROUP: County Department of Parks and Recreation</th>
<th>1997</th>
</tr>
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<tr>
<td><strong>OVERVIEW:</strong> The study includes: 1) a literature review; 2) an assessment of current land use practices and regulatory measures to minimize erosion and sedimentation to control runoff from nutrients and pesticides; 3) selection of 10 sampling stations to collect river sediment and river water quality samples and samples of fish, macroinvertebrates, and benthic organisms; 4) identification of permanent sediment and water quality monitoring stations; and 5) recommendations for management of water quality, sedimentation and aquatic habitats.</td>
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<td><strong>DESCRIPTION:</strong> The WQMP included an assessment of the watershed’s water quality using available data as well as data collected from 10 sampling locations along the river. At each sampling station, aquatic biota, sediment, and water quality data was gathered. Water quality sampling was conducted for dry and wet season flows in the river, as well as “first flush”, and was analyzed for several general chemistry parameters, bacteria, and metals. In addition to the sampling, research was conducted to review other relevant data, which primarily consisted of City of Oceanside data (described in Section 3.1.4 of this chapter) that was available at the time of the WQMP preparation. The water quality analysis in the WQMP resulted in the identification of several water quality parameters of concern. These included TDS, phosphorus, total and fecal coliform bacteria, and possibly ammonia.</td>
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<td><strong>PRIORITIES OR GOALS:</strong> The management plan was developed to control and reduce of water quality problems, nutrient enrichment problems, and sedimentation along the reach of the San Luis Rey River below Henshaw Dam to Oceanside.</td>
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## PLAN: San Luis Rey Watershed Guidelines
### LEAD GROUP: San Luis Rey Watershed Council
### 2000

**OVERVIEW:** Identifies general considerations for watershed since limited data is available. Highlights land-use issues, educational needs, wetlands enhancement opportunities, and recommendations for research and data collection.

**PLAN GOALS:**

- **A. Water Quality:**
  1. Improve monitoring of surface and ground water;
  2. Compile database on water quality and data on septic system impacts;
  3. Institute best management practices for agriculture lands and nurseries;
  4. Enforce runoff and erosion control for developments;
  5. Restore the native habitat to improve the water quality.

- **B. Water Quantity:**
  1. Groundwater pumping study, study streamflow measurements and a water rights analysis;
  2. Install streamflow gauges and try to develop a strategy to prevent overdrafting;
  3. Water conservation;

- **C. Hazard Management:**
  1. Avoid putting structures in the floodplain, allow river to meander, and avoid channelization;
  2. Remove invasive plants, such as Arundo donax, that can cause flooding;

- **D. Land Use & Management:**
  1. Enforce laws against illegal dumping and organize regular cleanups;
  2. Protect agricultural lands through a purchase of development rights in connection with the GP2020/MSCP update;
  3. As much native habitat must be permanently protected and restored;
  4. Remove invasive plant infestations;
  5. A comprehensive database of all the present and projected land uses;
  6. Protect and restore more native habitat, while protecting property.

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## PLAN: San Luis Rey WURMP
### LEAD GROUP: Stormwater Copermittees; Oceanside
### 2003

**OVERVIEW:** This Plan was prepared by the cities of Oceanside, Vista, Escondido, and the County of San Diego – all local agencies that have jurisdiction over the San Luis Rey River watershed. The Plan meets the requirements of the National Pollutant Discharge Elimination System (NPDES) Municipal Storm Water Permit for San Diego Copermittees (Order No. 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 including the San Luis Rey River watershed.

**DESCRIPTION:** The San Diego Regional Water Quality Control Board issued Municipal Storm Water Permit Order 2001-01 (Municipal Permit) on February 21, 2001 in an attempt to control waste discharges in urban runoff from the Municipal Separate Storm Sewer Systems (MS4) that drain into the watersheds of the County of San Diego, incorporated cities of San Diego County, San Diego Unified Port District, and the San Diego County Regional Airport Authority (Copermittees). The Watershed Urban Runoff Management Program (WURMP) prepared for the San Luis Rey (SLR) River Watershed includes material that describes the intended approach to meeting the watershed-related obligations of the Municipal Permit. To help reach these goals and objectives, the SLR River WURMP identifies and prioritizes water quality related issues within the watershed that can be potentially attributed (wholly or partially) to discharges from the municipal storm drain systems and may be addressed through a cross-jurisdictional approach. Existing data suggests that the principal water quality issues found in surface runoff for this watershed include bacterial indicators at the San Luis Rey river mouth, eutrophication in Guajome Lake, and Total Dissolved Solids. The SLR River WURMP has been developed as an iterative process of watershed assessment, setting priorities, monitoring, and implementation. At the conclusion of each yearly cycle, the process begins anew, allowing participants to respond to changing conditions or adjust strategies that have not performed as anticipated. This framework establishes mechanisms for the participants to evaluate priorities, improve coordination, assess program goals, and allocate finite resources in a cost-effective manner. As part of the yearly cycle, the SLR Watershed Copermittees submit WURMP Annual Reports to the RWQCB documenting the program’s progress.

**PRIORITIES OR GOALS:** To positively affect the water quality of the SLR River Watershed while balancing economic, social and environmental constraints. Objective #1: Develop/expand methods to assess and improve water quality within the watershed, which respond to identifiable problems and reflect the beneficial uses of the watershed. Objective #2: Integrate watershed principles into land use planning that affect the SLR River Watershed. Objective #3: Enhance public understanding of watershed issues and pollution prevention within the SLR River watershed. Objective #4: Encourage and enhance public involvement within the SLR River watershed in activities related to urban runoff management.
### San Luis Rey River HU (903)

**PLAN:** Guajome Lake Water Pollution Control and Management Plan  
**LEAD GROUP:** County Department of Parks and Recreation  
**YEAR:** 1996

**OVERVIEW:** This study was undertaken to document existing water quality and to explore alternative pollution control and restoration techniques appropriate for the lake. The study ultimately leads to the preparation of a lake management plan that provides for the enhancement of water quality and recreation values associated with Guajome Lake and Guajome Regional Park.

**DESCRIPTION:** This project involved the following activities in order to develop a management program: 1) reviewing the regulations and policies pertaining to protection of surface water quality; 2) assessing the acreage and impacts of different land uses including residential, agricultural, commercial, and open space; 3) noting historic changes to the configuration of Guajome Lake; 4) examining the water quality of the lake and the potential for contaminant transport; and 5) examining the factors influencing sediment and urban pollutant loading to Guajome Lake using a hydrological modeling approach. After finding evidence that sedimentation was the main problem, a variety of sediment and phosphorous control measures were evaluated. In addition, recreation value improvement is addressed.

### Carlsbad HU (904)

**PLAN:** Carlsbad WMP  
**LEAD GROUP:** Carlsbad Watershed Network  
**YEAR:** 2002

**PLAN GOAL:** To protect, restore and enhance the quality and beneficial uses of water, habitats and other natural resources of the watersheds of the Carlsbad Hydrologic unit and the adjacent coastal shoreline.

**PLAN SUMMARY:** To aid in the establishment of cooperative efforts between watershed advocacy groups and public officials in the Carlsbad Hydrologic Unit, several steps are required. The first step was undertaken by the Regional Water Quality Control Board by providing water resources and water quality management guidance through the San Diego Basin Plan. The Basin Plan recognized that water resource planning must occur across political boundaries by establishing beneficial uses and objectives on a watershed-wide basis. The second step was taken when the Carlsbad Watershed Network was formed by various environmental non-governmental organizations that recognized the commonality of objectives that transcended the focused concerns of both specific areas and individual groups. The third step in this process is reflected by the State Board, which funded efforts of the Carlsbad Watershed Network and the Resource Conservation District, culminating in the preparation of this Carlsbad Watershed Management Plan. Despite the name of the watershed, the study area extends well beyond the boundaries of the City of Carlsbad. It covers over 211 square miles incorporating substantial portions of the Cities of Oceanside, Vista, San Marcos, Escondido, Encinitas, and Solana Beach in addition to significant unincorporated portions of the County of San Diego. Plans of any kind can span a broad range of detail and focus. Some plans are meant to be regional in nature, while others are meant to form the basis of construction. Some plans expect a high degree of follow-on studies, while other are an end product in and by themselves. This watershed management plan for the Carlsbad Hydrologic Unit is meant to be a broad based plan with some watershed level detail. However, this format results from the need to frame overarching enhancement goals and characterize the features and issues within the large seven watershed plan area while at the same time address the desire of Network representatives to have specific enhancement opportunities identified and prioritized.

**PRIORITIES OR GOALS:** Capture the vision, goals and expectations of the communities and agencies within the Hydrologic Unit; Identify the present legislative, regulatory, and policy framework operative within the planning area; Characterize the current condition, beneficial water uses and water quality issues in the Hydrologic Unit; Identify the major projects and programs being implemented, planned, or suggested by participants in this planning process; Provide a direction for prioritizing efforts to remedy issues or protect uses and resources within the Carlsbad Hydrologic Unit; Recommend the types of studies and follow on research needed to further the watershed planning process; Form the framework of future water quality / water use protection efforts for projects and programs within the Carlsbad Hydrologic Unit, and; Motivate the agencies and citizens of the Carlsbad Hydrologic Unit to cooperatively work towards common goals and priorities, regardless of political boundaries or divergent mandates.
OVERVIEW: This Plan was prepared by the County of San Diego and the cities of Oceanside, Vista, Escondido, Encinitas, Carlsbad, San Marcos, and Solana Beach—local agencies that have jurisdiction over the Carlsbad watershed. The Plan meets the requirements of the National Pollutant Discharge Elimination System (NPDES) Municipal Storm Water Permit for San Diego Copermittees (Order No. 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 including the Carlsbad watershed.

DESCRIPTION: The Watershed Urban Runoff Management Program (WURMP) prepared for the Carlsbad Watershed includes material that describes the intended approach to meeting the watershed-related obligations of the Municipal Permit. To help reach these goals and objectives, the Carlsbad WURMP identifies and prioritizes water quality related issues within the watershed that can be potentially attributed (wholly or partially) to discharges from the municipal storm drain systems and may be addressed through a cross-jurisdictional approach. Existing data suggests that the principal water quality issues found in surface runoff for this watershed include bacterial indicators and sediment. The Carlsbad WURMP has been developed as an iterative process of watershed assessment, setting priorities, monitoring, and implementation. At the conclusion of each yearly cycle, the process begins anew, allowing participants to respond to changing conditions or adjust strategies that have not performed as anticipated. This framework establishes mechanisms for the participants to evaluate priorities, improve coordination, assess program goals, and allocate finite resources in a cost-effective manner. As part of the yearly cycle, the San Dieguito Watershed Copermittees submit WURMP Annual Reports to the RWQCB documenting the program’s progress.

PRIORITIES OR GOALS: To positively impact the water quality in the receiving waters of the Carlsbad Watershed. Objective #1: Develop/expand methods to assess and improve water quality in the Carlsbad watershed. Objective #2: Integrate watershed principles into land use planning among jurisdictions within the watershed. Objective #3: Increase and enhance public understanding of watershed issues and pollution prevention through a watershed-based educational program. Objective #4: Increase opportunities for public and stakeholder involvement within the watershed.

OVERVIEW: The Escondido Creek Watershed covers approximately 54,112 acres in North County San Diego. While the watershed is rapidly being developed, large areas of vacant land and high-quality habitat still remain within its boundaries. This report describes in detail the physical characteristics of the Escondido Creek watershed, its biological resources, and the influences of the human population on these resources.

DESCRIPTION: This Watershed Restoration Action Strategy is developed in the context of the Carlsbad Watershed Management Plan (KTU&A 2002), which addresses the whole of the Carlsbad Hydrologic Unit and the seven drainages and the communities that live in them. The Carlsbad Hydrologic Unit covers over 200 square miles and comprises most of North San Diego County, and is a region that has been, and continues to be, a place of dynamic change in population and land use. Escondido Creek and its tributaries drain 40% of the Carlsbad Hydrologic Unit. While there has been a marked increase in urbanization of the watershed in recent years, the Escondido Creek watershed still encompasses large areas of vacant land and high-quality habitat, including San Elijo Lagoon, one of the largest remaining wetlands in San Diego County. The Action Strategy for Escondido Creek will take the next critical step toward addressing the specific issues of a local watershed and the concerns of its residents, while adhering to the basic premise put forth by the Carlsbad Watershed Network: “To protect, restore and enhance the quality and beneficial uses of water, habitats and other natural resources of the watersheds of the Carlsbad Hydrologic unit and the adjacent coastal shoreline” (KTU&A 2002). First and foremost, this plan will represent the best work product possible, based upon the input and cooperation of a committed alliance of public stakeholders and individuals. The Escondido Creek Watershed Alliance (ECWA) is a group that has united, by written Memorandum of Understanding, to discuss, debate and address problems throughout the watershed. The Action Strategy for Escondido Creek will focus on the health and existing conditions of the Escondido Creek and its tributaries. It will try to draw conclusions based upon existing data and data from an in-depth field study, and will make recommendations where more information, scientific and otherwise, is required. It will attempt to integrate the needs and actions mandated by regulation and public agencies with the recommendations of the stakeholders for restoration, or objectives that legislation will not, or cannot, address. Habitat and land use planning policies similarly mandated will be used as a tool for recommendations and future management decisions. The Escondido Creek Watershed Restoration Action Strategy will be a concerted best effort to develop a “straight line to results” by creating a list of turn-key project plans considered by ECWA to be of the highest priority for improving the health of the watershed. Each project will be structured such that it will be readily suitable for either grant funding or mitigation efforts by an outside agency. Projects will be prioritized based upon both need and critical path considerations. The Action Strategy will address issues of water quality, invasive species and protection of threatened and endangered species and will emphasize land acquisition and the expansion and improvement of linked habitat. It will also carefully consider the needs of on-going monitoring on a regional (watershed) basis. Monitoring programs that will survive, in time, the requirements of a specific project and are based upon the specific needs of Escondido Creek will be considered within the context of the existing monitoring plans implemented by the various municipalities with interests and residents within the watershed. It is hoped that the unique approach of creating a catalog of both programmatic and site-specific projects will make many of the remedies sought more accessible to those who otherwise might not have the expertise or planning resources to undertake such projects on their own.

PRIORITIES OR GOALS: The primary goals outlined in the plan are: Invasive Plant Species Control, Water Quality Improvements, Habitat Acquisition and Restoration and Education.
### Loma Alta Creek Watershed Management Plan

**Overview:** The Loma Alta Creek Watershed Management Plan (WMP) represents a comprehensive overview of the condition of the Loma Alta Creek watershed and a plan for its management. It is intended to protect, enhance, and restore beneficial uses within the watershed. The WMP describes the characteristics of land uses, water quality, habitats, and biological resource utilization within the Loma Alta Creek watershed. It also provides an understanding of the linkages between watershed characteristics and impairments within the Loma Alta Creek watershed. Lastly, the WMP describes actions, methods, projects for reducing and ultimately eliminating impairments and protecting and restoring beneficial uses.

**Priorities or Goals:** The overall goals and objectives of the WMP are to eliminate impairments and to promote beneficial uses within the Loma Alta Creek watershed. The stated goals of the Loma Alta Creek Watershed Management Plan are to: (1) Protect Public Health and Wildlife by Preventing/Minimizing Risks Associated with Loma Alta Creek waters; (2) Protect, Enhance, Restore Native Habitats and Biological Resources; (3) Balance Environmental Benefits with Economic Impacts; and (4) Increase Public Awareness and Involvement in Watershed Management. The objectives identified in this plan are: (1) Protect and improve water quality, (2) Remove and control sedimentation, (3) Reduce flood risk, (4) Protect, enhance, and restore coastal and wetland resources, (5) Protect and integrate creek, habitat, and upland corridors, (6) Reduce exotic species impacts, (7) Coordinate with other planning efforts, (8) Obtain grant funds to implement watershed improvement projects, (9) Increase awareness and stewardship of watershed, (10) Involve public in watershed management, and (11) Document effectiveness of WMP Actions. Implementation of a variety of actions will be required to achieve the plan's objectives. Actions, activities, and potential projects to meet the goals and objectives of watershed management are summarized in the Loma Alta Creek Action Plan section of the document. This compilation of fifty four management actions is organized into four primary sections that correspond to each of the four goals of the WMP.

### San Dieguito Watershed Management Plan

**Overview:** The San Dieguito Watershed Management Plan developed by - and adopted September, 2006 as a guidance document - by 24-member stakeholders group representing local jurisdictions and water agencies business and agricultural interests, state and federal agencies, and citizen groups. The "Action Plan" identifies priority actions to achieve the following objectives in the watershed: Protect & Enhance Water Quality; Conserve, Reuse, Protect and Maintain Local Water Supplies; Protect, Enhance & Restore Native Habitats & Biological Resources; Support social and Community Resource Needs & Watershed Stewardship; Preserve Agricultural Land and Encourage Sustainable Farming. A Watershed Council has been formed to promote and facilitate implementation of the plan.

**Priorities or Goals:** Goals and Priorities include: 1) Reduce impervious surfaces - promote cluster development; use pervious paver in development/redevelopment; use of vegetated buffers to control urban runoff; 2) Address water quality problems of impaired segments - dry weather diversion to sanitary sewer, where appropriate; enhance existing detention basins - and promote greater use of basins; create wetland to control runoff; 3) Enhance Local Water Supply Sources and Storage - promote "saved water", such as by incentives for more efficient landscape irrigation; expand the use of reclaimed water; evaluate opportunities for injecting reclaimed water to aquifers; 4) Habitat & Biological Resources Protection - complete San Dieguito River Park; protect critical resource areas, such as Rancho Guejito; support implementation of regional habitat plans, such as the MSCP; support commitment to funding to implement habitat plans; update the County General Plan to encourage clustering of urban growth and low-impact development; jurisdictional ordinances to promote use of native plants and limit use of invasive species; 5) Support Community and Social Resources - protection of agricultural lands and incentives for sustainable farming; outreach to Tribal Governments; establish Watershed Council; obtain funding to implement priority watershed improvement projects.

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**Carlsbad HU (904)**
**Plan:** Loma Alta Creek Watershed Management Plan
**Lead Group:** City of Oceanside
**Date:** 2003

**Description:** Over 95 percent of the Loma Alta Creek watershed is within the City of Oceanside. The watershed covers nearly 6,300 acres of land. At the time of the writing of this plan, approximately seventy percent of the watershed was urbanized. Most of the undeveloped land (approximately 1,500 acres) supports disturbed and nonnative habitat with numerous exotic, invasive plant species throughout the watershed. There is approximately seven percent (350 acres) of native habitat remaining in the watershed, including freshwater marsh, willow riparian scrub, coastal sage scrub, chaparral, and valley and coastal grassland. The creek is an important wildlife corridor and supports several threatened and endangered species, as well as, approximately 100 species of wildlife. The purposes of this plan are to describe the characteristics of land uses, water quality, habitats and biological resource utilization within the Loma Alta Creek watershed; provide an understanding of the linkages between watershed characteristics and impairments within the Loma Alta Creek watershed; summarize the issues and concerns expressed by stakeholders of the watershed; communicate the goals and objectives developed for the watershed; present an Action Plan framework to guide watershed management; describe actions, methods, and projects for reducing and ultimately eliminating impairments and for protecting, enhancing, and/or restoring beneficial uses; identify types of grants that may provide funding opportunities for the watershed projects described in this plan; and assist the City of Oceanside in its planning and implementation of watershed management strategies consistent with the JURMP and WURMP.

**Priorities or Goals:** The overall goals and objectives of the WMP are to eliminate impairments and to promote beneficial uses within the Loma Alta Creek watershed. The stated goals of the Loma Alta Creek Watershed Management Plan are to: (1) Protect Public Health and Wildlife by Preventing/Minimizing Risks Associated with Loma Alta Creek waters; (2) Protect, Enhance, Restore Native Habitats and Biological Resources; (3) Balance Environmental Benefits with Economic Impacts; and (4) Increase Public Awareness and Involvement in Watershed Management. The objectives identified in this plan are: (1) Protect and improve water quality, (2) Remove and control sedimentation, (3) Reduce flood risk, (4) Protect, enhance, and restore coastal and wetland resources, (5) Protect and integrate creek, habitat, and upland corridors, (6) Reduce exotic species impacts, (7) Coordinate with other planning efforts, (8) Obtain grant funds to implement watershed improvement projects, (9) Increase awareness and stewardship of watershed, (10) Involve public in watershed management, and (11) Document effectiveness of WMP Actions. Implementation of a variety of actions will be required to achieve the plan’s objectives. Actions, activities, and potential projects to meet the goals and objectives of watershed management are summarized in the Loma Alta Creek Action Plan section of the document. This compilation of fifty four management actions is organized into four primary sections that correspond to each of the four goals of the WMP.

**San Dieguito HU (905)**
**Plan:** San Dieguito WMP
**Lead Group:** City of San Diego
**Date:** 2006

**Description:** The San Dieguito Watershed Management Plan was adopted in September, 2006 - as an advisory guidance document for jurisdictions, organizations, and the general citizens operating in the watershed - by the 24-member Watershed Stewardship Initiative Group, representing a broad range of stakeholder interests. The recommended actions in the San Dieguito Watershed Plan address 30 program areas and include 35 different types of projects. Education programs are assigned high priority in areas such as use of pervious surfaces and run-off reduction measures such as swales in development, anti-litter programs, management of pet and farm animal waste, reduction of invasive plant use for landscaping, and community support for local agriculture. Actions, such as the establishment of financial incentives, are identified to preserve working landscapes (farms and ranches).

**Priorities or Goals:** Goals and Priorities include: 1) Reduce impervious surfaces - promote cluster development; use pervious paver in development/redevelopment; use of vegetated buffers to control urban runoff; 2) Address water quality problems of impaired segments - dry weather diversion to sanitary sewer, where appropriate; enhance existing detention basins - and promote greater use of basins; create wetland to control runoff; 3) Enhance Local Water Supply Sources and Storage - promote "saved water", such as by incentives for more efficient landscape irrigation; expand the use of reclaimed water; evaluate opportunities for injecting reclaimed water to aquifers; 4) Habitat & Biological Resources Protection - complete San Dieguito River Park; protect critical resource areas, such as Rancho Guejito; support implementation of regional habitat plans, such as the MSCP; support commitment to funding to implement habitat plans; update the County General Plan to encourage clustering of urban growth and low-impact development; jurisdictional ordinances to promote use of native plants and limit use of invasive species; 5) Support Community and Social Resources - protection of agricultural lands and incentives for sustainable farming; outreach to Tribal Governments; establish Watershed Council; obtain funding to implement priority watershed improvement projects.
OVERVIEW: This Plan was prepared by the County of San Diego, and the cities of Poway, Escondido, Solana Beach, San Diego, and Del Mar – all local agencies, which have jurisdiction over the San Dieguito watershed. The Plan meets the requirements of the National Pollutant Discharge Elimination System (NPDES) Municipal Storm Water Permit for San Diego Copermittees (Order No. 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 including the San Dieguito watershed.

DESCRIPTION: This Plan includes material that describes the intended approach to meeting the watershed-related obligations of the Municipal Permit. The San Dieguito River WURMP identifies and prioritizes water quality related issues within the watershed that can be potentially attributed (wholly or partially) to discharges from the municipal storm drain systems and may be addressed through a cross-jurisdictional approach. Existing data suggests that the principal water quality issues found in surface runoff for this watershed include bacterial indicators (fecal coliform) and Total Dissolved Solids. The San Dieguito WURMP has been developed as an iterative process of watershed assessment, setting priorities, monitoring, and implementation. At the conclusion of each yearly cycle, the process begins anew, allowing participants to respond to changing conditions or adjust strategies that have not performed as anticipated. This framework establishes mechanisms for the participants to evaluate priorities, improve coordination, assess program goals, and allocate finite resources in a cost-effective manner. As part of the yearly cycle, the San Dieguito Watershed Copermittees submit WURMP Annual Reports to the RWQCB documenting the program’s progress.

PRIORITIES OR GOALS: To positively affect the water quality of the San Dieguito 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.
<table>
<thead>
<tr>
<th>Penasquitos HU (906)</th>
<th>PLAN: La Jolla Shores Coastal WMP</th>
<th>LEAD GROUP: Scripps Institute of Oceanography</th>
<th>2007</th>
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OVERVIEW: Watershed. The project is located within the community of La Jolla and on the campus of the University of California, San Diego located within the Penasquitos Hydrologic Unit (Scripps Hydrologic Area) of San Diego County, California. The purpose of this project is to develop a watershed plan to protect the San Diego Marine Life Refuge and the San Diego-La Jolla Ecological Reserve, two Areas of Special Biological Significance (ASBS). The plan addresses urban runoff and stormwater pollutants that discharge from the watershed. It also develops frameworks for monitoring marine ecosystems and for information management to better manage ASBS issued.

DESCRIPTION: The scope of work for the La Jolla Shores Coastal Watershed Management Plan was developed through stakeholder and project partner meetings held during the proposal preparation process. At these meetings, experts from the fields of urban runoff management, ocean and environmental science, data management and public participation were consulted to develop an ASBS protection program. Participants identified four key issue areas and the corresponding program elements that were necessary to prepare a coastal watershed management plan that enhances traditional watershed management programs. This approach is necessary to address the complex issues and strict compliance standards associated with the ASBSs. Program partners, stakeholders and team leaders were identified for each of the four key issue areas and program elements. These specific program elements and corresponding issue areas include: (1) Urban Runoff Management / need to reduce watershed pollutant impacts and address the potential of pollutants discharging into ASBS; (2) Ocean Ecosystem Assessment / need to develop resource management tool serving variety of end users, (3) Information Systems / need to develop resource management tool serving variety of end users, (4) Public Participation / need to engage public in protection and management of resources. These four program elements have been identified as the essential and interactive components of an Integrated Coastal Watershed Management Plan.

PRIORITIES OR GOALS: These four program elements have been identified as the essential and interactive components of an Integrated Coastal Watershed Management Plan.

Urban Runoff Management. At the center of this project is the management of urban runoff, including storm water, within the watershed in order to protect the adjacent ASBSs and meet the waste discharge prohibition stated in the California Ocean Plan. This element will seek to follow the Critical Coastal Area (CCA) Management Plan outline developed by the California Coastal Commission in the Critical Coastal Area’s work plan. Per CCA work plan guidelines, it will include a watershed assessment, analysis, and development of a comprehensive action plan for controlling urban runoff. The City of San Diego was selected to lead this effort. The City has been performing urban runoff management activities since the early 1990s when the Municipal Storm Water NPDES Permit was first developed for the San Diego Region. The City has a leader in development and implementation of successful programs throughout the City to reduce the impacts of urban runoff. Over the last 20 years, the City has taken aggressive steps to improve water quality and limit the impacts of urban runoff and sewage spills to our recreational waters. In the mid 1980’s, the City pioneered a new technology if we are to develop effective protection practices. This element takes an integrated approach, by considering discharge from terrestrial sources as well as pollutants discharged from ASBS. As early as the 1979-1980 surveys of the two ASBSs, the SWRCB strongly recommended the establishment of a regular sampling program to monitor ecological and environmental change in this protected area. This element will establish an ocean ecosystem monitoring and assessment model that is transferable statewide. Researchers at SIO will take the lead in ocean ecosystem assessment. SIO has been active in research in the adjacent ASBSs since its inception in 1903, and is widely known as one of the top oceanographic facilities in the world. A number of current research programs, including a newly created national Long Term Ecological Research site just offshore, will contribute to the knowledge base available in planning an ocean ecosystem assessment program. SIO’s physical facilities as well as the expertise of a highly skilled technical support staff will also be an invaluable asset in this process.

Information Management. As the elements of this project were discussed and evaluated by the project team and other professionals, the need for data and information management continually arose. The project team was encouraged to develop a plan to leverage the recent Coastal Conservancy investment in a Southern California Coastal Ocean Observation System (SCCOOS), which will provide background and context to the monitoring of receiving waters. The Plan proposes to build out information management capacity of the system to serve as a tool for La Jolla Shores Coastal Watershed Management Plan. The system will integrate data from both proposed urban runoff management and ocean ecosystem assessment programs. The data from disparate sources would be integrated into a single system making the information available to a range of users from scientists, to regulators, to the general public. Due to the strong unanimous consensus on the need for such capability, the project team developed the information management element with the goal of developing a system that can become a model for integrating watershed data and nearshore coastal ecosystem management as, specific resource management programs for ASBS, Critical Coastal Areas, and Marine Protected Areas, as well as IRWM programs. The Plan development will also identify those steps necessary to ensure the data/information system is interoperable with existing and planned state/federal efforts.

Public Participation. As an adage states, “an ounce of prevention is worth a pound of cure” – and preventing pollution at its source remains the most effective and cost-effective way to preserve the health of our coast in general, and the La Jolla ASBS in particular. Ultimately, it is the public that must embrace the La Jolla Shores Coastal Watershed Management Plan since it is often their actions that have a significant impact on the quality of the runoff within the watershed. The watershed generally consists of a firmly established residential community within La Jolla, a small commercial area, and a smaller student population in the northern section of the watershed. End-of-the-pipe solutions are not as desirable as source reduction programs that involve the public changing habits and eliminating urban runoff. This element involves the public through the stakeholder involvement process, and outreach and education of the residents within the watershed. San Diego Coastkeeper will manage this task because of their long-term presence in this area, their expertise in public outreach and education, and their commitment to increasing awareness of water quality issues and reducing pollution of our waters.
OVERVIEW: This report presents the available information on watershed resources and provides a preliminary identification of areas within the watershed to be protected and enhanced.

DESCRIPTION: Los Peñasquitos Watershed contains the largest block of habitat in the coastal portion of San Diego County. Los Peñasquitos Watershed supports a very high diversity of habitat types, including coastal salt and brackish water marshes; maritime succulent and coastal sage scrubs; southern maritime, southern mixed, chamise chaparrals; oak woodlands and oak riparian forests; riparian scrubs and woodlands; marshes and wet meadows; grasslands; and vernal pools.

PRIORITIES OR GOALS: Los Peñasquitos Lagoon – Protect the unique biological resources and water quality of the lagoon system; Miramar Reservoir – Protect water quality; Groundwater basins of Los Peñasquitos Canyon and Poway Valley – Protect water supply and quality; Continue to protect the open space and natural vegetation areas currently within the preserve areas of the MSCP and fully fund area-specific management directives (ASMDs) for preserve lands in the watershed. This includes upland and wetland/riparian areas throughout the watershed. This includes the continued protection of the resources within Los Peñasquitos Canyon, Carmel Valley, Del Mar Mesa, Black Mountain, and eastern Poway. To the maximum extent possible, protect remaining drainage floodplains and wetland buffer areas; To the extent possible, protect remaining natural tributaries and headwaters areas.

OVERVIEW: The overall goal of the planning-level wetland and riparian delineation and assessment effort was to map, characterize, and assess the wetland and riparian resources of the Los Peñasquitos watershed. The purpose of this effort was to identify the resources within the watershed and to assess the baseline integrity of these resources. Due to the subbasin scale of the assessment, the subbasin-wide scores may not represent the integrity or function at a site-specific scale.

DESCRIPTION: This report provides background on the classification and assessment process, describes the methods for this delineation and assessment study, and presents the results of the study. The Carmel Creek subwatershed in the northern portion of the watershed covers approximately 10,371 acres. A total of 349.3 acres of wetland and riparian resources were delineated within this subwatershed, which is approximately 3.4 percent of the total subwatershed area. The major wetland and riparian features of the Carmel Creek subwatershed include the lagoon, riparian scrub, and riparian forest. The Los Peñasquitos Creek subwatershed in the central portion of the watershed covers approximately 38,844 acres. A total of 1,273.9 acres of wetland and riparian resources were delineated within this subwatershed, which is approximately 3.3 percent of the total subwatershed area. The major wetland and riparian features of the Los Peñasquitos Creek subwatershed include the lagoon, riparian scrub, riparian woodland, riparian forest, oak riparian forest, large streambeds, and freshwater marsh. The Carroll Creek subwatershed in the southern portion of the watershed covers approximately 10,752.1 acres. A total of 345.6 acres of wetland and riparian resources were delineated within this subwatershed, which is approximately 3.2 percent of the total subwatershed area. The major wetland and riparian features of the Carroll Creek subwatershed include open water, riparian scrub, large streambed, and freshwater marsh. Carmel Creek and Carroll Creek subwatersheds exhibited generally lower integrity due to the level of alteration and development in these subwatersheds. The Los Peñasquitos Creek subwatershed includes the preserved canyon and the eastern, undeveloped areas of the watershed, resulting in higher composite integrity. Carmel Creek and Carroll Creek subwatersheds exhibited generally lower integrity due to the level of alteration and development in these subwatersheds. The Los Peñasquitos Creek subwatershed also includes an aggregate mine that covers several subbasins, which caused the water quality integrity to be reduced. The Los Peñasquitos Creek subwatershed includes the preserved canyon and the eastern, undeveloped areas of the watershed, resulting in higher composite integrity. Carmel Creek and Carroll Creek subwatersheds exhibited generally lower integrity due to the level of alteration and development in these subwatersheds. The Los Peñasquitos Creek subwatershed includes the preserved canyon and the eastern, undeveloped areas of the watershed, resulting in higher composite integrity.

PRIORITIES OR GOALS: (1) Review and comment by the City and the CAC. (2) Revisions and refinements of the results of this study. (3) An evaluation by the project team of the watershed resources to be preserved and enhanced. (4) An evaluation by the project team on watershed stressors. (5) Development of the watershed management plan.
OVERVIEW: This Plan assesses existing conditions, opportunities and constraints for habitat protection, habitat restoration, enhancement and protection of cultural resources, public access improvements, public safety, and water quality. This plan addresses a lack of management for the watershed due to dual jurisdiction between the City and Marines. Main concerns also include invasive species control, cultural resources, biological resources, recreational trails, and hydromodification.

DESCRIPTION: The Rose Creek Watershed (RCW) suffers from many of the same ailments as many urbanized southern California coastal watersheds. However, the RCW also benefits from two key factors that provide hope and opportunities for future improvements in overall watershed health and function. These factors are: 1) much of the upper watershed is being managed by MCAS Miramar as open space with low impact training ranges; and 2) the City of San Diego owns and manages as open space the majority of Rose and San Clemente Canyons from the western boundary of MCAS Miramar to just below their confluence near the Interstate 5 and State Route 52 interchange. These two factors provide a significant land area within the RCW where natural watershed functions can be maintained, enhanced or even re-created. The action recommendations described herein are the culmination of a year long process that focused on reviewing existing data and reports, conducting limited field work and assessments, and gaining insight from local stakeholders regarding their concerns and priorities. The actions are adaptive management tools to be used alone or in combination to systematically improve the use and function of the watershed’s resources. The recommended actions fall into the following categories: biological resources; cultural resources; public safety; recreational trails; and water resources. The recommendations center on a few key goals: 1) the issues and solutions within the RCW are linked and should be addressed concurrently; 2) hydrologic improvements (including water quality) are crucial to restoring the natural functions of the streams; 3) creation of a continuous recreational trail and wildlife corridor from Interstate 805 to Mission Bay is a viable and necessary regional amenity; and 4) support for the recommendations will need to be developed through public outreach and education. Understanding the value of incremental changes via an adaptive management program that considers habitat restoration, hydrologic improvements, and public access is crucial to the long-term success of these efforts. Adaptive management is the recognition that restoration professionals and scientists as a whole still cannot precisely predict the environmental responses to changes introduced by a project, and as such, a set of adaptive steps may be necessary to adjust and manage the project over time to compensate for environmental changes. Some of the recommendations in this assessment take the concept a step further and recommend that large improvement projects be broken into numerous incremental phases to allow adaptations between phases to occur to ensure the overall project meets its intended goal. In addition, most of the recommendations focus on the western third of the RCW, which falls west of Interstate 805 and completely within the jurisdiction of the City of San Diego. Some of the recommendations due include the portions of the RCW that fall within MCAS Miramar, but are predominantly coordination and cooperation efforts and not on the ground improvement projects. The recommended ongoing coordination with MCAS Miramar may lead to opportunities for cooperative projects.

PRIORITIES OR GOALS: Create a Rose Creek Watershed Conservation Bank; Enhance the biological connection to Mission Bay; Control invasive species; Restore and enhance native habitats; Protect and enhance wildlife corridors; Establish consistent land management of the open space lands (private and public); Document and protect cultural resources; Assess potential effects on cultural resources from other action recommendations; Interpret cultural resources; Manage fire risk; Reduce landslides; Reduce illegal activities on open space lands; Improve access to the open space system; Improve access within and between open space areas; Create regional recreational connections and loops; Create safe and legal railroad crossings; Develop data and models to improve understanding of hydrology and hydraulics; Reduce erosion from multiple sources; Modify or remove concrete flood control channels; Monitor and reduce water pollution.

OVERVIEW: This Plan inventories the resources in the watershed, promotes understanding of the nature and degree of threats to these resources, and begins to develop management solutions and projects to protect and enhance resources and improve the overall health of the watershed. Plan goals, policies, and projects are grouped into the following categories: Physical Character of the watershed; Human Enrichment Resources; Biological Resources; Land Use Regulations/Controls; and Education/Outreach.

DESCRIPTION: This Plan was developed through a more than two year stakeholder-driven process. The Plan identifies urbanization as the main threat or stressor to resources within this watershed. The approach taken in the Plan is to tie threats in the watershed to the land use generally associated with that threat. Land uses and associated threats were evaluated by identifying land use trends; identifying the impacts and stressors produced by different land use types; linking stressors (and thus land uses) to likely watershed responses; and, finally, identifying management solutions to reduce stressors. Goals for protecting the physical character of the watershed include advancing a water resources monitoring and modeling program; reduce nuisance urban runoff and pollutant loads; and protect geomorphology and transport. Goals for human use and enrichment include maintaining beaches, cultural and historic sites, and other public resources. Goals for biological resources include protecting remaining open space and reduce human impacts; maximizing the value of watershed biological resources; and managing fire. The goals for education are to inform the public and watershed users about the major issues and what they can do to help; and to empower them to become watershed stewards. The goals for land use regulations and controls are to integrate watershed issues at the discretionary land use review/approval level.
### Los Penasquitos Watershed Urban Runoff Management Program (WURMP)

**OVERVIEW:** This Plan was prepared by the cities of San Diego, Del Mar, Poway, and County of San Diego – all local agencies that have jurisdiction over the Los Penasquitos watershed. The Plan meets the requirements of the National Pollutant Discharge Elimination System (NPDES) Municipal Storm Water Permit for San Diego Copermittees (Order No. 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 including the Los Penasquitos watershed.

**DESCRIPTION:** The Watershed Urban Runoff Management Program (WURMP) prepared for the Los Penasquitos Watershed includes material that describes the intended approach to meeting the watershed-related obligations of the Municipal Permit. The Los Penasquitos WURMP identifies and prioritizes water quality related issues within the watershed that can be potentially attributed (wholly or partially) to discharges from the municipal storm drain systems and may be addressed through a cross-jurisdictional approach. Existing data suggests that the principal water quality issues found in surface runoff for this watershed include fecal coliform a bacterial indicator, total suspended solids, and total dissolved solids. The Los Penasquitos WURMP has been developed as an iterative process of watershed assessment, setting priorities, monitoring, and implementation. At the conclusion of each yearly cycle, the process begins anew, allowing participants to respond to changing conditions or adjust strategies that have not performed as anticipated. This framework establishes mechanisms for the participants to evaluate priorities, improve coordination, assess program goals, and allocate finite resources in a cost-effective manner. As part of the yearly cycle, the Los Penasquitos Watershed Copermittees submit WURMP Annual Reports to the RWQCB documenting the program’s progress.

**PRIORITIES OR GOALS:** To positively affect the water resources of the Los Penasquitos Watershed while balancing economic, social and environmental constraints. 
- Objective #1: Develop and 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 in the watershed.
- Objective #4: Encourage and enhance stakeholder involvement within the watershed.

### Los Penasquitos Lagoon Enhancement Plan

**OVERVIEW:** This plan recognizes the presence of natural resources in Mission Bay Park and provides guidelines and programs for the protection, enhancement, and management of these resources.

**DESCRIPTION:** This Plan defines a 636-acre lagoon system. In the past 60 years, the Lagoon has evolved from a tidal estuary to a lagoon that is closed to tidal action for long periods of time. The eight elements of the plan are: 1) monitoring, 2) opening the lagoon mouth, 3) expanding park and open space area, 4) improving tidal circulation, 5) restoring habitat, 6) providing public access, 7) controlling sedimentation, and 8) mitigating wetland developments.

**PRIORITIES OR GOALS:** The overall directive for the enhancement plan is to protect, maintain, and enhance the Los Penaquitos Lagoon system and adjacent uplands in order to perpetuate the native flora and fauna characteristic of southern California lagoons, and to restore and maintain estuarine hydrology in a regime which approaches that which existed before major modifications were made by modern man. The objectives are: 1) Open the lagoon mouth regularly to enhance the health and ecological value of the lagoon; 2) design and implement a plan to improve circulation in areas of historical tidal action; 3) Improve and maintain habitat for native species; 4) Provide compatible public access and education opportunities; 5) Protect the lagoon by reducing the amount of sedimentation and pollution the enters the lagoon; 6) Consider public health and safety; 7) Minimize capital and maintenance costs.

### Mission Bay Park Natural Resource Management Plan

**OVERVIEW:** This plan recognizes the presence of natural resources in Mission Bay Park and provides guidelines and programs for the protection, enhancement, and management of these resources.

**DESCRIPTION:** The guidelines for development and mitigation provided in the Management Plan include: dredging; methods of construction to minimize impacts to natural resources; beach maintenance restrictions; construction methods to reduce impacts to water quality; scheduling constraints; buffer zones, mitigation location restrictions; habitat replacement ratios such as 1:1 ratio for eelgrass, salt pan, salt marsh, and any coastal strand habitat supporting sensitive species; eelgrass mitigation options; mitigation plans; and mitigation monitoring plans.

**PRIORITIES OR GOALS:** One goal of the Plan is to demonstrate the City's recognition of the rich and varied biological resources of the Park. The Plan highlights recreational fishing, bird-watching, and aesthetic enjoyment provided by these resources, and recognizes them as an integral part of Mission Bay Park. Another goal of the Plan is to designate environmentally sensitive habitats and establish requirements for: 1) Enhancement and restoration; 2) Maintenance programs; 3) Appropriate buffer areas. The objectives of the Plan are: 1) Establish management practices to preserve and protect biological resources while providing future recreational development, maintenance, and land use; 2) provide a framework for mitigation acceptable to the City and resource agencies; 3) Provide opportunities for innovative resource enhancement; 4) Establish a foundation for increased educational and research opportunities.
San Diego River HU (907) and Peñasquitos HU (906)  
PLAN: La Jolla & Mission Bay WURMP  
LEAD GROUP: Stormwater Copermittees; City of San Diego  
2003

OVERVIEW: This Plan was prepared by the City of San Diego, as the lead agency. The Plan meets the requirements of the National Pollutant Discharge Elimination System (NPDES) Municipal Storm Water Permit for San Diego Copermittees (Order No. 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 including the Mission Bay and La Jolla watersheds.

DESCRIPTION: The Watershed Urban Runoff Management Program (WURMP) prepared for the Mission Bay and La Jolla Watersheds includes material that describes the intended approach to meeting the watershed-related obligations of the Municipal Permit. The City of San Diego is the sole Copermittee in the Mission Bay and La Jolla Watersheds. The Mission Bay and Coastal La Jolla watersheds encompass over 67 square miles within the central portion of the City of San Diego. The Tecolote and Rose Creeks watersheds drain directly to Mission Bay. A third watershed drains directly to the Pacific Ocean along the communities of La Jolla and Pacific Beach. The Mission Bay and La Jolla WURMP identifies and prioritizes water quality related issues within the watershed that can be potentially attributed (wholly or partially) to discharges from the municipal storm drain systems and may be addressed through a cross-jurisdictional approach. Existing data suggests that the principal water quality issue found in surface runoff for this watershed is fecal coliform, which is a bacterial indicator. The Mission Bay and La Jolla WURMP has been developed as an iterative process of watershed assessment, setting priorities, monitoring, and implementation. At the conclusion of each yearly cycle, the process begins anew, allowing participants to respond to changing conditions or adjust strategies that have not performed as anticipated. This framework establishes mechanisms for the participants to evaluate priorities, improve coordination, assess program goals, and allocate finite resources in a cost-effective manner. As part of the yearly cycle, the City of San Diego submits WURMP Annual Reports to the RWQCB documenting the program’s progress.

PRIORITIES OR GOALS: To positively affect the water resources of the Mission Bay and La Jolla Watersheds while balancing economic, social and environmental constraints. Objective #1: Develop and 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 in the watershed. Objective #4: Encourage and develop stakeholder participation

San Diego River HU (907)  
PLAN: Famosa Slough Enhancement Plan  
Pacific Southwest Biological Services  
1993

OVERVIEW: This Plan provides a conceptual plan for the enhancement of the Famosa Slough system. A range of development alternatives were reviewed for each project element (biology, hydrology, and human use). From this process, incompatible combinations of alternatives were identified and the proposed Enhancement Plan was defined.

DESCRIPTION: A variety of impacts have occurred over the last 100 years that have shaped the current condition of Famosa Slough. The historic restriction of tidal circulation by dike construction resulted in a drying of the marsh plain. Subsequent to the original diking, filling of marshlands and diversion of tidal and flood waters further degraded the system. Urban encroachment also restricted the connectivity of the Slough to other areas. In spite of this, the Slough is utilized by a variety of wildlife species, wintering shorebirds and waterfowl being the most abundant. The Slough offers a breadth of enhancement opportunity and a number of balancing constraints that were considered in planning efforts. The Plan preserves the saltwater pond, significantly expands salt marsh habitat, emphasizes tidal flushing and water quality, and provides trails viewpoints, and interpretive features.

PRIORITIES OR GOALS: The primary purpose of the Plan is: the restoration and preservation of Famosa Slough as a natural habitat, to provide sanctuary for wildlife, and to educate the public in appreciation of plants and animals that comprise a wetland system. The Plan identifies 10 biological and 8 social objectives to achieve this goal. The Plan also identifies Biology, Hydrology, and Human Use Elements for achieving the objectives identified.

San Diego River HU (907)  
PLAN: San Diego River WMP  
LEAD GROUP: County  
2005

OVERVIEW: This plan provides land use policies, programs, and practices designed to protect, enhance, and restore all of the land, water, biological and cultural resources, and associated beneficial uses in the San Diego River watershed from anthropogenic activities. The plan was developed through a stakeholder driven process over a three year process. The framework of the Plan is comprised of a vision, supporting goals, and strategies to achieve these goals.

PRIORITIES OR GOALS: Thirteen principles were established to clarify the vision statement. The Plan identifies several high priority actions - support ongoing collaborative management and stakeholder cooperation; develop and maintain a data management system for furthering watershed management and goals; advance public education and outreach; develop a comprehensive program of monitoring and watershed modeling to advance the removal of hydromodifications and restore streams; reduce the amount of impervious surfaces; promote groundwater management and protection of water supplies; address habitat degradation through acquisition, restoration and management; and control non-native invasive species.
OVERVIEW: This Plan was prepared by the cities of San Diego, El Cajon, Santee, La Mesa, Poway, and the County of San Diego – all local agencies that have jurisdiction over the San Diego River watershed. The Plan meets the requirements of the National Pollutant Discharge Elimination System (NPDES) Municipal Storm Water Permit for San Diego Copermittees (Order No. 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 including the San Diego River watershed.

DESCRIPTION: The Watershed Urban Runoff Management Program (WURMP) prepared for the San Diego River Watershed includes material that describes the intended approach to meeting the watershed-related obligations of the Municipal Permit. To help reach these goals and objectives, the San Diego River WURMP identifies and prioritizes water quality related issues within the watershed that can be potentially attributed (wholly or partially) to discharges from the municipal storm drain systems and may be addressed through a cross-jurisdictional approach. Existing data suggests that the principal water quality issues found in surface runoff for this watershed include bacterial indicators, total dissolved solids, pH, phosphorous, and dissolved oxygen. The San Diego River WURMP has been developed as an iterative process of watershed assessment, setting priorities, monitoring, and implementation. At the conclusion of each yearly cycle, the process begins anew, allowing participants to respond to changing conditions or adjust strategies that have not performed as anticipated. This framework establishes mechanisms for the participants to evaluate priorities, improve coordination, assess program goals, and allocate finite resources in a cost-effective manner. As part of the yearly cycle, the San Diego River Watershed Copermittees submit WURMP Annual Reports to the RWQCB documenting the program’s progress.

PRIORITIES OR GOALS: To positively affect the water resources of the San Diego River Watershed while balancing economic, social and environmental constraints. Objective #1: Develop and 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. Objective #4: Encourage and develop stakeholder participation.

OVERVIEW: This Plan describes current resource allocations to the San Diego River Conservancy, public needs served by the Conservancy, policies and principles guiding the Conservancy and the intended and recommended future course of the Conservancy’s efforts. This future course is expressed in terms of four major programs and a number of projects designed to implement each program. The Infrastructure portion of the Plan provides a reasonable estimate of the costs needed to conduct the projects. The Plan starts with background on the Conservancy, including the Conservancy’s statutory authority, business principles and project criteria.

PRIORITIES OR GOALS: The Plan’s objectives are grouped into four major program areas: (1) land conservation, (2) recreation and education, (3) natural and cultural resources preservation and restoration, and (4) water quality and natural flood conveyance. Goals and measurable outcomes are identified as follows: secure the preservation of 1450 acres of land; develop and implement protocols for land management; advance 32 miles of trails; encourage public involvement in caring for the river; advance projects that make the river safer; reduce, control, and where feasible, eradicate invasive non-native species while restoring area habitats to native function; restore 900 acres to native function; preserve key cultural and historic sites; promote and implement projects which maintain and improve the water quality and natural flood conveyance of the San Diego River including completing a watershed hydrologic assessment.

OVERVIEW: This Chollas Creek Enhancement Program provides recommendations for wetland conservation, restoration and rehabilitation. The Enhancement Program provides a community vision for development, existing city policies, design/development guidelines, and a strategy for implementation.

DESCRIPTION: Chollas Creek is a natural drainage system that traverses inner city, neighborhoods within the Greater Mid-City (City Heights, Eastern), Encanto Neighborhoods, Southeastern San Diego, and Barrio Logan communities, from its headwaters in La Mesa and Lemon Grove to San Diego Bay. In the past 50 years the creek has lost some of its natural geographic features due to freeways and other urban development that have segmented the creek so that in some areas it is barely recognizable as an open space system. The historic channel and floodplain of Chollas Creek has been altered substantially as a result of decades of development and human activity. Today, the Chollas Creek-bed is an urban creek with little native vegetation and much of the channel is armored or is concrete channel and culverts. The U.S. Environmental Protection Agency has identified it as an “impaired” water body due to high levels of cadmium, copper, lead, zinc, and other toxicity found in the storm water collected. The creek’s primary environmental value is its contribution to improved downstream water quality as a result of the filtering action of water flow through the channel.

PRIORITIES OR GOALS: Design guidelines for the Creek include: A. Wetland and Upland Restoration and Rehabilitation. One of the main objectives of the Community Vision for Chollas Creek Park is to restore the habitat in those areas that have some natural remnants., B. Channel Reconstruction including removing concrete, bioengineering, and sustainable design such as low-impact development, C. Landscaping with appropriate native wetland and upland vegetation, D. Create a Trail System to provide a much needed linear park-open space system that will ultimately link San Diego’s central mesas to San Diego Bay, E. Public Art, F. Education and Interpretation.
San Diego Bay (908, 909, 910)  
**PLAN:** San Diego Bay Comprehensive Management Plan  
**LEAD GROUP:** Regional Board  
**1999**

**OVERVIEW:** This Comprehensive Management Plan identified clear strategies and tactics to address eight key issues of concern in the San Diego Bay. There is also a plan for a Coordinated Monitoring Program with data stored at a data repository. A web site operated by the San Diego Supercomputer Center, provides the public access to the data.

**DESCRIPTION:** There is a great deal of data collected about the San Diego Bay by a wide variety of organizations that discuss: water quality, storm drains, eelgrass beds, sediment contaminants, rainfall, birds and fish. This monitoring program aims to coordinate monitoring efforts to allow for the centralization, integration, dissemination, and analysis of a wide range of data that can support public policy decision making. The eight key issues that are focused on are: 1) research and monitoring coordination; 2) data management; 3) public health; 4) fish and wildlife; 5) economic viability; 6) recreation; 7) communication and education; and 8) national security. These issues were sent to committees for focused discussion, debate and recommendation.

**PRIORITIES OR GOALS:** To protect the beneficial uses of the San Diego Bay, and create a coordinated monitoring program.

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San Diego Bay (908, 909, 910)  
**PLAN:** San Diego Bay WURMP  
**LEAD GROUP:** Stormwater Coopermittees; San Diego Port District  
**2003**

**OVERVIEW:** This Plan was prepared by the Port of San Diego, the County of San Diego, and the cities of Chula Vista, Coronado, Imperial Beach, La Mesa, Lemon Grove, National City, and San Diego – all local agencies that have jurisdiction over the San Diego Bay watershed. The Plan meets the requirements of the National Pollutant Discharge Elimination System (NPDES) Municipal Storm Water Permit for San Diego Coopermittees (Order No. 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 including the San Diego Bay watershed.

**DESCRIPTION:** The Watershed Urban Runoff Management Program (WURMP) prepared for the San Diego Bay Watershed includes material that describes the intended approach to meeting the watershed-related obligations of the Municipal Permit. The San Diego Bay Watershed is a combination of three individual watersheds: Pueblo Watershed, Otay Watershed, and Sweetwater Watershed. The San Diego Bay WURMP identifies and prioritizes water quality related issues within the watershed that can be potentially attributed (wholly or partially) to discharges from the municipal storm drain systems and may be addressed through a cross-jurisdictional approach. Existing data suggests that the principal water quality issues found in surface runoff for this watershed include bacterial indicators (Otay, Pueblo, and Sweetwater Watersheds), total and dissolved copper (Pueblo Watershed), and Zinc (Pueblo Watershed). The San Diego Bay WURMP has been developed as an iterative process of watershed assessment, setting priorities, monitoring, and implementation. At the conclusion of each yearly cycle, the process begins anew, allowing participants to respond to changing conditions or adjust strategies that have not performed as anticipated. This framework establishes mechanisms for the participants to evaluate priorities, improve coordination, assess program goals, and allocate finite resources in a cost-effective manner. As part of the yearly cycle, the San Diego Bay Watershed Coopermittees submit WURMP Annual Reports to the RWQCB documenting the program’s progress.

**PRIORITIES OR GOALS:** To positively affect the water resources of the San Diego Bay Watershed while balancing economic, social and environmental constraints. Objective #1: Develop and 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.
### San Diego Bay (908, 909, 910) - PLAN: San Diego Bay Integrated Natural Resources Management Plan
**LEAD GROUP:** U.S. Navy and San Diego Port District  
**1999**

**OVERVIEW:** The intent of this Plan is to provide direction for the good stewardship that natural resources require, while also supporting the ability of the Navy and Port to meet their missions and continue functioning within the Bay. The ecosystem approach reflected in the Plan looks at the interconnections among all of the natural resources and human uses of the Bay, across ownership and jurisdictional boundaries. San Diego Bay is viewed as an ecosystem rather than as a collection of individual species or sites or projects.

**DESCRIPTION:** This plan fleshes out a progression not towards the historical Bay, because that is gone forever, but towards one that is wilder, with softer shorelines, richer and more abundant in native life. It also describes a Bay that, while used for thriving urban, commercial, and military needs, has an increasing proportion of uses that are passive. It is moving towards a place with more opportunities for public access, recreation, education and enjoyment of the myriad benefits of a healthy, dynamic ecosystem. Finally, the Bay’s managers and stakeholders will make sounder decisions because of positive collaboration among themselves, a clearer understanding of the cumulative effects of their actions, and information support from focused research and long-term monitoring. The Plan contains over 1,000 strategies for better management of the Bay. Task forces, committees, partnerships, cooperative agreements, memoranda of understanding, monitoring strategies, research projects, award programs, information exchange mechanisms and endowment funds are among the strategies described.

**PRIORITIES OR GOALS:** The ecosystem goal of the Plan is: To ensure the long-term health, recovery and protection of San Diego Bay’s ecosystem in concert with the Bay’s economic, Naval, recreational, navigational, and fisheries needs. The Plan provides management strategies for: ecosystem management, compatible use, monitoring and research, and implementation. The core strategies are to: 1) Manage and restore habitats, populations, and ecosystem processes; 2) Plan and coordinate projects and activities so that they are compatible with natural resources; 3) Improve information sharing, coordination and dissemination; 4) Conduct research and long-term monitoring that supports decision-making; and 5) Put in place a Stakeholders’ Committee and Focus Subcommittees for collaborative, ecosystem-based problem-solving in pursuit of the goal and objectives.

### Otay HU (910) - San Diego Bay - PLAN: Otay River Special Area Management Plan
**LEAD GROUP:** County MSCP  
**2006**

**OVERVIEW:** The Otay River Watershed SAMP is a watershed-based planning process coordinated by the San Diego County Department of Planning and Land Use, the Corps, Los Angeles District, and the cities of Imperial Beach, and Chula Vista. The City of San Diego is not currently a signatory to the May 24, 2004 Cooperative Agreement, which formalized the intent of local jurisdictions and the Corps to develop the SAMP, they have indicated an interest in participating in the program.

**DESCRIPTION:** A SAMP is a comprehensive plan that provides for natural resource protection and reasonable economic growth within geographic areas of special sensitivity. This comprehensive planning effort is to be used to assist the federal, state and local regulatory agencies with their decision making and permitting authority to protect aquatic resources. Approval of these plans by the United States Army Corps of Engineers will result in the issuance of General Permits under the Clean Water Act for projects within the Otay River watershed. The SAMP will identify baseline conditions of the watershed including water quality and the extent of wetlands that can be used in other programs.

**PRIORITIES OR GOALS:** The Otay River Watershed SAMP will result in the implementation of a watershed-wide resource management plan (RMP) for the Otay River watershed that provides for the preservation, enhancement, restoration, and management of jurisdictional waters and other aquatic habitats within the watershed, while allowing reasonable economic activity and development to occur.
### Otay HU (910) - San Diego Bay

**OVERVIEW:** This report describes the importance of using an adaptive management approach in monitoring and evaluating the effectiveness of the 16 recommended protection, enhancement, restoration, and management strategies, and in undertaking remedial actions as necessary to ensure the strategies are effective in accomplishing the ORWMP’s goals and objectives. Watersheds are complex ecosystems, particularly in rapidly urbanizing southern California, so it is critical to take an approach that responsively incorporates the latest information to minimize adverse effects of stressors and maximize benefits to resources.

**DESCRIPTION:** The Otay River watershed is an approximately 145 square mile watershed (92,920 acres) located in southern San Diego County, near the international border with Mexico (Figure A-1). This watershed includes unincorporated County land, as well as land within the jurisdictions of the Cities of Chula Vista, San Diego, Imperial Beach, Coronado, and National City (Figure A-2). As with other coastal watersheds in southern California, the landscape along the coastal plain in proximity to the watershed’s outlet has rapidly developed with urban land uses, whereas the mountainous inland areas contain scattered, lower-density development (Figure A-3). Urbanization and other intensive landscape uses are anticipated to continue, with the population and housing expected to nearly double, as are efforts to protect, enhance, and restore the remaining upland and aquatic resources within this watershed. Large-scale efforts such as the Multiple Species Conservation Program (MSCP), the Otay Valley Regional Park (OVRP), and the San Diego Bay National Wildlife Refuge (NWR) are conserving significant natural resources in this watershed while allowing other uses to occur. While these efforts have been extremely valuable, none has attempted to evaluate and consider strategies for protecting, enhancing, restoring, and managing the watershed’s natural resources and the various uses comprehensively at the watershed scale. To address this need, on March 24, 2004, the County of San Diego, City of Chula Vista, City of Imperial Beach, and the Unified Port of San Diego entered into a Joint Exercise of Powers Agreement (JEPA) to develop and adopt the ORWMP, which is intended to identify and protect, enhance, restore, and manage the watershed’s beneficial uses, such as water quality and wildlife habitat, while allowing for reasonable economic development and other uses, such as recreation. Since that time, the City of San Diego has entered into this JEPA as well. The Otay River Watershed Management Plan (ORWMP) includes: 1. Characterizing the Otay River watershed’s various natural resources and land uses and threats to its resources; 2. Identifying goals and objectives; 3. Identifying implementation strategies for the protection, enhancement, restoration, and management of beneficial uses and natural resources; 4. Developing adaptive management strategies and objectives to ensure implemented strategies are effective; 5. Developing a water quality monitoring program to monitor, maintain, and enhance water quality; and 6. Developing a Plan that is consistent with the applicable local General Plans, local resource plans and programs, the Otay River watershed Special Area Management Plan (SAMP), the Municipal Storm Water Permit (San Diego Region National Pollutant Discharge Elimination System [NPDES]) General Permit Order No. 2001-01), and that will be periodically updated to be consistent with changing regulations, conditions in the watershed, and to ensure implemented strategies are successful.

**PRIORITIES OR GOALS:** Protect, enhance, and restore watershed resources; Ensure reasonable, sustainable, and compatible economic development; Provide educational and recreational opportunities; Ensure public health and safety; Maximize integration of existing Programs and Plans that affect the resources of this watershed.

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<tr>
<th>Otay HU (910) - San Diego Bay</th>
<th>Otay WMP</th>
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### Tijuana HU (911)

**OVERVIEW:** The Tijuana River watershed vision provides a framework for harmonizing data and stakeholder inputs. A vision describes the past, present, and desired future conditions of a watershed. It is interdisciplinary and combines data from scientists, social scientists, practitioners, and watershed stakeholders. The visioning process encourages stakeholder participation, and has been shown to be a successful way of creating realistic and sustainable watershed management plans (Montgomery and Sullivan 1995).

**DESCRIPTION:** The Tijuana River Watershed (TRW) lies across the U.S.-Mexican international boundary and is approximately 1,750 square mile (4,465 square km) in area, with one-third in California and two-thirds in Baja California. The watershed is a place of natural and cultural beauty that is at risk from uncontrolled urbanization and infrastructure deficits. Growing human populations and land use changes have brought numerous environmental problems to the TRW region. These include: Decline in local groundwater quantity and further dependence on imported water; Decline in quality of surface and groundwater for human use; Increased erosion and flood dangers; Increased air pollution; Reduction in the amount of safe, open, and green areas for urban residents; Decline in ecosystem health; Increasing number of threatened and endangered plants and animals. In 2002 a binational team of researchers and practitioners, the Binational Watershed Advisory Council (BWAC), was convened to address these environmental challenges. The council identified stakeholders in the watershed who, in turn, participated in the development of this Binational Vision for the TRW, a snapshot of the current and desired conditions in the TRW. The stakeholders also helped to devise strategies and options for achieving that Vision. The Vision document contains baseline data and trends for the major areas of concern identified by stakeholders: water, air, ecosystems and natural resources, waste, and socioeconomic issues.

**PRIORITIES OR GOALS:** The stakeholders of the Tijuana River Watershed desire to meet the needs of the present while protecting resources for future generations; to create a balance between natural resource protection, economic development, and quality of life; to proactively manage local surface and groundwater for long-term sustainability; to protect, restore, and connect habitats; to create a strong economic base for sustainable development; and to create human communities that allow people to enjoy the unique cultural and natural landscapes and functions of the watershed.

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<td>LEAD GROUP: Stormwater Copermitters; County</td>
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**OVERVIEW:** This Plan was prepared by the County of San Diego, and the cities of Imperial Beach and San Diego – all local agencies that have jurisdiction over the Tijuana River watershed. The Plan meets the requirements of the National Pollutant Discharge Elimination System (NPDES) Municipal Storm Water Permit for San Diego Copermittes (Order No. 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 including the Tijuana River watershed.

**DESCRIPTION:** The Watershed Urban Runoff Management Program (WURMP) prepared for the Tijuana River Watershed includes material that describes the intended approach to meeting the watershed related obligations of the Municipal Permit. The Tijuana River Watershed encompasses a region of approximately 1,750 square miles on either side of the California – Baja California border. Approximately 27% of the watershed land area is within California. The Tijuana River WURMP identifies and prioritizes water quality related issues within the watershed that can be potentially attributed (wholly or partially) to discharges from the municipal storm drain systems and may be addressed through a cross-jurisdictional approach. Existing data suggests that the principal water quality issues found in surface runoff for this watershed include bacterial indicators, total suspended solids/turbidity, pesticides, organic compounds, nutrients/eutrophication, oxygen (dissolved, biological, chemical), MBAS, and trace metals. The Tijuana River WURMP has been developed as an iterative process of watershed assessment, setting priorities, monitoring, and implementation. At the conclusion of each yearly cycle, the process begins anew, allowing participants to respond to changing conditions or adjust strategies that have not performed as anticipated. This framework establishes mechanisms for the participants to evaluate priorities, improve coordination, assess program goals, and allocate finite resources in a cost-effective manner. As part of the yearly cycle, the Tijuana River Watershed Copermittes submit WURMP Annual Reports to the RWQCB documenting the program’s progress.

**PRIORITIES OR GOALS:** To positively affect the water quality of the Tijuana River Watershed while balancing economic, social and environmental constraints. Objective #1: Develop and 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.
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