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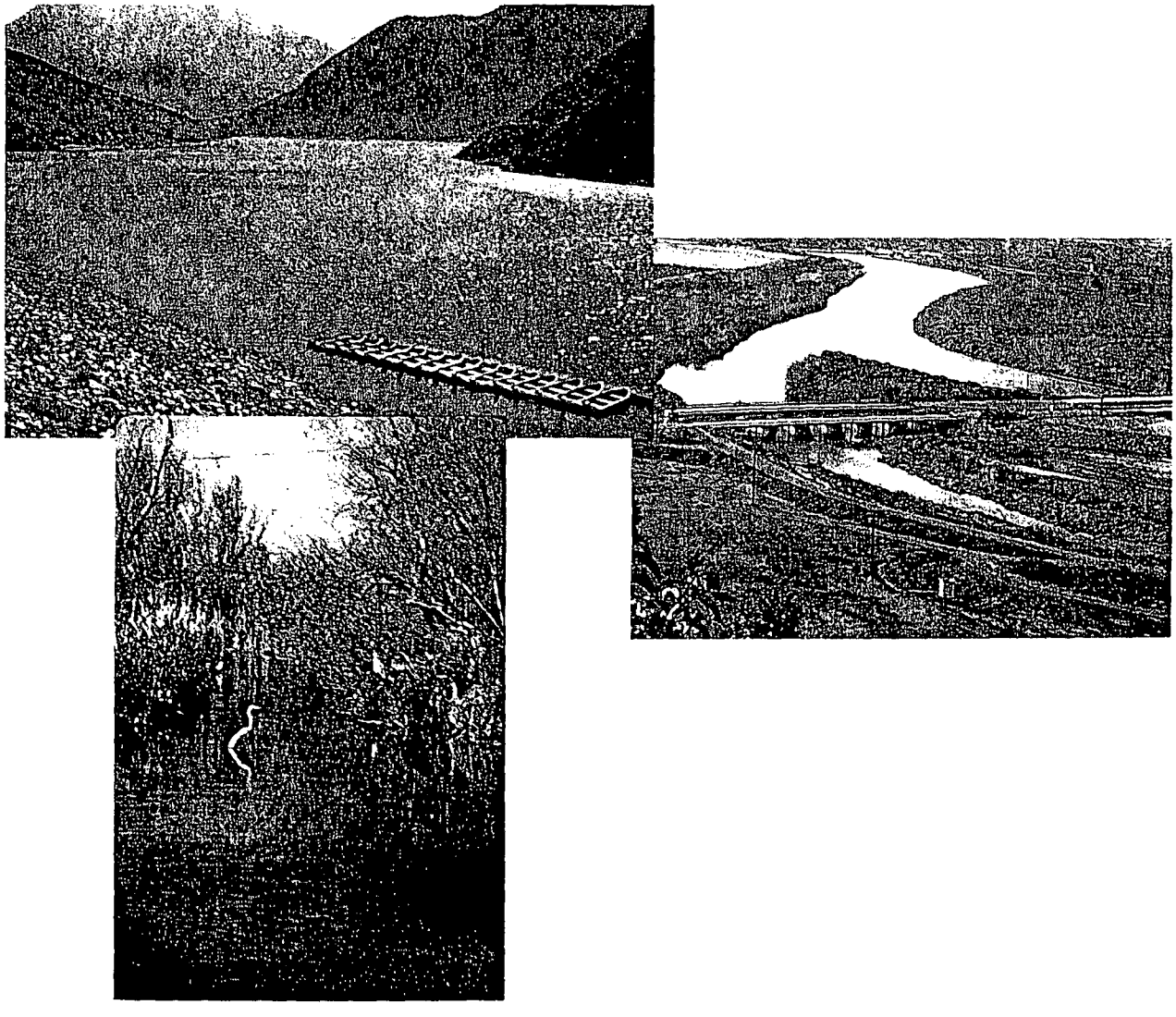
California
Regional Water Quality Control Board
Los Angeles Region



Watershed Management Initiative Chapter
December 2000

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OVERVIEW

Water resource protection efforts of the State Water Resources Control Board and the Regional Water Quality Control Boards are guided by a five year Strategic Plan (last updated in 1997). A key component of the Strategic Plan is to utilize a watershed management approach for water resources protection.

To protect water resources within a watershed context, a mix of point and nonpoint source discharges, ground and surface water interactions, and water quality/water quantity relationships must be considered. These complex relationships present considerable challenges to water resource protection programs. The State and Regional Boards are responding to these challenges within the context of our organization's Watershed Management Initiative (WMI). The WMI is designed to integrate various surface and ground water regulatory programs while promoting cooperative, collaborative efforts within a watershed. It is also designed to focus limited resources on key issues and use sound science.

Previously, State and Regional Board programs tended to be directed at site-specific problems. This approach was reasonably effective for controlling pollution from point sources. However, with diffuse nonpoint sources of pollutants, a new regulatory strategy was needed. The WMI uses a strategy to draw solutions from all interested parties within a watershed, and to more effectively coordinate and implement measures to control both point and nonpoint sources.

For the initial implementation of the WMI, during the late 1990s, each Regional Board identified the watersheds in their Region, prioritized water quality issues, and developed watershed management strategies. These strategies and the State Board's overall coordinating approach to WMI are contained in the *Integrated Plan for Implementation of the WMI* which is updated annually. In following years, the Regional Boards have continued to build upon their early efforts to utilize this approach. The full version of our WMI Chapter outlines our ongoing efforts to continue implementation of the WMI.

The Los Angeles Regional Board and Watershed Management

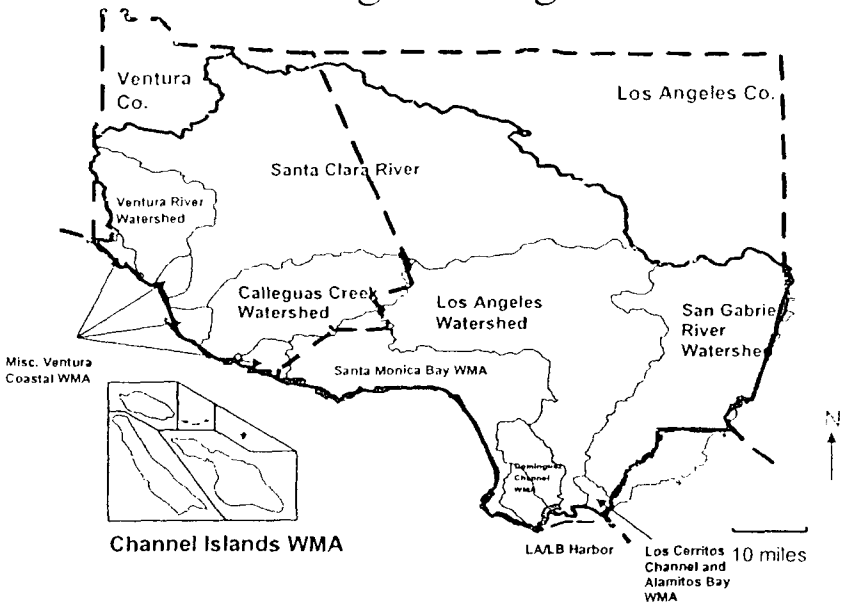
The Los Angeles Region has jurisdiction over all coastal drainages flowing to the Pacific Ocean between Rincon Point (on the coast in western Ventura County) and the eastern Los Angeles County line, as well as the drainages of five coastal islands (Anacapa, San Nicolas, Santa Barbara, Santa Catalina, and San Clemente). The Regional Board's jurisdiction also includes all coastal waters within three miles of the continental and island coastlines.

The Los Angeles Region is the State's most densely populated and industrialized region. Over 1,000 discharges of wastewater from point sources in this Region are regulated by the Los Angeles Regional Board. Over 700 of these point source discharges are discharged to surface waters, and are regulated under the National Pollutant Discharge Elimination System (NPDES). In addition, the Regional Board prescribes Waste Discharge Requirements (WDRs) for the remaining discharges, which are primarily to ground waters and landfills. However, the quality of many waters continue to be degraded from pollutants discharged from diffuse and diverse nonpoint sources. Future success in reducing pollutants from nonpoint sources and achieving additional reductions in pollutants from point sources requires a shift to a more geographically-targeted approach.

Our watershed management approach integrates activities across the Regional Board's many diverse programs, particularly permitting, planning, and other surface-water oriented programs which have tended to operate somewhat independent of each other. This approach enables us to better assess cumulative impacts of pollutants from all (point and nonpoint) sources, and more efficiently develop watershed-specific solutions that balance the environmental and economic impacts of our actions.

We have designated ten watershed management areas in the Los Angeles Region as shown in the figure below.

Watershed Management Areas of the Los Angeles Region



Initially, implementation of watershed management in the Los Angeles Region occurred in phases over a seven-year cycle for our pilot watersheds Ventura River and Calleguas Creek. We are now shifting to a five-year cycle to be in line with the standard permit life (of an NPDES permit) and to equalize workloads over the years. This shift in our watershed cycle is illustrated in the table on the next page. The majority of permit-related tasks such as permit renewals/revisions and regional monitoring program development as well as preparation of state of watershed reports, will occur during the first approximately twelve months of the watershed's five-year cycle. Much of the rest of the five-year cycle will be spent developing and implementing, with the input of stakeholders, measures for management of more complex pollutants from point and/or nonpoint sources. Many of the region's TMDLs will be implemented during the second cycle of permit renewals.

It should be pointed out that the involvement of stakeholders is critical to the success of watershed management; however, the process to involve stakeholders demands more of regulators in terms of public outreach, education, and consensus building.

Permit Timeline for Watershed Management Initiative

Santa Clara River Calleguas Creek	FY 2001/02
Dominguez Channel-LA/LB Harbor	FY 2002/03
Santa Monica Bay	FY 2003/04
Los Angeles River	FY 2004/05
San Gabriel River Los Cerritos Channel Channel Islands	FY 2005/06
Ventura River Misc. Ventura Coastal Santa Clara River Calleguas Creek	FY 2006/07
Dominguez Channel-LA/LB Harbor	FY 2007/08

NPDES permits in the Los Angeles Region are organized and scheduled by watershed. This workload must be integrated with that required under backlog reduction efforts or other regulatory or legislative requirements. Preliminary "State of the Watershed Reports" are prepared by watershed "teams" composed of permit writers, planning, TMDL, and nonpoint source program personnel, and those involved with groundwater protection.

The Watershed Management Initiative Chapter

This document is the fifth iteration of what we call our "Chapter" which is our Region's chapter of the WMI document for the whole state. The participants in implementation of the WMI in California (the nine Regional Boards, State Board, and USEPA) were asked in 1996 to begin preparation of a document which identified priorities and resource needs, across programs, in a watershed context. The Chapter is currently used both as an outreach and as a planning tool to identify the Region's priorities over the upcoming two fiscal years (FYs) and where we should spend our baseline resources, as well as where we need additional resources. The Chapter is organized into sections including the Introduction, Watershed Sections, and Region-wide Section. Included in each Watershed Section is an overview of that watershed, a description of its water quality concerns and issues, past significant Regional Board activities in the watershed, current (funded) activities, near-term (usually unfunded) activities that would benefit the watershed, and activities which may happen on a longer time-scale (usually unfunded). The Region-wide Section includes a description of activities not easily associated with particular watersheds.

Programs and Funding Under WMI

Programs covered under WMI include core regulatory (e.g., NPDES), monitoring and assessment, basin planning and water quality standards, watershed management, wetlands, TMDLs, 401 certifications, groundwater (as appropriate), and nonpoint source management activities (many of these programs also have region-wide components). It turns out most of our highest priority needs fall into areas that have little to no funding. **Areas with particular shortages include nonpoint source management (e.g., we see a need for an additional 14.0 PYs for FY00/01)**, CEQA review, monitoring and assessment, basin planning, **401 certifications (the statewide needs analysis from FY 00/01 indicated a shortfall of 13.9 PYs)**, stormwater, and more than minimal work on NPDES pretreatment, enforcement, compliance, and monitoring report review. A majority of any additional monies that may become available would be dedicated to these programs in the targeted watersheds (then non-targeted watersheds) as well as allocated to upcoming TMDLs occurring throughout the Region. **For example, in FY00/01, we see a need for an additional 8.8 PYs to conduct TMDL work**. This watershed effort, which itself has

consumed a lot of limited staff resources, will hopefully result in resource flexibility and augmentation to address these deficiencies.

Integration of Multiple Mandates Under WMI

While the Watershed Management Initiative strives to integrate and coordinate the various Regional and State Board programs and address the highest priority funding needs for those programs, there is also need to respond to and accommodate priorities established by the individual Regional and State Boards' members, priorities established prior to the WMI which run on their own timelines, legal or legislative mandates, or other new mandates which may affect the way the WMI is implemented in a Region. It is important to re-state here that the WMI is not a new program but rather a way to describe our approach to integrating existing and newly evolving programs and mandates.

For example, a high priority statewide mandate is management of nonpoint source pollution. High priority Regional Board activities include implementation of an effective enforcement strategy, development of a septic tank policy initiative, development and implementation of a strategy to assess nonpoint source loadings, TMDLs, and better communication and coordination of Board programs and policies through improved outreach. More information is included in the Introduction of the full chapter. It is clear many of the Regional Board high priority activities are of primary importance in fulfilling not only the WMI but also the nonpoint source management initiative and other mandates.

However, some mandates present challenges to fully implementing watershed management. These include recent USEPA, State Board, and legislative requirements for reducing permit backlog, conflicts with the timing of scheduled TMDLs, lengthy delays incurred by the public processes e.g., hearings, workshops), ands insufficient funding or staff.

SUMMARY OF SIGNIFICANT WATERSHED ISSUES

The Region encompasses ten Watershed Management Areas (WMAs) which are the geographically-defined watershed areas where the Regional Board implements the watershed approach. These generally involve a single large watershed, within which exists smaller subwatersheds. However, in some cases they may be an area that does not meet the strict hydrologic definition of a watershed (e.g., several small Ventura coastal waterbodies in the region are grouped together into one WMA). Watersheds in the strictest sense are geographic areas draining into a river system, ocean or other body of water through a single outlet and includes the receiving waters. They are usually bordered, and separated from other watersheds, by mountain ridges or other naturally elevated areas.

Many of the watersheds in this Region range over large areas that are highly diverse. A Designated Wilderness Area may occur in one part of a watershed while extensive development dominates another part and possibly agriculture in yet different area of the watershed. This fact results in a great diversity of issues of concern to this agency in any particular watershed with the concomitant need to balance priorities among existing stakeholders. The following summarizes significant watershed issues in our watershed management areas. More detail may be found by consulting the full version of the WMI Chapter.

Watershed Management Areas
Significant Watershed Issues

1) Ventura River Watershed

- Eutrophication, especially in estuary
- TDS concerns in some subwatersheds
- One major discharger (POTW)
- Industrial storm water – 27 dischargers
- Impediments (dams, diversions) to steelhead trout migration
- Impairments: DDT, algae, diversions, selenium, other metals, trash
- Currently scheduled TMDLs: eutrophication FY04/05

2) Miscellaneous Ventura Coastal WMA

The harbors

- Accumulation of metals, PCBs, and historic pesticides in sediment and tissue
- Considerable marine life subject to impacts
- Impairments: DDT, PCBs, PAHs, metals, TBT, coliform
- Currently scheduled TMDLs: zinc FY04/05

The wetlands and coast

- Historic pesticide contamination
- Loss of quality habitat
- Impacts from oil spills and agriculture
- Use by endangered species
- Impairments: historic pesticides and effects, coliform
- Currently scheduled TMDLs: coliform FY01/02

3) Santa Clara River Watershed

- High quality natural resource
- Four POTWs
- Industrial storm water – 103 dischargers
- Construction storm water – 310 dischargers
- Impacts from exotic vegetation
- Impacts from agriculture
- Increasing urbanization, flows, and channelization in upper watershed; impacts on middle and lower watershed
- Impairments: nitrogen and effects, salts, coliform, trash, historic pesticides
- Currently scheduled TMDLs: chloride FY01/02, nitrogen FY02/03, eutroph. and trash FY04/05, coliform FY05/06

4) Calleguas Creek Watershed

- Six POTWs
- Industrial storm water – 82 dischargers
- Construction storm water – 100 dischargers
- Highly modified watershed
- Impacts from agriculture and naval facility
- Sediment inputs to Mugu Lagoon, one of the largest wetlands in southern California
- Competing urban uses; development pressures, particularly in upper watershed
- Severe lack of benthic and riparian habitat in watershed
- Impairments: nitrogen and effects, water-soluble pesticides and effects, salts, historic pesticides, PCBs, siltation, selenium, mercury, other metals, trash
- Currently scheduled TMDLs: chloride FY00/01, nitrogen FY01/02, other salts and water-soluble pesticides FY03/04, PCBs and historic pesticides FY04/05, metals FY05/06

5) Dominguez Channel/LA-LB Harbor WMA

- One POTW, two generating stations, six refineries
- Industrial storm water – 415 dischargers
- Historical deposits of DDT and PCBs in sediment
- Discharges from POTW & refineries
- Spills from ships and industrial facilities
- Leaching of contaminated groundwater
- Stormwater runoff
- Impairments: metals, PCBs, PAHs, historic pesticides, coliform, trash, nitrogen
- Currently scheduled TMDLs: coliform FY01/02

6) Santa Monica Bay WMA

- Key recreational resource (beaches)
- Three POTWs, one refinery, and three generating stations
- 21 minor discharges
- General permits – 166 dischargers
- Industrial storm water – 147 dischargers
- Construction storm water – 107 dischargers
- Impairments: mercury, selenium, other metals, historical pesticides, PAHs, PCBs, nitrogen, coliform, trash, TBT, habitat alteration, exotic vegetation, salts

Coastline

- Acute health risk associated with swimming in runoff-contaminated surfzone waters
- Chronic risk associated with consumption of seafood in areas impacted by DDT and PCB contamination
- Reduction of loadings from the two major POTWs in light of projected population increases
- Other impacts from urban runoff/storm water
- Historic deposits of DDT and PCBs in sediment
- Loadings of pollutants from other sources: sediment resuspension, atmospheric deposition
- The need to have a better understanding of the Bay's resources
- Currently scheduled TMDLs: coliform FY01/02; metals FY03/04; chlordane FY05/06

Malibu Creek Watershed

- Excessive freshwater, nutrients, and coliform in lagoon; contributions from POTW and other sources
- Urban runoff from upper watershed
- Impacts to swimmers/surfers from lagoon water
- Septic tanks in lower watershed
- Appropriate restoration and management of lagoon
- Access to creek and lagoon by endangered fish
- Currently scheduled TMDLs: nutrients and coliform FY01/02

Ballona Creek Watershed

- Trash loading from creek
- Wetlands restoration
- Sediment contamination by heavy metals from creek to Marina del Rey Harbor and offshore)
- Toxicity of both dry weather and storm runoff in creek
- High bacterial indicators at mouth of creek
- Currently scheduled TMDLs: trash FY00/01, coliform FY02/03PCBs and pesticides FY03/04 and 04/05, metals FY03/04 and 04/05

7) Los Angeles River Watershed

- Six major NPDES dischargers (four POTWs)
- 30 minor permits
- 109 dischargers covered by general permits
- Industrial storm water – 1,327 dischargers
- Construction storm water - 147 dischargers
- Nitrogen and coliform contributions from septic systems
- Other nonpoint sources (horse stables, golf courses)
- Cross-contamination between surface and groundwater
- Protection and enhancement of fish and wildlife habitat and recreational areas
- Removal of exotic vegetation
- Balancing removal of vegetation for flood control with the need for urban habitat
- Attaining a balance between water reclamation and minimum flows to support habitat
- leakage of MTBE from underground storage tanks
- Contaminated sediments within the LA River estuary
- Impairments: nitrogen, trash, selenium, other metals, coliform, PCBs, historic pesticides, chlorpyrifos
- Currently scheduled TMDLs: trash 00/01, nitrogen and coliform FY01/02, metals FY03/04, historic pesticide FY05/06

8) San Gabriel River Watershed

- Eight major NPDES dischargers (five POTWs)
- 23 minor permits
- 65 discharges covered under general permits
- 549 dischargers covered under an industrial storm water permit
- 175 dischargers covered under a construction storm water permit
- Sluicing and disposal of sediments from reservoirs
- Protection of groundwater recharge areas
- Ambient toxicity
- Excessive trash in recreational areas of upper watershed
- Mining/stream modifications
- Extensive stream modification for mining and water reclamation
- Urban and storm water runoff quality
- Nonpoint source loadings from nurseries and horse stables
- Lack of understanding of estuary dynamics (e.g. salinity profile)
- Septic systems
- Impairments: nitrogen and effects, trash, metals, historic pesticides, coliform, chlorides, PCBs
- Currently scheduled TMDLs: trash (completed), nitrogen (river) and coliform FY02/03, metals FY04/05, nitrogen (lakes) FY03/04; PCBs & pest. FY05/06

9) Los Cerritos Channel/Alamitos Bay WMA

- Four minor dischargers
- Loss of wetlands habitat in Los Cerritos area
- Impacts from antifouling paint in marinas
- Urban and storm water runoff impacts on isolated water bodies
- Loss of tidal exchange
- Impairments: ammonia, metals, historic pesticides and effects, PCBs, PAHs
- Currently scheduled TMDLs: coliform, ammonia, metals, PAHs, historic pesticides FY04/05

10) The Channel Islands WMA

- Five islands
- One major discharger, four minor dischargers
- Areas offshore of islands designated as Areas of Special Biological Significance
- High quality marine and rocky intertidal habitat
- Heavy use by marine mammals and endangered species
- No known impairments
- Lack of information on water quality

SUMMARY OF REGIONWIDE ACTIVITIES

There are many activities conducted at the Region which do not apply to a specific watershed; instead they represent ongoing regionwide strategies and policies, or programs which are not directly linked to the rotating watershed cycle. Also, statutory, regulatory, or funding requirements may dictate completion of some activities at odd intervals throughout the five-year watershed cycle (such as increased emphasis on pretreatment inspections). The table below gives examples of watershed versus non-watershed related activities.

Watershed Tasks	*Non-Watershed Tasks*
Renew permits	Issue new permits
	Develop new general permits, reduce backlog, pretreatment
Integrate municipal storm water program	Issue individual industrial and storm water permits
Conduct inspections for watershed permits	Conduct inspections on new permits
Enforcement (in-cycle compliance)	Enforcement (spills, out of cycle compliance)
Implement NPS controls	Develop regional strategies to address NPS problems
TMDL/WLAs	
Develop, coordinate and implement watershed monitoring	Coordinate monitoring on a regional scale
Water Quality Assessments (State of the Watershed Reports, partial updates to 305(b) by watershed)	Biennial 305(b) Reports to USEPA
Develop watershed policies	Develop regional policies
Watershed-specific Basin Plan Updates	Regional Basin Plan Updates, Triennial Reviews (as Currently required)
Data management (input and use by watershed)	Regional Database management (development and
GIS (input of watershed-specific layers and information)	GIS (development and input of regional layers and Maintenance of system)
Watershed-specific outreach/education	General outreach education
Incorporation of CEQA and 401 Decisions into watershed planning (as groups are formed, and as timing permits)	Timely review of CEQA documents, 401 certifications per statutory deadlines

While the Watershed Management Initiative strives to integrate and coordinate the various Regional and State Board programs and address the highest priority funding needs for those programs, there is also need to respond to and accommodate priorities established by the individual Regional and State Boards' members, priorities established prior to the WMI which run on their own timelines, or other new mandates which may affect the way the WMI is implemented in a Region. The following briefly describes our overall approach to implementing a subset of programs (some statewide mandates) and other Board priorities on a regionwide scale.

Core Regulatory – General Permits

There are many dischargers in this Region covered by general permits for discharges to surface water through a letter issued by the Executive Officer. This activity occurs independent of the watershed cycle as the need arises. Many of these are for short-term projects such as dewatering. 40 CFR §122.28 provides for issuance of general permits to regulate a category of point sources if the sources: a) involve the same or substantially similar types of operations, b) discharge the same type of waste, c) require the same type of effluent limitations or operating conditions, d) require similar monitoring, and e) are more appropriately regulated under a general permit rather than individual permits.

Core Regulatory – Storm Water Permits

Storm water activities include those involving the three municipal permits (and Standard Urban Storm Water Mitigation Plans associated with the two urban ones) in the Region, the approximately 2700 facilities regulated under the State's general industrial permit, and the approximately 950 construction sites regulated under the State's general construction permit.

Wetlands Protection and Management – Water Quality Certification

A key wetlands regulatory tool for the Regional Board is the CWA Section 401 Water Quality Certification Program which regulates discharges of dredge and fill materials to waters. The 401 certification program is one of the most effective tools the state has for regulating hydrologic modification projects, especially those which directly impact the region's diminishing acres of wetlands and riparian habitat.

Key program activities should include CEQA documents review/response, pre-construction meetings with applicants, site visits, application processing, follow-up monitoring and inspections, and enforcement. Unfortunately, the program is currently severely underfunded with only application processing being undertaken. **The program is currently funded at 2.1 PYs; the FY 00/01 statewide needs analysis for the 401 certification program indicated a needed augmentation of 13.9 PYs.**

Approximately 150-200 applications are processed each year. Information about projects and the program in general is available on the Regional Board website at http://www.swrcb.ca.gov/~rwqcb4/.

Management of Nonpoint Source Pollution

California's Nonpoint Source (NPS) Pollution Control Program has been in effect since 1988; it has recently been updated (January 2000). A key element of the Program is the "Three-Tiered Approach," through which self-determined implementation is favored, but more stringent regulatory authorities are utilized when necessary to achieve implementation.

Our long-term goal for the NPS program is to improve water quality by implementing the management measures identified in *the California Management Measures for Polluted Runoff Report (CAMMPR)* by 2013.

Major current nonpoint source program priorities are: 1) oversight of workplans for 319(h) and Proposition 13 projects, 2) establishment of regional strategies to address agriculture, marinas, and septic tanks (the latter will be focused on densely populated communities and areas where ground water is a source of drinking water), 3) investigation of loading contributions from agriculture, nurseries, golf course, and horse stables (in aid of TMDL work), and 4) expansion of our public education and outreach. It is anticipated our nonpoint source program implementation will heavily emphasize Tier 1, at least initially. **We see a need for an additional 14.0 PYs to fully implement our priorities.**

Enforcement Strategy

The statewide Water Quality Enforcement Policy adopted by State Board in 1996 is intended to make all enforcement consistent, predictable, and fair throughout the state. The Regional Board adopted a resolution in 1997 which confirmed the Regional Board's desire to carry out enforcement in a manner consistent with State Board's enforcement policy and that Regional Board staff prepare a regional enforcement strategy consistent with State Board's enforcement policy. The statewide enforcement policy is currently in the process of being revised.

The enforcement policy states that the Regional Board staff must bring to the attention of their Regional Board for possible enforcement action, at a minimum, an array of permit violations for a variety of dischargers as well as failure to submit reports or deficient reports, and spills. Our increased efforts have resulted in an improved enforcement record for the region and has contributed to increased compliance in

some programs (e.g. industrial stormwater). The quarterly violations report is available to the public as part of the Executive Officer's Report; and is also available on the Board's web page.

Beaches/Coastal Watersheds Activities

Due to the great resource and economic value associated with the beaches and coastal watersheds of this Region, a number of activities occur that are specific to the coastal areas. Among these are a number of monitoring programs as well as a program to manage contaminated sediments. Monitoring programs include: several regional surveys of the Southern California Bight which evaluated a number of constituents to determine the spatial extent and magnitude of ecological disturbances, trend monitoring conducted through the State Mussel Watch and Toxic Substances Monitoring Programs, the recently formed Surface Water Ambient Monitoring Program (SWAMP), and a recently developed inventory of Coastal Ambient Monitoring Programs (CAMP).

Additionally, a Contaminated Sediments Task Force has been established to develop a long-term strategy to manage contaminated sediments found in the ports and marinas of Los Angeles County. This effort was funded by the Karnette bill.

FOR ADDITIONAL INFORMATION

Contact the Regional Board's Watershed Coordinator, Shirley Birosik, at (213) 576-6679 or sbirosik@rb4.swrcb.ca.gov for additional information or consult the Regional Board's website at http://www.swrcb.ca.gov/~rwqcb4.

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Section 1 . INTRODUCTION

THE REGIONAL WATER QUALITY CONTROL BOARD - WHY THE WATERSHED MANAGEMENT APPROACH?

The nine Regional Water Quality Control Boards (Regional Boards) are each semi-autonomous and comprised of up to nine part-time Board Members appointed by the Governor. Regional Board boundaries are primarily based on watersheds. Each Regional Board makes water quality decisions for its region. These decisions include setting water quality standards, issuing waste discharge permits, adopting policies, and taking enforcement actions.

The Los Angeles Region has jurisdiction over all coastal drainages flowing to the Pacific Ocean between Rincon Point (on the coast in western Ventura County) and the eastern Los Angeles County line, as well as the drainages of five coastal islands (Anacapa, San Nicolas, Santa Barbara, Santa Catalina, and San Clemente). The Regional Board's jurisdiction also includes all coastal waters within three miles of the continental and adjacent island coastlines.

The Los Angeles Region is the State's most densely populated and industrialized region. Over 1,000 discharges of wastewater from point sources in this Region are regulated by the Los Angeles Regional Board. Over 700 of these point source discharges are discharged to surface waters, and are regulated under the National Pollutant Discharge Elimination System. Permits issued under this program are referred to as NPDES permits. In addition, the Regional Board prescribes Waste Discharge Requirements (WDRs) for the remaining discharges, which are primarily to ground waters and landfills. Up until recently, NPDES permits and WDRs were assessed on a case-by-case basis as they came up for renewal.

In recent years, watershed issues have become much more complex and the need to respond with more coordinated monitoring as well as development of cost-effective solutions has required us to rethink our "permit by permit" approach and move to a watershed approach. In addition, in light of economic constraints, dischargers of point source wastewaters are requesting more consideration of site-specific objectives. At the same time, environmental interests are requesting cumulative assessments of pollutant loadings to waterbodies and impacts to beneficial uses. This requires acknowledgment of the growing importance of nonpoint sources to watershed pollutant loadings. We also have the added need of conducting TMDLs for most of our Region's waters.

Managing water quality by watershed allows the Los Angeles Regional Board to address these varied demands in a more coordinated and effective manner. As the control of point source pollutants through NPDES permits and WDRs is central to the Los Angeles Regional Board's strategy to protect water quality, we have structured our approach to watershed management around the need to issue NPDES permits by watershed, in a timely and coordinated manner over a five-year cycle. This also allows for the gathering of input and coordination of nonpoint source issues within the same framework.

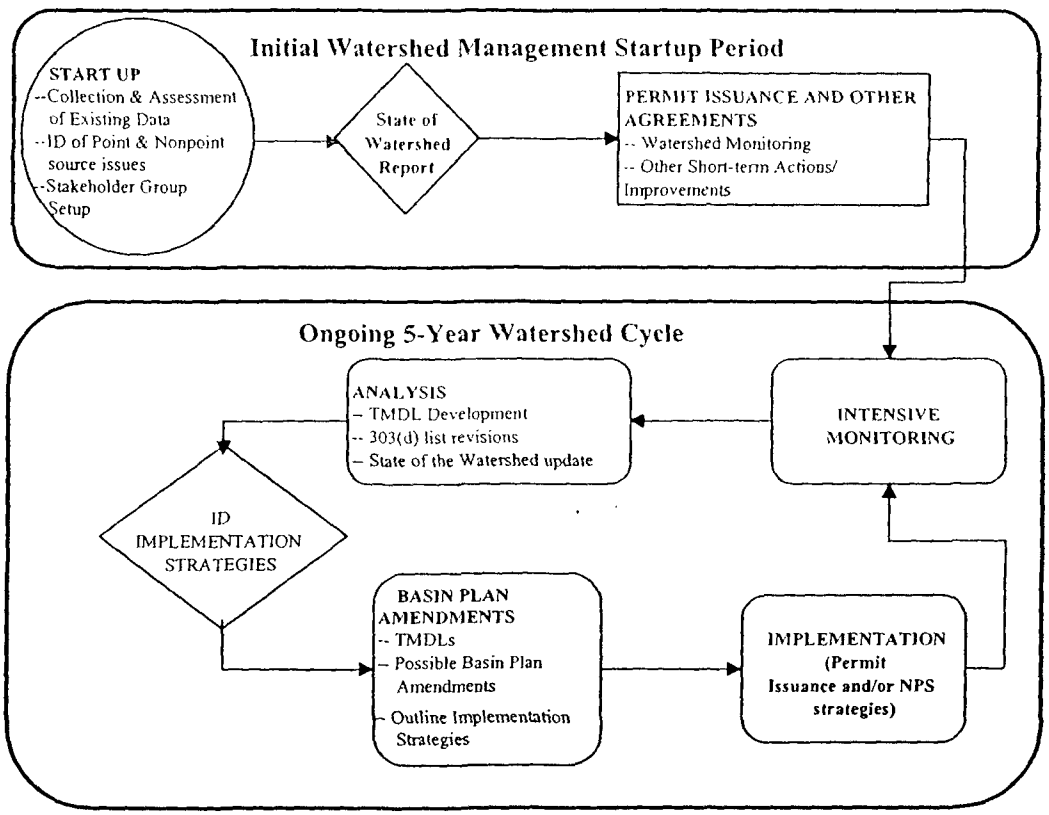
THE WATERSHED MANAGEMENT INITIATIVE

Watershed management is not a new program--it is a strategy for integrating and managing resources. The goal of the state's Watershed Management Initiative (WMI) is to integrate water quality monitoring, assessment, planning, standards, permit writing, nonpoint source management, ground water protection, and other programs at the State and Regional Boards to promote a more coordinated and efficient use of personnel and fiscal resources while ensuring maximum water quality protection benefits. The State's watershed work integrates and supports, to the extent possible, local community watershed protection efforts to implement cost-effective strategies for natural resource protection. As characteristics and resources vary widely from watershed to watershed, this approach customizes efforts to manage resources and address problems unique to each watershed while offering stakeholders the opportunity to implement the most cost-effective solutions to problems within their watersheds.

Watershed management represents a shift from a traditional approach that focuses on regulation of point sources, to a more regional approach that acknowledges environmental impacts from other activities. Over the last twenty-five years, permitting programs have significantly reduced pollutants that are discharged to California's waters from point sources. However, the quality of many waters continues to be degraded from pollutants discharged from diffuse and diverse sources, referred to as nonpoint sources, and from the cumulative impacts of multiple point sources. Future success in reducing pollutants from nonpoint sources and achieving additional cost-effective reductions in pollutants from point sources requires a shift to a more geographically-targeted approach.

Figure 1 illustrates an example of how permitting, planning, and other activities are integrated into our Regional watershed strategy. The upper part of the figure (initial start-up period) refers to work conducted mostly during the first time through the rotating cycle. The lower part of the figure addresses activities that occur during each cycle.

Figure 1. Elements of a Watershed Management Cycle - Region 4



THE WATERSHED MANAGEMENT INITIATIVE CHAPTER

This document is the fifth iteration of the Chapter. The participants in implementation of the WMI in California (the nine Regional Boards, State Board, and USEPA) were asked in 1996 to begin preparation of a document which identified priorities and resource needs, across programs, in a watershed context. The Chapter is currently used both as an outreach and as a planning tool to identify the Region's priorities over the upcoming two to three fiscal years (FYs), describe where we should spend our baseline resources, as well as where we need additional resources (in support of Budget Change Proposals). It turns out most of our highest priority needs fall into areas that have little to no funding. This effort will hopefully result in flexibility and augmentation to address this deficiency.

The Chapter itself is not a commitment to complete work but provides a framework to identify priorities and resource needs which should form the basis for formal commitments which are made in fund source- and program-specific Workplans on an annual basis. Determinations of which activities will be funded by specific Workplans will be negotiated on the basis of the information in the Chapters. Annual program Workplans and grant applications will still be prepared by program managers to identify which activities are going to be funded in a particular year based on the fiscal decisions made.

The Chapter is organized into sections including the Introduction, Watershed Sections, and Region-wide Section. Included in each Watershed Section is an overview of that watershed, a description of its water quality concerns and issues, past significant Regional Board activities in the watershed, current (funded) activities, near-term (usually unfunded) activities that would benefit the watershed, and activities which may happen on a longer time-scale (usually unfunded). The Region-wide Section includes a description of activities not easily associated with particular watersheds as well as more detailed information on implementation of certain programs (such as nonpoint source) in the Region. The Appendix includes TMDL schedules and lists of permits to be reviewed or renewed each year. More detailed information on allocation of resources may be obtained by request from the Regional Board.

WMI DEFINITIONS

The following represent commonly used terms and definitions utilized throughout the document:

A **watershed** is the geographic area draining into a river system, ocean or other body of water through a single outlet and includes the receiving waters. Watersheds are usually bordered, and separated from other watersheds, by mountain ridges or other naturally elevated areas.

The **watershed management approach** is the specific method by which the Regional Board implements watershed management. Features include the targeting of priority problems, stakeholder involvement, developing integrated solutions, and evaluating measures of success. The entire watershed, including the land mass draining into the receiving water, is considered.

Watershed Management Areas (WMAs) are the geographically-defined watershed areas where the Regional Board will implement the watershed approach. These generally involve a single large watershed within which exists smaller subwatersheds but in some cases may be an area that does not meet the strict hydrologic definition of a watershed e.g. several small Ventura coastal waterbodies in the region are grouped together into one WMA.

State of the Watershed/Water Quality Characterization Reports are reference documents produced by Regional Board staff that describe the existing water quality conditions, data gaps, and sources of pollutants within a WMA. Strategies to resolve the water quality concerns, either in progress or proposed, are described. Preliminary versions of these reports are produced by the Regional Board in order to stimulate discussion and inputs on issues from other stakeholders. These documents will be updated as needed. First edition reports are available for Calleguas Creek, Santa Monica Bay, Los Angeles River, and San Gabriel River Watersheds.

A **Watershed Management Plan** is a planning document often produced by watershed stakeholder groups which addresses water quality, land use, economic, habitat, recreation, and other concerns and recommends specific management strategies to resolve identified problems in a cooperative and coordinated manner. Should stakeholder involvement be lacking, a plan which focuses on water quality concerns will be produced by the Regional Board and would emphasize a more regulatory approach to water quality improvement.

Nonpoint sources of pollution are those with no single point of origin. Pollutants may often be carried off the land by stormwater or be part of urban runoff. Common nonpoint sources are agricultural, urban (runoff from residential areas, parking lots, streets, etc.), and construction activities. **Point sources**, on the other hand, by definition originate from a discrete source such as a pipe or outfall through which a facility may discharge while regulated by a NPDES permit.

Beneficial uses are those uses of water identified in state and regional water quality control plans that must be achieved and maintained. Uses include contact water recreation, municipal water supply, navigation, agricultural supply, wildlife habitat, and groundwater recharge, among others. **Designated** beneficial uses, together with water quality objectives, form water quality standards as mandated under the California Water Code and Federal Clean Water Act.
The California Water Code defines **water quality objectives** as "the allowable limits or levels of water quality constituents or characteristics which are established for the reasonable

protection of beneficial uses of water or prevention of nuisance within a specific area." These objectives are both narrative (descriptive) and numerical and appear in each Regional Board's water quality control plan (**Basin Plan**) which also describes implementation programs to protect all waters in the Region.

Best Management Practices (BMPs) are intended to reduce the amount of pollutants and prevent pollutants from leaving a facility and reaching a waterbody. BMPs include good facility housekeeping methods and such things as scheduling certain types of work around periods of rainfall or high winds, controlling runoff from a facility and modifying practices to reduce the possibility of pollutants leaving a facility. These are often used in regulating stormwater and other nonpoint sources.

The **Total Maximum Daily Load (TMDL)** is a number that represents the assimilative capacity of a receiving water to absorb a pollutant. The TMDL is the sum of the individual wasteload allocations for point sources, load allocations for nonpoint sources plus an allotment for natural background loading, and a margin of safety. TMDLs can be expressed in terms of mass per time (the traditional approach) or in other ways such as toxicity or a percentage reduction or other appropriate measure relating to a state water quality objective. A TMDL is implemented by reallocating the total allowable pollution among the different pollutant sources(through the permitting process or other regulatory means) to ensure that the water quality objectives are achieved.

- **TMDLs** establish the loading capacity of a watershed, identify needed reductions, identify sources, and recommend allocations for point and nonpoint sources.

- The **Margin of Safety** is a required component of the TMDL that accounts for the uncertainty about the relationship between the pollutant loads and the quality of the receiving waterbody.

- **Grouping TMDLs** is a reasonable and logical way to collapse the total number of individual TMDLs to make the most effective use of resources we currently have and any which we may obtain in the future. This is largely due to the fact that some of the "pollutants" for which a water may be listed are actually "effects" of pollutants. The TMDL chart in each watershed section of this report reflects this collapsed approach. For example, many reaches of the Los Angeles River are listed for ammonia. Some of the same reaches are listed for pH problems while other reaches are listed for algae, scum, and odors. It is very likely the presence of these "pollutants" are interrelated. Excessive nitrogen (reflected here as high levels of ammonia) may lead to a condition of eutrophication (excessive nutrient loading) which can influence pH levels as well as promote increased algal growth. Scum may be evident due to floating algal material and odors may result when excessive algae starts to die off. Thus, it makes sense to group these approximately 95 TMDLs (calling it a "nitrogen and related effects" TMDL "group") and approach the problem by determining the sources of nitrogen loading into the watershed and the appropriate allocations in order to reduce loadings.

OVERVIEW OF ONGOING REGIONAL BOARD PROGRAMS AND ACTIVITIES

The Regional Board implements a wide variety of programs with different mandates, requirements, etc. Many of these (most surface water programs) are already fully or partially integrated into the watershed approach; others (primarily ground water) will be incorporated later and a few will likely remain separate from the WMI process. The following gives a brief description of these major program areas, current priority activities for each, and whether they are considered Category One or Two activities. **Category One** activities are those of high priority which are required by federal or state statute or regulation that need to be completed at least once during the 5-year planning cycle. **Category Two** activities are considered very important but are not required by statute or regulation. Additionally, more specific program objectives and implementation activities are included in the watershed or region-wide sections as appropriate. Updated information on Regional Board activities and programs may be also found on the Board's webpage at http://www.swrcb.ca.gov/~rwqcb4.

SURFACE WATER

Core Regulatory (Category One)

Core regulatory activities include NPDES (individual permits - updates and revisions, issuance of general permits, stormwater permits/program, enforcement actions, response to complaints, compliance and pretreatment inspections, pretreatment audits, and review of monitoring reports), groundwater protection activities (issuance of Waste Discharge Requirements), issuance of Water Reclamation Requirements, and land disposal under Chapter 15 California Code of Regulations. Issuance of new permits continues to be a high priority. Reduction of backlog and increased efforts in compliance and enforcement are also very high priorities. Permits are scheduled for reissuance to coincide with targeted watersheds on a rotating schedule of five years. Major NPDES permittees are inspected at least once annually while those in Significant Noncompliance are inspected at least quarterly until the noncompliance issue is resolved. Minor NPDES permittees are inspected at least once in each permit reissuance cycle (20% of the total per year). Those in noncompliance will be inspected annually until the problem is resolved.

Our FY01/02 focus in the core regulatory workplan will be on reducing backlogs, increasing inspections, and increasing our emphasis on pretreatment. Our watershed efforts will focus on coordinating receiving water monitoring and implementing bioassessment. Storm water will put an increased emphasis on compliance inspections and enforcement.

An additional core regulatory task follows adoption of the statewide Consolidated Plan for cleanup of toxic hot spots (in sediment). The Water Code requires reevaluation of those WDRs that may influence the creation of further pollution of known toxic hot spots.

Core regulatory must also implement waste load allocations established by TMDLs during renewal of existing permits or issuance of new permits.

Monitoring and Assessment (Categories One and Two)

Category One activities include the biennial Water Quality Assessment 305(b) Report, Surface Water Ambient Monitoring Program (SWAMP), and Los Angeles Basin Contaminated Sediment Task Force work. Category Two activities include involvement with the State Mussel Watch/Toxic Substances Monitoring Programs (SMW/TSMP), special studies, and volunteer monitoring.

Monitoring and/or assessment efforts are occurring on both regional and watershed scales. The State Mussel Watch and Toxic Substances Monitoring Programs (SMW/TSMP), the recently concluded Bay Protection and Toxic Cleanup Program (BPTCP), Los Angeles Basin Contaminated Sediment Task Force, and Regional Board ambient monitoring through the SWAMP are the major regional monitoring and/or activities with direct coordination provided by Regional Board staff (the SMW/TSMP, BPTCP, SWAMP, and Contaminated Sediment Task Force are described in more detail in the Region-wide Section of this document while activities specific to each watershed are described in the appropriate watershed sections). Also, every two years an update of the 305(b) report is required; emphasis will be put on updating targeted watersheds at those times. It should be noted, however, that an update to 305(b)/303(d) was not required in April 2000. The next scheduled update will be due to USEPA in April 2002.

Monitoring can have a number of goals. It may be used to assess trends over time and obtain general assessment information on a regional scale (ambient monitoring, TSMP, and, to some extent, the SMWP). It may be used to pinpoint "hot spots" and track sources on a watershed scale (BPTCP and ambient monitoring). It may also be used to assess loadings for TMDLs. An increasing use will be to better judge impairments of beneficial uses on a watershed scale and to assess effectiveness of nonpoint source BMPs and other water quality improvement strategies.

A major long-term monitoring and assessment goal is to increase utilization of biological assessments including incorporating them in monitoring requirements for dischargers.

Basin Planning (Categories One and Two)

Category One basin planning activities include conducting triennial reviews of planning priorities, development of water quality standards and implementation plans and policies, development of TMDLs, and preparation of Basin Plan amendments (some of which follow from development of TMDLs).

A triennial review is a fundamental planning function at Regional Boards. This activity provides the Board with the opportunity to review the status of water quality, identify issues and problems, and solicit direction and comment from concerned parties as well as the public in general. The triennial review process sets the stage for possible changes (i.e. amendments) to the Basin Plan, which may be needed to more effectively protect water quality. Amendments to the Basin Plan also ensure that the Regional Board's approach to protecting water quality is legally sound. A triennial review is currently underway.

Another important planning function is interaction with the public and other agencies that are planning projects that may impact the environment. Under the California Environmental Quality Act, the Regional Board has an opportunity and responsibility to work with the public to ensure

projects that may affect water quality are properly designed to reasonably mitigate adverse impacts. This responsibility to participate in the planning processes at other agencies extends to the development of regulations (such as the California Toxics Rule and State Implementation Policy) and guidelines (such as irrigation practices). Review of environmental documents is a Category Two activity.

Wetlands Protection and Management (Categories One and Two)

Wetlands acres in the Region have diminished greatly over the past several decades as coastal development, in particular, has increased. Wetlands provide habitat, serve to slow down water flow, decrease total volume through infiltration, and filter out a number of pollutants through active uptake by plants as well as deposition in sediments. Wetlands such as coastal estuaries are a buffer zone between ocean and inland water resources and are heavily utilized by aquatic organisms. Continuous stretches of riparian habitat function as wildlife corridors to allow animal movement between increasingly isolated populations. They also serve as popular recreational destinations for residents and visitors. Unfortunately, many of our Region's wetlands are impacted by varying kinds and amounts of pollutants and alterations.

The Regional Board participates in the Southern California Wetlands Recovery Project, which for the first phase effort, conducted an inventory of coastal wetlands from Santa Barbara to the U.S.-Mexico border. This inventory included information on twelve wetlands in seven watersheds for our region. When compared to estimated historical acreages, Los Angeles County has lost 93% of its wetlands while Ventura County has lost 58% of its wetlands. A 20-year regional wetland plan and strategy for prioritizing and restoring sites is being developed. Currently, the Project funds wetlands projects which involve planning, restoration, or acquisition. More information about the Project may be found on its webpage at http://www.coastalconservancy.ca.gov/scwrp/index.html.

Our wetlands regulatory tools include:

1. **Wetlands beneficial use designation**: The Region's Basin Plan now includes a beneficial use category for Wetland Habitat.

2. **Water Quality Objective**: The Region's Basin Plan has a narrative objective for wetlands protection which addresses the protection of hydrologic conditions and physical habitats to sustain the functional values of regional wetlands.

3. **Water Quality Certification (401) Program**: A key Category One activity associated with wetlands protection and management is CWA Section 401 certification which regulates discharges of dredge and fill materials to waters. The 401 certification program is one of the most effective tools the state has for regulating hydrologic modification projects, especially those which directly impact the region's diminishing acres of wetlands and riparian habitat.

4. **Wetland Grant**: Funding for mitigation monitoring has been requested.

Nonpoint Source Program (Categories One and Two)

Nonpoint source Category One activities include coordination of 319(h) grant project activities, implementation of TMDLs and implementation of Coastal Zone Act Reauthorization Amendments provisions. Participation in stakeholder/watershed groups meetings and activities and public/agency outreach are Category Two activities.

California's Nonpoint Source (NPS) Pollution Control Program has been in effect since 1988. A key element of the Program is the "Three-Tiered Approach," through which self-determined implementation is favored, but more stringent regulatory authorities are utilized when necessary to achieve implementation. The NPS Program has been upgraded to enhance efforts to protect water quality, and to conform with the Clean Water Act Section 319 (CWA 319) and Section 6217 of the Coastal Zone Act Reauthorization Amendments (CZARA). The lead State agencies for the NPS Program are the SWRCB, the nine RWQCBs, and the California Coastal Commission.

Our long-term goal for the NPS program is to improve water quality by implementing the management measures identified in the California Management Measures for Polluted Runoff Report (CAMMPR) by 2013. The short-term plan to achieve this goal is to identify, educate, and promote stakeholder involvement.

Current nonpoint source program priorities are: 1) oversight of workplans for 319(h) and Proposition 13 projects, 2) establishment of regional strategies addressing agriculture, marinas, and septic tanks (the latter will be focused on densely populated communities and areas where ground water is a source of drinking water), 3) investigation of loading contributions from nurseries, golf course, and horse stables (in aid of TMDL work), and 4) expansion of our public education and outreach. Certain sources (e.g., commercial and multi-family septics) may be regulated with waste discharge requirements.

GROUND WATER

The following programs under our Groundwater Division are currently not managed under our watershed schedule. Over time, we expect to integrate aspects of these programs with other watershed activities, particularly with regard to coordination of monitoring and assessment activities and GIS. Steps taken to date include the mapping of drinking water wells and underground storage tank AND Well Investigation Program (WIP) sites in a Geographic Information System (GIS).

Underground Storage Tanks Regulation and Remediation (Category One)

Responsibilities include oversight of investigations into groundwater pollution and any corrective actions which may be needed which result from leaking underground storage tanks. Cases are roughly organized along watershed boundaries.

SLIC Program (Category One)

Response to reports of unauthorized discharges, such as spills and leaks from above-ground storage tanks which may impact any of the region's waterbodies, are investigated through the

Spills, Leaks, Investigation and Cleanup (SLIC) Program and remediation actions are implemented.

DOD and DOE Sites Cleanup Program (Category Two)

The Regional Board works with a number of other agencies involved with remedial investigation and cleanups at U.S. Department of Defense (DOD) and U.S. Department of Energy (DOE) sites. Agreements with the DOD and DOE provide for accelerated cleanups at military bases and other Defense sites schedule for closure.

Well Investigation Program (Category One).

Followup investigation of volatile organic compounds in public water supply wells is conducted through the Well Investigation Program (WIP). Investigations focus on identification and elimination of sources of pollutants in public water supply wells, the identification of responsible parties, and oversight of soil and ground water remediation. In a way, this program is watershed-based as it focuses on two watersheds – San Gabriel and San Fernando (upper Los Angeles River).

FUNDING

Many high priority (in terms of Regional Board as well as statutory priorities) activities are unfunded or underfunded. For example, monitoring and assessment, basin planning, and nonpoint source activities are grossly underfunded (we see a shortfall of 14.0 PYs in resources needed to implement our priorities for the NPS program and a statewide needs analysis revealed a 13.9 PYs shortfall in the 401 certification program) . Some resources must be utilized for required activities such as triennial Basin Plan reviews and Water Quality Assessments. The latter activity tells us where our impaired waters are and there are federal requirements to conduct TMDLs on 303(d)-listed waters although more money is needed to do TMDL work on the problem waters (for example, we foresee a shortfall of 8.8 PYs and $650,000 in contract monies for FY00/01 TMDL work). If a TMDL is completed and a remediation strategy developed despite this, there is then little money for followup work, particularly with regards to dealing with nonpoint source contributions. This means that our involvement in nonpoint sources must be very time-conservative. While it may take years of work to cooperatively fix a nonpoint source problem, direct enforcement could take a lot less time and be an immediate action. However, the latter is contrary to the cooperative spirit of watershed management. Each watershed will require difference site-specific approaches depending on a variety of factors. Additionally, enforcement is another underfunded activity, particularly when dealing with nonpoint source discharges. On the other hand, priorities may shift due to the influx of "new" money to fund a previously underfunded, and often times, lower priority activity. Use of the new money may be specific to certain activities such as increased pretreatment inspections in the core regulatory program. See Table 1 for the funding status and priority of Regional Board activities and programs in greater detail.

Table 1. Funding Status of Major Regional Board Activities and Programs

Program/Activity (and Subcategories)	Import-ance (High, Med, Low)	Man-dated?	Current Funding	What We Can Do With Existing Funds	What Could Be Done with More Funds
Basin Planning					
Triennial reviews	M	Y	*Under-funded*	*Absolutely necessary updates; delayed and/or limited Triennial Reviews*	*Conduct regular comprehensive reviews of the Basin Plan and associated issues; act on an increased number of triennial review-listed items*
Evaluation of beneficial uses	H	Y	*Under- to unfunded*	*Field observations in conjunction with other activities*	*Comprehensive beneficial use surveys (necessary to set and refine use designations)*
Development of WQ objectives	H	Y	*Under- to unfunded*	*Utilize existing objectives.*	*Develop new and/or site-specific objectives; participate on State/Federal Task Forces; develop regional policies to implement water quality standards*
Development of watershed/ regional priorities	H	N	*Under-funded*	*Solve the easiest problems*	*Develop of complex watershed solutions*
Watershed Coordination and Plan Development	H	N			
Development of watershed plans	H	N	*Under to unfunded*	*Rely on stakeholders to do most of the work*	*Ability to provide staffing efforts to watershed groups to guide and prepare integrated plans for water quality along with flood protection, habitat protection, etc.*
Coordination	H	N	*Under-funded*	*Limited outreach*	*Provide staff to participate in all watershed groups*
TMDL Development	H	Y	*Under-funded*	*TMDLs with only the required elements in order to meet deadlines*	*More time spent developing TMDLs with site-specific information*

Program/Activity (and Subcategories)	Import-ance (High, Med, Low)	Man-dated?	Current Funding	What We Can Do With Existing Funds	What Could Be Done with More Funds
Water Quality Assessment					
Monitoring — Ambient watershed	H	Y (SWAMP)	*Under-funded*	*Do the basics required by the SWAMP; minimal staff sampling; rely on stakeholder sampling with minimal oversight; develop collaborative discharger watershed monitoring programs*	*Collect better data to assess impacts, assess for more constituents with more robust sampling; develop priorities, and evaluate successes; actively solicit and coordinate stakeholder monitoring; move beyond "snapshot" monitoring*
Lab support	H	N/A	*Under-funded*	*Evaluate small subset of waters; analyze inexpensive constituents; often inadequate for decision-making*	*Utilizing "better science" for decision-making*
Biomonitoring (training /field wk.)	H	N	*Under-funded*	*Use effluent chronic toxicity testing as surrogate*	*Real assessment of impacts to Beneficial Uses through field surveys*
Assessment	H	Y (WQA)	*Unfunded*	*Compile and assess as time permits ("back-burner")*	*Utilization as a critical element in watershed decision-making*
Computer data storage	H	N	*Unfunded*	*Data stored in many locations*	*More efficient and comprehensive analyses*
Analyze data	H	Y	*Unfunded*	*Simple statistics*	*More rigorous analyses*
State of watershed report	M	N	*Unfunded*	*Summarize available info*	*Info sharing/priority setting*
Biennial WQA Report	M	Y	*Unfunded*	*Limited to targeted watersheds (minimal info)*	*Regular and more comprehensive updates/ better data for quality decisions*
Reporting – *Water Quality Report Card*	H	N	*Unfunded*	*Encourage other groups to develop indicators that would be useful for our Region*	*Research and develop indicators and a "report card" format for Region*

Program/Activity (and Subcategories)	Importance (High, Med, Low)	Mandated?	Current Funding	What We Can Do With Existing Funds	What Could Be Done with More Funds
CEQA Review	M-H	Y	*Unfunded*	*Limited to highest priority projects with the greatest potential impacts*	*Provide early, meaningful comments; pre-401 coord.; early notification; be aware of piecemealing of projects*
401 Review	M-H	Y	*Under-funded*	*Review and process applications*	*Follow-up work (monitoring and enforcement), pre-construction meetings, site visits, review of draft CEQA documents, development of regional policies*
Nonpoint Source/CZARA					
Outreach	H	N	*Under-funded*	*Minimal effort - usually associated with group meetings*	*More active cooperation and outreach with individuals and groups in the watershed*
Contract/Project Management	H	N	*Under-funded*	*Minimum needed to get project through funding process*	*Receive better products and leverage from successful projects, hands on involvement and advertisement of successful projects*
Development of NPS Solutions	H	Y	*Under-funded*	*Little to none on our own: some involvement with others' work, and initiation of regulatory mechanisms (Tiers II and III)*	*Work with watershed communities to develop and implement nonpoint pollution control strategies, evaluate success of best management practices and management measures*
Permitting - Point Source (NPDES and WDRs)					
Permit development	H	Y	*Under-funded*	*Reduce backlog; process major and minor permits on watershed schedule/transfer minor permits to general permits as time allows*	*Have resources to solicit more stakeholder involvement; use higher level tools (modeling) to develop limits*
Inspections	H	Y	*Under-funded*	*Minimum required*	*More field presence/outreach/may reduce need for enforcement*
Enforcement	H	Y	*Under-funded*	*Only high profile major spills/violations*	*More enforcement actions taken on spills/violations that are not high profile*
Spill/complaint follow-up	H	Y/N	*Under-funded*	*Only major spills*	*Better customer service, follow-up on complaints, successful cleanups*

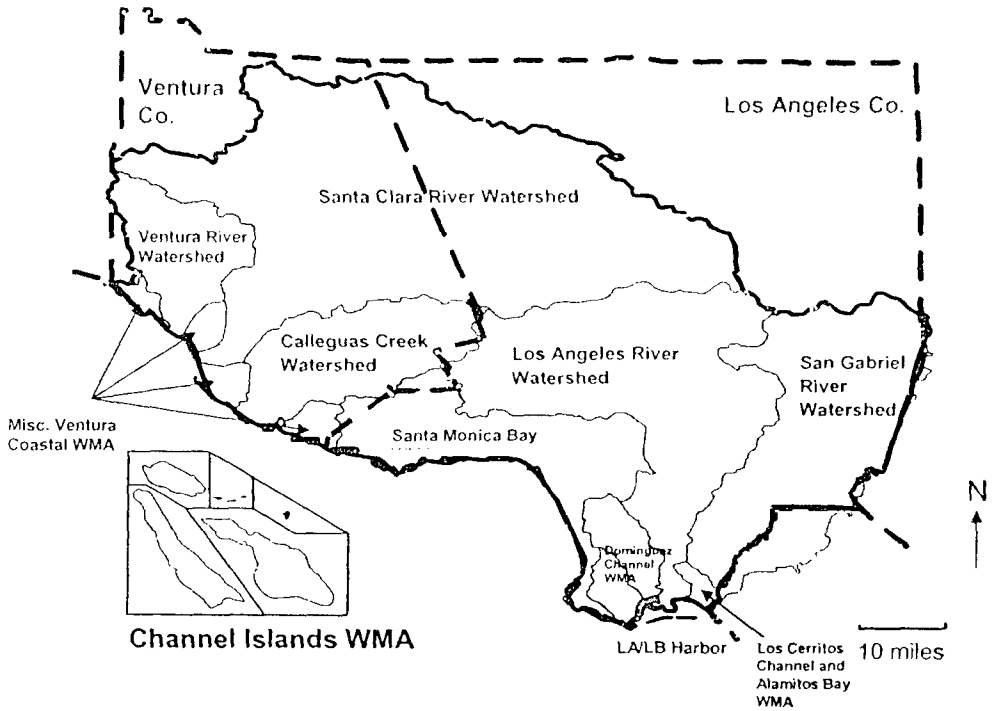
OUR REGION'S APPROACH TO WATERSHED MANAGEMENT

We have designated ten watershed management areas in the Los Angeles Region (Figure 2). Initially, implementation of watershed management in the Los Angeles Region occurred in phases over a seven-year cycle for each watershed. We are now shifting to a five-year cycle to be in line with the standard permit life and to equalize workloads over the years. This shift in our watershed cycle is illustrated in the table that follows. The majority of permit-related tasks such as permit renewals/revisions and regional monitoring program development as well as preparation of state of watershed reports, will occur during the first approximately twelve months of the watershed's five-year cycle. Much of the rest of the cycle will be spent developing and implementing, with the input of stakeholders, measures for management of pollutants from point and/or nonpoint sources. In some cases, nonpoint source activities may be occurring throughout the cycle due to the prior existence of stakeholder groups who have been meeting regularly on these issues. Toward the end of the five-year cycle (and prior to initiating the next cycle), we shall evaluate the success of our watershed efforts.

In light of limited schedules and resources, efforts during the 12-month start-up phase will target compilation and assessment of available data, identification of data gaps and the need for additional studies/monitoring, the development of a balanced stakeholder group, and issuance of permits for point source discharges. A by-product of these efforts will be a preliminary indication of pollutant problems from nonpoint sources; followup efforts to address these nonpoint source problems, as well as other water quality problems, will be undertaken during the cycle if efforts are not already underway through some other means.

NPDES permits in the Los Angeles Region are organized and scheduled by watershed. Preliminary "State of the Watershed Reports" are prepared by watershed "teams" composed of permit writers, planning and nonpoint source program personnel, and those involved with groundwater protection. These reports have become very useful tools for local watershed groups for general educational value and in setting priorities.

Figure 2. Watershed Management Areas of the Los Angeles Region



Permit Timeline for Watershed Management Initiative

Santa Clara River Calleguas Creek	FY 2001/02
Dominguez Channel-LA/LB Harbor	FY 2002/03
Santa Monica Bay	FY 2003/04
Los Angeles River	FY 2004/05
San Gabriel River Los Cerritos Channel Channel Islands	FY 2005/06
Ventura River Misc. Ventura Coastal Santa Clara River Calleguas Creek	FY 2006/07
Dominguez Channel-LA/LB Harbor	FY 2007/08

The formation of a balanced group of stakeholders for each watershed is critical to the success of watershed management, especially for resolving issues arising from nonpoint source pollutants. Accordingly, part of our approach is to initiate such groups of stakeholders and encourage active participation. Working in partnership with stakeholders, we expect that we can achieve the following goals (or have already done so during the watershed's first cycle) within each of our watershed management areas during the first five-year cycle of watershed management.

- **Establishment of a stakeholder group** or an infrastructure of stakeholder contacts which represents a range of key interest groups in the watershed; yet involvement is not a barrier to timely resolution of a water quality problem.
- **Compilation of reasonably available water quality data** and related information in the form of a 'State of the Watershed Report.'
- **Assessment of data gaps** and a plan to fill the gaps.
- **Development of a** coordinated, cost-effective **watershed-wide monitoring program.**
- **Identification of priority permit issues** and **coordinated issuance of NPDES permits** that addresses these issues.
- **Identification of other high priority issues**, including nonpoint source issues, and consensus among stakeholders as to how to proceed to resolve them.
- **Implementation of watershed-based solutions.**
- **Evaluate** success.

Many of the tasks noted above will not be limited to a particular part of the watershed cycle. Rather, some may overlap throughout the watershed cycle as may be the case with tasks such as review and assessment of monitoring data and permit compliance. Also, some tasks may have less emphasis than others depending on the watershed, its problems, and the relative influence of point versus nonpoint source contributors.

What is important is the basic tenets of watershed management are being implemented:

- *The effort has a geographic focus,*
- *The highest priority issues are being identified and addressed,*
- *Stakeholder involvement is occurring, and*
- *A scientific basis for water quality management decisions is being created.*

While this is an idealized model, many factors often change what can be done for each step. these include regulatory or statutory mandates, consent decrees, legislation, and changes in Board priorities or funding.

OUR HIGH PRIORITY ISSUES UNDER THE WMI

This Regional Board establishes priorities on an annual basis. While some of these priorities fall outside of the watershed management arena (it is acknowledged that some activities will likely always remain outside of the WMI), the bulk of these priorities are clearly of primary importance in fulfilling not only the WMI but also the nonpoint source management initiative and other mandates. For example, one major priority is, in fact, implementation of the watershed approach. In addition to Regional Board-directed priorities, priorities are mandated by legislation, statute, regulation, State Board, Cal-EPA, USEPA, and from sheer need to protect, restore, or enhance water quality. A list of the highest of these collective priorities follows. These are not necessarily arranged in priority order.

- **Point sources** – controlling compounds which continue to cause instream toxicity and/or accumulate in sediments or biota.
- **Industrial discharges** – ensuring compliance with either individual or general permits.
- **New/re-development** – proactively addressing water quality issues through CEQA, 401 certifications, or stormwater permits – ensuring wet weather compliance with construction permits.
- Addressing the **regional salt management**/salt imbalance issue which is becoming increasingly critical in the region. Also, balancing this issue with the need to promote the use of reclaimed water.
- **Municipal stormwater/urban runoff** – advancing stormwater and urban runoff programs through a variety of efforts. Current priorities include trash control and new development/re-development issues.
- **Watershed monitoring and assessment** – coordination of existing resources and participation in the Surface Water Ambient Monitoring Program. More use of bioassessment as a tool.
- **Water quality standards** program – although this is the cornerstone of all of our programs, it has been minimally funded for the last two decades. This is a critical need for our organization to address this deficiency.
- **Habitat loss/restoration** – even with strides in improving instream water quality, unless habitat is restored, in many cases beneficial uses can not be restored. Efforts which address this need are 401 certification, the Southern California Wetlands Recovery Project, and various watershed efforts. Removal of exotic species is also included in these efforts.
- Priority **nonpoint source** efforts – several areas have been targeted for accelerated efforts including development of regional strategies to address agriculture, septic tanks, urban runoff, and marinas as contributors of nonpoint source pollution as well as involvement with grant funding activities relating to CWA Section 319(h) and Proposition 13.
- **Toxic hot spots** (sediment) – many of the impairments in the Region, particularly in harbors, are related to contaminated sediments. While source reduction will decrease pollutant levels over time, remediation of these sediments will also be needed which will be a long-term project. An effort to help address this need is the Contaminated Sediments Task Force.
- **Beach closures** – other impairments in the Region are the result of elevated coliform levels or beach closures. Monitoring the water quality of recreational areas along the coast, identifying land uses or drainages which generate pathogens, and reducing pollution within these areas is a targeted activity.

These Board priorities are further highlighted in the watershed and region-wide sections as appropriate.

Section 2 . Activities Organized on a Watershed Basis

This section describes activities organized on a watershed basis. An **overview** of each watershed or WMA is provided, its **water quality problems and issues** are described, **past significant activities** (as appropriate), **current activities** (funded activities, in FY00/01 workplan), **near-term activities** (planned or projected high priority activities that may need funding, especially beginning in FY01/02), and **potential long-term activities** (long-term goals, beyond two years).

A table has been included in the Region-wide Section which describes non-TMDL-related resource needs for FY01/02. TMDL resource needs are also included in the Region-wide Section of this document.

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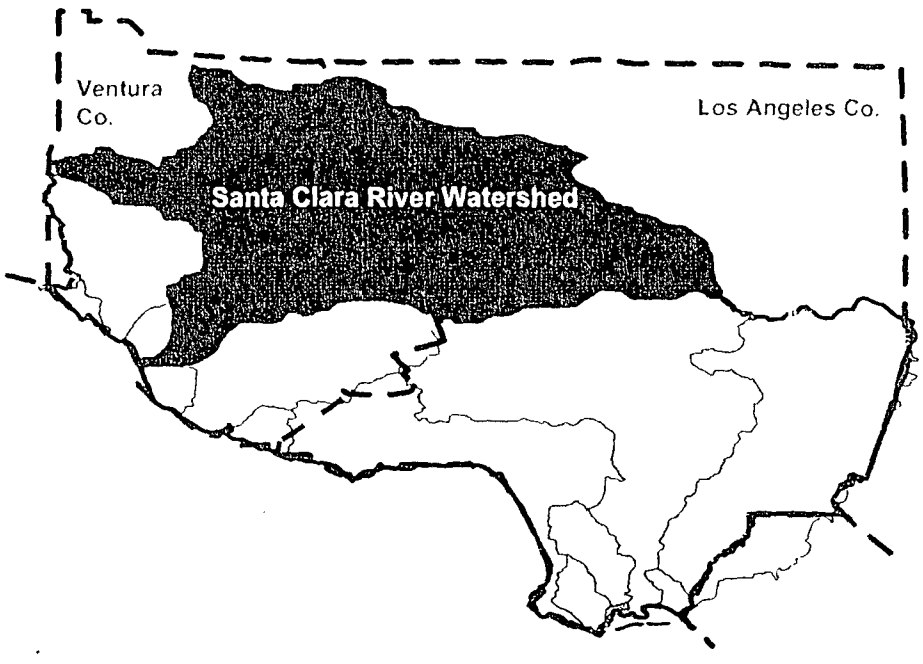
2.1 SANTA CLARA RIVER WATERSHED

This watershed will be targeted for permitting purposes in FY01/02.

Overview of Watershed

Size of watershed: approximately 1,200 sq. mi.

Length of river: approximately 100 miles



The Santa Clara River is the largest river system in southern California that remains in a relatively natural state; this is a high quality natural resource for much of its length. The river originates in the northern slope of the San Gabriel Mountains in Los Angeles County, traverses Ventura County, and flows into the Pacific Ocean halfway between the cities of San Buenaventura and Oxnard.

Extensive patches of high quality riparian habitat are present along the length of the river and its tributaries. The endangered fish, the unarmored stickleback, is resident in the river. One of the largest of the Santa Clara River's tributaries, Sespe Creek, is designated a wild trout stream by the state of California and supports significant spawning and rearing habitat. The Sespe Creek is also designated a wild and scenic river. Piru and Santa Paula Creeks, which are tributaries to the Santa Clara River, also support good habitats for steelhead. In addition, the river serves as an important wildlife corridor. A lagoon exists at the mouth of the river and supports a large variety of wildlife.

Water Quality Problems and Issues

Increasing loads of nitrogen and salts in supplies of ground water threaten beneficial uses including irrigation and drinking water. Other threats to water quality include increasing development in floodplain areas which has necessitated flood control measures such as channelization that results in increased runoff volumes and velocities, erosion, and loss of habitat. In many of these highly disturbed areas the exotic giant reed (*Arundo donax*) is gaining a foothold.

Beneficial Uses in watershed:

Estuary	Above Estuary
Contact & noncontact water recreation	Contact & noncontact water recreation
Wildlife habitat	Wildlife habitat
Preservation of rare & endangered species	Preservation of rare & endangered species
Migratory habitat	Migratory habitat
Wetlands habitat	Wetlands habitat
Spawning habitat	Municipal supply
Estuarine habitat	Industrial service supply
Marine habitat	Industrial process supply
Navigation	Agricultural supply
Commercial & sportfishing	Groundwater recharge
	Freshwater replenishment
	Warmwater habitat
	Coldwater habitat

Permitted discharges:

- Four POTWs (one discharge in estuary, one in middle reaches, two in upper watershed)
- 103 dischargers covered under an industrial storm water permit
- 310 dischargers covered under a construction storm water permit

Many of the smaller communities in this watershed remain unsewered. In particular, in the Agua Dulce area of the upper watershed, impacts on drinking water wells from septic tanks is a major concern. The community is undertaking a wellhead protection effort, with oversight by Board staff. Development pressure, particularly in the upper watershed, threatens habitat and the water quality of the river. The effects of septic system use in the Oxnard Forebay area is also of concern.

Types of permitted wastes discharged into the Santa Clara River Watershed:

Nature of Waste *Prior* to Treatment or Disposal	# of Permits	Types of Permits
Nonhazardous (designated) contaminated groundwater	2 1	Minor General
Nonhazardous (designated) wastes from dewatering, rec. lake overflow, swimming pool wastes, water ride wastewater, or groundwater seepage	6 8	Minor General
Nonhazardous (designated) noncontact cooling water	2	Minor
Nonhazardous (designated) process waste (produced as part of industrial/manufacturing process)	2	Minor
Nonhazardous (designated) stormwater runoff	1	Minor
Hazardous contaminated groundwater	1 1	Minor General
Nonhazardous (designated) filter backwash brine waters	1	Minor
Nonhazardous (designated) domestic sewage & industrial waste	4 1	Major Minor
Nonhazardous (designated) washwater waste (photo reuse washwater, vegetable washwater)	1	General
Inert wastes from dewatering, rec. lake overflow, swimming pool wastes, water ride wastewater, or groundwater seepage	12	General

Hazardous wastes are those influent or solid wastes that contain toxic, corrosive, ignitable, or reactive substances (prior to treatment or disposal) managed according to applicable Department of Health Services standards
Designated wastes are those influent or solid wastes that contain **nonhazardous** wastes (prior to treatment or disposal) that pose a significant threat to water quality because of their high concentrations

Nonhazardous wastes are those influent or solid wastes that do not contain soluble pollutants or organic wastes (prior to treatment or disposal) and have little adverse impact on water quality
Inert wastes are those influent or solid wastes that do not contain soluble pollutants or organic wastes (prior to treatment or disposal) and have little adverse impact on water quality

Major discharges are POTWs with a yearly average flow of over 0.5 MGD or an industrial source with a yearly average flow of over 0.1 MGD and those with lesser flows but with acute or potential adverse environmental impacts.

Minor discharges are all other discharges that are not categorized as a Major. Minor discharges may be covered by a general permit, which are issued administratively, for those that meet the conditions specified by the particular general permit.

Twenty-nine of the 43 NPDES discharges discharge into the mainstem of the Santa Clara River while the rest go to various tributaries.

Of the 130 dischargers enrolled under the general industrial storm water permit in the watershed, the largest numbers fall in the *Motor Freight Transportation and Warehousing*, and *Motor Vehicle Parts, Used* categories.

There are currently 310 sites enrolled under the construction storm water permit with a similar number of sites located in the upper and lower watershed. The majority of these are residential sites 10 acres or larger in size.

IMPAIRMENTS: Limited data (beyond mineral quality and nitrogen) is available for much of the Santa Clara River. The Santa Clara River Estuary and Beach is on the 1998 303(d) list for coliform while a portion of the river upstream of the estuary is listed for ammonia and coliform. Portions of the river have chloride exceedances. The Estuary is also listed for DDT in fish tissue. Two small lakes in the watershed are also on the 1998 303(d) list for eutrophication, trash, DO, and pH problems. Two major spills of crude oil into the river have occurred in the last six years although recovery has been helped somewhat by winter flooding events. Natural oil seeps discharge significant amounts of oil into Santa Paula Creek.

The table below gives examples of typical data ranges which led to the listings. See Table 7 in the Appendix for additional details on currently scheduled TMDLs as well as specific pollutants included in the TMDLs.

Impairments	Applicable Objective/Criteria	Typical Data Ranges Resulting in Impairment	303(d) Listed Waters/Reaches
chloride	Basin Plan numeric objective: 80 - 100 mg/l	10 - 138 mg/l (mean of 105 ± 21)	Santa Clara River Reach 9 (Bouquet Cyn Rd to abv Lang Gaging) Santa Clara River Reach 8 (W Pier Hwy 99 to Bouquet Cyn Rd Bridge) Santa Clara River Reach 7 (Blue Cut to West Pier Hwy 99) Santa Clara River Reach 3 (Dam to abv SP Crk./blw Timber Cyn)

Impairments	Applicable Objective/Criteria	Typical Data Ranges Resulting in Impairment	303(d) Listed Waters/Reaches
ammonia	Basin Plan narrative objective	ND - 4.9 mg/l (mean of 1.4 ± 1.3)	Santa Clara River Reach 8 (W Pier Hwy 99 to Bouquet Cyn Rd Bridge) Santa Clara River Reach 7 (Blue Cut to West Pier Hwy 99) Santa Clara River Reach 3 (Dam to abv SP Crk /blw Timber Cyn)
	Basin Plan numeric objective: varies depending on pH and temperature but the general range is 0.53 - 2.7 mg/l of total ammonia (at average pH and temp.) in waters designated as WARM to protect against chronic toxicity and 2.3 - 28.0 mg/l to protect against acute toxicity		
nitrate + nitrite	Basin Plan numeric objective: no greater than 10 mg/l	0.3 - 15.4 mg/l (mean of 5.7 ± 2.4)	Wheeler Canyon/Todd Barranca Torrey Canyon Creek Brown Barranca/Long Canyon Mint Canyon Creek Reach 1 Santa Clara River Reach 8 (W Pier Hwy 99 to Bouquet Cyn Rd Bridge)
org. enrichment/ low DO	Basin Plan narrative objective		Santa Clara River Reach 9 (Bouquet Cyn Rd to abv Lang Gaging) Santa Clara River Reach 8 (W Pier Hwy 99 to Bouquet Cyn Rd Bridge)
	Basin Plan numeric objective: annual mean greater than 7.0 mg/l no single sample less than 5.0 mg/l	0.8 - 11.0 mg/l (mean of 7.7 ± 2.5)	Elizabeth Lake
pH	Basin Plan numeric objective: 6.5 - 8.5 pH units	7.3 - 9.6 pH units (mean of 8.5 ± 0.7)	Elizabeth Lake
odors	Basin Plan narrative objective		Lake Hughes
coliform	Basin Plan numeric objective: Inland: fecal coliform not to exceed log mean of 200 mpn/100ml in 30-day period and not more than 10% of samples exceed 400 MPN/100ml Beaches: total coliform not to exceed 1,000 MPN/100ml in more than 20% of samples in 30 days and not more than 10,000 MPN/100ml at any time	20 - 24000 MPN/100ml	Santa Clara River Reach 8 (W Pier Hwy 99 to Bouquet Cyn Rd Bridge) Santa Clara River Estuary
sulfate	Basin Plan numeric objective: 150 mg/l		Santa Clara River Reach 9 (Bouquet Cyn Rd. to abv Lang Gaging)
Eutrophication	Basin Plan narrative objective		Elizabeth Lake Lake Hughes Munz Lake
algae	Basin Plan narrative objective		Lake Hughes
fish kills	Basin Plan narrative objective		Lake Hughes
trash	Basin Plan narrative objective		Elizabeth Lake Munz Lake Lake Hughes
ChemA*	National Academy of Science Guideline (tissue): 100 ng/g		Santa Clara River Estuary
toxaphene	State Board numeric objective (tissue): Max. Tissue Residue Level 8.8 ng/g		Santa Clara River Estuary

* ChemA refers to the sum of the chemicals aldrin, dieldrin, chlordane, endrin, heptachlor, heptachlor epoxide, HCH (including lindane), endosulfan, and toxaphene

CURRENTLY SCHEDULED TMDLS:

Type of TMDL	Listed Waters/Reaches in TMDL	Year Scheduled for Completion (FY)
chloride	Santa Clara River Reaches 3, 7, and 8	01/02
nitrogen	Santa Clara River Reaches 3, 7, and 8 Wheeler Canyon/Todd Barranca Torrey Canyon Creek Brown Barranca/Long Canyon Mint Canyon Creek Reach 1	02/03
eutrophication	Elizabeth Lake Munz Lake Lake Hughes	04/05
trash	Elizabeth Lake Munz Lake Lake Hughes	04/05
coliform	Santa Clara River Reaches 8 and 9 Santa Clara River Estuary Santa Clara River Estuary Beach/Surfers Knoll	05/06

We see a need for an additional 2.2 PYs as well as $100,000 in contract dollars for FY00/01 TMDL work conducted in this watershed.

Stakeholder Groups

Santa Clara River Enhancement and Management Plan Steering Committee The 26-member Project Steering Committee is currently directing preparation of an Enhancement and Management Plan. The Committee consists of representatives of the following individuals and agencies:

Acton Town Council *	Los Angeles Department of Regional Planning - APIS
Aggregate Producers	Newhall Land & Farming Company
Agriculture/Private Land Ownership	Santa Clara Valley Property Owners Association
Beach Erosion Authority for Operations & Nourishment *	State of California Coastal Conservancy *
Castaic Lake Water Agency	State of California Department of Fish and Game *
Cities of Fillmore/Santa Paula *	State of California Department of Parks and Recreation *
City of Oxnard	State of California Department of Transportation * - District 7
City of San Buenaventura *	State of California Water Quality Control Board - L.A. Region *
City of Santa Clarita *	United Water Conservation District
County of Ventura - Resource Management Agency *	U.S. Army Corps of Engineers *
Friends of the Santa Clara River * (environmental organization umbrella group)	U.S. Fish & Wildlife Service *
Los Angeles County Flood Control District *	Valley Advisory Committee
Los Angeles County Sanitation District	Ventura County Flood Control District *

* Additionally indicated support for the river study by signing a Memorandum of Cooperation

Six subcommittees worked with a consultant to collect the information necessary for a river management plan: agriculture, flood control, water resources, aggregate industry, recreation, and biology were the areas focused on. These subcommittees worked on determining river dynamics and areas where the interests of diverse groups overlap along the river; the critical issues areas were identified. Reports were developed by the subcommittees that provide background information, goals, and recommendations for the river on the issue areas. A series

of computer-based maps have been produced, which are currently being used in a GIS overlay process to identify conflicts and opportunities and facilitate decisions regarding use of the river floodplain. The stakeholder are currently looking for a consultant to put together a CEQA document for a watershed plan.

Friends of the Santa Clara River This non-profit stakeholder group has been involved with watershed activities along the length of the river with a focus on the protection, enhancement, and management of the river's resources. More information about this group may be found at their website http://www.FSCR.org.

Santa Clarita Organization for Planning the Environment (SCOPE) This group has been involved with educating the public about planning and environmental issues, including those involving the river, particularly in the area around the Santa Clarita Valley. More information about this group may be found at their website http://www.scope.org/.

Significant Past Activities

Santa Clara River Enhancement and Management Plan development evolved as the result of the efforts of former Ventura County Supervisor Maggie Kildee, representatives of the Ventura Office of the U.S. Fish and Wildlife Service, and grant funding provided by the State Coastal Conservancy. As far back as 1991, it was becoming apparent that the many proposed and conflicting uses of the river were heading for problems of rather large proportions unless the agencies that regulated the river and the various stakeholders along the river agreed on a consensus plan to manage the river and its resources. The increasingly complex regulatory process along the river, involving protection of river ecology and natural processes, was becoming a more difficult environment for stakeholders wishing to stabilize banks, develop urban projects, or mine river aggregate deposits. The river is a very complex natural system and agencies had been forced to be very conservative in analysis of projects because of incomplete understanding of the river's ecological processes. Large instream aggregate mining projects which had been proposed, plus several urban development projects in the making, led to the feeling that a giant "train wreck" was in store for the Santa Clara River. The options were to keep doing business-as-usual approaches, or to work together to develop a coordinated conservation plan for the river. Therefore, in 1991, Supervisor Kildee invited all concerned parties to participate in initiating the Plan. A Project Steering Committee was formed. Since that time, funding for consulting services associated with Plan development, totaling $510,000 to date, has been provided by the Coastal Conservancy, the State Wildlife Conservation Board, the U.S. Fish and Wildlife Service, the Cities of Santa Clarita and San Buenaventura, and both Ventura and Los Angeles County Flood Control Districts. In addition, a great deal of staff time and in-kind services have been contributed to this planning effort. This project also formed the primary basis for nomination of the Santa Clara River as an American Heritage River. Although the river is still under consideration, it has not yet been designated.

The Steering Committee began by identifying the river's critical issue areas. Reports were developed by subcommittees that provide background information, goals and recommendations for the river on the issue areas. A series of computer-based maps have been produced, which are currently being used in a Geographic Information Systems (GIS) overlay process to identify conflicts and opportunities and facilitate decisions regarding use of the river floodplain.

The Steering Committee initially identified nine main categories of critical resource issue areas and, over the past two years, subcommittees covering Biological Resources, Recreation, Water Resources, and Aggregate Mining have each developed reports providing background information, and goals and recommendations for their respective areas. In addition, two reports covering the History of the Santa Clara River and the Cultural Resources of the River have been published.

One downside to this effort is that the study and plan were limited to the mainstem of the river, not the tributaries or other watershed areas outside of the 100-year floodplain. If additional resources can be found, the study area can be expanded throughout the watershed. This will increase the chance of successful protection of this watershed.

Other important community-based efforts include Ventura County's Agriculture Policy Working Group's Agricultural Land Preservation Program, the Heritage Valley Tourism Development Program, Santa Clara River Valley Historic/Cultural Preservation Programs and the City of Santa Clarita's River Corridor Plan.

In 1990, the Regional Board adopted Resolution No. 90-004 (**Drought Policy**) which had a term of three years and provided interim relief to dischargers who experienced difficulty meeting chloride objectives because of a state-wide drought. The policy adjusted effluent limits to the lesser of 1) 250 mg/l or 2) the chloride concentration in the water supply plus 85 mg/l. In 1995, the Regional Board extended the interim limits for three years and directed staff to develop a long-term solution to deal with the impact of changing water supply, especially during droughts. In 1997, the Regional Board adopted Resolution No. 97-002 (**Chloride Policy**) which set the chloride objective at 190 mg/l except in the Calleguas Creek and Santa Clara River Watersheds where, due to the great concern for protection of agriculture, staff were directed to determine the chloride concentrations sufficient to protect agricultural beneficial uses.

Current Activities

CORE REGULATORY

Continuing core regulatory activities that will be integrated into the watershed management approach include (but are not limited to) necessary renewal/revision of NPDES permits and issuance of new permits. This will be a targeted watershed for the bulk of permit renewal purposes in FY 2001-02. There are four major dischargers, 16 significant or minor dischargers under individual permits, as well as 23 dischargers currently covered under general permits (additional information on permits may be found in the Appendix). Compliance inspections, review of monitoring reports, response to complaints, and enforcement actions relative to the watershed's NPDES permits will continue.

The one POTW discharging to the estuary conducted a limited-term receiving monitoring program to investigate whether toxic constituents (to be regulated under the CA Toxics Rule) are accumulating or bioaccumulating in the estuary.

We anticipate that NPDES permit renewals will focus on 1) compliance with the CA Toxics Rule, 2) nutrients, 3) coordinated monitoring, and 4) biomonitoring.

Additionally, most urban areas in Ventura County, including this watershed, are implementing Best Management Practices under the Ventura County Municipal Storm Water Permit (adopted in 2000). The "Discharger" consists of the co-permittees Ventura County Flood Control District, the County of Ventura, and the Cities of Camarillo, Fillmore, Moorpark, Ojai, Oxnard, Port Hueneme, San Buenaventura, Santa Paula, Simi Valley, and Thousand Oaks. The Discharger is required to implement the approved Ventura Countywide Stormwater Quality Urban Impact Mitigation Plan (SQUIMP) by January 27, 2001. The SQUIMP shall address conditions and requirements for new development and significant redevelopment.

To date, the storm water monitoring program has consisted of land-use based monitoring combined with receiving water monitoring and modeling. The Discharger intends to sign an agreement to participate in the Regional Monitoring Program established for Southern California municipal programs under the guidance of the Southern California Coastal Water Research Project.

The Santa Clara River receives municipal storm drain discharges from the City of Fillmore, City of Oxnard (part), City of San Buenaventura (part), City of Santa Paula, and unincorporated Ventura County (part).

MONITORING AND ASSESSMENT

The Santa Clara River will be a focus for SWAMP monitoring as the watershed comes up for targeting in the rotating watershed cycle. Currently, we plan on emphasizing stratified random sampling with the strata represented by stretches of river or tributary immediately upstream of confluences. Biological assessment work will be a major component of the program.

The upper Santa Clara River is monitored by the County Sanitation Districts of Los Angeles County under NPDES permits for the Saugus and Valencia treatment plants. Somewhat downstream, between the towns of Piru and Saticoy, water quality in the surface and groundwater is monitored by United Water Conservation District. Mid-river receiving water data is provided by the City of Santa Paula treatment plant under an NPDES permit and occasionally by the City of Fillmore when they discharge to surface waters under an NPDES permit. Otherwise, the City of Fillmore provides groundwater data that has not yet been integrated into the watershed picture. At the river's terminus, some water quality data is available from the City of San Buenaventura under NPDES permit for discharge to ponds adjacent to the river. The monitoring supports compliance evaluation; it is not part of a program for nonpoint source identification or TMDL development. In conjunction with the receiving water monitoring, land-use based monitoring is carried out as part of the Ventura County Municipal Storm Water Program. There is a long stretch of the middle river (surrounded by private property) that has had little to no monitoring because of limited access. Additionally, the Regional Board monitored a number of locations in the river and its tributaries until fairly recently when funding levels were reduced. The Regional Board has conducted some monitoring in the watershed also.

In support of upcoming TMDLs scheduled for the watershed, approximately one dozen sites will sampled along the length of the river this fiscal year for pesticides, nutrients, and minerals.

In addition, efforts to study impacts of chloride on groundwater supplies will require ongoing monitoring. A MOU has been prepared by staff and has been signed by several key stakeholders interested in this issue.

Ground water data are being collected by a number of agencies and should be compiled by the Fox Canyon Groundwater Management Agency. We should be acquiring some of this data over the next two years for use in our analysis of the Oxnard Plain nonpoint source contamination problems.

WETLANDS PROTECTION AND MANAGEMENT

Acquisition of parcels at the mouth of the river (wetlands, dunes and former riparian areas at the estuary as well as at the adjoining McGrath Lake and dunes) is a high priority for FY00/01 and future years funding by the Southern California Wetlands Recovery Project.

The Santa Monica Mountains Conservancy is a state agency created by the Legislature in 1979 charged with primary responsibility for acquiring property with statewide and regional significance, and making those properties accessible to the general public. The Conservancy manages parkland in the Santa Monica Mountains, Santa Susana Mountains, the Simi Hills, the Santa Clarita Woodlands, the Whittier-Puente Hills, the Sierra Pelona, the Los Angeles River Greenway, the Rio Hondo, the Verdugo Mountains, the San Gabriel Mountains, and the San Rafael Hills. The agency's goals are to: 1) implement the Santa Monica Mountains Comprehensive Plan, 2) implement the Rim of the Valley Trails Corridor Master Plan, 3) implement the Los Angeles County River Master Plan, 4) further cooperation with local governments in the region to secure open space and parkland, and 5) expand education, public access, and resource stewardship components in a manner that best serves the public, protects habitat, and provides recreational opportunities.

NONPOINT SOURCE PROGRAM

Santa Clara River Enhancement and Management Plan

A set of computer-based GIS maps has been developed to allow generation of a set of comparative overlay maps demonstrating the potential conflicting uses and compatible opportunities on each of 13 river reaches defined in the Plan.

Using the maps, extensive discussion of issues along the river will take place during a series of Project Steering Committee working sessions. Overlay layers are developed around the resource areas of water resources, flood protection, agricultural resources, aggregate resources, biological resources, cultural resources, recreation, and land use. Within each resource area, individual layers are being developed depicting selected parameters for comparison. For example, for biological resources, layers have been generated showing the various types of riparian vegetation, exotic species, and habitat values. The overlay analysis resulted in identification of the areas of greatest potential conflicts facing the river, and recommendations for addressing these issues, including (1) preserving and maintaining water conveyance and groundwater recharge functions of the river, (2) creating mitigation banks, enhancing significant biological areas, and providing public access opportunities, (3) enhancing populations of threatened and endangered species on the river, with the goal of creating viable

and sustainable populations, (4) enhancement and preservation of agricultural land, (5) mitigation of beach erosion issues, (6) implementation of flood protection and bank stabilization facilities, and (7) identification of areas appropriate for development and for sand and gravel extraction.

Following completion in 1998 of the overlay analysis, a Draft Plan with reach-by-reach analyses was developed and public meetings held to discuss the Plan and its ramifications. Environmental review of the Draft Plan will also be carried out prior to developing the Final Plan.

Two demonstration projects under consideration for funding by the Coastal Conservancy would utilize a GIS overlay process for 1) a bank stabilization project using bio-technical methods to promote reduced bank erosion while increasing wildlife habitat, and 2) creation of a mitigation bank on a unique portion of river terrace riparian habitat for the protection and enhancement of wildlife habitat

In April 1999, the Project Steering Committee released preliminary river-wide and reach-specific recommendations for public comment. River-wide recommendations include those involving issues such as public outreach, private property rights, water quality, water rights, saltwater intrusion, water supply, river gradient, public flood protection facilities, maintenance of design flow capacity, private flood protection, cultural resource protection, fish passage, habitat conservation priorities, biological management, control of exotics, biological mitigation, public access and recreation, recreational property acquisition, and permit streamlining.

The group has also developed draft resource-based ranking criteria for parcel acquisition. There is one such parcel acquisition, funded by the State Coastal Conservancy, currently being pursued. The proposed acquisition includes 213 acres of river bottom, river terrace, and riparian habitat. Staff will remain involved with the Plan's development and implementation. During the fall of 1999, the Project Steering Committee reviewed proposals from consultants to prepare a CEQA document for the Plan for the river.

Regulatory-based Encouragement of Best Management Practices

Currently under consideration are agreements with sister agencies in regulatory-based encouragement of Best Management Practices. Most notably is the use of a GIS layer for pesticides application available from the Department of Pesticide Regulation (DPR). Reduction of pesticides identified as contaminants of concern for a watershed might be addressed through a Management Agency Agreement (MAA) with the DPR, or through waiving adoption of waste discharge requirements on an individual basis using information gathered in databases provided by the Ventura County Agricultural Commission office.

Regulatory involvement with the Agua Dulce septic tank problems is currently at Tier I but is moving into Tier II (see discussion of Nonpoint Source Program in the Regionwide Section for description of tiers). The rural community of Aqua Dulce is at the headwaters of the Santa Clara River in northern Los Angeles County. Previous studies have shown elevated nitrate levels in the groundwater due to animal wastes, septic systems, and some natural sources. Some drinking water wells are experiencing high levels of nitrate exceeding the MCL. The Regional Board requested the Aqua Dulce Town Council submit quarterly monitoring reports

with a goal of testing 65 wells each quarter. Quarterly reports so far submitted have shown nitrate contamination.

Agriculture

There are a number of 303(d)-listed impairments in the watershed which may be attributable in part to agricultural practices, notably salts and nitrogen related as well as movement of historic pesticides. We will be focussing our 319(h) priorities for the upcoming application period on a number of areas of concern in the Region including development of an agricultural "strategy", education and outreach programs and implementation of management measures relative to nutrient management and erosion control.

Groundwater

The Oxnard Forebay is a prime groundwater recharge area that is impacted by nitrogen discharges, mainly from densely populated communities using septic systems, and agricultural areas. The Regional Board undertook a study of septic systems in the area during FY98/99; in August 1999 the Board adopted a Basin Plan amendment to prohibit septic systems in the Oxnard Forebay. The amendment immediately prohibits the installation of new septic systems or the expansion of existing septic systems on lot sizes of less than five acres. Discharges from septic systems on lot sizes of less than five acres must cease by January 1, 2008. This prohibition will affect up to 3,000 septic systems and ten to fifteen thousand people.

BASIN PLANNING

Chloride impairments in certain reaches of the river initially led to formation of a chloride committee to conduct a chloride TMDL by spring 2000. This stemmed from issues raised during development of a chloride policy for the region. Growers expressed concerned about increased chloride and effects on salt-sensitive crops, such as avocados. Staff propose going to the Board in December 2000 with two resolutions: one to extend the interim chloride limitation for discharges to the river until December 7, 2001; the other to amend the Basin Plan chloride objective for certain reaches in the river. The Board adopted the extension of the interim limitation at the December meeting, raised the Basin Plan objectives in Reach #3 from 80 to 100 mg/l, and determined the chloride objective for chloride in reaches #7 and #8 should remain unchanged from 100 mg/l. Reaches #3, #7, and #8 are currently 303(d)-listed for chloride. Reach #3, now with a higher objective for chloride, may be considered for de-listing in 2002. The Board has directed staff to complete a chloride TMDL on Reaches #7 and #8 within six to nine months.

Basin Planning activities will also include continued participation in both internal and external watershed planning efforts and further incorporation of watershed management and principles and watershed-specific priorities into future updates of the Basin Plan, where appropriate.

Near-term Activities

Specific resource needs are described in the Region-wide Section of this document.

A preliminary review of resources for core regulatory activities against cost factors has determined that our region is seriously underfunded for our baseline program. We will be seeking more funding for our core program activities.

The Santa Clara River Watershed is being proposed for inclusion in a partial update of the Water Quality Assessment report due in 2002. This will require staff resources to collect and analyze data in 2000/01 in order to develop a State of the Watershed Report and update the Water Quality Assessment.
Future phases of the Santa Clara River Enhancement and Management Plan effort, to be carried out over the next one-to-five years, involve completion of the GIS overlay analysis, preparation of the Draft Plan, environmental and public review of the Draft Plan, publication of a Final Plan, and acquisition of funding for Plan implementation. Regional Board staff involvement will continue.

Our efforts to involve stakeholders shall also include exploration of funding options (especially for implementation of nonpoint source measures) and continuation of other outreach activities, such as speeches, meetings, and participation in environmental events. We shall continue out involvement in the watershed group's efforts to develop and implement a watershed management plan.

We are also proposing increased efforts in oversight and management of ground water resources. However, staff involvement in voluntary resolution of nonpoint source problems (Tier I) requires more resources than a regulatory-based approach. Tier II (regulatory encouragement) activities over the long-term include tracking nonpoint source inputs by supplemental databases such as DPR and the Department of Food and Agriculture (DFA), as well as increased sampling of the receiving water for contaminants of concern and toxicity. Tier III (effluent limitations) activities over the long-term include sampling, inspecting, and permitting priority contributors of contaminants of concern in watersheds not fully implementing a stakeholder-driven watershed approach.

We will maintain involvement with stakeholder activities and pursue funding options, especially those involving implementation of nonpoint source measures (coordinate 205(j) and 319(h) activities) as well as other outreach activities such as speeches, meetings, and participation in environmental events. With additional resources we propose conducting a number of education and outreach activities including holding regional workshops and conferences with other Regional Boards as well as experts in the field. We also propose further refining our agricultural strategy to clearly delineate our goals and objectives with regards to reducing nonpoint source pollution from this sector and potential triggers for moving through the tiers.

The complexity of this watershed system, coupled with divergent goals among upstream developers, downstream farmers, and environmental interests, necessitate that extra planning resources be allocated to this watershed. It is imperative that the Regional Board actively participate in dialogue regarding water quality issues during the near-term, to ensure proper planning and development of the long-term projects that are being proposed. Among the various approaches that will be taken by the Regional Board is more active participation in CEQA and other planning efforts in this watershed to ensure protection of this valuable water resource, especially in light of the high growth projections in the floodplains and recharge areas of this watershed.

Potential Mid- to Long-term Activities

- Evaluation of potential impacts from mining in and around the river
- Evaluation of impacts from large-scale development in the upper river
- Identification of conflicts between ground water supply and water quality in lower watershed
- Identification of water quality and quantity issues for steelhead trout recovery
- Consideration of TMDL-related issues
- Implementation of watershed-wide biological monitoring which is a long-term goal for all of our watersheds

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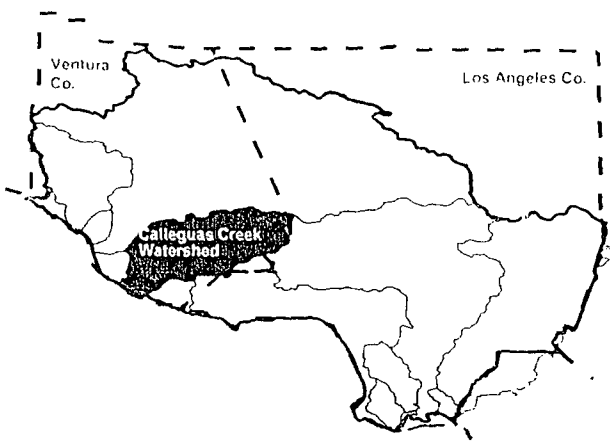
2.2 CALLEGUAS CREEK WATERSHED

This was a targeted watershed for permitting purposes in FY95/96 and it will be targeted next in FY01/02.

Overview of Watershed



Calleguas Creek and its major tributaries, Revolon Slough, Conejo Creek, Arroyo Conejo, Arroyo Santa Rosa, and Arroyo Simi drain an area of 343 square miles in southern Ventura County and a small portion of western Los Angeles County. This watershed, which is elongated along an east-west axis, is about 30 miles long and 14 miles wide. The northern boundary of the watershed is formed by the Santa Susana Mountains, South Mountain, and Oak Ridge; the southern boundary is formed by the Simi Hills and Santa Monica Mountains.

Land uses vary throughout the watershed. Urban developments are generally restricted to the city limits of Simi Valley, Moorpark, Thousand Oaks, and Camarillo. Although some residential development has occurred along the slopes of the watershed, most upland areas are still open space, however, golf courses are becoming increasingly popular to locate in these open areas. Agricultural activities, primarily cultivation of orchards and row crops, are spread out along valleys and on the Oxnard Plain.

Mugu Lagoon, located at the mouth of the watershed, is one of the few remaining significant saltwater wetland habitats in southern California. The Point Mugu Naval Air Base is located in the immediate area and the surrounding Oxnard Plain supports a large variety of agricultural crops. These fields drain into ditches which either enter the lagoon directly or through Calleguas Creek and its tributaries. Other fields drain into tile drain systems which discharge to drains or creeks. Also in the area of the base are freshwater wetlands created on a seasonal basis to support duck hunting clubs. The lagoon borders on an Area of Special Biological Significance (ASBS)

Beneficial Uses in watershed:

Estuary	*Above Estuary*
Wildlife habitat	Wildlife habitat
Contact & noncontact water recreation	Contact & noncontact water recreation
Estuarine habitat	Industrial service supply
Marine habitat	Industrial process supply
Preservation of rare & endangered species	Preservation of rare & endangered species
Navigation	Agricultural supply
Preservation of biological habitats	Groundwater recharge
Wetlands habitat	Wetlands habitat
Migratory & spawning habitat	Freshwater replenishment
Shellfish harvesting	Warmwater habitat

and supports a great diversity of wildlife including several endangered birds and one endangered plant species. Except for the military base, the lagoon area is relatively undeveloped.

Supplies of ground water are critical to agricultural operations and industry (sand and gravel mining) in this watershed. Moreover, much of the population in the watershed relies upon ground water for drinking.

Water Quality Problems and Issues

Aquatic life in both Mugu Lagoon and the inland streams of this watershed has been impacted by pollutants from nonpoint sources. DDT, PCBs, other pesticides, and some metals have been detected in both sediment and biota collected from surface waterbodies of this watershed. Additionally, ambient toxicity has been revealed in several studies from periodic toxicity testing in the watershed (ammonia from POTWs and pesticides such as diazinon and chlorpyrifos are implicated). Fish collected from Calleguas Creek and Revolon Slough exhibit skin lesions and have been found to have other histopathologic abnormalities. High levels of minerals and nitrates are common in the water column as well as in the groundwater. Sediment toxicity is also elevated in some parts of the lagoon. Reproduction is impaired in the resident endangered species, the light-footed clapper rail due to elevated levels of DDT and PCBs. Overall, this is a very impaired watershed. It appears that the sources of many of these pollutants are agricultural activities (mostly through continued disturbance and erosion of historically contaminated soils), which cover approximately 25% of the watershed along the inland valleys and coastal plain, although the nearby naval facility has also been a contributor. Other nonpoint sources include residential and urban activities, which are present over approximately 25% of the watershed. The remaining 50% of the watershed is still open space although there is a severe lack of benthic and riparian habitat.

Permitted discharges:

- Six POTWs with NPDES permits (3 larger, 3 smaller)
- 82 dischargers covered under an industrial storm water permit
- 100 dischargers covered under construction storm water permit
- Municipal storm water permit

Mugu Lagoon as well as the Calleguas Creek Estuary is considered a candidate toxic hot spot under the BPTCP for reproductive impairment (the endangered clapper rail), exceedance of the state Office of Environmental and Health Hazard Assessment (OEHHA) advisory level for mercury in fish, and exceedance of the NAS guideline level for DDT in fish, sediment concentrations of DDT, PCB, chlordane, chlorpyrifos, sediment toxicity and degraded benthic infaunal community.

Primary issues related to POTW discharges include ammonia toxicity and high mineral content (i.e., salinity), the latter, in part, due to imported water supplies.

Types of permitted wastes discharged into the Calleguas Creek Watershed:

Nature of Waste *Prior* to Treatment or Disposal	# of Permits	Types of Permits
Nonhazardous (designated) contaminated groundwater	2	General
Nonhazardous (designated) wastes from dewatering, rec. lake overflow, swimming pool wastes, water ride wastewater, or groundwater seepage	2 4	Minor General
Hazardous contaminated groundwater	4 4	Minor General
Nonhazardous (designated) domestic sewage & industrial waste	3 2	Major Minor
Nonhazardous (designated) domestic sewage	1	Minor
Inert wastes from dewatering, rec. lake overflow, swimming pool wastes, water ride wastewater, or groundwater seepage	3	General

Hazardous wastes are those influent or solid wastes that contain toxic, corrosive, ignitable, or reactive substances (prior to treatment or disposal) managed according to applicable Department of Health Services standards
Designated wastes are those influent or solid wastes that contain **nonhazardous** wastes (prior to treatment or disposal) that pose a significant threat to water quality because of their high concentrations
Nonhazardous wastes are those influent or solid wastes that do not contain soluble pollutants or organic wastes (prior to treatment or disposal) and have little adverse impact on water quality
Inert wastes are those influent or solid wastes that do not contain soluble pollutants or organic wastes (prior to treatment or disposal) and have little adverse impact on water quality

Major discharges are POTWs with a yearly average flow of over 0.5 MGD or an industrial source with a yearly average flow of over 0.1 MGD and those with lesser flows but with acute or potential adverse environmental impacts.

Minor discharges are all other discharges that are not categorized as a Major. Minor discharges may be covered by a general permit, which are issued administratively, for those that meet the conditions specified by the particular general permit.

Discharges are fairly evenly spread around the watershed; nine of the 25 NPDES discharges go to the Arroyo Conejo, five each to the Arroyo Las Posas and Calleguas Creek, while four go to the Arroyo Simi.

Of the 82 dischargers enrolled under the general industrial storm water permit in the watershed, the largest numbers fall in the *Electronic and Other Electrical Equipment and Components* and *Stone, Clay, Glass, and Concrete Products* categories.

There are 100 construction sites enrolled under the construction storm water permit. About 60 percent are located in the Simi Valley area and 40% in the Camarillo area. The majority of these are residential sites 10 acres or larger in size.

The table below gives examples of typical data ranges which led to the 1998 303(d) listings. See Table 7 in the Appendix for additional details on currently scheduled TMDLs as well as specific pollutants included in the TMDLs.

IMPAIRMENTS:

Impairments	Applicable Objective/Criteria	Typical Data Ranges Resulting in Impairment	303(d) Listed Waters/Reaches
nitrate + nitrite	Basin Plan numeric objective: no greater than 10 mg/l	11.9 - 70.0 mg/l (mean of 48.5 ± 13)	Fox Barranca Arroyo Las Posas Reach 1 (Lewis/Somis Rd. to Fox Barranca) Arroyo Las Posas Reach 2 (Fox Barranca to Moorpark Fwy (23)) Arroyo Simi Reach 1 (Moorpark Fwy (23) to Brea Cyn) Calleguas Creek Reach 3 (Potrero to Somis Rd.)
nitrogen	Basin Plan numeric objective: no greater than 10 mg/l		Rio de Santa Clara/Oxnard Drain #3 Calleguas Creek Reach 1 (estuary to 0.5 mi. S. of Broome Rd.) Calleguas Creek Reach 2(0.5 mi. S. of Broome Rd. to Potrero Rd.) Revolon Slough Main Branch (Mugu Lagoon to Central Ave.) Beardsley Channel (above Central Ave.) Mugu Lagoon Duck pond agric. drain/Mugu Drain/Oxnard Drain #2
ammonia	Basin Plan narrative objective		Arroyo Las Posas Reach 1 (Lewis/Somis Rd. to Fox Barranca) Arroyo Las Posas Reach 2 (Fox Barranca to Moorpark Fwy (23)) Arroyo Simi Reach 1 (Moorpark Fwy (23) to Brea Cyn) Calleguas Creek Reach 1 (estuary to 0.5 mi. S. of Broome Rd.) Calleguas Creek Reach 2(0.5 mi. S. of Broome Rd. to Potrero Rd.) Conejo Creek/Arroyo Conejo N. Fork Conejo Creek Reach 1 (confl. Calleguas to Santa Rosa Rd) Conejo Creek Reach 2 (Santa Rosa Rd. to Tho. Oaks city limit) Conejo Creek Reach 3 (Tho. Oaks city limit to Lynn Rd.) Conejo Creek Reach 4 (above Lynn Rd.)
	Basin Plan numeric objective: varies depending on pH and temperature but the general range is 0.53 - 2.7 mg/l of total ammonia (at average pH and temp.) in waters designated as WARM to protect against chronic toxicity and 2.3 - 28.0 mg/l to protect against acute toxicity	0.1 - 20. 2 mg/l (mean of 2.7 ± 3.6)	
algae	Basin Plan narrative objective		Conejo Creek Reach 1 (confl. Calleguas to Santa Rosa Rd) Conejo Creek Reach 2 (Santa Rosa Rd. to Tho. Oaks city limit) Conejo Creek Reach 3 (Tho. Oaks city limit to Lynn Rd.) Conejo Creek Reach 4 (above Lynn Rd.) Revolon Slough Main Branch (Mugu Lagoon to Central Ave.) Beardsley Channel (above Central Ave.)
low DO/org. enrichment	Basin Plan narrative objective		Conejo Creek Reach 1 (confl. Calleguas to Santa Rosa Rd) Conejo Creek Reach 2 (Santa Rosa Rd. to Tho. Oaks city limit) Conejo Creek Reach 3 (Tho. Oaks city limit to Lynn Rd.) Conejo Creek Reach 4 (above Lynn Rd.)
	Basin Plan numeric objective: annual mean greater than 7.0 mg/l no single sample less than 5.0 mg/l	2.6 - 10.9 mg/l (mean of 7.0 ± 1.8)	
chlorpyrifos (tissue)	Basin Plan narrative objective		Revolon Slough Main Branch (Mugu Lagoon to Central Ave.) Beardsley Channel (above Central Ave.)
toxicity	Basin Plan narrative objective	0 - 100 % survival	Conejo Creek Reach 1 (confl. Calleguas to Santa Rosa Rd) Conejo Creek Reach 2 (Santa Rosa Rd. to Tho. Oaks city limit) Conejo Creek Reach 3 (Tho. Oaks city limit to Lynn Rd.) Conejo Creek Reach 4 (above Lynn Rd.) Calleguas Creek Reach 1 (estuary to 0.5 mi. S. of Broome Rd.) Calleguas Creek Reach 2(0.5 mi. S. of Broome Rd. to Potrero Rd.) Duck pond agric. drain/Mugu Drain/Oxnard Drain #2 Revolon Slough Main Branch (Mugu Lagoon to Central Ave.) Beardsley Channel (above Central Ave.)

Impairments	Applicable Objective/Criteria	Typical Data Ranges Resulting in Impairment	303(d) Listed Waters/Reaches
chloride	Basin Plan numeric objective: 150 mg/l	78 - 230 mg/l (mean of 173 ± 31)	Tapo Canyon Reach 1 Arroyo Simi Reach 1 (Moorpark Fwy (23) to Brea Cyn) Arroyo Las Posas Reach 2 (Fox Barranca to Moorpark Fwy (23)) Arroyo Las Posas Reach 1 (Lewis/Somis Rd. to Fox Barranca) Calleguas Creek Reach 3 (Potrero to Somis Rd.) Conejo Creek Reach 2 (Santa Rosa Rd. to Tho. Oaks city limit) Conejo Creek Reach 4 (above Lynn Rd.)
Boron	Basin Plan numeric objective: 1.0 mg/l	0.4 - 1.4 mg/l (mean of 1.1 ± 0.3)	Fox Barranca Tapo Canyon Reach 1 Arroyo Simi Reach 1 (Moorpark Fwy (23) to Brea Cyn) Arroyo Simi Reach 2 (above Brea Canyon) Calleguas Creek Reach 3 (Potrero to Somis Rd.)
sulfate	Basin Plan numeric objective: 250 mg/l	185 - 1000 mg/l (mean of 642 ± 278)	Fox Barranca Tapo Canyon Reach 1 Arroyo Simi Reach 1 (Moorpark Fwy (23) to Brea Cyn) Arroyo Simi Reach 2 (above Brea Canyon) Arroyo Las Posas Reach 1 (Lewis/Somis Rd. to Fox Barranca) Arroyo Las Posas Reach 2 (Fox Barranca to Moorpark Fwy (23)) Conejo Creek/Arroyo Conejo N. Fork Conejo Creek Reach 1 (confl. Calleguas to Santa Rosa Rd) Conejo Creek Reach 2 (Santa Rosa Rd. to Tho. Oaks city limit) Conejo Creek Reach 3 (Tho. Oaks city limit to Lynn Rd.) Conejo Creek Reach 4 (above Lynn Rd.)
total dissolved solids	Basin Plan numeric objective 850 mg/l	460 - 1470 mg/l (mean of 1023 ± 246)	Tapo Canyon Reach 1 Fox Barranca Arroyo Simi Reach 1 (Moorpark Fwy (23) to Brea Cyn) Arroyo Simi Reach 2 (above Brea Canyon) Arroyo Las Posas Reach 1 (Lewis/Somis Rd. to Fox Barranca) Arroyo Las Posas Reach 2 (Fox Barranca to Moorpark Fwy (23)) Calleguas Creek Reach 3 (Potrero to Somis Rd.) Conejo Creek/Arroyo Conejo N. Fork Conejo Creek Reach 1 (confl. Calleguas to Santa Rosa Rd) Conejo Creek Reach 2 (Santa Rosa Rd. to Tho. Oaks city limit) Conejo Creek Reach 3 (Tho. Oaks city limit to Lynn Rd.) Conejo Creek Reach 4 (above Lynn Rd.)
DDT (tissue & sediment)	Basin Plan narrative objective	37.5 - 1648.0 ng/g (sediment)	Arroyo Las Posas Reach 1 (Lewis/Somis Rd. to Fox Barranca) Arroyo Las Posas Reach 2 (Fox Barranca to Moorpark Fwy (23))
	State Board numeric objective (tissue): Max. Tissue Residue Level 32.0 ng/g	145.9 - 556.9 ng/g (tissue)	Conejo Creek/Arroyo Conejo N. Fork Conejo Creek Reach 1 (confl. Calleguas to Santa Rosa Rd) Conejo Creek Reach 2 (Santa Rosa Rd. to Tho. Oaks city limit) Conejo Creek Reach 3 (Tho. Oaks city limit to Lynn Rd.) Conejo Creek Reach 4 (above Lynn Rd.) Calleguas Creek Reach 1 (estuary to 0.5 mi. S of Broome Rd.) Calleguas Creek Reach 2 (0.5 mi. S of Broome Rd. to Potrero Rd.) Duck pond agric. drain/Mugu Drain/Oxnard Drain #2 Revolon Slough Main Branch (Mugu Lagoon to Central Ave.) Beardsley Channel (above Central Ave.) Mugu Lagoon Rio de Santa Clara/Oxnard Drain #3
chlordane (tissue & sediment)	Basin Plan narrative objective	3.4 - 45.0 ng/g (sediment)	Conejo Creek/Arroyo Conejo N. Fork Calleguas Creek Reach 1 (estuary to 0.5 mi. S of Broome Rd.)
	State Board numeric objective (tissue): Max. Tissue Residue Level 1.1 ng/g	28.5 - 40.6 ng/g (tissue)	Calleguas Creek Reach 2 (0.5 mi. S of Broome Rd. to Potrero Rd.) Duck pond agric. drain/Mugu Drain/Oxnard Drain #2 Revolon Slough Main Branch (Mugu Lagoon to Central Ave.) Beardsley Channel (above Central Ave.) Mugu Lagoon Rio de Santa Clara/Oxnard Drain #3

Impairments	Applicable Objective/Criteria	Typical Data Ranges Resulting in Impairment	303(d) Listed Waters/Reaches
ChemA* (tissue)	National Academy of Science Guideline (tissue): 100 ng/g	695.9 - 1910.1 ng/g (tissue)	Conejo Creek Reach 1 (confl. Calleguas to Santa Rosa Rd) Conejo Creek Reach 2 (Santa Rosa Rd. to Tho. Oaks city limit) Conejo Creek Reach 3 (Tho. Oaks city limit to Lynn Rd.) Conejo Creek Reach 4 (above Lynn Rd.) Calleguas Creek Reach 1 (estuary to 0.5 mi. S of Broome Rd.) Calleguas Creek Reach 2 (0.5 mi. S of Broome Rd. to Potrero Rd.) Duck pond agric. drain/Mugu Drain/Oxnard Drain #2 Revolon Slough Main Branch (Mugu Lagoon to Central Ave.) Beardsley Channel (above Central Ave.) Rio de Santa Clara/Oxnard Drain #3
dacthal (tissue & sediment)	Basin Plan narrative objective	ND - 120.1 ng/g (sediment) 1.8 - 5.7 ng/g (tissue)	Conejo Creek Reach 1 (confl. Calleguas to Santa Rosa Rd) Conejo Creek Reach 2 (Santa Rosa Rd. to Tho. Oaks city limit) Conejo Creek Reach 3 (Tho. Oaks city limit to Lynn Rd.) Conejo Creek Reach 4 (above Lynn Rd.) Calleguas Creek Reach 2 (0.5 mi. S of Broome Rd. to Potrero Rd.) Revolon Slough Main Branch (Mugu Lagoon to Central Ave.) Beardsley Channel (above Central Ave.) Mugu Lagoon
endosulfan (tissue & sediment)	Basin Plan narrative objective	ND - 144.2 ng/g (sediment)	Conejo Creek Reach 1 (confl. Calleguas to Santa Rosa Rd) Conejo Creek Reach 2 (Santa Rosa Rd. to Tho. Oaks city limit)
	State Board numeric objective (tissue): Max. Tissue Residue Level 250 ng/g	42.3 - 294.0 ng/g (tissue)	Conejo Creek Reach 3 (Tho. Oaks city limit to Lynn Rd.) Conejo Creek Reach 4 (above Lynn Rd.) Calleguas Creek Reach 1 (estuary to 0.5 mi. S of Broome Rd.) Calleguas Creek Reach 2 (0.5 mi. S of Broome Rd. to Potrero Rd.) Revolon Slough Main Branch (Mugu Lagoon to Central Ave.) Beardsley Channel (above Central Ave.) Mugu Lagoon
toxaphene (tissue & sediment)	Basin Plan narrative objective	ND - 1900 ng/g (sediment)	Conejo Creek Reach 1 (confl. Calleguas to Santa Rosa Rd) Conejo Creek Reach 2 (Santa Rosa Rd. to Tho. Oaks city limit)
	State Board numeric objective (tissue): Max. Tissue Residue Level 8.8 ng/g	238 - 468 ng/g (tissue)	Conejo Creek Reach 3 (Tho. Oaks city limit to Lynn Rd.) Conejo Creek Reach 4 (above Lynn Rd.) Calleguas Creek Reach 1 (estuary to 0.5 mi. S of Broome Rd.) Calleguas Creek Reach 2 (0.5 mi. S of Broome Rd. to Potrero Rd.) Duck pond agric. drain/Mugu Drain/Oxnard Drain #2 Revolon Slough Main Branch (Mugu Lagoon to Central Ave.) Beardsley Channel (above Central Ave.) Mugu Lagoon Rio de Santa Clara/Oxnard Drain #3
dieldrin (tissue)	State Board numeric objective (tissue): Max. Tissue Residue Level 0.65 ng/g	4.7 - 6.6 ng/g (tissue)	Revolon Slough Main Branch (Mugu Lagoon to Central Ave.) Beardsley Channel (above Central Ave.)
sediment toxicity	Basin Plan narrative objective	14 - 71 % survival	Calleguas Creek Reach 1 (estuary to 0.5 mi. S. of Broome Rd.) Calleguas Creek Reach 2(0.5 mi. S. of Broome Rd. to Potrero Rd.) Mugu Lagoon Rio de Santa Clara/Oxnard Drain #3 Duck pond agric. drain/Mugu Drain/Oxnard Drain #2
siltation	Basin Plan narrative objective		Mugu Lagoon
chromium (tissue)	Basin Plan narrative objective	0.51 - 0.58 ug/g (tissue)	Arroyo Simi Reach 1 (Moorpark Fwy (23) to Brea Cyn) Conejo Creek Reach 3 (Tho. Oaks city limit to Lynn Rd.) Conejo Creek Reach 2 (Santa Rosa Rd. to Tho. Oaks city limit) Conejo Creek Reach 1 (confl. Calleguas to Santa Rosa Rd)

* ChemA refers to the sum of the chemicals aldrin, dieldrin, chlordane, endrin, heptachlor, heptachlor epoxide, HCH (including lindane), endosulfan, and toxaphene

Impairments	Applicable Objective/Criteria	Typical Data Ranges Resulting in Impairment	303(d) Listed Waters/Reaches
silver (tissue)	Basin Plan narrative objective	0.03 - 0.04 ug/g (tissue)	Arroyo Simi Reach 1 (Moorpark Fwy (23) to Brea Cyn) Conejo Creek Reach 3 (Tho. Oaks city limit to Lynn Rd.) Conejo Creek Reach 2 (Santa Rosa Rd. to Tho. Oaks city limit) Conejo Creek Reach 1 (confl. Calleguas to Santa Rosa Rd)
nickel (tissue)	Basin Plan narrative objective	0.5 ug/g (tissue)	Arroyo Simi Reach 1 (Moorpark Fwy (23) to Brea Cyn) Conejo Creek Reach 3 (Tho. Oaks city limit to Lynn Rd.) Conejo Creek Reach 2 (Santa Rosa Rd. to Tho. Oaks city limit) Conejo Creek Reach 1 (confl. Calleguas to Santa Rosa Rd) Mugu Lagoon
cadmium (tissue)	Basin Plan narrative objective	0.14 - 0.15 ug/g (tissue)	Conejo Creek Reach 3 (Tho. Oaks city limit to Lynn Rd.) Conejo Creek Reach 2 (Santa Rosa Rd. to Tho. Oaks city limit) Conejo Creek Reach 1 (confl. Calleguas to Santa Rosa Rd)
copper	USEPA water quality criteria: 2.9 ug/l		Mugu Lagoon
zinc	USEPA water quality criteria: 86 ug/l		Arroyo Simi Reach 1 (Moorpark Fwy (23) to Brea Cyn) Mugu Lagoon
Mercury	USEPA water quality criteria: 2.1 ug/l		Mugu Lagoon
Selenium	USEPA water quality criteria: 5.0 ug/l	11.0 ug/l (maximum)	Arroyo Simi Reach 1 (Moorpark Fwy (23) to Brea Cyn) Revolon Slough Main Branch (Mugu Lagoon to Central Ave.)
PCBs (tissue & Sediment)	Basin Plan narrative objective State Board numeric objective (tissue): Max. Tissue Residue Level 2.2 ng/g	ND - 96.0 ng/g (sediment) 16.8 - 70.8 ng/g (tissue)	Calleguas Creek Reach 1 (estuary to 0.5 mi. S of Broome Rd.) Calleguas Creek Reach 2 (0.5 mi. S of Broome Rd. to Potrero Rd.) Revolon Slough Main Branch (Mugu Lagoon to Central Ave.) Beardsley Channel (above Central Ave.) Mugu Lagoon Rio de Santa Clara/Oxnard Drain #3
Trash	Basin Plan narrative objective		Revolon Slough Main Branch (Mugu Lagoon to Central Ave.) Beardsley Channel (above Central Ave.)

CURRENTLY SCHEDULED TMDLS:

Type of TMDL	Listed Waters/Reaches in TMDL	Year Scheduled for Completion (FY)
chloride	Tapo Canyon Reach 1 Arroyo Simi Reach 1 Arroyo Las Posas Reaches 1 and 2 Calleguas Creek Reach 3 Conejo Creek Reaches 2 and 4	00/01
nitrogen	Fox Barranca Arroyo Las Posas Reaches 1 and 2 Arroyo Simi Reach 1 Calleguas Creek Reaches 1, 2 and 3 Conejo Creek/Arroyo Conejo N. Fork Conejo Creek Reaches 1, 2, 3, and 4 Revolon Slough Main Branch Beardsley Channel Mugu Lagoon Duck pond agric. drain/Mugu Drain/Oxnard Drain #2	02/03
pesticides (water-soluble)	Conejo Creek Reaches 1, 2, 3 and 4 Calleguas Creek Reaches 1 and 2 Duck pond agric. drain/Mugu Drain/Oxnard Drain #2 Revolon Slough Main Branch Beardsley Channel	03/04
Other salts	Fox Barranca Tapo Canyon Reach 1 Arroyo Simi Reaches 1 and 2 Arroyo Las Posas Reaches 1 and 2 Calleguas Creek Reach 3 Conejo Creek/Arroyo Conejo N Fork Conejo Creek Reaches 1, 2, 3 and 4	03/04

Type of TMDL	Listed Waters/Reaches in TMDL	Year Scheduled for Completion (FY)
PCBs	Calleguas Creek Reach 1 Calleguas Creek Reach 2 Revolon Slough Main Branch Beardsley Channel Mugu Lagoon	04/05
pesticides (sediment-bound)	Mugu Lagoon Arroyo Las Posas Reaches 1 and 2 Conejo Creek/Arroyo Conejo N. Fork Conejo Creek Reaches 1, 2, 3 and 4 Calleguas Creek Reaches 1 and 2 Duck pond agric. drain/Mugu Drain/Oxnard Drain #2 Revolon Slough Main Branch Beardsley Channel	04/05
metals	Arroyo Simi Reach 1 Conejo Creek Reaches 1, 2 and 3 Mugu Lagoon Revolon Slough Main Branch	05/06

We see a need for an additional 2.5 PYs as well as $50,000 in contract dollars for FY00/01 TMDL work conducted in this watershed.

Stakeholder Groups

Calleguas Creek Watershed Management Committee (and subcommittees) The committee and subcommittees have been actively meeting since November 1996 with the purpose of developing a watershed management plan. The technical subcommittees include Habitat/Recreation, Flood Protection/Sediment Management, Water Quality/Water Resources, Public Outreach/Education, and Geographical Information Systems (GIS). A Steering Committee attends to the details of management plan development. The full Management Plan Committee meets on a quarterly basis, generally conducting business in a half-day session. Two or three Regional Board staff attend these meetings. The Flood Protection and Habitat Subcommittees meet bimonthly; one Regional Board staff member attends each. The Water Quality Subcommittee is meeting bimonthly and 1-2 staff members attend. The Steering Committee is also meeting bimonthly with 1-2 staff members attending. Regional Board staff are not currently assigned to the Public Outreach and GIS Subcommittees. For further information concerning this group, please visit their website at http://www.calleguas.com/cc.htm.

A number of committee members were also on the *Mugu Lagoon Task Force* which was formed in 1990 in response to concerns about sedimentation filling in Mugu Lagoon which is at the mouth of the Calleguas Creek Watershed. A major focus of the early meetings was exchange of information on the extent of sedimentation with related concerns such as pesticide transfer. A sediment and erosion control plan was prepared for the Ventura County RCD by the U.S. Natural Resource Conservation Service (USNRCS) using Coastal Conservancy funds ("Calleguas Creek Watershed Erosion and Sediment Control Plan for Mugu Lagoon", May 1995). This group is not currently meeting; however, information gained from this effort continues to be used by the other Calleguas Watershed Committees.

Significant Past Activities

CORE REGULATORY

The majority of Calleguas Creek Watershed permits were revised in June 1996. This watershed, as well as the Ventura River Watershed, were pilot watersheds in our implementation of the watershed management approach. The Ventura County Municipal Stormwater NPDES Permit had most recently been adopted in 2000.

MONITORING AND ASSESSMENT

The Calleguas Creek Watershed was included in a partial update of the Water Quality Assessment report in 1998. Also, in 2000, the dischargers completed a short-term watershed characterization study which assessed a large number of sites for both biological and chemical parameters.

BASIN PLANNING

In 1990, the Regional Board adopted Resolution No. 90-004 (**Drought Policy**) which had a term of three years and provided interim relief to dischargers who experienced difficulty meeting chloride objectives because of a state-wide drought. The policy adjusted effluent limits to the lesser of 1) 250 mg/l or 2) the chloride concentration in the water supply plus 85 mg/l. In 1995, the Regional Board extended the interim limits for three years and directed staff to develop a long-term solution to deal with the impact of changing water supply, especially during droughts. In 1997, the Regional Board adopted Resolution No. 97-002 (**Chloride Policy**) which set the chloride objective at 190 mg/l except in the Calleguas Creek and Santa Clara River Watersheds where, due to the great concern for protection of agriculture, staff were directed to determine the chloride concentrations sufficient to protect agricultural beneficial uses.

NONPOINT SOURCE PROGRAM

Work on nonpoint source problems in the watershed has been a long-term effort, initiated in 1990, with the support of 319(h) funds and other funding from, and support by, stakeholders. The 319(h) grant projects, special studies, and other activities that have been completed to date include:

- ***Irrigation Demonstration Project***: In 1994, the Ventura County Resource Conservation District successfully completed an irrigation project that demonstrated the water quality and conservation benefits of drip irrigation. This project was funded through a 319(h) grant.

- ***Toxicity Testing***: In order to detect sources of toxicity, we have collected water samples under three sequential studies (toxicity testing by UC Davis). Results of this sampling indicated sporadic toxicity, generally during wet weather seasons, with strong implication of organophosphate pesticides.

- ***Calleguas Creek Watershed Treatment – Phase I***: The Ventura County Resource Conservation District served as contractor for this project which focused on Best Management

Practices that involved small, individual landowners/ farmers. This demonstration project was designed to implement streambed protection practices. This project was funded through a 319(h) grant.

Current Activities

The following is a summary of current regional board activities in the Calleguas Creek Watershed which are expected to continue as part of the Watershed Management Initiative.

CORE REGULATORY

Permits in this watershed will be targeted for renewal in FY 2001-02. Current regulatory activities include compliance inspections, review of monitoring reports, response to complaints, and enforcement actions, as needed.

A watershed-wide regional monitoring program was created to fill in data gaps and eliminate duplicative and unnecessary monitoring. POTWs contributed significant resources to do a surface and ground water characterization study. It also serves to assess nonpoint source pollution from a variety of land uses.

Additionally, most urban areas in Ventura County, including this watershed, are implementing Best Management Practices under the Municipal Storm Water Permit (revised in 2000). Additionally, most urban areas in Ventura County, including this watershed, are implementing Best Management Practices under the Ventura County Municipal Storm Water Program. The "Discharger" consists of the co-permittees Ventura County Flood Control District, the County of Ventura, and the Cities of Camarillo, Fillmore, Moorpark, Ojai, Oxnard, Port Hueneme, San Buenaventura, Santa Paula, Simi Valley, and Thousand Oaks. The Discharger is required to implement the approved Ventura Countywide Stormwater Quality Urban Impact Mitigation Plan (SQUIMP) by January 27, 2001. The SQUIMP shall address conditions and requirements for new development and significant redevelopment.

The Calleguas Creek receives municipal storm drain discharges from the City of Camarillo, City of Moorpark, City of Simi Valley, City of Thousand Oaks (part), and unincorporated Ventura County (part).

To date, the storm water monitoring program has consisted of land-use based monitoring combined with receiving water monitoring and modeling. The Discharger intends to sign an agreement to participate in the Regional Monitoring Program established for Southern California municipal programs under the guidance of the Southern California Coastal Water Research Project.

In fulfillment of NPDES permit requirements for one discharger, and in concert with other point and nonpoint source dischargers, a characterization study of primarily point source loadings for the pollutants of concern began in June 1998.

Regulation of groundwater protection activities is intended to eventually become fully integrated into the watershed management approach; currently, groundwater monitoring (for POTWs using ponds) is being coordinated with surface water monitoring.

Key regulatory staff continue to participate as past of the Calleguas Creek Watershed team for purposes of updating the State of the Watershed Report and for communication on the characterization study in development.

MONITORING AND ASSESSMENT

Calleguas Creek will be a focus for SWAMP monitoring as the watershed comes up for targeting in the rotating watershed cycle. Since extensive monitoring has already occurred here, particularly in the lower watershed, a more directed approach to sampling site selection will be taken.

As the first integrated watershed monitoring program in the Region, the six POTWs in the watershed are each implementing a portion of the monitoring program as described in their NPDES permits, and as further revised in their Characterization Study to also include other agencies in the effort. In conjunction with the receiving water monitoring, land-use based monitoring is done as a part of the Ventura County Municipal Storm Water Program. The monitoring supports compliance valuation, nonpoint source identification, and potential TMDL development. The expanded monitoring by the dischargers will also serve to evaluate beneficial uses. Additionally, the Regional Board is funding additional toxicity work in the upper watershed in coordination with the dischargers' monitoring.

The BPTCP has identified the lagoon and tidal prism as "toxic hot spots" based on sediment contamination. Staff have completed a cleanup plan for the areas which was adopted as part of a statewide consolidated plan by the State Board in June 1999. Cleanup/remediation alternatives identified include dredging, in-situ capping, and treatment. Continuing Regional Board activities include working with stakeholders to further characterize historical sources of pollution as well as the extent of existing contributions. While remediation of the lagoon (as part of a military facility) may proceed on its own timeline, in general, there is a concerted effort by all stakeholders to prepare a comprehensive watershed management plan to address all problems in the watershed.

Six TMDLs are currently scheduled for this watershed over the next five years and considerable resources will be needed to support their development.

NONPOINT SOURCE PROGRAM

We expect that stakeholders will continue work on developing a watershed management plan, which will include measures for reducing pollutants from nonpoint sources. Accordingly, our efforts in the Calleguas Creek watershed will focus on continuing the nonpoint source phase of the watershed cycle, including integrating results of our on-going nonpoint source efforts. The 319(h) grant projects, special studies, and other activities that are currently on-going include:

319(h) Grant Project

Calleguas Creek Watershed Treatment – Phase II: The Ventura County Resource Conservation District serves as contractor for this project which focuses on Best Management Practices that require the coordinated efforts of several small groups or a large landowner/

farmer (as a followup to Phase I concentrated on small, individual landowners/ farmers). This demonstration project is designed to implement streambed projects that were successful.

We continue to support as high priorities for FY2001/02 319(h) funding projects relating to comprehensive erosion control efforts, habitat enhancement/restoration, and reduction of a variety of pollutants (see Table 4).

205(j) Grant Project

205(j) monies have funded a component of the Surface Water Element of the Calleguas Creek Characterization Study Monitoring Program which is evaluating nonpoint source contributions in the watershed. The study seeks to identify nonpoint source loadings of nitrogen, salts, and pesticides and with the results of the Surface Water Element, conduct TMDLs on several of these pollutants. The study is currently in the data analysis stage.

Toxicity Testing

Followup work is being conducted on the sporadic toxicity found in previous studies conducted by UC Davis. Another contractor is investigating a procedure to distinguish toxicity due to organophosphate pesticides.

Participation in Stakeholder Groups

Calleguas Creek Watershed Management Committee and Technical Subcommittees: Recognizing that many of the water quality problems in the lagoon stem from land use practices and pollutant sources above the lagoon, members of these committees meet regularly to exchange data and discuss coordinated approaches to solving the many problems in this watershed, including development of a watershed management plan. The watershed group consists of about 130 stakeholders who have been meeting for about two years. As we expect that much effort will need to be focussed on resolving agricultural and flood control issues, we have made a concerted effort to include appropriate stakeholders. Besides the main management committee of stakeholders, five technical subcommittees deal with more specific issues such as water quality, flood control, habitat/natural resources, public outreach, and GIS. The group is working on development of a watershed management plan and are actively pursuing development and implementation of "early action" items. Staff have been and will continue to work with these committees.

During fiscal year 2000/01, we shall continue to work with stakeholders to complete a watershed management plan. In particular, we shall work toward integrating our past, on-going, as well as other appropriate nonpoint source projects into the stakeholders' watershed management plan.

Other NPS Activities

Our efforts to involve stakeholders also shall include exploration of funding options (especially for implementation of nonpoint source measures) and continuation of other outreach activities, such as speeches, meetings, and participation in environmental events.

In this watershed, particularly with regards to agriculture, voluntary nonpoint source management measures are taking place. Agriculture is being brought into the watershed process as an important stakeholder and have, under the various subcommittees, brought to the table a number of voluntary best management practices.

Currently under consideration are agreements with sister agencies in regulatory-based encouragement of Best Management Practices. Most notably is the use of a GIS layer for pesticides application available from the Department of Pesticide Regulation (DPR). Reduction of pesticides identified as contaminants of concern for a watershed might be addressed through a Management Agency Agreement (MAA) with the DPR, or through waiving adoption of waste discharge requirements on an individual basis using information gathered in databases provided by the Ventura County Agricultural Commission office.

BASIN PLANNING

A priority basin planning issue is continued work to determine the scope of water quality impacts from agricultural runoff in the Region. The majority of agricultural activities occur in the Calleguas Creek Watershed, especially in the Oxnard Plain and in the nearby foothills. Development of solutions to any impacts is also a high priority and will be a major concern of the nonpoint source program and, by extension, the watershed committee and subcommittees which will be addressing this as well as other problems. An evaluation of salt-sensitive agricultural resources will be done as part of the chloride TMDL.

Chloride impairments in certain reaches of the river led to formation of a chloride committee to conduct a chloride TMDL by spring 2000. This stemmed from issues raised during development of a chloride policy for the region. Growers are concerned about increased chloride and effects on salt-sensitive crops, such as avocados. In December 2000, the Board a resolution to extend the interim chloride limitation (190 mg/l) for discharges to the creek until December 7, 2001. A chloride TMDL for the creek is tentatively scheduled to go before the Board in March 2001.

WETLANDS PROTECTION AND MANAGEMENT

The Southern California Wetlands Recovery Project considers the lower Conejo Creek acquisition a high priority project for funding starting in FY00/01. The Habitat Subcommittee of the Calleguas Creek Watershed Plan Committee has also approved the acquisition as a priority. A conceptual restoration plan is being prepared.

The Santa Monica Mountains Conservancy is a state agency created by the Legislature in 1979 charged with primary responsibility for acquiring property with statewide and regional significance, and making those properties accessible to the general public. The Conservancy manages parkland in the Santa Monica Mountains, Santa Susana Mountains, the Simi Hills, the Santa Clarita Woodlands, the Whittier-Puente Hills, the Sierra Pelona, the Los Angeles River Greenway, the Rio Hondo, the Verdugo Mountains, the San Gabriel Mountains, and the San Rafael Hills. The agency's goals are to: 1) implement the Santa Monica Mountains Comprehensive Plan, 2) implement the Rim of the Valley Trails Corridor Master Plan, 3) implement the Los Angeles County River Master Plan, 4) further cooperation with local governments in the region to secure open space and parkland, and 5) expand education, public

access, and resource stewardship components in a manner that best serves the public, protects habitat, and provides recreational opportunities.

DOD SITE CLEANUP PROGRAM

The Regional Board is working with the Department of Toxic Substances Control (DTSC) to investigate soil and groundwater quality. Sites currently under assessment/remediation include Mugu Lagoon, a former landfill, the Naval Exchange gas station, two Installation Restoration Program (IRP) sites, numerous underground storage tanks, and the former oxidation sewage ponds.

The Navy disposed of inert, contaminated and hazardous wastes to an unlined unpermitted landfill constructed by depositing and compacting wastes into Calleguas Creek. An erosion berm was installed as an interim remedial measure to prevent further erosion of the former landfill by storm water flowing through the creek during storm events. Long-term groundwater monitoring will be required for this site. Sediments and surface water at IRP Site 5 are contaminated with chrome. An initial emergency removal action (sediment excavation) failed to adequately remediate all impacted sediments and additional sediment remediation and surface water monitoring is ongoing.

Soil and groundwater at IRP Site 24 is contaminated with chlorinated solvents. Groundwater is being treated by implementation of a new biodegradation technology. It is not yet determined to what extent groundwater remediation or monitoring will be required to restore this site.

It is anticipated the Navy will implement a base-wide groundwater/surface water investigation to evaluate the overall groundwater and surface water quality, evaluate the interactions of surface water and groundwater, and determine the cumulative risk of multiple groundwater-surface water contamination sites on the overall water quality of the area and the risk to human health and the environment.

Prior to 1979, the Navy was allowed to discharge partially treated wastewater to surface water oxidation ponds that were constructed in the Calleguas Creek tidal prism. The ponds were unlined and allowed to percolate unevaporated water to the underlying groundwater, which is located about four feet below grade. The Regional Board rescinded the Navy's discharge permit in 1979 and required the Navy to pump all wastewater to the Oxnard POTW. However, periodic unpermitted discharges of wastewater continued to the ponds during planned repairs of the wastewater discharge line and wastewater overflow conditions, which occurred during heavy rains.

To prevent additional wastewater discharges to the ponds, the Regional Board issued a Cleanup and Abatement Order to the Navy in 1998 directing the Navy to cease all unpermitted discharges, construct a lined emergency wastewater retention basin, upgrade the wastewater discharge line, and remove the sludge that has accumulated in the ponds.

Current funding for the investigation and remediation of contaminated solids, surface water and groundwater at the base is through the DoD/CalEPA funding agreement; however, this funding is not satisfactory for the investigation or control of contaminants from upstream sources for the

protection of Mugu Lagoon and continued funding cuts have had significant impacts on the level of oversight by Regional Board staff on these areas.

Near-term Activities

Specific resource needs are described in the Region-wide Section of this document.

NPDES Permits in the watershed will come up for renewal in FY 2003/04. In the meantime, core regulatory activities will focus on permit compliance, monitoring report review, and enforcement as needed. In addition, integration of stormwater and nonpoint source issues will continue. Members of the watershed team will be involved with periodic updates of the State of the Watershed Report. Additionally, there will be on-going interaction with stakeholders and followup on goals established during the permit renewal phase. Pending results from the discharger pollutant characterization study, a decision on waste load and load allocations will be pursued.

A review of resources for core regulatory activities against cost factors has determined that our region is seriously underfunded for our baseline program. We will be seeking more funding for our core program activities.

We shall have made significant progress later in this watershed's first cycle, toward identifying and assessing problems (through the characterization study) and involving stakeholders. At that point we (and the stakeholders) may also enough information to get a headstart on establishing load allocations for certain pollutants of concern.

Additional monitoring and assessment tasks include continued involvement in updates to the baseline State of the Watershed Report, focusing on filling data gaps and evaluating cumulative impacts as monitoring data become available from dischargers, evaluating the results of the the Characterization Study, Regional Board ambient monitoring, follow-up on pollutants identified through toxicity identification evaluations, implement TMDLs to actually begin to solve problems found through monitoring, and implementing the municipal storm water program.

Our efforts to involve stakeholders shall also include exploration of funding options (especially for implementation of nonpoint source measures) and continuation of other outreach activities, such as speeches, meetings, and participation in environmental events. We shall continue our involvement in the watershed group's efforts to develop and implement a watershed management plan.

Additionally, we need to outreach more with the agricultural community. We are also proposing increased efforts in oversight and management of ground water resources. However, staff involvement in voluntary resolution of nonpoint source problems (Tier I) requires more resources than a regulatory-based approach. Tier II (regulatory encouragement) activities over the long-term include tracking nonpoint source inputs by supplemental databases such as DPR and the Department of Food and Agriculture (DFA), as well as increased sampling of the receiving water for contaminants of concern and toxicity. Tier III (effluent limitations) activities over the long-term include sampling, inspecting, and permitting priority contributors of contaminants of concern in watersheds not fully implementing a stakeholder-driven watershed approach. Staff are currently working on an agricultural policy for the board.

We will maintain involvement with stakeholder activities and pursue funding options, especially those involving implementation of nonpoint source measures (coordinate Small Community Grant, State Revolving Fund, 205(j), and 319(h) activities) as well as other outreach activities such as speeches, meetings, and participation in environmental events. As resources permit, we will also work with stakeholders to implement provisions of the Coastal Zone Act Reauthorization Amendments.

Potential Mid- to Long-term Activities

In the long-term, activities will include continued participation in both internal and external watershed planning efforts and further implementation of watershed-specific solutions. Several Basin Planning issues will be addressed through the Characterization Study and watershed planning efforts. More resources are needed for these activities in 2000/01 and beyond.

Other mid- to long-term issues include:

- Beneficial uses: Studies to evaluate beneficial use issues.
- Site specific objectives: Review studies conducted by dischargers or other watershed interests.
- Land use planning: Integrate water supply and quality issues with local land use planning and management.
- Groundwater: Integrate inter-related ground and surface waters--optimizing protection for both.
- Flood control: Institute better coordination of multi-agency reviews of environmental impacts for flood control and development projects, including the consideration of regional mitigation programs. Optimize the use of environmentally-friendly flood control facilities.
- Implementation of watershed-wide biological monitoring is a long-term goal for all of our watersheds.

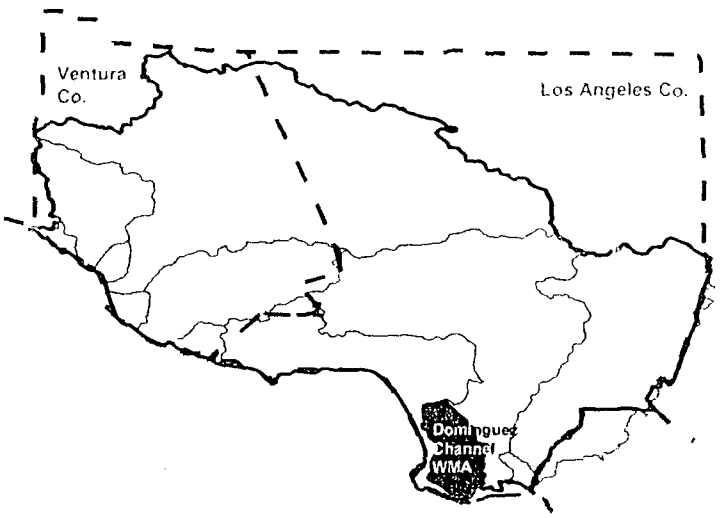
Review and comment on watershed issues in CEQA documents (for the highest priority projects) will also continue; however, this is currently an unfunded program.

Under the BPTCP, we estimated that about 20% of the Western Arm and 10% of the Eastern Arm of Mugu Lagoon contain contaminated sediments (about 725,000 cubic yards). We estimate that about 3 miles of Calleguas Creek contains 50,000 to 100,000 cubic yards of contaminated sediments. We want to work with local groups to develop remediation plans. Due to sensitive nature of Mugu Lagoon, we would suggest no action or in-situ treatment, rather than dredging, as remediation options. Treatment is expensive (probably would exceed $100 per cubic yard). Dredging could be used to remediate Calleguas Creek, although finding a suitable disposal site could be difficult; it would cost $1 to 5 million.

2.3 DOMINGUEZ CHANNEL AND LOS ANGELES/LONG BEACH HARBORS WMA

This watershed will be targeted for permitting purposes in FY02/03.

Overview of WMA



The Los Angeles and Long Beach Harbors are located in the southern portion of the Los Angeles Basin. Along the northern portion of San Pedro Bay is a natural embayment formed by a westerly extension of the coastline which contains both harbors, with the Palos Verdes Hills the dominant onshore feature. Historically, the area consisted of marshes and mudflats with a large marshy area, Dominguez Slough, to the north, and flow from the Los Angeles River entering where Dominguez Channel now drains. Near the end of last century and during the beginning of this one, channels were dredged, marshes were filled, wharves were constructed, the Los Angeles River was diverted, and a breakwater was constructed in order to allow deep draft ships to be directly offloaded and products be swiftly moved. The Dominguez Slough was completely channelized and became the drainage endpoint for runoff from a highly industrialized area. Eventually, the greater San Pedro Bay was enclosed by two more breakwaters and deep entrance channels were dredged to allow for entry of ships with need of 70 feet of clearance. The LA/LB Harbor complex together is now one of the largest ports in the country.

Both harbors are considered to be one oceanographic unit. Despite its industrial nature, contaminant sources, and low flushing ability, the inner harbor area supports fairly diverse fish and benthic populations and provides a protected nursery area for juvenile fish. The California least tern, an endangered species, nests in one part of the harbor complex.

Similar to LA Inner Harbor in many respects, LB Inner Harbor is dissimilar to the other Port in the higher number of privately-owned waterfront parcels which the Port has recently been in the process of the buying up and converting to Port-related uses, generally container terminals. Also, basins and slips in LB Inner

Beneficial Uses in WMA

Dominguez Channel (above estuary)	*Dominguez Channel (in estuary)*
Noncontact water recreation	Contact & noncontact water recreation
Preservation of rare & endangered species	Preservation of rare & endangered species
	Industrial water supply
	Navigation
	Commercial & sportfishing
	Marine habitat
	Estuarine habitat
	Wildlife habitat
	Migratory & spawning habitat

Harbor are somewhat more separated from each other than in LA Inner Harbor which may possibly prevent contamination from spreading easily.

The outer part of both harbors (the greater San Pedro Bay) has been less disrupted and supports a great diversity of marine life. It is also open to the ocean at its eastern end and receives much greater flushing than the inner harbors.

Water Quality Issues and Problems

A POTW discharges secondary-treated effluent to the outer LA/LB Harbor and is under a time schedule order to remove the discharge. The discharger's plan consists of achieving full reclamation (mostly for industrial reuse purposes) by 2020 which would eliminate the discharge completely. They plan on achieving about 80% reclamation by 2005. Two generating stations discharge to the inner harbor areas. Many smaller, non-process waste discharges also occur into the harbors and Dominguez Channel drains a highly industrialized area of the city resulting in very poor water quality.

Permitted discharges:

- One POTW
- Two generating stations
- Six refineries
- 415 dischargers covered under an industrial storm water permit
- 69 dischargers covered under the construction storm water permit

Types of permitted wastes discharged into the Dominguez Channel WMA:

Nature of Waste *Prior* to Treatment or Disposal	# of Permits	Types of Permits
Nonhazardous (designated) contaminated groundwater	1 1 1	Major Minor General
Nonhazardous (designated) contact cooling water	2	Minor
Nonhazardous (designated) wastes from dewatering, rec. lake overflow, swimming pool wastes, water ride wastewater, or groundwater seepage	1 6 30	Major Minor General
Nonhazardous (designated) noncontact cooling water	2 5 2	Major Minor General
Nonhazardous (designated) process waste (produced as part of industrial/manufacturing process)	1	Minor
Nonhazardous (designated) stormwater runoff	2 36	Major Minor
Hazardous contaminated groundwater	6 4	Minor General
Nonhazardous (designated) domestic sewage	1	Major
Nonhazardous (designated) filter backwash brine waters	2	Minor
Nonhazardous wastes from dewatering, rec. lake overflow, swimming pool wastes, water ride wastewater, or groundwater seepage	2	General
Inert wastes from dewatering, rec. lake overflow, swimming pool wastes, water ride wastewater, or groundwater seepage	9	General

Hazardous wastes are those influent or solid wastes that contain toxic, corrosive, ignitable, or reactive substances (prior to treatment or disposal) managed according to applicable Department of Health Services standards
Designated wastes are those influent or solid wastes that contain **nonhazardous** wastes (prior to treatment or disposal) that pose a significant threat to water quality because of their high concentrations
Nonhazardous wastes are those influent or solid wastes that do not contain soluble pollutants or organic wastes (prior to treatment or disposal) and have little adverse impact on water quality
Inert wastes are those influent or solid wastes that do not contain soluble pollutants or organic wastes (prior to treatment or disposal) and have little adverse impact on water quality

Major discharges are POTWs with a yearly average flow of over 0.5 MGD or an industrial source with a yearly average flow of over 0.1 MGD and those with lesser flows but with acute or potential adverse environmental impacts.

Minor discharges are all other discharges that are not categorized as a Major. Minor discharges may be covered by a general permit, which are issued administratively, for those that meet the conditions specified by the particular general permit.

About one-half of the 120 NPDES discharges to Dominguez Channel; the rest go to the LA/LB Harbor.

Of the 415 dischargers enrolled under the general industrial storm water permit in the watershed, the largest numbers fall in the *Motor Vehicle Parts, Used*; *Fabricated Metals Products, Except Machinery and Transportation Equipment*; and *Motor Freight Transportation and Warehousing* categories.

There are 69 sites enrolled under the construction storm water permit. The majority are along Dominguez Channel and are commercial sites.

Two areas within Los Angeles Harbor are considered to be toxic hot spots under the BPTCP: Dominguez Channel/Consolidated Slip, based on sediment concentrations of DDT, PCB, cadmium, copper, lead, mercury, zinc, dieldrin, chlordane (all exceed sediment quality guidelines), sediment toxicity, and degraded benthic infaunal community; and Cabrillo Pier area, based on sediment concentrations of DDT, PCB and copper, sediment toxicity and issuance of a human health (fishing) advisory for DDT and PCB in white croaker and exceedances of National Academy of Science guidelines for DDT in fish and shellfish. Several locations have been listed as sites of concern under the BPTCP: Inner Fish Harbor, due to sediment concentrations of DDT, PCB, copper, mercury and zinc and sediment toxicity (not recurrent); Kaiser International, due to sediment concentrations of DDT, PCB, PAH, copper and endosulfan; Hugo Neu-Proler, due to PCB sediment concentrations; Southwest Slip, due to sediment concentrations of DDT, PCB, PAH, mercury, and chromium, and sediment toxicity (not recurrent); Cerritos Channel, due to sediment concentrations of DDT, PCB, metal, chlordane, TBT, sediment toxicity and accumulation in mussel tissue; Colorado Lagoon, due to DDT, PCB, lead, zinc, chlordane, dieldrin, sediment toxicity and accumulation in mussel and fish tissue; Shoreline Marina, due to sediment concentrations of zinc, DDT, PCB, chlordane and PAH, and sediment toxicity (not recurrent); Long Beach Outer Harbor, due to sediment concentrations of DDT and chlordane and sediment toxicity (not recurrent); West Basin, due to sediment concentrations of DDT and PCB, sediment toxicity (not recurrent) and accumulation in clam tissue; Alamitos Bay, due to sediment concentrations of DDT and chlordane. There is need for further monitoring in all of these areas to clarify their status. Potential sources of these materials are considered to be historical deposition, discharges from the nearby POTW (especially for metals), spills from ships and industrial facilities, as well as stormwater runoff. Many areas of the harbors have experienced soil and/or groundwater contamination, which may result in possible transport of pollutants to the harbors' surface waters. Dredging and disposal of contaminated sediments and source control of pollutants in the harbors will be a major focal point for the Contaminated Sediment Task Force described further in the Region-wide Section of this document.

Potential sources of pollution:

- Historical deposits of DDT and PCBs in sediment
- Discharges from POTW & refineries
- Spills from ships and industrial facilities
- Leaching of contaminated groundwater
- Stormwater runoff

Los Angeles Inner Harbor

Although the area is dramatically cleaner now than twenty-five years ago, parts of LA Inner Harbor are still suffering the effects of historic deposits of pollutants in the sediment and current point and nonpoint source discharges. Fish caught in the East Basin have exhibited histopathological abnormalities (liver lesions). The abnormalities are indicative of aromatic and chlorinated hydrocarbon contamination. There is also significant degradation in the biological community of a part of Inner Harbor with high levels of PCB and DDT; and toxicity of the surface water microlayer of one part of the harbor to a test fish species (larval kelp bass). Additionally, Cal-EPA's Office of Environmental Health Hazard Assessment now advises against consumption of white croaker in the harbor and recommends no more than one meal every two weeks of black croaker, queenfish, and surfperches if caught in the harbor. On the other hand, the benthic community in many other areas of the inner harbor are healthy and sediments, though high in many pollutants, do not cause a great deal of toxicity in controlled lab tests.

LA Inner Harbor is on the 1998 303(d) list due to DDT, metals, PAHs, chlordane, TBT, and PCBs. Some of the contamination in sediment is historic with resuspension potential. Dominguez Channel was the recipient of runoff from the Montrose Chemical Facility which manufactured DDT several decades ago. There are also mostly nonpoint source inputs from several problem sites, spills, and storm drain runoff. The problems tend to be exacerbated by the poor circulation and flushing. The Port is in the process of filling in a large part of Outer Harbor and deepening some channels as part of their "2020 Plan". Pier 400, a 590-acre site of new land created by diking and filling harbor waters, was completed in April 2000. As a result, the potential exists for greater stagnation and more problems from deposition of new contaminants.

Data from the State Mussel Watch (SMW) Program have documented high levels of metals, PCBs, TBT, and PAHs in mussel tissue at several locations in LA Inner Harbor. The Bay Protection and Toxic Cleanup Program (BPTCP) has found a number of inner harbor areas with elevated pollutant levels but a smaller number of those have exhibited sediment toxicity.

Sediment data collected by Regional Board staff, the Port of LA, and various other researchers, have revealed several areas of heavy contamination with metals, PCBs, and DDT, and occasionally PAHs. Regional Board data show that the level of contamination within particular regions of the inner harbor vary considerably from site to site. Additionally, it is difficult to separate the effects of historic contamination from current inputs. Bight'98 included samples within harbors, including a number of stations in LA/LB Harbor; toxicity, sediment chemistry, and benthic data reports should be available early in 2001.

Dominguez Channel

Little recent data exist for the Channel itself even though considerable heavy industrial facilities (including the old Montrose site) are located within the watershed. However, a consultant for Montrose conducted sediment sampling for DDT in the Channel during 1990. EPA, in a letter to Montrose, cited this data and provided a comparison of those values with NOAA's "identified concentrations of DDT in sediment associated with adverse impacts. A sediment level of 3 ppb was associated with adverse impacts in 10% (ER-L) of the data reviewed by NOAA and a level

of 350 ppb total DDT was associated with adverse impacts in 50% (ER-M) of the data reviewed by NOAA" (EPA letter to Montrose Chemical Corporation, November 27, 1991). The consultant found DDT levels of 300 - 13,000 ppb in the Channel. EPA stated that adverse impacts in the biological community of Dominguez Channel and Consolidated Slip would be expected.

A Regional Board study conducted in 1975 found that the aquatic biota of the Channel were largely marine in origin and were a continuation of LA Inner Harbor biota. The number and abundance of aquatic species declined with distance inland from the harbor. A fairly abrupt decline in benthic species between Alameda and Wilmington Streets was attributed to the effects of pollution. *Capitella capitata* was one of the most abundant benthic species in the area and is generally associated with polluted areas. An absence of benthic fish species adjacent to one oil refinery was considered to be indicative of oxygen-poor bottom water. There was a degraded benthic community at several stations in Consolidated Slip during BPTCP sampling.

Of major concern in the mid-1980s was discharge of zinc chromate as an additive in cooling water/boiler blowdown. There may have been some justification for that concern. Sediment sampling conducted by Regional Board staff in 1988 revealed zinc levels as high as 447 ppm, chromium as high as 67 ppm, and lead as high as 231 ppm.

Long Beach Inner Harbor

While historic contamination is a definite problem in the older parts of the harbor (including the naval base), Pier J has only recently been constructed, utilizing some highly contaminated dredge material. Some other likely problem sites include: Cerritos Channel with its inputs at times from Consolidated Slip (water generally flows from LB to LA Harbors), a creosote manufacturing site, several oil terminals, a defunct ship repair yard (and several active ones), and the naval base, which is closed, while the attached shipyard remains open.

Contamination in the LB Inner Harbor is known to be sporadic. Little information is available on contamination in Southeast Basin except for TBT water concentrations of up to 380 PPT found in a 1988 statewide study of harbors and low levels of PCBs found in mussel tissue in 1986. The most recent SMW data for the Inner Harbor show some areas of elevated DDT, most notably at those stations located in or near Cerritos Channel.

Moderate PCB levels were found in mussel tissue in front of the creosote facility located in Channel 2 and somewhat higher levels were found in Cerritos Channel which is likely related to its proximity to Consolidated Slip and other LA Harbor point and nonpoint sources. Long Beach Inner Harbor is on the 1998 303(d) list for DDT, PAHs, and PCBs, while San Pedro Bay is listed for DDT, PAHs, PCBs, and some metals.

The table below gives examples of typical data ranges which led to the listings. ~~See~~ Table 7 in the Appendix for additional details on currently scheduled TMDLs as well as specific pollutants included in the TMDLs.

IMPAIRMENTS:

Impairments	Applicable Objective/Criteria	Typical Data Ranges Resulting in Impairment	303(d) Listed Waters/Reaches
Benthic comm. effects	Basin Plan narrative objective		Dominguez Channel Estuary (to Vermont) Los Angeles Harbor: Consolidated Slip Long Beach Harbor (part. Main Ch., SE Basin, West Basin, Pier J, and breakwater)
ChemA* (tissue)	National Academy of Science Guideline (tissue). 100 ng/g		Dominguez Channel Estuary (to Vermont) Dominguez Channel (above Vermont) Machado Lake (Harbor Lake)
chlordane (sediment & tissue)	Basin Plan narrative objective	100 ng/g (sediment)	Dominguez Channel Estuary (to Vermont) Dominguez Channel (above Vermont)
	State Board numeric objective (tissue): Max. Tissue Residue Level 1.1 ng/g	5.0 - 11.3 ng/g (tissue)	Los Angeles Harbor: Consolidated Slip Machado Lake (Harbor Lake)
DDT (sediment & tissue)	Basin Plan narrative objective	500 - 1,500 ng/g (sediment)	Dominguez Channel Estuary (to Vermont) Dominguez Channel (above Vermont)
	State Board numeric objective (tissue): Max. Tissue Residue Level 32.0 ng/g	36 - 227 ng/g (tissue)	Los Angeles Harbor: Consolidated Slip Los Angeles Harbor (part. Main Ch., Fish Hbr, Cabrillo Pier, and breakwater) Long Beach Harbor (part. Main Ch., SE Basin, West Basin, Pier J, and breakwater) Cabrillo Beach (Inner) San Pedro Bay nearshore and offshore zone: Cabrillo Pier area Los Angeles Harbor: Southwest Slip Machado Lake (Harbor Lake)
PCBs (sediment & tissue)	Basin Plan narrative objective	500 - 1,000 ng/g (sediment)	Dominguez Channel Estuary (to Vermont) Dominguez Channel (above Vermont)
	State Board numeric objective (tissue): Max. Tissue Residue Level 2.2 ng/g	42.5 - 90.7 ng/g (tissue)	Los Angeles Harbor: Consolidated Slip Los Angeles Harbor (part. Main Ch., Fish Hbr, Cabrillo Pier, and breakwater) Los Angeles Harbor: Southwest Slip San Pedro Bay nearshore and offshore zone: Cabrillo Pier area Cabrillo Beach (Inner) Long Beach Harbor (part. Main Ch., SE Basin, West Basin, Pier J, and breakwater) Machado Lake (Harbor Lake)
aldrin (tissue)	State Board numeric objective (tissue): Max. Tissue Residue Level 0.33 ng/g		Dominguez Channel Estuary (to Vermont) Dominguez Channel (above Vermont)
dieldrin (tissue)	State Board numeric objective (tissue): Max. Tissue Residue Level 0.7 ng/g	0.9 - 2.1 ng/g (tissue)	Dominguez Channel Estuary (to Vermont) Dominguez Channel (above Vermont) Machado Lake (Harbor Lake)
sediment toxicity	Basin Plan narrative objective		San Pedro Bay nearshore and offshore zone: Cabrillo Pier area Los Angeles Harbor: Southwest Slip Los Angeles Harbor: Consolidated Slip Los Angeles Harbor (part. Main Ch., Fish Hbr, Cabrillo Pier, and breakwater) Long Beach Harbor (part. Main Ch., SE Basin, West Basin, Pier J, and breakwater)
PAHs (sediment)	Basin Plan narrative objective	2,000 - 15,000 ng/g (sediment)	Dominguez Channel (above Vermont) Dominguez Channel Estuary (to Vermont) Los Angeles Harbor: Consolidated Slip Los Angeles Harbor (part. Main Ch., Fish Hbr, Cabrillo Pier, and breakwater) Long Beach Harbor (part. Main Ch., SE Basin, West Basin, Pier J, and breakwater) San Pedro Bay nearshore and offshore zone: Cabrillo Pier area
Chromium (sediment)	Basin Plan narrative objective	100 - 200 ug/g (sediment)	San Pedro Bay nearshore and offshore zone: Cabrillo Pier area Dominguez Channel (above Vermont) Dominguez Channel Estuary (to Vermont) Los Angeles Harbor: Consolidated Slip

* ChemA refers to the sum of the chemicals aldrin, dieldrin, chlordane, endrin, heptachlor, heptachlor epoxide, HCH (including lindane), endosulfan, and toxaphene

Impairments	Applicable Objective/Criteria	Typical Data Ranges Resulting in Impairment	303(d) Listed Waters/Reaches
Zinc (sediment & tissue)	Basin Plan narrative objective	150 - 510 ug/g (sediment) 110 - 510 ug/g (tissue)	Los Angeles Harbor: Consolidated Slip Dominguez Channel (above Vermont) Dominguez Channel Estuary (to Vermont) Los Angeles Harbor (part. Main Ch., Fish Hbr, Cabrillo Pier, and breakwater) San Pedro Bay nearshore and offshore zone: Cabrillo Pier area
Lead (sediment)	Basin Plan narrative objective	120 - 122 ug/g (sediment)	Los Angeles Harbor: Consolidated Slip Torrance Carson Channel Dominguez Channel Estuary (to Vermont) Dominguez Channel (above Vermont) Dominguez Channel (above Vermont) Wilmington Drain
Copper (sediment)	Basin Plan narrative objective	110 - 140 ug/g (sediment)	Los Angeles Harbor (part. Main Ch., Fish Hbr, Cabrillo Pier, and breakwater) Wilmington Drain Dominguez Channel (above Vermont) Torrance Carson Channel Dominguez Channel Estuary (to Vermont) San Pedro Bay nearshore and offshore zone: Cabrillo Pier area
algae, eutroph.	Basin Plan narrative objective		Machado Lake (Harbor Lake)
odors	Basin Plan narrative objective		Machado Lake (Harbor Lake)
ammonia	Basin Plan narrative objective Basin Plan numeric objective: varies depending on pH and temperature but the general range is 0.53 - 2.7 mg/l of total ammonia (at average pH and temp.) in waters designated as WARM to protect against chronic toxicity and 2.3 - 28.0 mg/l to protect against acute toxicity	ND - 18.0 mg/l	Machado Lake (Harbor Lake) Wilmington Drain Dominguez Channel (above Vermont) Dominguez Channel Estuary (to Vermont)
tributyltin	Basin Plan narrative objective	2,000 ng/g (tissue)	Los Angeles Harbor: Consolidated Slip Los Angeles Harbor (part. Main Ch., Fish Hbr, Cabrillo Pier, and breakwater)
coliform	Basin Plan numeric objective: Inland: fecal coliform not to exceed log mean of 200 mpn/100ml in 30-day period and not more than 10% of samples exceed 400 MPN/100ml Beaches: total coliform not to exceed 1,000 MPN/100ml in more than 20% of samples in 30 days and not more than 10,000 MPN/100ml at any time	33 - 160,000 MPN/100ml	Dominguez Channel (above Vermont) Dominguez Channel Estuary (to Vermont) Torrance Carson Channel Wilmington Drain
beach closures	Basin Plan narrative objective	2 - 11 days/year closed	Los Angeles Harbor (part. Main Ch., Fish Hbr, Cabrillo Pier, and breakwater) Cabrillo Beach (Inner)
Trash	Basin Plan narrative objective		Machado Lake (Harbor Lake)

* Chem A refers to the sum of the chemicals aldrin, dieldrin, chlordane, endrin, heptachlor, heptachlor epoxide, HCH (including lindane), endosulfan, and toxaphene

CURRENTLY SCHEDULED TMDLS:

Type of TMDL	303(d) Listed Waters/Reaches	Year Scheduled for Completed (FY)
coliform	Dominguez Channel Dominguez Channel Estuary Torrance Carson Channel Wilmington Drain	01/02
coliform	Cabrillo Pier area Cabrillo Beach (inner)	01/02

We see a need for an additional 1.1 PY as well as $50,000 in contract dollars for FY00/01 TMDL work conducted in this watershed.

Current Activities

The following is a summary of current regional board activities in the Dominguez Channel Watershed which are expected to continue as part of the Watershed Management Initiative on a watershed basis.

CORE REGULATORY

Continuing core regulatory activities that will be integrated into the watershed management approach include (but are not limited to) necessary renewal/revision of NPDES permits. This will be a targeted watershed for the bulk of permit renewal purposes in FY 2002-03. Many permits (refineries, in particular) are being renewed this year because of backlog issues, however. There are eleven major dischargers, 65 significant or minor dischargers under individual permits, as well as 37 dischargers currently covered under general permits (additional information on permits may be found in the Appendix). Compliance inspections, review of monitoring reports, response to complaints, and enforcement actions relative to the watershed's NPDES permits will continue. A watershed-wide regional monitoring program will be created in anticipation of the next cycle.

Due to limited resources, only the basic regulatory activities are performed: review of dischargers' monitoring reports, minimum necessary inspections and sampling, issuance/ renewal of permits, levels 1 and 2 enforcement actions (noncompliance and violation notification), case handling, and answering inquiries from the public.

MONITORING AND ASSESSMENT

In anticipation of the need for preparation of a State of the Watershed Report during the permit renewal time period, the Board's regional database's charting and mapping capabilities will be utilized to begin an assessment of available water and sediment quality information.

The BPTCP has identified two areas in the harbors as "toxic hot spots" based on sediment contamination. Staff have completed a cleanup plan for these areas; this plan is part of the Consolidated Plan for the state's toxic hot spots approved recently by State Board. Cleanup/ remediation alternatives identified include dredging, in-situ capping, and treatment. Continuing Regional Board activities include working to insure cleanup of contaminated land sites which may affect harbor waters, issuance of waste discharge requirements, where appropriate, and control/treatment of stormwater runoff. Of those areas identified as candidate sediment toxic hot spots, there is about 25,000 to 50,000 cubic yards of contaminated sediments in the Cabrillo Pier area; removal by dredging and disposal would cost 0.5 to $5 million; however, remediation there isn't recommended until Consolidated Slip contaminated sediments are cleaned up. The Consolidated Slip/Dominguez Channel area has about 50,000 cubic yards of contaminated sediments and would take $1 to 5 million to dredge. More sampling would be needed prior to any dredging in order to develop a detailed dredging plan. Also, post-

remediation monitoring would be needed. This area is part of an EPA-designated Superfund site and should receive attention under that program within the next few years.

NONPOINT SOURCE PROGRAM

Staff will pursue starting a general stakeholder group in the watershed to address nonpoint source issues. Staff have performed inspections of commercial fishing operations in the Los Angeles Harbor area and educated personnel regarding negative impacts of discharges to the harbor. Since these inspections, staff have initiated some enforcement actions.

Staff is encouraging proposals for Proposition 13 funding for preparation of a watershed management plan.

BASIN PLANNING

Basin Planning activities will include continued participation in both internal and external watershed planning efforts and further incorporation of watershed management and principles and watershed-specific priorities into future updates of the Basin Plan, where appropriate.

Comments on watershed issues in CEQA documents for the highest priority projects will continue to be prepared; this is currently an unfunded program.

Near-term Activities

Specific resource needs are described in the Region-wide Section of this document.

Permits in this watershed will be renewed in FY 2002/03. Continuing core regulatory activities include compliance inspections, review of monitoring reports, response to complaints, and enforcement actions as needed relative to the watersheds NPDES permits. A watershed-wide regional monitoring program will be created in anticipation of the next cycle.

A preliminary review of resources for core regulatory activities against cost factors has determined that our region is seriously underfunded for our baseline program. We will be seeking more funding for our core program activities.

As noted earlier, a large part of this watershed is on the 303(d) list for a variety of pollutants, especially in the sediment. Work conducted through the BPTCP has determined many of these areas support healthy benthic communities and acceptable levels of sediment toxicity. We will initiate discussions with stakeholders in 2000/01 on the best approach to take to resolve the problems noted on the 303(d) list.

The Dominguez Channel and Los Angeles/Long Beach Harbors Watershed is being proposed for inclusion in a partial update of the Water Quality Assessment report due in 2002. **Staff resources (0.75 PY/year) will be needed in 2000/01 and 2001/02 to collect, analyze, and store data for the Water Quality Assessment, State of the Watershed Report, and TMDL development.**

We will maintain involvement with stakeholder activities and pursue funding options, especially those involving implementation of nonpoint source measures (coordinate 205(j) and 319(h) activities) as well as other outreach activities such as speeches, meetings, and participation in environmental events. As resources permit, we will also work with stakeholders to implement provisions of the Coastal Zone Act Reauthorization Amendments.

Potential Mid- to Long-term Activities

As may be the case in other industrial areas with extensive sediment contamination, development of regional sediment quality guidelines would be very valuable. The CSTF is developing an electronic database of relevant local sediment monitoring data to be used for this purpose. Development of sediment quality guidelines should be completed by January 2003. Basin Planning efforts may be focused on better defining beneficial uses in the area and implementing the State Bays and Estuaries Plan adopted in 2000. We also anticipate discharger requests for development of site-specific objectives for a number of constituents that will be included in the new Bays and Estuaries Plan. An assessment of existing data will be needed as part of this task.

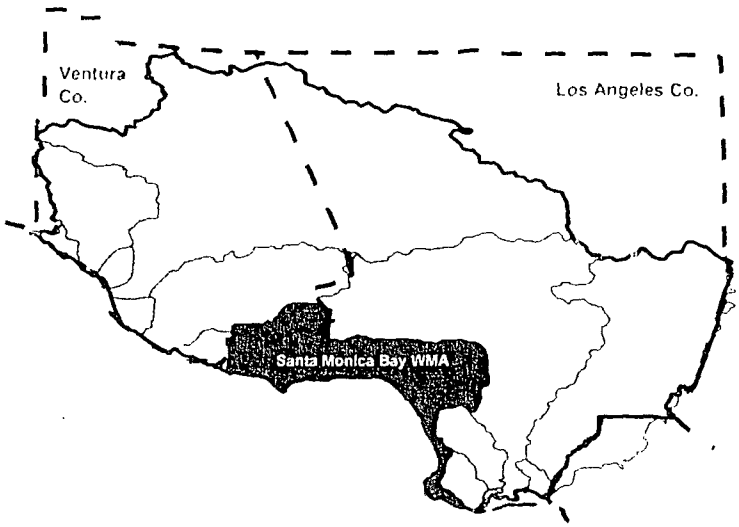
Additional long-term activities include:

- Development of a watershed-wide monitoring program
- Consideration and implementation of TMDL-related issues
- Further evaluate beneficial uses throughout the watershed
- Restoration of habitat following improvements in water quality
- Implementation of biological monitoring
- Explore options for, and implement, sediment cleanup/removal

2.4 SANTA MONICA BAY WMA

This was the targeted watershed for permitting purposes in FY1996/97 and will be targeted again in FY03/04.

Overview of WMA



The Santa Monica Bay Watershed Management Area (WMA), which encompasses an area of 414 square miles, is quite diverse. Its borders reach from the crest of the Santa Monica Mountains on the north and from the Ventura-Los Angeles County line to downtown Los Angeles. From there it extends south and west across the Los Angeles plain to include the area east of Ballona Creek and north of the Baldwin Hills. South of Ballona Creek the natural drainage area is a narrow strip of wetlands between Playa del Rey and Palos Verdes. The WMA includes several watersheds the two largest being Malibu Creek to the north and Ballona Creek to the south. While the Malibu Creek area contains mostly undeveloped mountain areas, large acreage residential properties and many natural stream reaches; Ballona Creek is predominantly channelized, and highly developed with both residential and commercial properties.

As a nationally significant water body, Santa Monica Bay was included in the National Estuary Program in 1989. It has been extensively studied by the Santa Monica Bay Restoration Project (SMBRP) and a watershed plan was developed in 1994. A Santa Monica Bay Watershed Council was formed in 1994 to oversee implementation of the Plan. The Restoration Project staff will be coordinating with Regional Board staff to carry out the Board's watershed approach in the Santa Monica Bay Watershed.

Water Quality Problems and Issues

Though relatively small in its size compared with watersheds in other parts of the country, the Santa Monica Bay WMA embraces a high diversity in geological and hydrological characteristics, habitat features, and human activities. Almost every beneficial use defined in the Basin Plan is identified in water bodies somewhere in the WMA. Yet many of these beneficial uses have been impaired for years. While some of the impaired areas are showing signs of recovery, beneficial uses that are in relatively good condition face the threat of degradation.

Existing and potential beneficial use impairment problems in the watershed fall into two major categories: human health risk, and natural habitat (wildlife) degradation. The former are issues primarily associated with recreational uses of the Santa Monica Bay. The latter are issues associated with terrestrial, aquatic, and marine environments. Pollutant loadings that originate from human activities are common causes of both human health risks and habitat degradation.

Beneficial Uses in the WMA:

All of the beneficial uses defined in the Basin Plan for the Region occur somewhere in this Watershed Management Area except for BIOL (preservation of biological habitats)

Permitted discharges:

- Seven major NPDES permit discharges
- Three POTWs (two direct ocean discharges), one refinery, and three generating stations
- 21 minor discharges
- 166 dischargers covered under general permits
- 147 discharges covered by an industrial storm water permit
- 107 dischargers covered by a construction storm water permit

Of the major NPDES dischargers in the Santa Monica Bay WMA, the three POTWs (particularly the two direct ocean discharges) are the largest point sources of pollutants to Santa Monica Bay. Pollutants from the minor discharges have been estimated to contribute less than two percent of the total pollutants being discharged to the Bay.

Types of permitted wastes discharged into the Santa Monica Bay WMA:

Nature of Waste *Prior* to Treatment or Disposal	# of Permits	Types of Permits
Nonhazardous (designated) contaminated groundwater	2 1 4	Major Minor General
Nonhazardous (designated) contact cooling water	1	Major
Nonhazardous (designated) domestic sewage & industrial waste	3	Major
Nonhazardous (designated) domestic sewage	2	Minor
Nonhazardous filter backwash brine waters	1	Minor
Hazardous stormwater runoff	1	Major
Nonhazardous (designated) wastes from dewatering, rec. lake overflow, swimming pool wastes, water ride wastewater, or groundwater seepage	11 131	Minor General
Nonhazardous (designated) noncontact cooling water	4 1	Minor General
Nonhazardous (designated) process waste (produced as part of industrial/manufacturing process)	2	Major
Nonhazardous (designated) stormwater runoff	1	Minor
Hazardous contaminated groundwater	1 21	Minor General
Inert wastes from dewatering, rec. lake overflow, swimming pool wastes, water ride wastewater, or groundwater seepage)	8	General

Hazardous wastes are those influent or solid wastes that contain toxic, corrosive, ignitable, or reactive substances (prior to treatment or disposal) managed according to applicable Department of Health Services standards
Designated wastes are those influent or solid wastes that contain **nonhazardous** wastes (prior to treatment or disposal) that pose a significant threat to water quality because of their high concentrations
Nonhazardous wastes are those influent or solid wastes that do not contain soluble pollutants or organic wastes (prior to treatment or disposal) and have little adverse impact on water quality
Inert wastes are those influent or solid wastes that do not contain soluble pollutants or organic wastes (prior to treatment or disposal) and have little adverse impact on water quality

Major discharges are POTWs with a yearly average flow of over 0.5 MGD or an industrial source with a yearly average flow of over 0.1 MGD and those with lesser flows but with acute or potential adverse environmental impacts.

Minor discharges are all other discharges that are not categorized as a Major. Minor discharges may be covered by a general permit, which are issued administratively, for those that meet the conditions specified by the particular general permit.

The majority of the 196 NPDES discharges to the Santa Monica Bay WMA go to Ballona Creek (160).

Of the 147 dischargers enrolled under the general industrial storm water permit in the watershed, the largest numbers fall in the *Fabricated Metal Products, Except Machinery and Transportation Equipment*; *Local and Suburban Transit and Interurban Highway Passenger Transportation*; *Motor Freight Transportation and Warehousing*; and *Scrap and Waste Materials* categories.

There are a total of 107 construction sites enrolled under the construction storm water permit. Forty-five of these sites are in the Malibu Creek Watershed with 62 in the rest of the WMA. The sites are fairly evenly divided between commercial and residential.

A considerable number of monitoring programs have been implemented in the Santa Monica Bay WMA, particularly over the last twenty years. Sampling efforts tend to center around assessing urban runoff effects in general along the coastline and reservoirs of PCBs and DDT contaminated sediment in the area of the Palos Verdes Shelf. Three statewide monitoring programs, State Mussel Watch, Bay Protection and Toxic Cleanup, and Toxic Substances Monitoring, focus on biological measurements.

The data from these programs indicate that in general the open coastline is much cleaner than the Bay's enclosed waters, except with regards to DDT and PCBs on the Palos Verdes Shelf. Pollutants of particular concern are chlordane, DDT, copper, and zinc. The BPTCP has listed the Santa Monica Bay - Palos Verdes Shelf area as a toxic hot spot for DDT and PCBs human health advisories (fishing) and NAS exceedances of DDT levels in fish. Marina Del Rey is listed as a toxic hot spot due to sediment concentrations of DDT, PCB, copper, mercury, nickel, lead, zinc and chlordane, and sediment toxicity; Marina Del Rey Entrance Channel (mouth of Ballona Creek) is listed due to sediment concentrations of DDT, zinc, lead, chlordane, dieldrin, and chlorpyrifos, and sediment toxicity. The BPTCP listed King Harbor as a site of concern, due to sediment concentrations of DDT and PCB and sediment toxicity (not recurrent).

Urbanization has had a significant impact on the riparian and wetland resources of the watershed, primarily through filling, alteration of flows, and decrease in water quality. It is estimated that 90% of the historic wetlands of the Santa Monica Bay WMA have been destroyed, with the remaining wetlands significantly degraded.

Although groundwater accounts only a limited portion of the Santa Monica Bay WMA's supply of fresh water, the general quality of groundwater in the watershed has degraded from background levels.

Greater Santa Monica Bay

Santa Monica Bay is heavily used for fishing, swimming, surfing, diving etc, activities classified as water contact recreation (REC-1). However, the ability for people to enjoy these activities has been lost to a certain degree because of the real or perceived risk to human health. The primary, and also the best documented, problems are acute health risk associated with swimming in runoff-contaminated surfzone waters, and chronic (cancer) risk associated with consumption of certain sport fish species in areas impacted by DDT and PCB contamination.

The general public has also been concerned about potential health risks associated with the consumption of contaminated seafood from Santa Monica Bay. This is the primary pathway through which humans are exposed to toxic chemicals found in the marine environment. While recent studies have shown that health risks are limited to consumption of certain seafood species found at certain locations, the public perception remains that all seafood in the Bay is contaminated.

One of the most evident impacts in marine habitats is sediment contamination and damage to marine life that the contaminants cause when they are released from the sediment (through natural fluctuations or through disturbance of the sediment) into the food chain. Organic compounds such as DDT, PCBs, polycyclic aromatic hydrocarbons (PAHs), chlordane, and tributyltin (TBT) are found in sediments in concentrations that are harmful to marine organisms at various locations in the Bay. Also found in Bay sediments are heavy metals such as cadmium, copper, chromium, nickel, silver, zinc, and lead. The major historic sources of sediment contamination have been wastewater treatment facilities; thus the accumulations are highest near treatment plant outfalls off of Palos Verdes and Playa del Rey.

Major Issues of Concern in Greater Santa Monica Bay

- Acute health risk associated with swimming in runoff-contaminated surfzone waters
- Chronic risk associated with consumption of certain sport fish species in areas impacted by DDT and PCB contamination
- Reduction of loadings from the two major POTWs in light of projected population increases
- Other impacts from urban runoff/storm water
- Historic deposits of DDT and PCBs in sediment; high levels in fish (Palos Verdes Shelf a Superfund site)
- Loadings of pollutants from other sources: sediment resuspension, atmospheric deposition
- The need to have a better understanding of the Bay's resources

Bioaccumulation of DDT in white croaker, dover sole, and California brown pelicans are well-known examples of the impacts caused by sediment contamination. Prior to the 1980s, high concentrations of DDT were found in muscle tissues of these organisms. DDT in these organisms are implicated in fin erosion and other diseases in fish as well as eggshell thinning and subsequent species decline in the California brown pelican.

Malibu Creek Watershed

The most recent Water Quality Assessment Report finds water quality in some streams within the Malibu Creek Watershed is impaired by nutrients and their effects, coliform and their effects, trash, and, in some instances, metals. While natural sources contribute, nonpoint source pollution from human activities is strongly implicated including ill-placed or malfunctioning septic systems and runoff from horse corrals. Nutrient inputs are also contributed by urban runoff and the POTW which discharges tertiary-treated effluent into the Creek about five miles upstream of Malibu Lagoon.

Major Issues of Concern in Malibu Creek Watershed

- Excessive freshwater, nutrients, and coliform in lagoon; contributions from POTW
- Urban runoff from upper watershed
- Impacts to swimmers/surfers from lagoon water
- Septic tanks in lower watershed
- Appropriate restoration and management of lagoon
- Access to creek and lagoon by endangered fish (steelhead trout and tidewater goby)

A nutrient TMDL for the mainstem of the Creek is in progress although ecologically-relevant nutrient objectives are lacking. A recently completed study produced a report which should lead to more effective management of the Lagoon and its resources as the restoration process continues.

Historically, the Lagoon was much larger than its current day size and although the flow dynamics of the Creek as well as the ocean's influence on the Lagoon in the past can only be extrapolated, it is likely Creek flow was much less than today during the dry season and a marine influence may have dominated, keeping the lagoon entrance open much of the year as occurs in the larger Mugu Lagoon to the north.. This also would have facilitated migration of the now endangered steelhead trout. And though Creek flow was likely less, more of the watershed was available for the trouts' use, at least prior to the construction of Rindge Dam in the 1920's. Most important, during the dry season there would be access to deep shaded pools in many parts of the watershed where the fish could mature until rain created the flows needed to reach the ocean.

Today, the flow regime is quite different and a major issue of concern. Both increased urban runoff from the more developed upper watershed and discharges from the POTW have increased baseline flows. However, recently the POTW which discharges to Malibu Creek came under a discharge prohibition starting each May 1, or at the first natural closure of Malibu Lagoon by sand buildup (whichever is later), through and including October 31 of each year, except during times of plant upset, storm events, or the existence of minimal streamflow conditions that require flow augmentation in Malibu Creek to sustain endangered species. In the long-run, this discharge prohibition may have many other implications on water quality and quantity in the Creek and Lagoon.

The lagoon size is much reduced from historic times and it currently remains closed much of the year except for during the winter when ocean influences breach the sandbar and Creek flows help maintain the opening. This had led to decreasing salinity or, at times, greatly fluctuating salinity which has disturbed efforts to restore the Lagoon. This also leads to elevated groundwater levels adjacent to the lagoon, assuring failure of septic systems in the area. Additionally, surfing and swimming is popular off the beaches in the immediate area and there is considerable concern over contaminated Lagoon water reaching these people.

Ballona Creek Watershed

The most recent Water Quality Assessment Report indicates impairment in this watershed due to coliform and its effects such as shellfish harvesting advisories; trash; PCBs and pesticides of historical origin such as DDT, chlordane, and dieldrin, as well as their effects such as sediment toxicity; metals such as lead, silver, arsenic, copper, cadmium, and zinc, as well as their effects such as water column toxicity; and tributyltin.

Ballona Creek is completely channelized to the ocean except for the estuarine portion which has a soft bottom. While at one time it drained into a large wetlands complex, it now has no

direct connection to the few wetlands remaining in the area although tide gates exist in the channel which connect to Ballona Wetlands. However, Ballona Creek may more often affect the nearby wetlands due to wave action moving trash, suspended material and dissolved contaminants from the ocean to the nearby Ballona Wetlands and Marina del Rey Harbor within which complex Ballona Lagoon is located.

Major Issues of Concern in Ballona Creek Watershed and Wetlands

- Trash loading from creek
- Wetlands restoration
- Sediment contamination by heavy metals from creek to Marina del Rey Harbor and offshore)
- Toxicity of both dry weather and storm runoff in creek
- High bacterial indicators at mouth of creek

The U.S. Army Corps of Engineers (USACE) and Los Angeles County Department of Beaches and Harbors conduct routine dredging operations in order to keep the entrance to Marina del Rey Harbor open. Led by the Los Angeles Basin Contaminated Sediment Task Force (for further information on this Task Force, see the Regionwide Section of this document), the USACE is conducting a study to identify sources of heavy metals loadings within the watershed. The results of the study could provide useful information to develop a TMDL for selected heavy metals.

Both dry weather and storm runoff from the main channel and two major tributaries were found to be toxic to marine organisms. Toxicity was also found during storms in the ocean near the mouth of the Creek. Preliminary investigations show that the sources of toxicity vary, and were associated with metals on one occasion and with organic chemicals on another occasion. Further efforts are needed to identify the sources of toxicity.

Bacterial indicator levels measured at stations near the mouth of Ballona Creek frequently exceed the level of concern. As a result, warning signs are posted permanently on each side of the Creek. The number of beach closures due to sewage spills rose again in 1998 after a long declining trend over the last ten years.

The BPTCP lists the Marina del Rey Entrance Channel and Marina del Rey back channels as Toxic Hot Spots; however, since they are not high priority sites, we have not yet developed preliminary remediation plans or cost estimates.

Other Urban Watersheds

The most recent Water Quality Assessment Report indicates impairment in many of these smaller drainages, which discharge directly to the ocean, due to one or several of the following: coliform, ammonia, lead, copper (and toxicity likely associated with metals), trash, and low dissolved oxygen. Due to the frequency of high bacterial indicator levels, warning signs are posted permanently at many of these locations (i.e., storm drain outlets). It should be noted that there are plans to divert many of these storm drains to the sewer system during dry weather.

IMPAIRMENTS:

The table below gives examples of typical data ranges which led to the 1998 303(d) listings. See Table 7 in the Appendix for additional details on currently scheduled TMDLs as well as specific pollutants included in the TMDLs.

Impairments	Applicable Objective/Criteria	Typical Data Ranges Resulting in Impairment	303(d) Listed Waters/Reaches
beach closures	Basin Plan narrative objective	1 - 15 days/year closed	Marina Del Rey Harbor Beach Santa Monica Bay beaches
swimming restrictions	Basin Plan narrative objective		Malibu Lagoon
shellfish harvesting adv.	Basin Plan narrative objective		Malibu Lagoon Ballona Creek Estuary
enteric viruses	Basin Plan narrative objective		Malibu Lagoon Pico Kenter Drain Ballona Creek
pathogens	Basin Plan narrative objective		Palos Verdes Shoreline Point Beach
coliform	Basin Plan numeric objective: Inland: fecal coliform not to exceed log mean of 200 mpn/100ml in 30-day period and not more than 10% of samples exceed 400 MPN/100ml Beaches: total coliform not to exceed 1,000 MPN/100ml in more than 20% of samples in 30 days and not more than 10,000 MPN/100ml at any time	Exceedances occurring on up to 53% of sample dates	Marina Del Rey Harbor Beach Marine del Rey Harbor - Back Basins Medea Creek Reach 2 (abv. confl. with Lindero) Medea Creek Reach 1 (lake to confl. with Lindero) Las Virgenes Creek Malibu Lagoon Malibu Creek: lagoon to Malibu Lake Stokes Creek Lindero Creek Reach 1 Lindero Creek Reach 2 (above lake) Palo Comado Santa Monica Bay beaches Santa Monica Canyon Ashland Avenue Drain Sepulveda Canyon Pico Kenter Drain Ballona Creek Estuary Ballona Creek
algae	Basin Plan narrative objective		Malibu Creek: Lagoon to Malibu Lake Las Virgenes Creek Lindero Creek Reach 2 (above lake) Medea Creek Reach 2 (abv. confl. with Lindero) Medea Creek Reach 1 (lake to confl. with Lindero) Lindero Creek Reach 1 Malibou Lake Lake Lindero Westlake Lake Lake Sherwood
eutroph.	Basin Plan narrative objective		Malibu Lagoon Malibou Lake Lake Lindero Westlake Lake Lake Sherwood
unnatural scum/foam	Basin Plan narrative objective		Malibu Creek: lagoon to Malibu Lake Las Virgenes Creek Lindero Creek Reach 2 (above lake) Lindero Creek Reach 1
ammonia	Basin Plan narrative objective Basin Plan numeric objective: varies depending on pH and temperature but the general range is 0.53 - 2.7 mg/l of total ammonia (at average pH and temp.) in waters designated as WARM to protect against chronic toxicity and 2.3-28.0 mg/l to protect against acute toxicity	ND - 5.77 mg/l	Westlake Lake Lake Sherwood Sepulveda Canyon Pico Kenter Drain
odors	Basin Plan narrative objective		Lake Lindero

Impairments	Applicable Objective/Criteria	Typical Data Ranges Resulting in Impairment	303(d) Listed Waters/Reaches
low DO, organic enrichment	Basin Plan narrative objective		Las Virgenes Creek Malibou Lake
	Basin Plan numeric objective: annual mean greater than 7.0 mg/l no single sample less than 5.0 mg/l	0.1 - 19.3 mg/l (mean of 4.9 ± 4.5)	Westlake Lake Lake Sherwood Ashland Avenue Drain
trash	Basin Plan narrative objective		Ballona Wetland Ballona Creek Medea Creek Reach 2 (abv. confl. with Lindero) Medea Creek Reach 1 (lake to confl. with Lindero) Lake Lindero Lindero Creek Reach 2 (above lake) Lindero Creek Reach 1 Malibu Creek: lagoon to Malibu Lake Las Virgenes Creek Pico Kenter Drain
mercury (water & tissue)	USEPA water quality criteria: 0.012 ug/l	1.0 ug/l (maximum - water)	Santa Monica Bay Nearshore and Offshore Zone Lake Sherwood
	State Board numeric objective (tissue): Max. Tissue Residue Level 1,000 ng/g		Triunfo Cyn Creek Reach 1 Triunfo Cyn Creek Reach 2
lead (water & sediment)	Basin Plan narrative objective	100 - 306 ng/g (sediment)	Marina del Rey Harbor - Back Basins Topanga Cyn Creek
	USEPA water quality criteria: varies based on hardness but typically 3.2 - 25 ug/l	91 - 240 ug/l (water)	Sepulveda Canyon Pico Kenter Drain Santa Monica Bay Nearshore and Offshore Zone Ballona Creek Ballona Creek Estuary Santa Monica Canyon Westlake Lake Triunfo Cyn Creek Reach 1 Triunfo Cyn Creek Reach 2
cadmium (sediment)	Basin Plan narrative objective		Ballona Creek Santa Monica Bay Nearshore and Offshore Zone
copper (sediment, tissue, & water)	Basin Plan narrative objective	100 ng/g (tissue)	Santa Monica Bay Nearshore and Offshore Zone Marina del Rey Harbor - Back Basins
	USEPA water quality criteria: varies based on hardness but typically 12 - 47 ug/l	117 - 293 ug/l (water)	Ballona Creek Pico Kenter Drain Westlake Lake Malibou Lake Lake Calabasas
nickel (sediment)	Basin Plan narrative objective		Santa Monica Bay Nearshore and Offshore Zone
silver (sediment)	Basin Plan narrative objective		Santa Monica Bay Nearshore and Offshore Zone Ballona Creek
arsenic (tissue)	State Board numeric objective (tissue): Max. Tissue Residue Level 200 ng/g		Ballona Creek Ballona Wetland
zinc (tissue & sediment)	Basin Plan narrative objective	500 ng/g (sediment) 500 ng/g (tissue)	Santa Monica Bay Nearshore and Offshore Zone Marina del Rey Harbor - Back Basins Ballona Creek Estuary Lake Calabasas
selenium (water)	USEPA water quality criteria: 5.0 ug/l	8 - 38 ug/l	Lake Lindero Medea Creek Reach 2 (abv. confl. with Lindero) Medea Creek Reach 1 (lake to confl. with Lindero) Las Virgenes Creek Lindero Creek Reach 2 (above lake) Lindero Creek Reach 1
tributyltin (sediment & tissue)	Basin Plan narrative objective	6,000 ng/g (tissue)	Ballona Creek Marina del Rey Harbor - Back Basins
toxicity	Basin Plan narrative objective		Ballona Creek Ashland Avenue Drain Pico Kenter Drain

Impairments	Applicable Objective/Criteria	Typical Data Ranges Resulting in Impairment	303(d) Listed Waters/Reaches
benthic comm. effects	Basin Plan narrative objective		Marina del Rey Harbor - Back Basins Malibu Lagoon
fish consumption advisory	Basin Plan narrative objective		Santa Monica Bay Nearshore and Offshore Zone Marina del Rey Harbor - Back Basins
sediment toxicity	Basin Plan narrative objective		Santa Monica Bay Nearshore and Offshore Zone Marina del Rey Harbor - Back Basins Ballona Creek Ballona Creek Estuary
ChemA*	National Academy of Science Guideline (tissue): 100 ng/g		Ballona Creek
PAHs (sediment)	Basin Plan narrative objective	5000 - 6509 ng/g	Ballona Creek Estuary Santa Monica Bay Nearshore and Offshore Zone
DDT (tissue)	State Board numeric objective (tissue): Max. Tissue Residué Level 32.0 ng/g	52 - 88 ng/g	Marina del Rey Harbor - Back Basins Ballona Creek Estuary Ballona Creek Santa Monica Bay Nearshore and Offshore Zone Santa Monica Bay beaches
pesticides	Basin Plan narrative objective		Palos Verdes Shoreline Point Beach
PCBs (sediment & tissue)	Basin Plan narrative objective	200 ng/g (sediment)	Marina del Rey Harbor - Back Basins Ballona Creek Estuary
	State Board numeric objective (tissue): Max. Tissue Residue Level 2.2 ng/g	29 - 162 ng/g	Ballona Creek Malibou Lake Santa Monica Bay Nearshore and Offshore Zone Santa Monica Bay beaches
dieldrin (tissue)	State Board numeric objective (tissue): Max. Tissue Residue Level 0.65 ng/g	4.8 - 16.8 ng/g	Ballona Creek Marina del Rey Harbor - Back Basins
chlordane (tissue &	Basin Plan narrative objective	100 ng/g (sediment)	Ballona Creek Santa Monica Bay Nearshore and Offshore Zone
sediment)	State Board numeric objective (tissue): Max. Tissue Residue Level 1.1 ng/g	15.3 - 55 ng/g (tissue)	Ballona Creek Estuary Marina del Rey Harbor - Back Basins Westlake Lake Malibou Lake
exotic vegetation	Basin Plan narrative objective		Ballona Wetland
habitat alteration, hydromodification, reduced tidal flushing	Basin Plan narrative objective		Ballona Wetland
debris	Basin Plan narrative objective		Santa Monica Bay Nearshore and Offshore Zone
chloride	Basin Plan numeric objective: 250 mg/l	89 - 330 mg/l (mean of 244 ± 76)	Lake Lindero
specific conductance	Basin Plan narrative objective	1325 - 3530 mg/l (mean of 2937 ± 747	Lake Lindero

* ChemA refers to the sum of the chemicals aldrin, dieldrin, chlordane, endrin, heptachlor, heptachlor epoxide, HCH (including lindane), endosulfan, and toxaphene

CURRENTLY SCHEDULED TMDLS:

Type of TMDL	Listed Waters/Reaches in TMDL	Year Scheduled for Completion (FY)
trash	Ballona Wetland Ballona Creek	00/01
Nutrients and their effect	Malibu Lagoon Malibu Creek: Lagoon to Malibu Lake Lindero Creek Reaches 1 and 2 Las Virgenes Creek Medea Creek Reaches 1 and 2 Malibou Lake Lake Lindero Westlake Lake Lake Sherwood	01/02

Type of TMDL	Listed Waters/Reaches in TMDL	Year Scheduled for Completion (FY)
coliform and its effect	Medea Creek Reaches 1 and 2 Lindero Creek Reaches 1 and 2 Las Virgenes Creek Malibu Lagoon Malibu Creek: lagoon to Malibu Lake Stokes Creek Palo Comado	01/02
coliform and its effect	Greater Santa Monica Bay beaches Santa Monica Canyon Ashland Avenue Drain Sepulveda Canyon Pico Kenter Drain	01/02
nutrients and their effect	Medea Creek Reach 2 Lindero Creek Reaches 1 and 2 Las Virgenes Creek Malibu Lagoon Malibu Creek: lagoon to Malibu Lake Malibu Lake Lake Lindero Westlake Lake Lake Sherwood Lake Calabasas	01/02
coliform and its effect	Marina Del Rey Harbor Beach Marine del Rey Harbor - Back Basins	02/03
metals and their effects	Ballona Creek Ballona Creek Estuary Ballona Wetland	02/03
coliform and its effect	Ballona Creek Estuary	02/03
Metals	Santa Monica Bay Nearshore and Offshore Zone	03/04
hist. PCBs, pest. and effects	Marina del Rey Harbor - Back Basins	03/04
hist. PCBs, pest. and effects	Ballona Creek Ballona Creek Estuary	04/05
Metals	Marina del Rey Harbor - Back Basins	04/05

We see a need for an additional 4.2 PYs as well as $230,000 in contract dollars for FY00/01 TMDL work conducted in this watershed.

Stakeholder Groups

- *Malibu Creek Watershed Advisory Council and Executive Committee (with subcommittees)* A number of stakeholder groups began meeting in the late 1980's/early 1990's in the Malibu area. One short-term facilitated group (in conjunction with the Advisory Council) formulated a list of priority issues that need to be resolved while the Executive Committee worked with the Advisory Council to exchange information and develop a Natural Resources Plan for the watershed prepared by the USNRCS. Separate task forces and subcommittees formed and reformed and eventually one group emerged with its associated subcommittees (and task forces as needed) as the main stakeholder forum. The Malibu Lagoon Task Force is currently quite active and the group is involved with offering advice on watershed-wide monitoring and coordination on development of a Malibu Lagoon Enhancement and Management Plan. Also currently active is the Volunteer Water Quality Monitoring Task Force, Monitoring and Modeling Subcommittee (tasked with developing a watershed-wide monitoring program), Human Health Subcommittee, and Wildlife Subcommittee. Joint Advisory Council/Executive Committee meetings occur quarterly with 1-2 staff members attending. Various subcommittees and task forces are active as needed but usually 1-2 other groups will be meeting quarterly with 1-2 staff members attending.

- *Santa Monica Bay Restoration Project (Watershed Council, Bay Oversight Committee, Implementation Committee,* and *Technical Advisory Committee)* The SMBRP was formed in 1989 under the National Estuary Program and is charged with the responsibility of assessing the Bay's problems, developing solutions, and identifying implementation procedures. A Bay Restoration Plan was developed and is in the process of being implemented. One or two Regional Board staff will attend the quarterly meetings of the Oversight Committee while another staff member will attend the quarterly Technical Advisory Committee meetings. More information about this group may be found at their website http://www.smbay.org/.

- *Topanga Watershed Committee* The committee was formed in 1998 as a followup to previous a community group working developing on alternatives to traditional flood control measures. Their focus has expanded to include general watershed management and protection activities as well as volunteer monitoring. More information about this group may be found at their website http://www.topangaonline.com/twc/index.html.

Past Significant Activities

Watershed Management

The first edition of a State of the Watershed Report was produced in June 1997 which assessed water quality using data from the SMBRP and the Regional Board as well as other data provided by Watershed Council members; this document will continue to evolve and be updated.

Nonpoint Source

A number of nonpoint source control strategies have been undertaken in the Malibu Creek Watershed. Those that involved restoration of aquatic life beneficial uses include streambank and riparian corridor habitat restoration projects funded by 319(h) monies undertaken by the Resource Conservation District of the Santa Monica Mountains and the Department of Parks and Recreation. Additionally, the Resource Conservation District has prepared a manual for horse owners in the areas detailing ways to prevent nonpoint source inputs from their land (funded by 319(h) monies).

Current Activities

The following is a summary of current regional board activities and strategies for dealing with point and nonpoint source pollution as well as other issues of concern in the Santa Monica Bay WMA.

CORE REGULATORY

Revisions of most of the major permits took place during 1997. Many of the minor discharges are now regulated under general permits. Portions of a regional ocean monitoring program are currently being implemented and other aspects of it are being developed (see Region-wide Section for additional details). Watershed (inland) regional monitoring programs are being developed with the dual purpose, in many instances, of both creating a more effective program

and collecting the needed data to determine mass loading allocations. Ongoing work related to individual NPDES permits includes review and assessment of monitoring data, conducting compliance inspections, and pursuing enforcement actions if necessary. Due to limited resources, only the basic regulatory activities are performed: review of dischargers' monitoring reports, minimum necessary inspections and sampling, issuance/renewal of permits, levels 1 and 2 enforcement actions (noncompliance and violation notification), case handling, and answering inquiries from the public.

Core regulatory responsibilities also include administration of the consent decrees for full secondary treatment compliance by the City of Los Angeles and the County Sanitation Districts of Los Angeles County (CSDLAC) and a 1990 Settlement Agreement with the City of Los Angeles. Another responsibility is oversight of the approved pretreatment programs for the joint outfall system for the City of Los Angeles and the CSDLAC and oversight of the sewage collection systems.

In addition, although the permit for the Tapia Water Reclamation Plant in the Malibu Creek Watershed was renewed in 1997, there were appeals and changes which resulted in the permit being revised again in December 1999. Staff continue to spend significant effort on this permit due to contentious issues such as the summer flow prohibition and pending nutrient limitations.

The Santa Monica Bay WMA falls within Los Angeles County which was issued a renewed municipal storm water permit in 1996. There are 87 co-permittees covered under this permit including 85 cities, the County of Los Angeles, and the California Department of Transportation (Caltrans). Work on the permit will involve review of monitoring reports, evaluation of the storm water program's effectiveness, coordination with other watershed efforts, and modification of the permit as necessary. During 1997/98, discharger responsibilities under the permit concentrated on the evaluation of the five BMP model programs required in the 1996 permit: Illicit Connection/Illicit Discharges, Development Construction, Development Planning, Public Agency Activities, and Five-Year Public Education Strategy (including industrial/commercial site visits).

However, the Regional Board also needs to encourage and support the development and implementation of innovative structural and non-structural BMPs under the municipal storm water permit. In the Ballona Creek Watershed, over the next two years, many projects funded under Proposition A will be implemented. Promoted by the SMBRP, co-permittees within the watershed have collaboratively or individually conducted pilot projects to test new catchbasin retrofit devices and the effectiveness of street sweeping methodologies. The City of Los Angeles also conducted a study of impacts of street washing in homeless-aggregated areas. The results of these studies/pilot projects may lead to possible wide application of some new BMPs over the next two years. These projects would qualify to receive Section 319(h) funding.

An important requirement of the storm water municipal permit is implementation of the Standard Urban Storm Water Mitigation Plans (SUSMPs) and Numerical Design Standards for Best Management Practices (BMPs) which were adopted in 2000. The SUSMP is designed to ensure that storm water pollution is addressed in one of the most effective ways possible, i.e., by incorporating BMPs in the design phase of new development and redevelopment. It provides for numerical design standards to ensure that storm water runoff is managed for water quality concerns in addition to flood protection and that pollutants carried by storm water are retained and not delivered to waterways.

The numerical design standard is that post-construction treatment BMPs be designed to mitigate (infiltrate or treat) storm water runoff from the first ¾ inch of rainfall, prior to its discharge to a storm water conveyance system. Other standards also apply; additional information on the SUSMP may be found on the Regional Board website http://www.swrcb.ca.gov/~rwqcb4.

Also, given the recent surge in sewage spills into Ballona Creek, the Regional Board needs to exercise its authority through use of enforcement actions to require the City of Los Angeles to complete its planned infrastructure improvement and enhance its vigilance over the existing sewer system.

Key regulatory staff will also remain involved in the Santa Monica Bay team in order to stay focused on key watershed issues and contribute to updates of the State of the Watershed Report.

MONITORING AND ASSESSMENT

Portions of a regional ocean monitoring program are currently being implemented and other aspects of it are being developed (see Regionwide Section for additional details). Watershed (inland) regional monitoring programs are being developed with the dual purpose, in many instances, of both creating a more effective program and collecting the needed data to determine mass loading allocations. Bight'98 and 1994 SCBPP monitoring covered coastal areas (including harbors and marinas in Bight'98).

The SMBRP, with participation of the Regional Board, has been developing a new sources and loading monitoring design for point and nonpoint source ocean discharges from the Santa Monica Bay WMA/wasteshed. The overall objective of this monitoring program design, which applies to any watershed, is to produce improved estimates of loadings to the Bay in order to:

- make cost-effective trade-offs in reducing inputs of toxic pollutants
- evaluate the effectiveness over time of source control and treatment options taken to reduce inputs to the Bay
- assist in evaluating receiving water impacts

Because it is not practical to continuously monitor every stream/storm drain, the monitoring approach adopted by the municipal storm water permit is to rely on sampling of a set of mass loading stations in combination with a set of land use stations. Data collected through sampling of these stations will then be used to calibrate models that produce mass loading estimates for a specific watershed/subwatershed. This approach is further supplemented by several monitoring programs and research projects with narrower objectives. Under the municipal storm water permit, the Los Angeles County Department of Public Works (LAC-DPW) is conducting a critical source monitoring project to estimate the relative loading from five selected facilities/sites with high potential of generating pollutants. Caltrans conducts monitoring aimed at estimating loadings from highway runoff. For the last two years, LAC-DPW has funded USC/UCBS/SCCWRP to define the dispersion zone of storm water in the nearshore ocean and to study impacts from storm water runoff by measuring sediment contamination, toxicity, and the benthic community response index in the dispersion zone. The USACE has worked with UCLA to collect storm water samples in Ballona Creek to calculate relative contributions of

pollutant loadings from each tributary and major land use types. SCCWRP also has on-going efforts to investigate the loading and impacts of storm water runoff throughout the Southern California region, including creeks in the Santa Monica Mountains.

Besides information provided by these existing efforts, there are still information gaps that hinder the fulfillment of the identified monitoring objectives. Specifically, the following needs to happen during the next two years:

- A project that develops methodology for and conducts status and trend analysis using stormwater monitoring data collected under the municipal NPDES permit.
- A study that uses more frequent monitoring during different periods of a storm to generate a "pollutograph." This information will greatly improve the accuracy of pollutant loading estimates generated by modeling efforts.
- A project that resolves the issue of consistency in detection limits used by different dischargers. The Regional Board needs recommendations and rationale on the proper detection limits for each measured constituent to estimate and make comparisons of loadings from various sources (point and nonpoint sources).
- The study and application of molecular markers for storm water runoff. The marker can be used to identify the area of storm water influence and therefore aid further study if the runoff impacts in receiving water sediments.
- Toxicity Identification Evaluations to identify the sources of storm water/urban runoff toxicity.
- A study of the effectiveness of structural BMPs that are implemented using Proposition A grant money funds. Since many pollution control devices are new and considered to be pilots in the Region, the review panel for the Proposition A funds recommended that the regional Board should take on the responsibility to both monitor the progress in implementing these projects and to evaluate the effectiveness of installed devices for regional applicability.
- A study of the effectiveness of non-structural BMPs (e.g. public outreach) implemented under the municipal storm water permit. The information will be useful for developing future storm water pollution control strategies.
- Development of practical sanitation survey tools.

These projects would require either additional staff time or need to receive funding from sources such as Section 205(j) grants, State Revolving Fund (SRF), or Proposition 13.

A marine resource inventory and habitat mapping (available on CD) are two projects recently completed for Santa Monica Bay. The objectives of these projects are to produce a detailed inventory of the Bay's habitats, especially the Bay's unique and sensitive habitats that have been overlooked in past monitoring and inventory including intertidal, kelp bed, short bank, Torrance Beach, and artificial reefs. It also provides necessary baseline for the valuation (and potential damage assessment) of the Bay's habitats, for special designation (e.g. ecological reserve) of certain areas, and for planning measures against abuse and depletion by pollution, development, or excessive harvesting. Additionally, it helps to identify the "habitats of concern" or "species of concern" and identify cost-effective methods for restoration and rebuilding efforts. It is anticipated that the initial mapping and inventory efforts planned by the SMBRP will identify many data gaps that need to be filled by special studies that:

- quantify the amount of substrate in the Bay and the Southern California Bight capable of supporting kelp beds
- assess the conditions of kelp habitats in the vicinity of Malibu
- analyze trends in the abundance of target species such as sea stars, owl limpets, and sea grasses based on historical surveys

- analyze trends in community composition and diversity of intertidal habitats in the Bay
- survey the abundance of resident species in the Bay
- assess the population sustainability of key commercial and sportfishing species

These studies could qualify to receive grant funding such as Section 205(j), SRF, or Proposition 13.

There are also a number of ongoing volunteer monitoring efforts underway in the WMA. They include storm event sampling at over 30 Bay storm drains coordinated by the Santa Monica BayKeeper, gutter patrol monitoring in inland neighborhoods and monitoring of Malibu Lagoon and the lower Creek for water quality and biological parameters coordinated by Heal the Bay, water quality and biological monitoring and surveys of Malibu lagoon coordinated by the Resource Conservation District of the Santa Monica Mountains, monitoring of the upper Malibu Creek Watershed, and coliform monitoring of the surf zone off of Malibu coordinated by the Malibu Chapter of the Surfrider Foundation.

WETLANDS PROTECTION AND MANAGEMENT

The wetlands priority in the Ballona Creek Watershed is Ballona Wetlands. Currently, the restoration process is stalled due to controversy surrounding approval of a large development in the area. Previous planning efforts have produced a wetlands restoration plan known as a "hybrid" plan, which contains elements of both full and mid-tidal alternatives in a manner that reduces environmental impacts and minimizes costs. Depending on the development plan approval process, the strategy is to ensure that adequate funding sources are secured for implementation of the restoration plan. The Regional Board participated in this activity through the 401 water quality certification process.

In the Malibu area, The Southern California Wetlands Recovery Project considers the Malibu Lagoon Water Level Control Project a high priority for FY00/01 or future funding. Also considered a high priority for funding is the Upper Malibu Creek Feasibility Study which would join with US Army Corps to study the feasibility of removing Rindge Dam. Two other high priority projects in the Santa Monica WMA is the Topanga Lagoon Restoration Feasibility Study and Solstice Creek Steelhead Enhancement work.

The Santa Monica Mountains Conservancy is a state agency created by the Legislature in 1979 charged with primary responsibility for acquiring property with statewide and regional significance, and making those properties accessible to the general public. The Conservancy manages parkland in the Santa Monica Mountains, Santa Susana Mountains, the Simi Hills, the Santa Clarita Woodlands, the Whittier-Puente Hills, the Sierra Pelona, the Los Angeles River Greenway, the Rio Hondo, the Verdugo Mountains, the San Gabriel Mountains, and the San Rafael Hills. The agency's goals are to: 1) implement the Santa Monica Mountains Comprehensive Plan, 2) implement the Rim of the Valley Trails Corridor Master Plan, 3) implement the Los Angeles County River Master Plan, 4) further cooperation with local governments in the region to secure open space and parkland, and 5) expand education, public access, and resource stewardship components in a manner that best serves the public, protects habitat, and provides recreational opportunities.

NONPOINT SOURCE PROGRAM

Nonpoint source pollution to the ocean (greater Santa Monica Bay) includes urban runoff, aerial fallout, spills, sediment resuspension, oil seeps, vessel traffic, and advection. Strategies for dealing with urban and storm runoff were discussed under the Core Regulatory section. In addition, a priority over the next two years is to divert dry weather flows from all problematic storm drains to the sewer system. Currently, diversions of six storm drains (Pico-Kenter, Ashland, Brooks Ave., Herondo St., Pershing Dr., and Thornton Ave.) have been fully or partially funded through Proposition A money. Therefore, more attention will be shifted to deal with Santa Monica Canyon, the only problematic drain that has not been scheduled for diversion, and Santa Monica and Redondo Piers, where measures to prevent sewer system leakage may be needed.

Strategies have been developed and efforts are underway to address aerial fallout, sediment resuspension, septic systems, marinas, and vessel traffic.

Septic Systems: In January 2000, the Santa Monica Bay Restoration Project (SMBRP) convened a Task Force to address the issue of septic system management throughout the northern Santa Monica Bay watersheds. The area of focus covers three jurisdictions: the City of Malibu, the City of Los Angeles, and areas of unincorporated Los Angeles County. In order to bring together the various perspectives and expertise on this issue, the Task Force was composed of representatives from various stakeholder organizations including: State Department of Health Services (SDHS); Los Angeles Regional Water Quality Control Board (RWQCB); California Coastal Commission; Los Angeles County Departments of Public Works, Health Services and Regional Planning; City of Los Angeles Department of Building and Safety; City of Malibu Environmental and Building Safety Department; Los Angeles County Board of Supervisors Office - Third District; and Heal the Bay.

The Task Force's goal has been to develop solutions to the problems associated with septic systems and their impact on water quality, while at the same time identifying the obstacles that must be faced in trying to mitigate the situation. By bringing an understanding of these obstacles into the formulation of its recommendations, the Task Force has tried to ensure that the solutions are implementable and still fully address the problem at hand.

After its review of the existing management and regulatory framework for septic system management in the Bay's watersheds, the Task Force's recommendations suggest that improving management of septic systems will require significantly greater oversight by both state and local agencies as well as improved coordination between them.

The Task Force recommends a comprehensive approach to septics system management in northern Santa Monica Bay that includes the following elements:

- **Issue waste discharge requirements (WDRs) for all existing multi-family and commercial establishments in northern Santa Monica Bay watersheds.**
  - The RWQCB should issue WDRs for all existing commercial and applicable multi-unit developments in northern Santa Monica Bay watersheds that are not currently permitted. It is estimated that there are approximately 380 systems that need permits in this area.
  - Develop general WDRs for common types of commercial and multi-unit residential units to facilitate the permitting process.

- Seek funding to increase RWQCB staffing to reduce the permit backlog.

- **Establish a comprehensive permitting program for operation, inspection and monitoring of all septic systems.**
  - Local agencies should require operational permits for all (commercial, multi-unit and single-family) septic systems. These permits would be issued on a five-year renewal basis, with shorter intervals for poorly performing systems.
  - Develop a comprehensive inspection and monitoring program that would be implemented through the operational permits. Require that initial inspections be conducted between six and 12 months after installation of new systems.
  - All properties served by septic systems should be permitted within five years of the adoption of these recommendations by local municipalities.
  - Develop computerized management systems to track and analyze permits, maintenance and inspection schedules.

- **Design and implement a comprehensive groundwater monitoring program to improve assessments of septic system impacts to receiving waters and groundwaters.**
  - Design a regional groundwater monitoring program in order to obtain information needed to better understand groundwater conditions and reduce the number of monitoring wells that may be required of permittees. This monitoring program would be implemented through WDRs.

- **Establish a coordinated approach for oversight of septic systems, including modification/update of the WDR waivers between the RWQCB and local agencies.**
  - The RWQCB and local agencies should establish agreements that ensure consistent implementation of a policy that all commercial and multisystems obtain WDRs before building permits are issued by local agencies.

- **Develop a grants program for qualified homeowners to provide financial assistance to upgrade failing systems.**
  - Establish a financial assistance program for homeowners for which the upgrade, replacement or repair of failing on-site waste disposal systems would be a significant financial hardship.

- **Develop more stringent requirements for installation and operation of wastewater management systems in environmentally sensitive areas.**
  - Utilize a risk-based approach in implementing the operational permit program, e.g. identify environmentally sensitive areas to be addressed as high priority, develop more stringent operating permits for wastewater management systems in these areas.

- **Establish local septic system maintenance districts to oversee and fund the permitting, inspection and monitoring activities.**
  - The process for establishing such a district is outlined in the State Health and Safety Code.

- **Conduct public outreach to residents regarding proper operation and maintenance of septic systems.**
  - Educational outreach to septic system owners should be conducted regarding proper operation and maintenance of septic systems and regarding the implementation of the proposed permitting and inspection programs.

The Task Force is currently seeking approval and support of these recommendations from the agencies responsible for their implementation. Finalized recommendations will be incorporated into the Santa Monica Bay Restoration Plan with the ultimate goal of implementation by all appropriate entities.

Aerial Fallout: Funded by USEPA, the SMBRP will conduct a study of air transport/deposition of toxic contaminants to the Bay over the next three years. This study will quantify the toxic materials and nitrogens emitted annually in the Los Angeles air basin that are subsequently deposited in the Bay and the Bay's watershed, and identify the sources of various airborne pollutants in the air basin and their relative contributions to total pollutant loading to the Bay. The Regional Board has been assisting the SMBRP by encouraging participation of the stormwater management agencies. The Regional Board can use this information to evaluate the effectiveness of air pollution control measures.

Sediment Resuspension: Currently, there is no study specifically planned to examine sediment resuspension as a source of pollutant loading to the Bay. However, the USEPA Superfund investigation on the Palos Verdes Shelf and the Contaminated Sediment Task Force are both looking into the sediment resuspension issue in order to evaluate the feasibility of capping as a remediation measure. USEPA initiated a pilot project in September 2000 to evaluate cap placement methods and cap stability at three test cells on the Palos Verdes Shelf. These two efforts will provide valuable information that will help evaluate relative contributions of pollutant loading from sediment resuspension.

Marinas and Vessel Traffic: Boating wastes (vessel traffic) are potentially a significant source of loadings into the Bay as well as into harbors of pathogens, trash, and some heavy metals. The SMBRP has organized a comprehensive boater education program for the southern California counties. In addition, the new Clean Marina 319h grant will further help educate boaters, facilitate clean-out practices, and promote recognition of successes.

Other NPS Activities: We will continue to manage a 319(h) project involving restoration of Zuma Lagoon. The goals of the project are: enhancement of existing native habitats, an increase in habitat diversity and expansion of freshwater marsh and willow riparian habitats through the use of native plantings, establishment of a sycamore alluvial woodland/coastal scrub habitat, and development of an interpretive area and trails that would serve to educate the public regarding the biological and cultural resources of the site. This project is projected to be finished by 2001.

A number of nonpoint source control strategies are being undertaken in the Malibu Creek Watershed. Those that involve restoration of contact and noncontact recreation beneficial uses include:

- An assessment of nutrient and bacteria inflow from septic systems adjacent to the Lagoon through the use of tracers, by the City of Malibu (a 205(j)-funded study).
- Development of a policy at the Regional Board to regulate/permit, if appropriate, septic systems in localized areas of Malibu and the Santa Monica Mountains area including Malibou Lake.
- Implementation of the waiver policy

Also, the City of Calabasas is using 319(h) money to develop and coordinate a watershed education center and library with a projected completion date of 2000.

We continue to support as a high priority for 319(h) program funding in FY2000/01 projects to restore wetlands in Malibu, Topanga, and Trancas Lagoons.

We anticipate a number of applicants will be pursuing Proposition 13 funding for implementation or restoration projects, particularly in the Malibu area.

Additionally, work will continue with the Bay Watershed Council, the Implementation Committees for Ballona Creek and Malibu Creek, with the Storm Water Santa Monica Bay Watershed Committees, and with other Santa Monica Bay Watershed stakeholder groups, in order to identify any necessary modifications and/or new nonpoint measures that should be implemented through the Bay Restoration Plan or individual Ballona Creek and Malibu Creek Plans.

BASIN PLANNING

As we are limited in resources and time to accomplish every watershed goal during the permit phase of the first cycle, the priority issues identified for the first cycle will need to be addressed during the remainder of the first cycle. We will continue to develop strategies for the implementation of priority actions identified under the Santa Monica Bay Restoration Plan, including protection of the Ballona Wetlands, as well as additional actions targeted by the Watershed Council for action. We will also integrate these into the Watershed Council's Plan and implementation activities.

Basin Planning activities will include continued participation in both internal and external watershed planning efforts and further incorporation of watershed management and principles and watershed-specific priorities into future updates of the Basin Plan, where appropriate.

Near-term Activities

Specific resource needs are described in the Region-wide Section of this document.

Since most of the NPDES permits for this watershed were renewed in 1997, in general, core regulatory activities during the next four years will focus on permit compliance, monitoring report review, and enforcement as needed. Work continues on lower Malibu Creek issues. Members of the watershed team will be involved with periodic updates of the State of the Watershed Report. Additionally, there will be on-going interaction with stakeholders and followup on goals established during the permit renewal phase.

In particular, over the next two fiscal years, a number of issues need to be addressed that require additional funding. The major NPDES permits that were not renewed in 1997 (one POTW and the three generating stations) expired in 1999 (Scattergood, El Segundo and Redondo were renewed in 2000). The next watershed cycle when the Santa Monica Bay WMA will be targeted is in 2003/04. In the meantime, the POTW has completed construction of its secondary treatment facilities in order to achieve compliance with full secondary treatment requirements. There is a need to revise the facility's effluent monitoring program to include intermediate monitoring to determine removal efficiencies. There are also a number of major studies requested of dischargers have been submitted, are due soon, or are likely to take place which will require review and evaluation. Consolidation of non-storm water discharges into general permits specific to watersheds and development of a waiver program for de minimis non-storm water discharges also requires resources. **It is estimated the above activities will require an additional 2 PYs/year over baseline resources.**

Regarding resources needed to continue oversight of the Los Angeles County storm water permit (regulatory-based BMP management), regulatory personnel will be revising the annual program report format, auditing the permittees, evaluating the revised model programs, and reviewing reports and alternate programs submitted by permittees. The eighteen municipal program audits must be completed and matched with BMPs selected to address the pollutants of concern to facilitate development of TMDLs. The Caltrans storm water management program BMPs must be matched with pollutants of concern to facilitate TMDLs impacted by transportation land use. In addition, SWPPPs for all industrial storm water facilities in the WMA must be reviewed and BMPs matched with pollutants of concern to facilitate TMDL development. **These above activities will also require an additional 2 PYs.**

A preliminary review of resources for core regulatory activities against cost factors has determined that our region is seriously underfunded for our baseline program. We will be seeking more funding for our core program activities.

Issuing waste discharge requirements for all existing multi-family and commercial establishments in northern Santa Monica Bay watersheds not currently under permit (with any necessary followup work), as recommended by the Santa Monica Bay Restoration Project septic systems task force, will entail requiring **an additional 2 – 4 PYs per year for at least the next five years**.

There are a number of information gaps that need to be filled over the next few years such as:

- Review existing data and assess fish contamination levels in the entire Santa Monica Bay (not just the Palos Verdes Shelf).

- Analyze the link between contaminants in fish and biological impacts to shore birds, sea birds, and marine mammals.

- Continued involvement in updates to the baseline State of the Watershed Report, focussing on filling data gaps and evaluating cumulative impacts as monitoring data become available from dischargers.

- Regional Board ambient monitoring, and evaluation of monitoring data from the municipal storm water program.

- An important issue to address at some point in the future is the need to protect the populations of threatened and endangered species in the Bay which include the California least tern, Belding's savannah sparrow, western snowy plover, California brown pelican, El Segundo blue butterfly, steelhead trout, and tidewater goby. Depending on the level of existing efforts, the needs for each species range from monitoring and assessing current conditions, to developing or implementing strategies for population recovery.

- In the Malibu Creek Watershed, a number of long-term projects are being considered or are in progress which the Regional Board will be involved with to some extent. The Malibu Creek Watershed Council is projected to complete work on a Watershed Management Plan by 2001. This Plan would include implementation strategies to resolve concerns and issues in the watershed. The Department of Parks and Recreation and the City of Malibu are investigating development of a plan to reduce unseasonal breaching of the lagoon; a plan may be available by 2002. Also, the Rindge Dam Task Force is investigating the possibility and alternative ways to remove the dam in order to facilitate access to the upper watershed by steelhead trout. There is no projected end date for this project.

Additionally, although not a nonpoint source project per se, the POTW which discharges to Malibu Creek is under a discharge prohibition starting each May 1, or at the first natural closure of Malibu Lagoon by sand buildup (whichever is later), through and including October 31 of each year, except during times of plant upset, storm events, or the existence of minimal streamflow conditions that require flow augmentation in Malibu Creek to sustain endangered species. However, in the long-run, this discharge prohibition may have many other implications on water quality and quantity in the Creek and Lagoon.

- Develop a strategy for regulating septic systems in the Malibu area.

- A priority planning issue is to define water quality standards for nutrients in Malibu Lagoon and Creek.

- We will also continue our involvement with stakeholder activities and the pursuit of funding options, especially those involving implementation of nonpoint source measures (coordinate 205(j), SRF, Prop. 13, Small Community Grant, and 319(h) activities) as well as other outreach activities such as speeches, meetings, and participation in environmental events. As resources permit, we will also work with stakeholders to implement provisions of the Coastal Zone Act Reauthorization Amendments.

- We plan on pursuing funding in FY00/01 in order to complete a nutrient TMDL in the Malibu Creek Watershed as well as start a coliform TMDL there. We also require funding for trash and coliform TMDLs in Ballona Creek and coliform TMDL in Marina del Rey Harbor.

- Comments on watershed issues in CEQA documents (for the highest priority projects) will continue to be prepared; however, there is currently no funding for this program.

- Implement biological monitoring in priority watersheds (e.g. Malibu, Topanga).

Potential Long-term Activities

In the long-term, Basin Planning activities will include continued participation in both internal and external watershed planning efforts and further incorporation of watershed management and principles and watershed-specific priorities into future updates of the Basin Plan, where appropriate.

A wetlands management issue that will continue to impact core regulatory activities in Malibu Creek is the listing of the creek as critical habitat for the endangered steelhead trout. Water quantity will continue to play as critical a role as water quality in the issue.

We will continue to develop strategies for the implementation of priority actions identified under the Santa Monica Bay Restoration Plan, including protection of the Ballona Wetlands, as well as additional actions targeted by the Watershed Council for action. We will also integrate these into the Watershed Council's Plan and implementation activities. Additional issues may include: 1) conduct or review studies to evaluate and refine (if necessary) the designated beneficial uses for certain waterbodies, 2) consider the establishment of wet weather criteria in some areas, 3) integrate water supply and quality issues with local land use planning and management, and 4) institute better coordination of multi-agency reviews of environmental impacts for flood control and development projects, including the consideration of regional mitigation programs.

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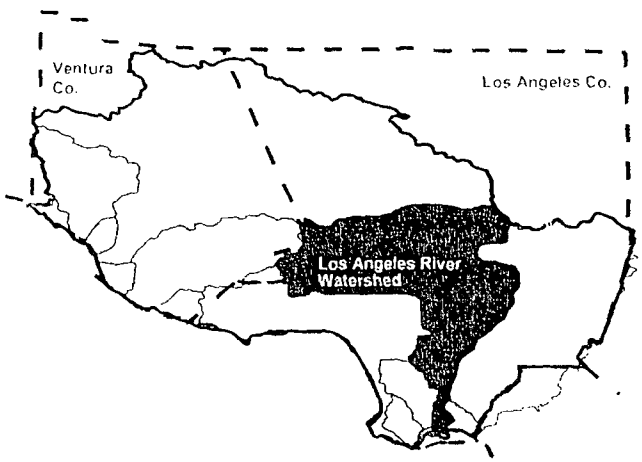
2.5 LOS ANGELES RIVER WATERSHED

This was the targeted watershed for permitting purposes in FY1997/99 and will be targeted again in FY 2004/05.

Overview of Watershed



Size of watershed: 824 square miles

Length of river: 55 miles

The Los Angeles (LA) River watershed is one of the largest in the Region. It is also one of the most diverse in terms of land use patterns. Approximately 324 square miles of the watershed are covered by forest or open space land including the area near the headwaters which originate in the Santa Monica, Santa Susana, and San Gabriel Mountains. The rest of the watershed is highly developed. The river flows through the San Fernando Valley past heavily developed residential and commercial areas. From the Arroyo Seco, north of downtown Los Angeles, to the confluence with the Rio Hondo, the river flows through industrial and commercial areas and is bordered by railyards, freeways, and major commercial and government buildings. From the Rio Hondo to the Pacific Ocean, the river flows through industrial, residential, and commercial areas, including major refineries and petroleum products storage facilities, major freeways, rail lines, and rail yards serving the Ports of Los Angeles and Long Beach.

Major tributaries to the river in the San Fernando Valley are the Pacoima Wash, Tujunga Wash (both drain portions of the Angeles National Forest in the San Gabriel Mountains), Burbank Western Channel and Verdugo Wash (both drain the Verdugo Mountains). Due to major flood events at the beginning of the century, by the 1950's most of the river was lined with concrete. In the San Fernando Valley, there is a section of the river with a soft bottom at the Sepulveda Flood Control Basin. The Basin is a 2,150-acre open space upstream of the Sepulveda Dam designed to collect flood waters during major storms. Because the area is periodically inundated, it remains in a semi-natural condition and supports a variety of low-intensity uses as well as supplying habitat. At the eastern end of the San Fernando Valley, the river bends around the Hollywood Hills and flows through Griffith and Elysian Parks, in an area known as the Glendale Narrows. Since the water table was too high to allow laying of concrete, the river in this area has a rocky, unlined bottom with concrete-lined or rip-rap sides. This stretch of the river is fed by natural springs and supports stands of willows, sycamores, and cottonwoods. The many trails and paths along the river in this area are heavily used by the public for hiking, horseback riding, and bird watching.

South of the Glendale Narrows, the river is contained in a concrete-lined channel down to Willow Street in Long Beach. The main tributaries to the river in this stretch are the Arroyo Seco (which drains areas of Pasadena and portions of the Angeles National Forest in the San

Gabriel Mountains), the Rio Hondo, and Compton Creek. Compton Creek supports a wetland habitat just before its confluence with the Los Angeles River. The river is hydraulically connected to the San Gabriel River Watershed by the Rio Hondo through the Whittier Narrows Reservoir. Flows from the San Gabriel River and Rio Hondo merge at this reservoir during larger flood events, thus flows from the San Gabriel River Watershed may impact the LA River. Most of the water in the Rio Hondo is used for groundwater recharge during dry weather seasons. The San Gabriel River drains approximately 689 square miles, which includes the eastern San Gabriel Mountains and portions of the Chino, San Jose, and Puente Hills.

Beneficial Uses in watershed:

Estuary	*Above estuary*
Industrial service supply	Groundwater recharge
Contact & noncontact water recreation	Contact & noncontact water recreation
Navigation	Warmwater habitat
Commercial & sportfishing	Wetlands Habitat
Protection of rare & endangered species	Protection of rare & endangered species
Wildlife habitat	Wildlife habitat
Marine habitat	
Migration of aquatic organisms	
Spawning	
Estuarine habitat	

The LA River tidal prism/estuary begins in Long Beach at Willow Street and runs approximately three miles before joining with Queensway Bay located between the Port of Long Beach and the city of Long Beach. The channel has a soft bottom in this reach with concrete-lined sides. Queensway Bay is heavily water recreation-oriented; however, major pollutant inputs are likely more related to flows from the LA River which carries the largest storm flow of any river in southern California.

Also part of the watershed are a number of lakes including Peck Road Park, Belvedere Park, Hollenbeck Park, Lincoln Park, and Echo Park Lakes as well as Lake Calabasas. These lakes are heavily used for recreational purposes.

Four basins in the San Fernando Valley area contain substantial deep groundwater reserves and are recharged mainly through runoff and infiltration although the increase in impermeable surfaces has decreased infiltration. Groundwater basins in the San Gabriel Valley are not separated into distinct aquifers other than near the Whittier Narrows. Active recharge occurs in some of these areas through facilities operated by Los Angeles County. Spreading grounds recharge two basins in the coastal plain of Los Angeles west of the downtown area.

Permitted discharges:

- Six major NPDES dischargers (four POTWs)
- 30 minor permits
- 112 dischargers covered by general permits
- Minor permits cover miscellaneous wastes such as ground water dewatering, recreational lake overflow, swimming pool wastes, and ground water seepage. Other permits are for discharge of treated contaminated ground water, noncontact cooling water, and storm water
- Two municipal storm water permits
- 1,327 dischargers covered under an industrial storm water permit
- 147 dischargers covered under a construction storm water permit

Water Quality Problems and Issues

Pollutants from dense clusters of residential, industrial, and other urban activities have impaired water quality in the middle and lower watershed. Added to this complex mixture of pollutant sources (in particular, pollutants associated with urban and stormwater runoff), is the high number of point source permits.

Types of permitted wastes discharged into the Los Angeles River Watershed:

Nature of Waste *Prior* to Treatment or Disposal	# of Permits	Types of Permits
Nonhazardous (designated) contaminated groundwater	2 9	Minor General
Nonhazardous (designated) contact cooling water	1	Minor
Nonhazardous (designated) domestic sewage & industrial waste	3	Major
Nonhazardous (designated) wastes from dewatering, rec. lake overflow, swimming pool wastes, water ride wastewater, or groundwater seepage	1 8 58	Major Minor General
Nonhazardous (designated) noncontact cooling water	3 13	Minor General
Nonhazardous (designated) process waste (produced as part of industrial/manufacturing process)	2	Minor
Nonhazardous (designated) stormwater runoff	1 9 1	Major Minor General
Hazardous contaminated groundwater	2 9	Minor General
Nonhazardous (designated) domestic sewage	1 1	Major Minor
Nonhazardous (designated) filter backwash brine waters	2	Minor
Nonhazardous wastes from dewatering, rec. lake overflow, swimming pool wastes, water ride wastewater, or groundwater seepage	2	General
Inert contaminated groundwater	1	General
Inert wastes from dewatering, rec. lake overflow, swimming pool wastes, water ride wastewater, or groundwater seepage	16	General

Hazardous wastes are those influent or solid wastes that contain toxic, corrosive, ignitable, or reactive substances (prior to treatment or disposal) managed according to applicable Department of Health Services standards
Designated wastes are those influent or solid wastes that contain **nonhazardous** wastes (prior to treatment or disposal) that pose a significant threat to water quality because of their high concentrations
Nonhazardous wastes are those influent or solid wastes that do not contain soluble pollutants or organic wastes (prior to treatment or disposal) and have little adverse impact on water quality
Inert wastes are those influent or solid wastes that do not contain soluble pollutants or organic wastes (prior to treatment or disposal) and have little adverse impact on water quality

Major discharges are POTWs with a yearly average flow of over 0.5 MGD or an industrial source with a yearly average flow of over 0.1 MGD and those with lesser flows but with acute or potential adverse environmental impacts.

Minor discharges are all other discharges that are not categorized as a Major. Minor discharges may be covered by a general permit, which are issued administratively, for those that meet the conditions specified by the particular general permit.

A majority of the 148 NPDES discharges go directly to the Los Angeles River. Burbank Western Channel receives four discharges, Compton Creek receives five, and Eaton Wash receives three.

Of the 1,327 dischargers enrolled under the general industrial storm water permit in the watershed, the largest numbers fall in the *Fabricated Metal Products, Except Machinery and Transportation Equipment*; *Motor Freight Transportation and Warehousing*; *Scrap and Waste Materials*; *Motor Vehicle Parts, Used*; *Primary Metal Industries*; and *Chemicals and Allied Products* categories.

There are a total of 147 construction sites enrolled under the construction storm water permit. About twice as many of these are in the upper watershed (which includes the San Fernando Valley) and the construction in this watershed is fairly evenly divided between commercial and residential.

IMPAIRMENTS: The majority of the LA River Watershed is considered impaired due to a variety of point and nonpoint sources. The 1998 303(d) list implicates pH, ammonia, a number of metals, coliform, trash, scum, algae, oil, chlorpyrifos as well as other pesticides, and volatile organics in that impairment. Some of these constituents are of concern throughout the length of the river while others are of concern only in certain reaches (see chart below). Impairment may be due to water column exceedances, excessive sediment levels of pollutants, or bioaccumulation of pollutants. The beneficial uses threatened or impaired by degraded water quality are aquatic life, recreation, groundwater recharge, and municipal water supply.

The table below gives examples of typical data ranges which led to the listings. See Table 7 in the Appendix for additional details on currently scheduled TMDLs as well as specific pollutants included in the TMDLs.

Impairments	Applicable Objective/Criteria	Typical Data Ranges Resulting in Impairment	303(d) Listed Waters/Reaches
ammonia	Basin Plan narrative objective		Tujunga Wash (d/s Hansen Dam to Los Angeles River) Los Angeles River Reach 5 (within Sepulveda Basin)
	Basin Plan numeric objective: varies depending on pH and temperature but the general range is 0.53 - 2.7 mg/l of total ammonia (at average pH and temp.) in waters designated as WARM to protect against chronic toxicity and 2.3 - 28.0 mg/l to protect against acute toxicity	ND - 34.9 mg/l (mean of 10.7 ± 4.8)	Los Angeles River Reach 4 (Sepulveda Dam to Riverside Dr.) Los Angeles River Reach 3 (Riverside Dr. to Figueroa St.) Los Angeles River Reach 2 (Figueroa St. to u/s Carson St.) Los Angeles River Reach 1(u/s Carson St. to estuary) Burbank Western Channel Rio Hondo Reach 2 (from Whittier Narrows Flood Cntrl Basin to Spreading Grounds) Rio Hondo Reach 1 (Santa Ana Fwy to Los Angeles River) Lincoln Park Lake Echo Park Lake Lake Calabasas
nutrients (algae)	Basin Plan narrative objective		Los Angeles River Reach 5 (within Sepulveda Basin) Los Angeles River Reach 4 (Sepulveda Dam to Riverside Dr.)
	Basin Plan numeric objective: nitrates-N + nitrites-N not greater than 10 mg/l	0.2 - 14.5 mg/l (mean of 2.7 ± 3.2)	Los Angeles River Reach 3 (Riverside Dr. to Figueroa St.) Los Angeles River Reach 2 (Figueroa St. to u/s Carson St.) Los Angeles River Reach 1(u/s Carson St. to estuary) Burbank Western Channel Verdugo Wash (Reaches 1 & 2) Arroyo Seco Rch 1 (d/s Devil's Gate Dam) & Rch 2 (W. Holly Ave. to Devil's Gate) Lincoln Park Lake Echo Park Lake Lake Calabasas
Scum, odors	Basin Plan narrative objective		Tujunga Wash (d/s Hansen Dam to Los Angeles River) Los Angeles River Reach 5 (within Sepulveda Basin) Los Angeles River Reach 4 (Sepulveda Dam to Riverside Dr.) Los Angeles River Reach 3 (Riverside Dr. to Figueroa St.) Los Angeles River Reach 2 (Figueroa St. to u/s Carson St.) Los Angeles River Reach 1(u/s Carson St. to estuary) Burbank Western Channel Peck Rd Lake Lincoln Park Lake Echo Park Lake Lake Calabasas
pH	Basin Plan numeric objective: 6.5 - 8.5 pH units	7.0 - 10.6 pH units (mean of 9.2 ± 0.9)	Los Angeles River Reach 1(u/s Carson St. to estuary) Rio Hondo Reach 1 (Santa Ana Fwy to Los Angeles River) Compton Creek Echo Park Lake Lake Calabasas

Impairments	Applicable Objective/Criteria	Typical Data Ranges Resulting in Impairment	303(d) Listed Waters/Reaches
Low DO/organic Enrichment	Basin Plan narrative objective		Lincoln Park Lake Peck Rd Lake
	Basin Plan numeric objective: annual mean greater than 7.0 mg/l no single sample less than 5.0 mg/l	0.2 - 15.2 mg/l (mean of 6.0 ± 4.0)	Lake Calabasas
Trash	Basin Plan narrative objective		Tujunga Wash (d/s Hansen Dam to Los Angeles River) Los Angeles River Reach 5 (within Sepulveda Basin) Los Angeles River Reach 4 (Sepulveda Dam to Riverside Dr.) Los Angeles River Reach 3 (Riverside Dr. to Figueroa St.) Los Angeles River Reach 2 (Figueroa St. to u/s Carson St.) Los Angeles River Reach 1(u/s Carson St. to estuary) Burbank Western Channel Verdugo Wash (Reaches 1 & 2) Arroyo Seco Reach 1 (d/s Devil's Gate Dam) & Reach 2 (W. Holly Ave. to Devil's Gate) Rio Hondo Reach 1 (Santa Ana Fwy to Los Angeles River) Peck Rd Lake Echo Park Lake Lincoln Park Lake
Copper	USEPA water quality criteria: varies based on hardness but typically 12 - 47 ug/l	63 ug/l (maximum)	Tujunga Wash (d/s Hansen Dam to Los Angeles River) Compton Creek Rio Hondo Reach 1 (Santa Ana Fwy to Los Angeles River) Echo Park Lake Lake Calabasas
Lead	USEPA water quality criteria: varies based on hardness but typically 3.2 - 25 ug/l	140 ug/l (maximum)	Los Angeles River Reach 4 (Sepulveda Dam to Riverside Dr.) Los Angeles River Reach 2 (Figueroa St. to u/s Carson St.) Los Angeles River Reach 1(u/s Carson St. to estuary) Monrovia Cyn Creek Rio Hondo Reach 1 (Santa Ana Fwy to Los Angeles River) Compton Creek Peck Rd Lake Lincoln Park Lake Echo Park Lake
Cadmium	USEPA water quality criteria: varies based on hardness but typically 1.1 - 4.0 ug/l	3 ug/l (maximum)	Burbank Western Channel
Zinc	USEPA water quality criteria: varies based on hardness but typically 106 - 414 ug/l	1,340 ug/l (maximum)	Lake Calabasas Rio Hondo Reach 1 (Santa Ana Fwy to Los Angeles River)
Selenium	USEPA water quality criteria: 5.0 ug/l	9.3 ug/l (maximum)	Aliso Canyon Wash
coliform	Basin Plan numeric objective: Inland: fecal coliform not to exceed log mean of 200 mpn/100ml in 30-day period and not more than 10% of samples exceed 400 MPN/100ml Beaches: total coliform not to exceed 1,000 MPN/100ml in more than 20% of samples in 30 days and not more than 10,000 MPN/100ml at any time	ND - 93,000 MPN/100ml	Tujunga Wash (d/s Hansen Dam to Los Angeles River) Los Angeles River Reach 6 (u/s of Sepulveda Basin) Los Angeles River Reach 4 (Sepulveda Dam to Riverside Dr.) Los Angeles River Reach 2 (Figueroa St. to u/s Carson St.) Los Angeles River Reach 1(u/s Carson St. to estuary) Verdugo Wash (Reaches 1 & 2) Arroyo Seco Rch 1 (d/s Devil's Gate Dam) & Rch 2 (W. Holly Ave. to Devil's Gate) Rio Hondo Reach 1 (Santa Ana Fwy to Los Angeles River) Rio Hondo Reach 2 (Whittier Narrows Flood Control Basin to Spreading Grounds) Compton Creek Bell Creek
chlorpyrifos	Basin Plan narrative objective		Los Angeles River Reach 5 (within Sepulveda Basin)
Chem A*	National Academy of Science Guideline (tissue): 100 ng/g		Los Angeles River Reach 5 (within Sepulveda Basin)
PCBs	State Board numeric objective (tissue): Max. Tissue Residue Level 2.2 ng/g		Echo Park Lake
DDT	State Board numeric objective (tissue): Max. Tissue Residue Level 32.0 ng/g		Peck Rd Lake Lake Calabasas
chlordane	State Board numeric objective (tissue): Max. Tissue Residue Level 1.1 ng/g		Peck Rd Lake

* Chem A refers to the sum of the chemicals aldrin, dieldrin, chlordane, endrin, heptachlor, heptachlor epoxide, HCH (including lindane), endosulfan, and toxaphene

Potential sources of pollution:

- POTWs
- Industrial discharges
- septic systems
- landfills
- Nonpoint sources (horse stables, golf courses)
- Illegal trash dumping
- Cross-contamination between surface and groundwater

Ground water resources in the watershed are also impacted. Impacts, both real and threatened, include those from hundreds of cases of known leaking underground storage tanks that have contaminated soil and/or ground water with petroleum hydrocarbons and volatile organic compounds. There are also a number of cases of refineries/tank farms that have contaminated soil and/or ground water. Seawater intrusion (chloride) is of concern in other areas of the watershed which has necessitated wellhead treatment, shutdown, or blending. Finally, a number of wells have been shut down due to nitrate contamination with septic systems as a likely source.

ISSUES: The major issues of concern in the watershed include: 1) protection and enhancement of fish and wildlife habitat, 2) removal of exotic vegetation, 3) enhancement of recreational areas, 4) attaining a balance between water reclamation and minimum flows to support habitat, 5) management of storm water quality, 6) assessment of other nonpoint sources including horse stables, golf courses, and septic systems, 7) pollution from contaminated ground water, 8) groundwater recharge with reclaimed water, 9) contamination of ground water by volatile organic compounds, 10) leakage of MTBE from underground storage tanks, 11) groundwater contamination with heavy metals, particularly hexavalent chromium, and 12) contaminated sediments within the LA River estuary.. Some of these issues are only indirectly related to water quality but are those identified by stakeholder groups.

CURRENTLY SCHEDULED TMDLS:

Type of TMDL	Listed Waters/Reaches in TMDL	Year Scheduled for Completion (FY)
trash	Tujunga Wash (d/s Hansen Dam to Los Angeles River) Los Angeles River Reaches 1, 2, 3, 4, 5 Burbank Western Channel Verdugo Wash Reaches 1 & 2 Arroyo Seco Reaches 1 and 2 Rio Hondo Reach 1	00/01
nitrogen and related effects	Tujunga Wash (d/s Hansen Dam to Los Angeles River) Los Angeles River Reaches 1, 2, 3, 4, 5 Burbank Western Channel Verdugo Wash Reaches 1 & 2 Arroyo Seco Reaches 1 and 2 Rio Hondo Reaches 1 and 2 Compton Creek	01/02
coliform	Los Angeles River Reaches 1, 2, 4, and 6 Tujunga Wash (d/s Hansen Dam to LA River) Verdugo Wash Reaches 1 and 2 Arroyo Seco Reach 1 Rio Hondo Reaches 1 and 2 Compton Creek	01/02

Type of TMDL	Listed Waters/Reaches in TMDL	Year Scheduled for Completion (FY)
metals	Tujunga Wash (d/s Hansen Dam to Los Angeles River) Compton Creek Burbank Western Channel Los Angeles River Reaches 1, 2, 4 Rio Hondo Reach 1 Monrovia Cyn Creek Aliso Canyon Wash	03/04
hist. pesticides	Los Angeles River Reach 5 (within Sepulveda Basin)	05/06

We see a need for an additional 1.9 PYs and $100,000 of contract monies for FY00/01 TMDL work conducted in this watershed.

Stakeholder Groups

Los Angeles/San Gabriel Rivers Watershed Council The group was formed in 1995 following a large watershed conference held in the area which served as a springboard. The Council has a board of directors and became incorporated as a nonprofit organization in 1996. The group is tracking watershed activities, but has primarily focused on flood control issues in the Los Angeles River as well as opportunities to create greenbelts and restore habitat. Three committees have been formed recently: water resources, water quality, and multi-use projects. The Council's goal is to help facilitate a process to preserve, restore, and enhance all aspects of the two watersheds. Preparation of a watershed management plan by this group is underway. This group is coordinating with other groups to seek Proposition 13 funding. Generally one staff person attends these monthly council as well as monthly board of directors meetings. More information about this group may be found at their website http://www.lasgriverswatershed.org/.

Los Angeles Basin Contaminated Sediment Task Force Contaminated dredged material disposal is a major issue in the Los Angeles Region due to its large commercial ports and the several major marina complexes and small vessel harbors. Queensway Bay, at the mouth of the watershed, receives a large sediment load that impacts recreational uses. The U.S. Army Corps of Engineers frequently conducts maintenance dredging to remove accumulated sediments from this area. The need for a long-term management strategy for dealing with contaminated sediments in the Los Angeles area has been identified and the Task Force will prepare this strategy. Representatives on the Task Force include a number of federal and state agencies as well as port and environmental group representatives. More information about this group may be found in the Region-wide Section of this Chapter.

Past Significant Activities

CORE REGULATORY

The Los Angeles County Storm Water Permit (which the LA River Watershed falls within) permit was renewed in July 1996.

WATERSHED MANAGEMENT

Key regulatory staff are part of a LA River Watershed "team" for purposes of preparing a State of the Watershed Report/Water Quality Characterization Report (a draft of which was released April 18, 1998) and for coordinating permit renewals and regional monitoring program development.

Current Activities

The following is a summary of current Regional Board activities in the Los Angeles River Watershed which are expected to continue as part of the Watershed Management Initiative on a watershed basis. Activities which address the aforementioned pollutants or issues of concern are highlighted. Additionally, there are a large number of projects and activities currently underway by watershed stakeholders ranging from a wetlands assessment funded by the Coastal Conservancy and others to an NPDES Permit Public Education Program funded by the City of Alhambra.

CORE REGULATORY

Continuing core regulatory activities that have been integrated into the watershed management approach include (but are not limited to) renewal/revision of NPDES permits including those covered under Regional Board general permits. Compliance inspections, review of monitoring reports, response to complaints, and enforcement actions relative to the watershed's NPDES permits will continue. A draft watershed-wide regional monitoring program was created in 1998/99 and our modifications and improvements to discharger monitoring programs will target data gaps and eliminate duplicative and unnecessary monitoring. Coordination between major dischargers, environmental groups, volunteer monitors, and resource and regulatory agencies will be critical to the success of this task. Because of the large number of permits, renewal of permits in this watershed during its first cycle was spread over two years.

The Los Angeles River Watershed falls within Los Angeles County which was issued a renewed municipal storm water permit in 1996. There are 87 co-permittees covered under this permit including 85 cities, the County of Los Angeles, and the California Department of Transportation (Caltrans). Work on the permit will involve review of monitoring reports, evaluation of the storm water program's effectiveness, coordination with other watershed efforts, and modification of the permit as necessary. During 1997/98, discharger responsibilities under the permit concentrated on the evaluation of the five BMP model programs required in the 1996 permit: Illicit Connection/Illicit Discharges, Development Construction, Development Planning, Public Agency Activities, and Five-Year Public Education Strategy (including industrial/commercial site visits). The watershed also falls partly within the City of Long Beach which was issued a municipal storm water permit in 1999.

An important requirement of both storm water municipal permits is implementation of the Standard Urban Storm Water Mitigation Plans (SUSMPs) and Numerical Design Standards for Best Management Practices (BMPs) which were adopted in 2000. The SUSMP is designed to ensure that storm water pollution is addressed in one of the most effective ways possible, i.e., by incorporating BMPs in the design phase of new development and redevelopment. It provides for numerical design standards to ensure that storm water runoff is managed for water

quality concerns in addition to flood protection and that pollutants carried by storm water are retained and not delivered to waterways.

The numerical design standard is that post-construction treatment BMPs be designed to mitigate (infiltrate or treat) storm water runoff from the first ¾ inch of rainfall, prior to its discharge to a storm water conveyance system. Other standards also apply; additional information on the SUSMP may be found on the Regional Board website http://www.swrcb.ca.gov/~rwqcb4.

Regulation of groundwater protection activities is intended to eventually become integrated into the watershed management approach while land disposal activities will likely remain separate. Accomplishment of core regulatory activities are a high priority that is currently funded; however, funds do not tend to go far enough to encompass extensive enforcement and response to complaints; however, enforcement is a high priority.

Due to limited resources, only the basic regulatory activities are performed: review of dischargers' monitoring reports, minimum necessary inspections and sampling, issuance/renewal of permits, levels 1 and 2 enforcement actions (noncompliance and violation notification), case handling, and answering inquiries from the public.

MONITORING AND ASSESSMENT

Work on a TMDL for nitrogen in the watershed is currently underway. A preliminary draft was released to the public on April 1, 1998; however, due to staff changes and resources, it was not completed. A public draft of this TMDL is expected to be available early in the summer of 2001.

A State of the Watershed/Water Quality Characterization Report was prepared during 1997/98 based on information obtained through the Board's ambient monitoring program, dischargers' receiving water monitoring data, and data available from other agencies. The first edition of the report focuses on the upper LA River Watershed. This document was released in April 1998.

NONPOINT SOURCE PROGRAM

The major nonpoint source-generated pollutants found throughout the watershed that have contributed to its impairments are lead, coliform, and oil, while chlorpyrifos is implicated in the upper watershed. These pollutants are common components of dry weather urban runoff and wet weather storm runoff. In many ways, the "point source" municipal stormwater permit for LA County will be a major tool in nonpoint source pollution elimination. Permitees are responsible for development and implementation of storm water management plans, for plans to eliminate non-storm water discharges (dry weather urban runoff), and must apply best management practices to prevent storm water pollution.

The Regional Board encourages pollution prevention and source control; the 205(j) and 319(h) grants are tools to provide funds for these types of projects. For FY00/01, we have listed as a priority for 319(h) grant funding activities (see Table 4) which demonstrate effective ways to reduce loadings of trash, nutrients, and coliform through pilot projects which implement trash reduction, management of horse corral runoff, golf course irrigation water runoff, urban runoff, or implementation of septic correction measures.

Staff will also be involved in stakeholder meetings and will assist in the development of watershed management plans which will be expected to address strategies to reduce point and nonpoint source pollutants as well as other issues other than strictly water quality concerns. A strong stakeholder group already exists and has been meeting regularly.

BASIN PLANNING

A priority basin planning issue is to implement the Basin Plan's ammonia objective. Some dischargers believe the objective may be too stringent for certain waters and that site-specific objectives may be justified while some resource agencies and many environmental groups support the current objective. The regional board objective for ammonia allows for studies to be performed to explore site-specific objectives, if appropriate. Dischargers which must meet this objective by June 2002, and should be well on their way to compliance by this point. This issue is especially relevant in the LA River since ammonia is already known to be a pollutant of concern.

Determination of appropriate nutrient (nitrate and phosphate) objectives for protection of aquatic life is also a remaining issue.

Basin Planning activities will include continued participation in both internal and external watershed planning efforts and further incorporation of watershed management and principles and watershed-specific priorities into future updates of the Basin Plan, where appropriate.

Review and comment on EIRs for the highest priority projects within the watershed will continue; however, there is currently no funding for this program.

WETLANDS PROTECTION AND MANAGEMENT

The San Gabriel and Lower Los Angeles Rivers and Mountains Conservancy is an independent State agency within the Resources Agency. State law established the Conservancy in 1999. Its jurisdiction includes the San Gabriel River and its tributaries, the Lower Los Angeles River and its tributaries, and the San Gabriel Mountains. Puente Hills, and San Jose Hills. It was established to preserve open space and habitats in order to provide for low-impact recreation and educational uses, wildlife and habitat restoration and protection, and watershed improvements within its jurisdiction. It is currently involved with beginning work on an open space plan for the area. Propositions 12 and 13 have directed funds to the Conservancy. The Santa Monica Mountains Conservancy is a state agency created by the Legislature in 1979 charged with primary responsibility for acquiring property with statewide and regional significance, and making those properties accessible to the general public. The Conservancy manages parkland in the Santa Monica Mountains, Santa Susana Mountains, the Simi Hills, the Santa Clarita Woodlands, the Whittier-Puente Hills, the Sierra Pelona, the Los Angeles River Greenway, the Rio Hondo, the Verdugo Mountains, the San Gabriel Mountains, and the San Rafael Hills. The agency's goals are to: 1) implement the Santa Monica Mountains Comprehensive Plan, 2) implement the Rim of the Valley Trails Corridor Master Plan, 3) implement the Los Angeles County River Master Plan, 4) further cooperation with local governments in the region to secure open space and parkland, and 5) expand education, public

access, and resource stewardship components in a manner that best serves the public, protects habitat, and provides recreational opportunities.

Near-term Activities

Specific resource needs are described in the Region-wide Section of this document.

Following renewal of the watershed's permits, core regulatory activities will focus on permit compliance, monitoring report review, and enforcement as needed. Members of the watershed team will be involved with periodic updates of the State of the Watershed Report. Additionally, there will be on-going interaction with stakeholders and followup on goals established during the permit renewal phase. Pending completion of a final TMDL we will pursue agreement on pollutant loadings that can be implemented through future NPDES permits, the municipal stormwater permit, and through other nonpoint source control measures.

A preliminary review of resources for core regulatory activities against cost factors has determined that our region is seriously underfunded for our baseline program. We will be seeking more funding for our core program activities.

We are making significant progress toward identifying and assessing problems in the upper watershed and involving stakeholders. Also by this time, we shall have completed intensive sampling and modeling of ammonia loads in the main channels in the Los Angeles River watershed for a TMDL which will give us a headstart on assessing and allocating pollutant loadings from both point and nonpoint sources.

Monitoring and special studies: Quarterly water quality assessment monitoring at a minimum of 14 stations along the LA River Watershed (particularly its tributaries) with sampling for general minerals, nutrients, metals, coliform, pesticides, radioactivity, volatile organics, and other organics, as well as gathering baseline information on trash, is proposed. **The annual cost of this monitoring is estimated at $113,400.** This monitoring will be in addition to monitoring of the main channel conducted by dischargers. **Additionally, a number of special studies will be needed which are expected to cost a total of $108,000.** TMDLs that need to be developed include:

1) Ammonia: The first phase of the TMDL was completed in FY97/98. Currently the model is at the calibration stages for dry weather simulations. Historical data as been gathered from the Regional Board and various other agencies to calibrate the model. Wet season calibration for the model will occur in the first quarter of 2001. Sampling efforts are currently underway to gather data for the wet season calibration effort. Investigation of nitrogen uptake by algae and algal growth rates and river nitrification rates are currently underway, and will be available for use in the model simulations.

2) Coliform: A first review indicates that the coliform contributions from POTWs is not significant. To give us a rough estimate of the sources of coliform, special studies are needed to determine the type of coliform present in the river: from human waste, horses, wildlife, or other. **These studies are estimated to cost $75,000.** Once the sources have been identified, a load allocation may be calculated, and BMPs or other solutions may be proposed to achieve such allocations.

3) Metals: To develop a first phase TMDL for metals, more monitoring is needed. However, staff resources should be dedicated to data assessment and analysis, and to prepare an implementation strategy.

4) Trash: The municipal stormwater permit co-permittees in coordination with the Regional Board will be conducting a study to determine the threshold level for beneficial use impairment as part of this TMDL effort. A draft TMDL is out for review and is scheduled for adoption at a January 25, 2000, Board meeting.

5) Pesticides: A section of the river has been listed impaired due to pesticides found in fish or shellfish. POTWs are currently implementing effluent limitations to control pesticide loadings. Nonpoint source contributions need to be estimated. If toxicity money is available, **$100,000 would allow us to pinpoint specific areas and seasons where we have problems.**

6) Volatile organic compounds: A section of the river has been listed impaired due to VOCs from ground water. As efforts to clean up the ground water in the San Fernando Valley are implemented, staff expects that contamination from VOCs will decrease. Monitoring of VOCs is needed to determine if this assumption is correct.

Our efforts to involve stakeholders also shall include exploration of funding options (especially for implementation of nonpoint source measures) and continuation of other outreach activities, such as presentations, meetings, and participation in environmental events.

Also, efforts are underway to address problems with urban runoff (through the storm water municipal and industrial NPDES permits) and septic systems. Future activities should focus on horse corrals and golf courses, parks or other green areas. Activities proposed include outreach to implement BMPs. Tier I activities also should include monitoring and assessment to determine if Tier 2 or Tier 3 activities are needed to ensure successful implementation of BMPs and reduction of nitrogen and coliform loadings.

We will maintain involvement with stakeholder activities and pursue funding options, especially those involving implementation of nonpoint source measures (coordinate 205(j) and 319(h) activities) as well as other outreach activities such as speeches, meetings, and participation in environmental events. As resources permit, we will also work with stakeholders to implement provisions of the Coastal Zone Act Reauthorization Amendments.

Potential Long-term Activities

In the long-term, Basin Planning activities will include continued participation in both internal and external watershed planning efforts and further incorporation of watershed management and principles and watershed-specific priorities (such as more refined regional procedures for conducting use attainability analyses and site-specific objective development) into the next update of the Basin Plan. More detailed analysis regarding certain beneficial uses needs to be done (species inhabiting/using the river, potential for aquatic life in the river, future water supply needs/diversions, ground water recharge areas). We will continue to pursue funding for Basin Planning programs. Comments on watershed issues in CEQA documents (for the highest priority projects) will continue to be prepared; however, there is currently no funding for this program.

Other issues include:

- Balancing maintenance of habitat in the river with flood control needs
- Evaluation of areas in the river for restoration purposes
- Evaluating critical habitat areas
- Evaluating the most protective (while providing flood control) long-term plans for vegetation/sediment removal under the 401 certification program
- Evaluate and implement low flow diversions where appropriate
- Assist in greenway developments along the river
- Evaluate estuarine habitats and water quality
- Implementing biological monitoring

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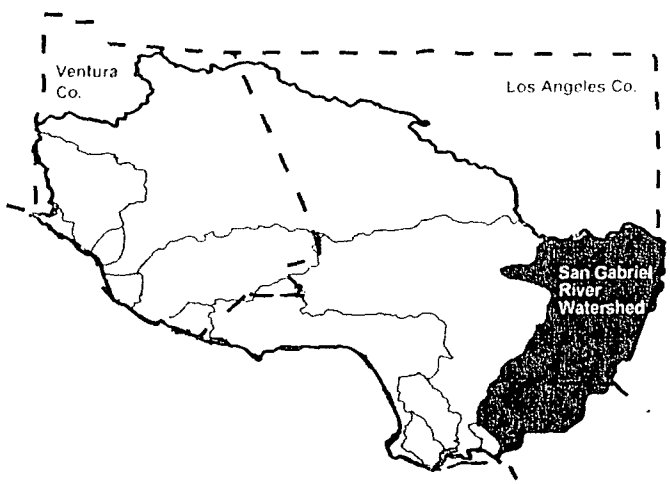
2.6 SAN GABRIEL RIVER WATERSHED

This watershed will be targeted for permit renewal purposes in FY05/06.

Overview of Watershed



Size of watershed: 689 sq. mi.

The San Gabriel River receives drainage from a large area of eastern Los Angeles County; its headwaters originate in the San Gabriel Mountains. The watershed consists of extensive areas of undisturbed riparian and woodland habitats in its upper reaches. Much of the watershed of the West Fork and East Fork of the river is set aside as a wilderness area; other areas in the upper watershed are subject to heavy recreational use. The upper watershed also contains a series of flood control dams. Further downstream, towards the middle of the watershed, are large spreading grounds utilized for groundwater recharge. The watershed is hydraulically connected to the Los Angeles River through the Whittier Narrows Reservoir (normally only during high storm flows). The lower part of the river flows through a concrete-lined channel in a heavily urbanized portion of the county before becoming an soft bottom channel once again near the ocean in the city of Long Beach. Large electrical power poles line the river along the channelized portion and nurseries, small stable areas, and a large poultry farm are located in these areas.

Beneficial Uses designated in the watershed:

Estuary	*Above Estuary*
Contact & noncontact water recreation	Contact & noncontact water recreation
Industrial service supply	Industrial service supply
Protection of rare & endangered species	Protection of rare & endangered species
Wildlife habitat	Wildlife habitat
Spawning	Spawning
Marine habitat	Warm- & coldwater habitat
Estuarine habitat	Municipal water supply
Navigation	Groundwater recharge
Commercial & sportfishing	Industrial process supply
Migratory	Agricultural supply

Water Quality Problems and Issues

Pollutants from dense clusters of residential and commercial activities have impaired water quality in the middle and lower watershed. Tertiary effluent from several sewage treatment plants enters the river in its middle reaches (which is partially channelized) while two power generating stations discharge cooling water into the river's estuary. The watershed is also covered under two municipal storm water NPDES permits. Several landfills are also located in the watershed.

Several reservoirs, which exist primarily for flood control purposes, occur in the upper part of the watershed. Frequent removal of accumulated sediments is necessary to maintain the flood control capacity of these reservoirs. Some of the removal methods previously used have had water quality impacts. Continued need for such maintenance could cause longer-term impacts. A study is currently underway to better assess impacts associated with the sluicing projects.

Significant Issues:

- Sluicing of reservoirs
- Protection of groundwater recharge areas
- Trash in upper watershed
- Mining/stream, modifications
- Ambient toxicity
- Urban and storm water runoff quality

Permitted discharges:

- Nine major NPDES dischargers (five POTWs)
- 23 minor permits
- 2 municipal storm water permits
- 65 discharges covered under general permits
- 549 dischargers covered under an industrial storm water permit
- 175 dischargers covered under a construction storm water permit

Types of permitted wastes discharged into the San Gabriel River Watershed:

Nature of Waste *Prior* to Treatment or Disposal	# of Permits	Types of Permits
Nonhazardous (designated) contaminated groundwater	3	General
Nonhazardous (designated) contact cooling water	1 2	Major Minor
Nonhazardous (designated) domestic sewage & industrial waste	5	Major
Nonhazardous (designated) wastes from dewatering, rec. lake overflow, swimming pool wastes, water ride wastewater, or groundwater seepage	4 37	Minor General
Nonhazardous (designated) noncontact cooling water	1 1	Minor General
Nonhazardous (designated) process waste (produced as part of industrial/manufacturing process)	1 2	Major Minor
Nonhazardous (designated) stormwater runoff	1 9 1	Major Minor General
Nonhazardous (designated) washwater waste (photo reuse washwater, vegetable washwater)	1	Minor
Hazardous contaminated groundwater	3 7	Minor General
Inert wastes from dewatering, rec. lake overflow, swimming pool wastes, water ride wastewater, or groundwater seepage)	1 16	Minor General

Hazardous wastes are those influent or solid wastes that contain toxic, corrosive, ignitable, or reactive substances (prior to treatment or disposal) managed according to applicable Department of Health Services standards
Designated wastes are those influent or solid wastes that contain **nonhazardous** wastes (prior to treatment or disposal) that pose a significant threat to water quality because of their high concentrations
Nonhazardous wastes are those influent or solid wastes that do not contain soluble pollutants or organic wastes (prior to treatment or disposal) and have little adverse impact on water quality
Inert wastes are those influent or solid wastes that do not contain soluble pollutants or organic wastes (prior to treatment or disposal) and have little adverse impact on water quality

Major discharges are POTWs with a yearly average flow of over 0.5 MGD or an industrial source with a yearly average flow of over 0.1 MGD and those with lesser flows but with acute or potential adverse environmental impacts.

Minor discharges are all other discharges that are not categorized as a Major. Minor discharges may be covered by a general permit, which are issued administratively, for those that meet the conditions specified by the particular general permit.

A majority of the 99 NPDES permittees in the watershed discharge directly to the San Gabriel River (38). Nineteen discharge to Coyote Creek and twelve discharge to San Jose Creek.

Of the 549 dischargers enrolled under the general industrial storm water permit in the watershed, the largest numbers fall in the *Fabricated Metal Products, Except Machinery and Transportation Equipment*; *Chemicals and Allied Products*; *Motor Freight Transportation and Warehousing*; and *Motor Vehicle Parts, Used* categories.

There are 175 construction sites enrolled under the construction storm water permit. The sites are fairly evenly divided between residential and commercial and a similar number of sites are found in both the upper and lower watershed.

IMPAIRMENTS: The upper reaches of the river (in the Angeles National Forest) are heavily used for recreational purposes and have been impacted from trash, debris, and habitat destruction. Various reaches of the river are on the 1998 303(d) list due to nitrogen and its effects, trash, PCBs and pesticides, metals, and coliform. The table below gives examples of typical data ranges which led to the listings. See Table 7 in the Appendix for additional details on currently scheduled TMDLs as well as specific pollutants included in the TMDLs.

Impairments	Applicable Objective/Criteria	Typical Data Ranges Resulting in Impairment	303(d) Listed Waters/Reaches
ammonia	Basin Plan narrative objective Basin Plan numeric objective: varies depending on pH and temperature but the general range is 0.53 - 2.7 mg/l of total ammonia (at average pH and temp.) in waters designated as WARM to protect against chronic toxicity and 2.3-28.0 mg/l to protect against acute toxicity	ND - 21.1 mg/l (mean of 10.1±4.1)	San Gabriel River Reach 2 (Firestone to Whittier Narrows Dam) San Gabriel River Reach 1 (Estuary to Firestone) San Jose Creek Reach 2 (Temple to I-10 at White Ave) San Jose Creek Reach 1 (SG confluence to Temple St.) Coyote Creek Legg Lake El Dorado Lakes
toxicity	Basin Plan narrative objective	0 – 100% survival	San Gabriel River Reach 3 (Whittier Narrows to Ramona) San Gabriel River Reach 1 (Estuary to Firestone) Coyote Creek Walnut Creek
algae	Basin Plan narrative objective		San Gabriel River Reach 1 (Estuary to Firestone) San Jose Creek Reach 1 (SG confluence to Temple St.) San Jose Creek Reach 2 (Temple to I-10 at White Ave) Coyote Creek El Dorado Lakes
Eutrophication	Basin Plan narrative objective		El Dorado Lakes
pH	Basin Plan numeric objective: 6.5 - 8.5 pH units	6.9 - 9.4 pH units (mean of 8.5±0.6)	Walnut Creek El Dorado Lakes Legg Lake Santa Fe Dam Park Lake
odors	Basin Plan narrative objective		Legg Lake
low DO, organic enrichment	Basin Plan narrative objective		Puddingstone Reservoir Crystal Lake
	Basin Plan numeric objective: annual mean greater than 7.0 mg/l no single sample less than 5.0 mg/l	0.1 - 14.9 mg/l (mean of 4.3±3.5)	
trash	Basin Plan narrative objective		San Gabriel River East Fork Legg Lake
Lead	USEPA water quality criteria: varies based on hardness but typically 3.2 - 25 ug/l	100 ug/l (maximum)	San Gabriel River Reach 2 (Firestone to Whittier Narrows Dam) Santa Fe Dam Park Lake El Dorado Lakes Legg Lake
Arsenic (tissue)	State Board numeric objective (tissue): Max. Tissue Residue Level 200 ng/g	240 - 300 ng/g (tissue)	San Gabriel River Estuary
Copper	USEPA water quality criteria varies based on hardness but typically 12 - 47 ug/l	90 ug/l (maximum)	Legg Lake El Dorado Lakes Santa Fe Dam Park Lake
Silver	USEPA water quality criteria varies based on hardness but typically 4.1 - 65 ug/l	30 ug/l (maximum)	Coyote Creek
Mercury (tissue)	NAS guidelines (tissue): 500 ng/g	510 ng/g (tissue)	Puddingstone Reservoir El Dorado Lakes

Impairments	Applicable Objective/Criteria	Typical Data Ranges Resulting in Impairment	303(d) Listed Waters/Reaches
coliform	Basin Plan numeric objective: fecal coliform not to exceed log mean of 200 mpn/100ml in 30-day period and not more than 10% of samples exceed 400 MPN/100ml	ND - 240000 MPN/100ml	San Jose Creek Reach 2 (Temple to I-10 at White Ave) San Jose Creek Reach 1 (SG confluence to Temple St.) San Gabriel River Reach 2 (Firestone to Whittier Narrows Dam) San Gabriel River Reach 1 (Estuary to Firestone) Coyote Creek
DDT	State Board numeric objective (tissue): Max. Tissue Residue Level 32.0 ng/g	25 - 36 ng/g (tissue)	Puddingstone Reservoir
PCBs	State Board numeric objective (tissue): Max. Tissue Residue Level 2.2 ng/g	54 - 65 ng/g (tissue)	Puddingstone Reservoir
chlordane	State Board numeric objective (tissue): Max. Tissue Residue Level 1.1 ng/g	16.1 - 31.7 ng/g (tissue)	Puddingstone Reservoir
abnormal fish histology	Basin Plan narrative objective		Coyote Creek San Gabriel River Reach 1 (Estuary to Firestone) San Gabriel River Estuary

CURRENTLY SCHEDULED TMDLS:

Type of TMDL	Listed Waters/Reaches in TMDL	Year Scheduled For Completion (FY)
nitrogen and its effects	San Gabriel River Reaches 1, 2, 3 San Jose Creek Reaches 1 and 2 Coyote Creek Walnut Creek	02/03
Nitrogen and its effects	El Dorado Lakes Puddingstone Reservoir Legg Lake Santa Fe Dam Lake Crystal Lake	03/04
coliform	San Gabriel River Reaches 1 and 2 San Jose Creek Reaches 1 and 2 Coyote Creek	02/03
metals	San Gabriel River Reach 2 San Gabriel River Estuary Coyote Creek	04/05

We see a need for an additional 1.4 PYs as well as $200,000 in contract dollars for FY00/01 TMDL work conducted in this watershed.

Stakeholder Groups

Los Angeles/San Gabriel Rivers Watershed Council: This group was formed in 1995 following a large watershed conference held in the area which served as a springboard for other efforts. The Council has a board of directors and became incorporated as a nonprofit organization in 1996. The group is tracking watershed activities, but has primarily focused on flood control issues in the Los Angeles River as well as opportunities to create greenbelts and restore habitat. The Council's goal is to help facilitate a process to preserve, restore, and enhance all aspects of the two watersheds. There has been interest recently to convene a subcommittee to address water quality issues in more detail. More information on this group may be found on their website http://www.lasgriverswatershed.org.

Friends of the San Gabriel River

The Friends of the San Gabriel River is a non-profit organization founded in 1999 that advocates water quality improvements, restoration of habitat, and increased access to the river

for the public. More information on this group may be found on their website at http://www.sangabrielriver.org/.

Past Significant Activities

CORE REGULATORY

The Los Angeles County Storm Water Permit (which the San Gabriel River Watershed falls within) permit was renewed in July 1996. Individual NPDES permits in this watershed were renewed in FY99/00.

WATERSHED MANAGEMENT

An in-house team of staff completed a "State of the Watershed Report" for the San Gabriel River. This report is available by request as hardcopy or electronic files.

MONITORING AND ASSESSMENT

As part of a larger-scale investigation which concluded in 1996, ambient toxicity (as well as fish histopathology) was evaluated at a number of locations in the river which lead to additional 303(d) listings for impairments. The East Fork Trash TMDL (1999) documented the main sources of trash in the upper watershed.

Current Activities

The following is a summary of current regional board activities in the San Gabriel River Watershed which are expected to continue as part of the Watershed Management Initiative on a watershed basis.

CORE REGULATORY

Continuing core regulatory activities that will be integrated into the watershed management approach include (but are not limited to) necessary renewal/revision of NPDES permits. There are nine major dischargers, 25 significant or minor dischargers under individual permits, as well as 39 dischargers currently covered under general permits. Compliance inspections, review of monitoring reports, response to complaints, and enforcement actions relative to the watershed's NPDES permits will continue. All of the County Sanitation Districts' permits for their inland POTWs (which comprise most of the flow in the middle to lower river) are being renewed this year.

The San Gabriel River Watershed falls within Los Angeles County which was issued a renewed municipal storm water permit in 1996. There are 87 co-permittees covered under this permit including 85 cities, the County of Los Angeles, and the California Department of Transportation (Caltrans). Work on the permit will involve review of monitoring reports, evaluation of the storm water program's effectiveness, coordination with other watershed efforts, and modification of the permit as necessary. During 1997/98, discharger responsibilities under the permit concentrated on the evaluation of the five BMP model programs required in the 1996 permit: Illicit Connection/Illicit Discharges, Development Construction, Development Planning, Public Agency Activities, and Five-Year Public Education Strategy (including industrial/commercial site

visits). The watershed also falls partly within the City of Long Beach which was issued a municipal storm water permit in 1999.
An important requirement of both storm water municipal permits is implementation of the Standard Urban Storm Water Mitigation Plans (SUSMPs) and Numerical Design Standards for Best Management Practices (BMPs) which were adopted in 2000. The SUSMP is designed to ensure that storm water pollution is addressed in one of the most effective ways possible, i.e., by incorporating BMPs in the design phase of new development and redevelopment. It provides for numerical design standards to ensure that storm water runoff is managed for water quality concerns in addition to flood protection and that pollutants carried by storm water are retained and not delivered to waterways.

The numerical design standard is that post-construction treatment BMPs be designed to mitigate (infiltrate or treat) storm water runoff from the first ¾ inch of rainfall, prior to its discharge to a storm water conveyance system. Other standards also apply; additional information on the SUSMP may be found on the Regional Board website http://www.swrcb.ca.gov/~rwqcb4.

Due to limited resources, only the basic regulatory activities are performed: review of dischargers' monitoring reports, minimum necessary inspections and sampling, issuance/ renewal of permits, levels 1 and 2 enforcement actions (noncompliance and violation notification), case handling, and answering inquiries from the public.

NONPOINT SOURCE PROGRAM

The Regional Board encourages pollution prevention and source control; the 205(j), Prop 13, SRF, and 319(h) grants are tools to provide funds for these types of projects. For FY00/01, we have listed as a priority for 319(h) grant funding activities (see Table 3) which demonstrate effective ways to reduce loadings of trash, nutrients, and coliform through pilot projects which implement trash reduction, management of horse corral runoff, golf course irrigation water runoff, urban runoff, or implementation of septic correction measures. High priority projects also include those involving restoration of aquatic and riparian habitats, as well as, enhancement of recreational uses.

MONITORING AND ASSESSMENT

In support of TMDL work, as well to obtain other needed information, we are requesting funding in order to start nitrogen, coliform, and metals TMDLs which are currently scheduled. We also plan on conducting ambient toxicity monitoring work and noted the need for a tidal prism mixing study to resolve issues concerning the fate of freshwater effluent in the estuary.

BASIN PLANNING

Basin Planning activities will include continued participation in both internal and external watershed planning efforts and further incorporation of watershed management and principles and watershed-specific priorities into future updates of the Basin Plan, where appropriate.

WETLANDS PROTECTION AND MANAGEMENT

The Southern California Wetlands Recovery Project considers the El Dorado Wetlands Restoration Plan a high priority for FY00/01 or future funding.

The San Gabriel and Lower Los Angeles Rivers and Mountains Conservancy is an independent State agency within the Resources Agency. State law established the Conservancy in 1999. Its jurisdiction includes the San Gabriel River and its tributaries, the Lower Los Angeles River and its tributaries, and the San Gabriel Mountains. Puente Hills, and San Jose Hills. It was established to preserve open space and habitats in order to provide for low-impact recreation and educational uses, wildlife and habitat restoration and protection, and watershed improvements within its jurisdiction. It is currently involved with beginning work on an open space plan for the area. Propositions 12 and 13 have directed funds to the Conservancy.

The Santa Monica Mountains Conservancy is a state agency created by the Legislature in 1979 charged with primary responsibility for acquiring property with statewide and regional significance, and making those properties accessible to the general public. The Conservancy manages parkland in the Santa Monica Mountains, Santa Susana Mountains, the Simi Hills, the Santa Clarita Woodlands, the Whittier-Puente Hills, the Sierra Pelona, the Los Angeles River Greenway, the Rio Hondo, the Verdugo Mountains, the San Gabriel Mountains, and the San Rafael Hills. The agency's goals are to: 1) implement the Santa Monica Mountains Comprehensive Plan, 2) implement the Rim of the Valley Trails Corridor Master Plan, 3) implement the Los Angeles County River Master Plan, 4) further cooperation with local governments in the region to secure open space and parkland, and 5) expand education, public access, and resource stewardship components in a manner that best serves the public, protects habitat, and provides recreational opportunities.

Near-term Activities

Specific resource needs are described in the Region-wide Section of this document.

A preliminary review of resources for core regulatory activities against cost factors has determined that our region is seriously underfunded for our baseline program. We will be seeking more funding for our core program activities.

We will maintain involvement with stakeholder activities and pursue funding options, especially those involving implementation of nonpoint source measures (coordinate 205(j), Prop. 13, SRF, and 319(h) activities) as well as other outreach activities such as speeches, meetings, and participation in environmental events. As resources permit, we will also work with stakeholders to implement provisions of the Coastal Zone Act Reauthorization Amendments.

Potential Long-term Activities

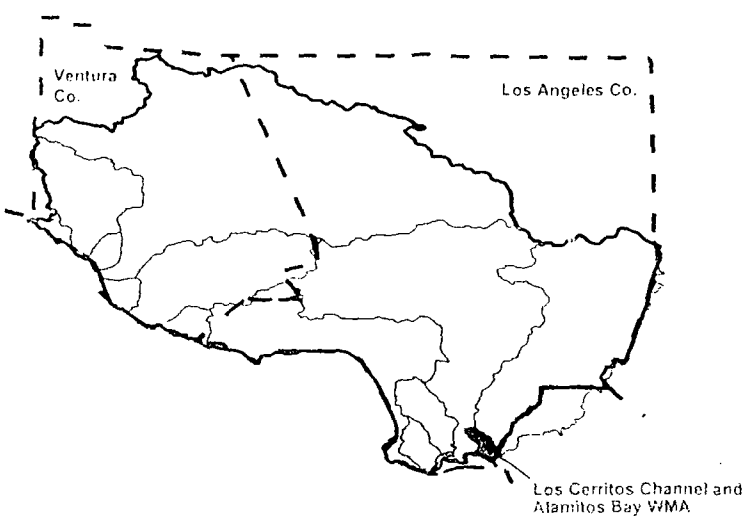
- Development of coordinated watershed monitoring program
- Hydrologic study of the estuary to evaluate mixing dynamics and effects on water quality and beneficial uses
- Evaluation of fish tissue from fish in the lower river and estuary
- Evaluation of toxicity impacts in the estuary
- Evaluation of habitats in the middle/lower river
- Evaluation of impacts from reservoir cleaning on water quality, particularly fisheries-related

- Evaluation of mining on instream beneficial uses
- Evaluation of impacts of reclaimed water on river/groundwater
- Evaluation of success of trash TMDL efforts in upper river
- Evaluation of impacts from industrial stormwater in the watershed
- Consideration of TMDL-related issues
- Implementation of biological monitoring

2.7 LOS CERRITOS CHANNEL AND ALAMITOS BAY WMA

This watershed will be targeted for permit renewal purposes in FY05/06.

Overview of WMA



Los Cerritos Channel, Tidal Prism, and Wetlands: The Los Cerritos Channel is concrete-lined above the tidal prism and drains a relatively small area of east Long Beach, albeit a densely urbanized one. The channel's tidal prism starts at Anaheim Road and connects with Alamitos Bay through the Marine Stadium; the wetlands connects to the Channel a short distance from the lower end of the Channel. The wetlands, and portion of the channel near the wetlands, is an overwintering site for a great diversity of birds (up to 50 species) despite its small size. An endangered bird species, the Belding's Savannah Sparrow, may nest there and an area adjacent to the wetlands is a historic least tern colony site. One small marina is located in the channel which is also used by rowing teams and is a popular fishing area.

Alamitos Bay: Alamitos Bay is composed of the Marine Stadium, a recreation facility built in 1932 and used for boating, water skiing, and jet skiing; Long Beach Marina, which contains five smaller basins for recreational craft and a boatyard; a variety of public and private berths; and the Bay proper which includes several small canals, a bathing beach, and several popular clamming areas. A small bathing lagoon, Colorado Lagoon in Long Beach, has a tidal connection with the Bay and a small wildlife pond, Sims Pond, also has a tidal connection. The latter is heavily used by overwintering migratory birds.

Beneficial uses designated in the watershed:

Estuary (marina, wetlands, bay)	*Above Estuary*
Contact & noncontact water recreation	Wildlife habitat
Industrial service supply	
Navigation	*Intermittent uses:*
Commercial & sportfishing	Noncontact water recreation
Estuarine habitat	Warmwater habitat
Marine habitat	
Wildlife habitat	
Preservation of rare & endangered species	
Migration of aquatic organisms	
Spawning habitat	
Shellfish harvesting	
Wetlands habitat	

Significant Issues:

- Loss of wetlands habitat in Los Cerritos area
- Impacts from antifouling paint in marinas
- Urban and storm water runoff

Water Quality Problems and Issues

A considerable amount of leaching of boat paint likely occurs in the Bay, particularly in the marina. Nonpoint source runoff from storm drains are is also a likely source of problems.

Types of permitted wastes discharged into the Los Cerritos Channel WMA:

Nature of Waste *Prior* to Treatment or Disposal	# of Permits	Types of Permits
Nonhazardous (designated) filter backwash brine waters	1	Minor
Nonhazardous (designated) wastes from dewatering, rec. lake overflow, swimming pool wastes, water ride wastewater, or groundwater seepage	2	General
Nonhazardous (designated) stormwater runoff	2 1	Minor General
Hazardous contaminated groundwater	1 1	Minor General
Inert wastes from dewatering, rec. lake overflow, swimming pool wastes, water ride wastewater, or groundwater seepage	3	General

Hazardous wastes are those influent or solid wastes that contain toxic, corrosive, ignitable, or reactive substances (prior to treatment or disposal) managed according to applicable Department of Health Services standards
Designated wastes are those influent or solid wastes that contain **nonhazardous** wastes (prior to treatment or disposal) that pose a significant threat to water quality because of their high concentrations
Nonhazardous wastes are those influent or solid wastes that do not contain soluble pollutants or organic wastes (prior to treatment or disposal) and have little adverse impact on water quality
Inert wastes are those influent or solid wastes that do not contain soluble pollutants or organic wastes (prior to treatment or disposal) and have little adverse impact on water quality

Major discharges are POTWs with a yearly average flow of over 0.5 MGD or an industrial source with a yearly average flow of over 0.1 MGD and those with lesser flows but with acute or potential adverse environmental impacts.

Minor discharges are all other discharges that are not categorized as a Major. Minor discharges may be covered by a general permit, which are issued administratively, for those that meet the conditions specified by the particular general permit.

IMPAIRMENTS: Beneficial uses in the wetlands area are considered fully supported while those in the channel are not. Beneficial uses in the Bay are, for the most part, considered fully supported although Long Beach Marina is considered a site of concern due to elevated sediment concentrations of metals. The table below gives examples of typical data ranges which led to the listings. See Table 7 in the Appendix for additional details on currently scheduled TMDLs as well as specific pollutants included in the TMDLs.

Impairments	Applicable Objective/Criteria	Typical Data Ranges Resulting in Impairment	303(d) Listed Waters/Reaches
Ammonia	Basin Plan narrative objective		Los Cerritos Channel
	Basin Plan numeric objective: varies depending on pH and temperature but the general range is 0.53 - 2.7 mg/l of total ammonia (at average pH and temp.) in waters designated as WARM to protect against chronic toxicity and 2.3-28.0 mg/l to protect against acute toxicity	ND - 2.19 mg/l (mean of 0.34 ± 0.41)	
Copper (in tissue)	Basin Plan narrative objective		Los Cerritos Channel
Lead (in sediment)	Basin Plan narrative objective	510 ug/g (sediment)	Colorado Lagoon Los Cerritos Channel

Impairments	Applicable Objective/Criteria	Typical Data Ranges Resulting in Impairment	303(d) Listed Waters/Reaches
Zinc (in sediment)	Basin Plan narrative objective	690 ug/g (sediment)	Colorado Lagoon Los Cerritos Channel
chlordane (in tissue)	State Board numeric objective (tissue): Max. Tissue Residue Level 1.1 ng/g	64.9 ng/g (tissue)	Colorado Lagoon
DDT	State Board numeric objective (tissue): Max. Tissue Residue Level 32.0 ng/g	59.9 ng/g (tissue)	Colorado Lagoon
PCBs	State Board numeric objective (tissue): Max. Tissue Residue Level 2.2 ng/g	42.0 ng/g (tissue)	Colorado Lagoon
dieldrin	State Board numeric objective (tissue): Max. Tissue Residue Level 0.65 ng/g	18.2 ng/g (tissue)	Colorado Lagoon
sediment toxicity	Basin Plan narrative objective		Colorado Lagoon
coliform	Basin Plan numeric objective: Inland: fecal coliform not to exceed log mean of 200 mpn/100ml in 30-day period and not more than 10% of samples exceed 400 MPN/100ml Beaches: total coliform not to exceed 1,000 MPN/100ml in more than 20% of samples in 30 days and not more than 10,000 MPN/100ml at any time	2 - 170000 MPN/100ml	Los Cerritos Channel
PAHs	Basin Plan narrative objective	10,000 ng/g (sediment)	Colorado Lagoon

CURRENTLY SCHEDULED TMDLS:

Type of TMDL	Listed Waters/Reaches in TMDL	Year Scheduled For Completion (FY)
coliform	Los Cerritos Channel	04/05
ammonia	Los Cerritos Channel	04/05
metals	Los Cerritos Channel Colorado Lagoon	04/05
PAHs	Colorado Lagoon	04/05
Historic pesticides	Colorado Lagoon	04/05

Stakeholder Group

It is anticipated the Los Angeles/San Gabriel Watershed Council and the Friends of the San Gabriel River will function, at least initially, as this WMA's stakeholder groups. The Los Cerritos WMA is located between the Los Angeles and San Gabriel Rivers and drains to the same general area as the San Gabriel River. There is also a minor hydraulic connection between the lower San Gabriel River and Los Cerritos Channel due to the location of a power plant intake with the Long Beach Marina; the discharge from this facility is into the San Gabriel River estuary. Another potential stakeholder group is the Los Cerritos Wetlands Task Force http://www.loscerritos.org/.

Current Activities

The following is a summary of current regional board activities in the Los Cerritos Channel and Alamitos Bay Watershed which are expected to continue as part of the Watershed Management Initiative on a watershed basis. Please see the San Gabriel River Watershed Section for combined information on existing and needed resources for these two watersheds.

CORE REGULATORY

Continuing core regulatory activities that will be integrated into the watershed management approach include (but are not limited to) necessary renewal/revision of NPDES permits. There eight significant or minor dischargers under individual permits as well as seven dischargers currently covered under general permits. Compliance inspections, review of monitoring reports, response to complaints, and enforcement actions relative to the watershed's NPDES permits will continue.

The Los Cerritos Channel and Alamitos Bay WMA falls partly within Los Angeles County which was issued a renewed municipal storm water permit in 1996. There are 87 co-permittees covered under this permit including 85 cities, the County of Los Angeles, and the California Department of Transportation (Caltrans). Work on the permit will involve review of monitoring reports, evaluation of the storm water program's effectiveness, coordination with other watershed efforts, and modification of the permit as necessary. During 1997/98, discharger responsibilities under the permit concentrated on the evaluation of the five BMP model programs required in the 1996 permit: Illicit Connection/Illicit Discharges, Development Construction, Development Planning, Public Agency Activities, and Five-Year Public Education Strategy (including industrial/commercial site visits). The watershed falls mostly within the City of Long Beach which was issued a municipal storm water permit in 1999.

An important requirement of both storm water municipal permits is implementation of the Standard Urban Storm Water Mitigation Plans (SUSMPs) and Numerical Design Standards for Best Management Practices (BMPs) which were adopted in 2000. The SUSMP is designed to ensure that storm water pollution is addressed in one of the most effective ways possible, i.e., by incorporating BMPs in the design phase of new development and redevelopment. It provides for numerical design standards to ensure that storm water runoff is managed for water quality concerns in addition to flood protection and that pollutants carried by storm water are retained and not delivered to waterways.

The numerical design standard is that post-construction treatment BMPs be designed to mitigate (infiltrates or treat) storm water runoff from the first ¾ inch of rainfall, prior to its discharge to a storm water conveyance system. Other standards also apply; additional information on the SUSMP may be found on the Regional Board website http://www.swrcb.ca.gov/~rwqcb4.

NONPOINT SOURCE PROGRAM

The Regional Board encourages pollution prevention and source control; the 205(j) and 319(h) grants are tools to provide funds for these types of projects. For FY00/01, we have listed as a

priority for 319(h) grant funding activities (see Table 3) which restore aquatic and riparian habitats and those that enhance recreational uses.

BASIN PLANNING

Basin Planning activities will include continued participation in both internal and external watershed planning efforts and further incorporation of watershed management and principles and watershed-specific priorities into future updates of the Basin Plan, where appropriate.

WETLANDS PROTECTION AND MANAGEMENT

The Southern California Wetlands Recovery Project has identified acquisition of an option on the 185-acre Bixby and100-acre Hellman Ranch parcels (which are in the area of the wetlands) priority projects for FY00/01 or future funding.

Near-term Activities

Specific resource needs are described in the Region-wide Section of this document.

A preliminary review of resources for core regulatory activities against cost factors has determined that our region is seriously underfunded for our baseline program. We will be seeking more funding for our core program activities and TMDLs in this area.

We will maintain involvement with stakeholder activities and pursue funding options, especially those involving implementation of nonpoint source measures (coordinate 205(j) and 319(h) activities) as well as other outreach activities such as speeches, meetings, and participation in environmental events. As resources permit, we will also work with stakeholders to implement provisions of the Coastal Zone Act Reauthorization Amendments.

Potential Long-term Activities

- Evaluation of existing conditions/beneficial uses
- Consideration of TMDL-related issues
- Implementation of biological monitoring

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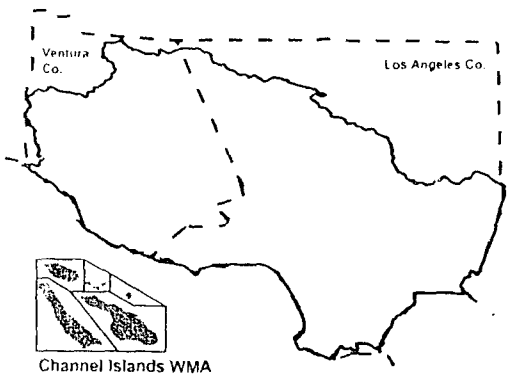
2.8 THE CHANNEL ISLANDS WMA

This watershed will be targeted for permit renewal purposes in FY05/06.

Overview of WMA



Channel Islands WMA

The Channel Islands within the Region's boundaries are: Anacapa, San Nicolas, Santa Barbara, Santa Catalina, and San Clemente Islands. Anacapa and Santa Barbara Islands are part of the Channel Islands National Park. The waters within six nautical miles of Anacapa and Santa Barbara Islands are designated a national marine sanctuary. The ocean waters adjacent to the islands (not the entire circumference of Santa Catalina however) were designated Areas of Special Biological Significance by the state of California. The west side of San Nicolas supports a large gull rookery and elephant seal breeding area. The U.S. Navy has facilities on San Nicolas (and a desalination plant) and San Clemente Islands with a small package treatment plant on the latter. The city of Avalon is located on Santa Catalina Island and also has a small treatment plant.

Beneficial Uses of Island Watercourses

Municipal supply
Groundwater recharge
Contact & noncontact water recreation
Warmwater habitat
Wildlife habitat
Preservation of rare & endangered species

Water Quality Problems and Issues

Water quality in the vicinity of the islands is uniformly good. There are some potential threats from naval facilities and small treatment plants; however, no part of this watershed management area is on the 303(d) list.

Types of permitted wastes discharged into the Channel Islands WMA:

Nature of Waste *Prior* to Treatment or Disposal	# of Permits	Types of Permits
Nonhazardous (designated) filter backwash brine waters	2	Minor
Nonhazardous (designated) wastes from dewatering, rec. lake overflow, swimming pool wastes, water ride wastewater, or groundwater seepage	1	Minor
Nonhazardous (designated) domestic sewage	1 1	Major Minor

Hazardous wastes are those influent or solid wastes that contain toxic, corrosive, ignitable, or reactive substances (prior to treatment or disposal) managed according to applicable Department of Health Services standards
Designated wastes are those influent or solid wastes that contain **nonhazardous** wastes (prior to treatment or disposal) that pose a significant threat to water quality because of their high concentrations
Nonhazardous wastes are those influent or solid wastes that do not contain soluble pollutants or organic wastes (prior to treatment or disposal) and have little adverse impact on water quality
Inert wastes are those influent or solid wastes that do not contain soluble pollutants or organic wastes (prior to treatment or disposal) and have little adverse impact on water quality

Major discharges are POTWs with a yearly average flow of over 0.5 MGD or an industrial source with a yearly average flow of over 0.1 MGD and those with lesser flows but with acute or potential adverse environmental impacts.

Minor discharges are all other discharges that are not categorized as a Major. Minor discharges may be covered by a general permit, which are issued administratively, for those that meet the conditions specified by the particular general permit.

Stakeholder Group

There is currently no stakeholder group organized for the islands.

Current Activities

CORE REGULATORY

Continuing core regulatory activities that will be integrated into the watershed management approach include (but are not limited to) necessary renewal/revision of NPDES permits. There is one major discharger (sewage treatment plant on Santa Catalina Island) and four significant or minor dischargers under individual permits. Compliance inspections, review of monitoring reports, response to complaints, and enforcement actions relative to the watershed's NPDES permits will continue.

The Channel Islands WMA

- Five islands
- One major discharger, four minor dischargers
- Areas offshore of islands designated as Areas of Special Biological Significance
- High quality marine and rocky intertidal habitat
- Heavy use by marine mammals and endangered species

Due to limited resources, only the basic regulatory activities are performed: review of dischargers' monitoring reports, minimum necessary inspections and sampling, issuance/renewal of permits, levels 1 and 2 enforcement actions (noncompliance and violation notification), case handling, and answering inquiries from the public.

Near-term Activities

Specific resource needs are described in the Region-wide Section of this document.

A preliminary review of resources for core regulatory activities against cost factors has determined that our region is seriously underfunded for our baseline program. We will be seeking more funding for our core program activities.

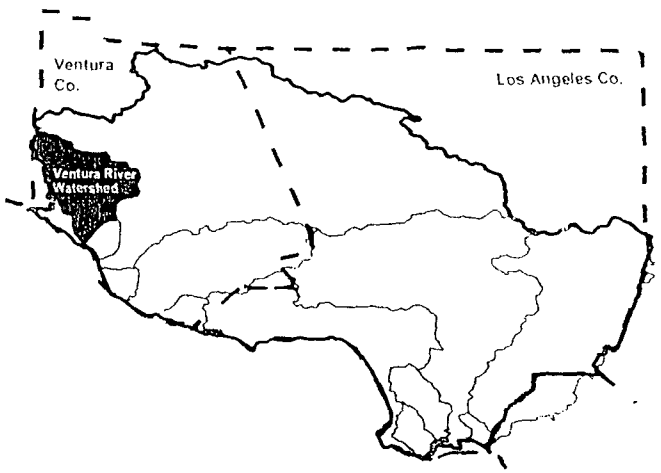
The Channel Islands WMA is being proposed for inclusion in a partial update of the Water Quality Assessment report due in 2002. Some staff resources will be needed in 2001/02 to gather and analyze existing data.

We will maintain involvement with island activities and pursue funding options, especially those involving implementation of nonpoint source measures (coordinate 205(j) and 319(h) activities) as well as other outreach activities such as speeches, meetings, and participation in environmental events. As resources permit, we will also work with stakeholders to implement provisions of the Coastal Zone Act Reauthorization Amendments.

2.9 VENTURA RIVER WATERSHED

This was a targeted watershed for permitting purposes in FY95/96 and FY00/01.

Overview of Watershed



The Ventura River and its tributaries drain a coastal watershed in western Ventura County. The watershed covers a fan-shaped area of 235 square miles, which is situated within the western Transverse Ranges (the only major east-west mountain ranges in the continental U.S.). From the upper slopes of the Transverse Ranges, the surface water system in the Ventura River watershed generally flows in a southerly direction to an estuary, located at the mouth of the Ventura River. Groundwater basins composed of alluvial aquifers deposited along the surface water system, are highly interconnected with the surface water system and are quickly recharged or depleted, according to surface flow conditions. Topography in the watershed is rugged and as a result, the surface waters that drain the watershed have very steep gradients, ranging from 40 feet per mile at the mouth to 150 feet per mile at the headwaters.

Precipitation varies widely in the watershed. Most occurs as rainfall during just a few storms, between November and March. Summer and fall months are typically dry. Although snow occurs at higher elevations, melting snowpack does not sustain significant runoff in warmer months. The erratic weather pattern, coupled with the steep gradients throughout most of the watershed, result in high flow velocities with most runoff reaching the ocean.

Beneficial Uses in Watershed:

Estuary	*Above Estuary*
Navigation	Municipal supply
Commercial & sportfishing	Industrial service supply
Estuarine habitat	Industrial process supply
Marine habitat	Agricultural supply
Contact & noncontact water recreation	Contact & noncontact water recreation
Warmwater habitat	Warmwater habitat
Wildlife habitat	Wildlife habitat
Preservation of rare & endangered species	Preservation of rare & endangered species
Migratory & spawning habitat	Migratory & spawning habitat
Wetlands habitat	Wetlands habitat
Shellfish harvesting	Coldwater habitat
	Groundwater recharge
	Freshwater replenishment

Water Quality Problems and Issues

The majority of water quality problems involve eutrophication (excessive nutrients and effects), especially in the estuary/lagoon although some DDT and metals have been found in mussel and fish tissue (on the 303(d) list for these). A large storm drain enters the river near the estuary and homeless persons live in and frequent the river bed. Sediment in the estuary, however, appears relatively uncontaminated and in laboratory tests conducted through the Bay Protection and Toxic Cleanup Program, little sediment toxicity was found. In some sub- watersheds, high TDS concentrations impair the use of water for agriculture. The watershed's water quality problems are, for the most part, nonpoint source-related. There have also been incidents of releases of toxic materials into storm drains entering the lower river.

The Ventura River Watershed

- One major discharger (POTW)
- 27 dischargers covered under industrial stormwater permit
- Eutrophication concerns, especially in lagoon
- Some bioaccumulation of DDT and metals
- TDS concerns in some subwatersheds
- Impediments to steelhead trout migration (but much high quality habitat)

There is only one major discharger, a small POTW (3.0 MGD) in the middle reach of the Ventura River which has recently upgraded (end of 1997) to tertiary treatment The treatment plant effluent had been implicated in nuisance growth of aquatic plants and low dissolved oxygen found at times downstream of the discharge. For much of the year, the facility's effluent can make up two-thirds of the total river flow. The major concern was the facility's inability to meet the nutrients and suspended solids discharge limitations in its NPDES permit. Additionally, high biochemical oxygen demand (BOD) in the effluent resulted in dissolved oxygen concentrations in the river that could not support cold water aquatic habitat. The facility was required to upgrade under a Regional Board Cease and Desist Order. The most recent monitoring has shown the quality of the effluent has significantly improved including a reduction of nitrate-nitrogen from 20 mg/l to 4 mg/l, a reduction of suspended solids from 12 mg/l to 2 mg/l, and a reduction of BOD from 10 mg/l to 2 mg/l. DO levels in the river have improved dramatically to about 11 mg/l and algal growth is greatly reduced below the plant; however, nonpoint sources (agriculture and horse stables) still appear to be contributing to algal growth above the plant.

Types of permitted wastes discharged into the Ventura River Watershed:

Nature of Waste *Prior* to Treatment or Disposal	# of Permits	Types of Permits
Nonhazardous (designated) domestic sewage & industrial waste	1	Major
Nonhazardous (designated) wastes from dewatering, rec. lake overflow, swimming pool wastes, water ride wastewater, or groundwater seepage	4	General

Hazardous wastes are those influent or solid wastes that contain toxic, corrosive, ignitable, or reactive substances (prior to treatment or disposal) managed according to applicable Department of Health Services standards
Designated wastes are those influent or solid wastes that contain **nonhazardous** wastes (prior to treatment or disposal) that pose a significant threat to water quality because of their high concentrations
Nonhazardous wastes are those influent or solid wastes that do not contain soluble pollutants or organic wastes (prior to treatment or disposal) and have little adverse impact on water quality
Inert wastes are those influent or solid wastes that do not contain soluble pollutants or organic wastes (prior to treatment or disposal) and have little adverse impact on water quality

Major discharges are POTWs with a yearly average flow of over 0.5 MGD or an industrial source with a yearly average flow of over 0.1 MGD and those with lesser flows but with acute or potential adverse environmental impacts.

Minor discharges are all other discharges that are not categorized as a Major. Minor discharges may be covered by a general permit, which are issued administratively, for those that meet the conditions specified by the particular general permit.

Of the 27 dischargers enrolled under the general industrial storm water permit in the watershed, the largest numbers fall in the *Motor Freight Transportation and Warehousing*; *Food and Kindred Products*; and *Oil and Gas Extraction* categories.

Water diversions, dams, and groundwater pumping also are thought to limit surface water resources needed to support a high quality fishery. Reduced water supplies affect water quality and thus beneficial uses, particularly with regards to the endangered steelhead trout (steelhead trout are known to utilize the River and some of its tributaries historically supported annual steelhead runs of 5000 – 6000 adults). Removal of the Matilija Dam (upper river) has recently been identified as a high priority.

The table below gives examples of typical data ranges which led to the 1998 303(d) listings. See Table 7 in the Appendix for additional details on currently scheduled TMDLs as well as specific pollutants included in the TMDLs.

IMPAIRMENTS:

Impairments	Applicable Objective/Criteria	Typical Data Ranges Resulting in Impairment	303(d) Listed Waters/Reaches
DDT	Basin Plan narrative objective	23.0 ng/g (tissue)	Ventura River Estuary
Algae	Basin Plan narrative objective		Ventura River Reach 2 (Main St. to Weldon Canyon) Ventura River Reach 1 (estuary to Main St.) Ventura River Estuary
Pumping, Water diversions	Basin Plan narrative objective		Ventura River Reach 4 (Coyote Creek to Camino Cielo Rd.) Ventura River Reach 3 (Weldon Canyon to confl. w/ Coyote Cr.)
Copper	Basin Plan narrative objective	4.1 ug/g (tissue)	Ventura River Reach 2 (Main St. to Weldon Canyon) Ventura River Reach 1 (estuary to Main St.)
Silver	Basin Plan narrative objective	0.03 ug/g (tissue)	Ventura River Reach 2 (Main St. to Weldon Canyon) Ventura River Reach 1 (estuary to Main St.)
Zinc	Basin Plan narrative objective	40.0 ug/g (tissue)	Ventura River Reach 2 (Main St. to Weldon Canyon) Ventura River Reach 1 (estuary to Main St.)
Trash	Basin Plan narrative objective		Ventura River Estuary
Se	Basin Plan narrative objective	2.2 ug/g (tissue)	Ventura River Reach 2 (Main St. to Weldon Canyon)

CURRENTLY SCHEDULED TMDLS

Type of TMDL	Listed Waters/Reaches in TMDL	Year Scheduled for Completion (FY)
eutrophication	Ventura River Reaches 1 and 2 Ventura River Estuary	04/05

We see a need for an additional 1.3 PYs as well as $50,000 in contract dollars for FY00/01 TMDL work conducted in this watershed.

Stakeholder Group

Ventura River Steelhead Restoration and Recovery Plan Group A Plan was developed in response to the listing of steelhead trout as an endangered species by the National Marine

Fisheries Service (NMFS) in August 1997. The plan was developed 1) to identify measures to mitigate impacts of ongoing operations and maintenance activities, 2) to identify future projects and, 3) identify and evaluate opportunities to promote recovery and restoration of the steelhead trout in the watershed. One staff person will continue to remain involved with the group, as needed.

Preliminary State of the Watershed Report Staff completed a Preliminary State of the Watershed Report for the Ventura River in 1995.

Significant Past Activities

In August 1997, the National Marine Fisheries Service (NMFS) listed the steelhead trout in Southern California as endangered under the Federal Endangered Species Act (ESA). The listing means that any project or action that may affect steelhead trout or their habitats will require consultation with NMFS to obtain an incidental take permit. In order to prepare for the listing and deal with possible regulatory requirements as a result of the listing, the Casitas Municipal Water District, City of Ventura, Ventura County Flood Control District, and seven other local public and private agencies collaborated and developed the **Ventura River Steelhead Restoration and Recovery Plan** in December 1997 (see above). The plan also contains large amount of background information on the watershed such as hydrology, biology, steelhead habitat conditions, and the operations and maintenance of water wastewater, solid waste, transportation and flood control facilities of the sponsoring agencies. The regulatory activities by the Regional Water Quality Control Board in the watershed were briefly reviewed in the plan.

Current Activities

The following is a summary of current regional board activities in the Ventura River Watershed which are expected to continue as part of the Watershed Management Initiative on a watershed basis.

CORE REGULATORY

Permits in this watershed were renewed together in June 1996; this watershed will be targeted again in FY2000-01. The Ventura County Municipal Stormwater Permit is scheduled for reissuance in spring 2000. Continuing core regulatory activities include compliance inspections, reviewing of monitoring reports, response to complaints, and enforcement actions as needed. Key regulatory staff will continue to remain involved in the Ventura River Watershed Team for purposes of coordinating watershed activities in-house and working on any needed State of the Watershed Report updates.

Additionally, most urban areas in Ventura County, including this watershed, are implementing Best Management Practices under the Municipal Storm Water Permit (adopted in 2000). Additionally, most urban areas in Ventura County, including this watershed, are implementing Best Management Practices under the Ventura County Municipal Storm Water Program. The "Discharger" consists of the co-permittees Ventura County Flood Control District, the County of Ventura, and the Cities of Camarillo, Fillmore, Moorpark, Ojai, Oxnard, Port Hueneme, San Buenaventura, Santa Paula, Simi Valley, and Thousand Oaks. The Discharger is required to

implement the approved Ventura Countywide Stormwater Quality Urban Impact Mitigation Plan (SQUIMP) by January 27, 2001. The SQUIMP shall address conditions and requirements for new development and significant redevelopment.

The Ventura River receives municipal storm drain discharges from the City of Ojai, City of San Buenaventura (part), and unincorporated Ventura County (part).

To date, the storm water monitoring program has consisted of land-use based monitoring combined with receiving water monitoring and modeling. The Discharger intends to sign an agreement to participate in the Regional Monitoring Program established for Southern California municipal programs under the guidance of the Southern California Coastal Water Research Project.

Currently under consideration are agreements with sister agencies in regulatory-based encouragement of Best Management Practices. Most notably is the use of a GIS layer for pesticides application available from the Department of Pesticide Regulation (DPR). Reduction of pesticides identified as contaminants of concern for a watershed might be addressed through a Management Agency Agreement (MAA) with the DPR, or through waiving adoption of waste discharge requirements on an individual basis using information gathered in databases provided by the Ventura County Agricultural Commission office.

MONITORING AND ASSESSMENT

A receiving water monitoring program is implemented by the Ojai Valley Sanitary District, supplemented by ambient or special monitoring conducted by Regional Board staff. The monitoring supports compliance evaluation, nonpoint source identification, and potential TMDL development. Ventura River Watershed TMDL-type activities investigated sources of low dissolved oxygen in the river in the area of the treatment plant. In conjunction with the receiving water monitoring, land-use based monitoring is done as part of the Ventura County Municipal Storm Water Program. We would also like to begin early monitoring for 303(d) parameters in 2001, with a potential de-listing of some of the current 303(d) parameters.

WETLANDS PROTECTION AND MANAGEMENT

The Southern California Wetlands Recovery Project considers the removal of Matilija Dam on Matilija Creek, a tributary to the Ventura River northwest of Ojai a strong contender for funding in FY00/01 and future years. According to the US Fish & Wildlife Service, the removal would accomplish 1) restoration of the Ventura River ecosystem and contribute to recovery of endangered steelhead trout, 2) provide needed sediment for beach nourishment and coastal erosion control, and 3) facilitate recreational access to Matilija Wilderness Area in the Los Padres National Forest. Other projects under discussion involve land acquisitions at the mouth of the river. This habitat is primarily riparian.

NONPOINT SOURCE PROGRAM

A priority issue is continued work to determine the scope of water quality impacts from agricultural runoff in the Region. Some agricultural activities occur in the Ventura River Watershed. Development of solutions to any impacts is also a high priority and will be a major

concern of the nonpoint source program and, by extension, watershed groups which will be addressing this as well as other problems.

Staff will pursue re-initiating stakeholder meetings in the watershed and assist in development of a watershed management plan which will be expected to address strategies to reduce point and nonpoint source pollutants as well as issues other than strictly water quality concerns. In the meantime, staff will remain involved with the agencies that collaborated to develop a plan for restoration and recovery of anadramous steelhead trout in the watershed. An example of regulatory-based encouragement can be found in this plan development. Equestrian stables in the San Antonio Creek tributary of the river were identified by Regional Board and U.S. Army Corps of Engineers staff as existing and potential sources of problems in the watershed. Facility owners are working to improve their operations from a water quality standpoint in an effort to avoid implementation of management practices under Waste Discharge Requirements.

BASIN PLANNING

Basin Planning activities will include continued participation in both internal and external watershed planning efforts and further incorporation of watershed management and principles and watershed-specific priorities into future updates of the Basin Plan, where appropriate.

Review of and comment for the highest priority EIRs in the watershed will continue although this is currently an unfunded program.

Near-term Activities

Specific resource needs are described in the Region-wide Section of this document.

Near-term **Basin Planning** issues include addressing impacts from hydromodification and pumping, particularly in steelhead trout restoration and dam removal efforts, and developing nutrient standards for the lagoon.

Potential Long-term Activities

Baseline watershed-wide bioassessment monitoring in this largely natural watershed will be an important component of any long-term planning and assessment. There are currently no funds for this type of activity.

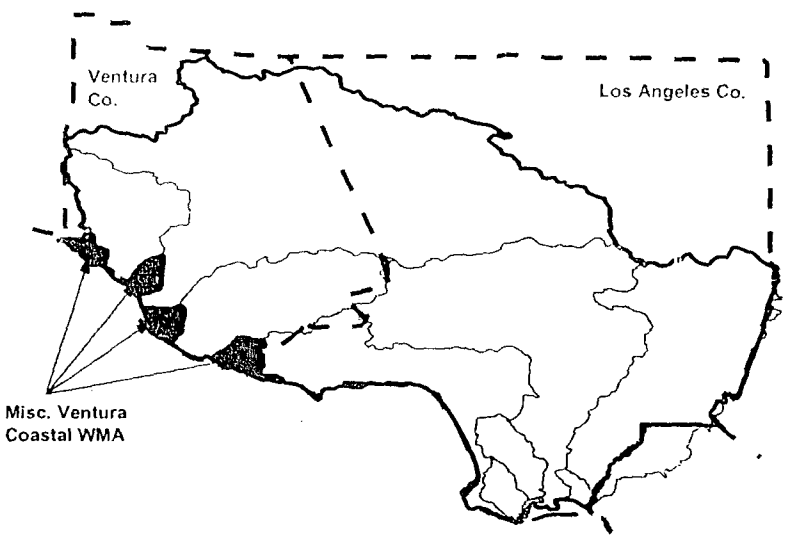
We will be involved to some extent with discussions concerning the proposal to decommission and remove the Matilija Dam. The Ventura County Board of Supervisors voted to request legislation be introduced to fund a Reconnaissance Study by the U.S. Army Corps of Engineers on that matter.

2.10 MISCELLANEOUS VENTURA COASTAL WMA

This Watershed Management Area was targeted for permitting purposes in FY00/01.

Overview of WMA

Channel Islands Harbor: Channels Islands Harbor is located south of the Santa Clara River and is in the immediate vicinity of considerable residential development and some agricultural land. The Southern California Edison inlet canal to the Ormond Beach Generating Station is located at the north end of the harbor. The harbor is home to many recreational boats and two boatyards.



Port Hueneme Harbor: Port Hueneme is a medium-sized deepwater harbor located in Ventura County, north of Mugu Lagoon. Part of it was operated by a U.S. Navy Construction Battalion until very recently while the rest of the harbor serves as a commercial port operated by the Oxnard Harbor District. The construction of a majority of the harbor was completed in 1975. The commercial side generally serves ocean-going cargo vessels and oil supply boats; the latter serve the oil platforms in the Santa Barbara Channel. Two endangered bird species may use the harbor, the California Brown Pelican and the California Least Tern.

Ventura Marina: Ventura Marina is a small craft harbor located between the mouths of the Ventura and Santa Clara Rivers. It is home to numerous small boats and two boatyards. The "Ventura Keys" area of the marina is a residential area situated along three canals. The marina is surrounded by agricultural land and a large unlined ditch drains into the Keys area. Since the marina is between the mouths of two rivers which discharge large sediment loads from their relatively undeveloped watersheds, the marina has a constant problem with keeping the entrance channel open.

McGrath Lake: McGrath Lake is a small brackish waterbody located just south of the Santa Clara River. The lake is located partially on State Parks land and partially on privately-owned oilfields in current production. A number of agricultural ditches drain into the lake. A state beach is located off the coastal side of the lake. The habitat around the lake is considered to be quite unique and it is utilized by a large number of overwintering migratory birds.

Beneficial Uses in WMA

Channel Islands Harbor
Industrial service supply
Contact & noncontact water recreation
Navigation
Commercial & sportfishing
Marine habitat
Wildlife habitat

Port Hueneme Harbor
Process water supply
Contact & noncontact water recreation
Navigation
Commercial & sportfishing
Marine Habitat
Wildlife habitat

Ventura Marina
Industrial service supply
Contact & noncontact water recreation
Navigation
Commercial & sportfishing
Marine habitat
Wildlife habitat
Shellfish harvesting

Ormond Beach
Industrial water supply
Contact & noncontact water recreation
Wildlife habitat
Wetlands habitat
Protection of rare & endangered species
Navigation
Power generation
Commercial & sportfishing
Marine habitat
Shellfish harvesting

Ormond Beach Wetlands and McGrath Lake
Estuarine habitat
Contact & noncontact water recreation
Wildlife habitat
Wetlands habitat
Protection of rare & endangered species

Open Coastline: A major feature of the coastline north of Mugu Lagoon is Ormond Beach and Ormond Beach Wetlands. There are a number of scenarios under consideration for restoration of this degraded yet valuable wetlands.

Water Quality Problems and Issues

Channel Islands Harbor: The harbor is on the 1998 303(d) list for lead and zinc. During the early to mid-1980s, the SMWP found low to intermediate levels of metals and organics except for one especially high accumulation of DDT. Sediment sampling for metals conducted by Regional Board staff in 1988 revealed slightly to moderately elevated levels. Copper at one site was nearly 50 ppm and zinc was as high as 76 ppm. Arsenic was slightly elevated (4 ppm) at a sampling site located next to a drain possibly connected to a nearby agricultural field. Under the BPTCP, the harbor is listed as site of concern due to DDT and silver sediment concentrations and sediment toxicity (but not recurrent toxicity); further monitoring is needed here.

Port Hueneme Harbor: The harbor is on the 1998 303(d) list for PAHs, DDT, PCBs, TBT, and zinc. The SMWP has found elevated levels of Cu, Zn, PAHs, and PCBs. Zinc was at elevated levels on the commercial side while PCBs were very high on the Navy side. The Navy side is suspected of using large amounts of pentachlorophenol (PCP) for treatment of wood pilings. An Army Corps DEIR released in 1985 covering extension of one channel stated that water quality was good. The document also briefly discussed the port's biota which CDFG found to be "fairly healthy" and typical of southern California harbors. Sediment core samples were collected in 1985 as part of a proposed dredge project. Relatively low levels of metals were found and no pesticides were detected. It may well be that flushing is good in the harbor and only locating a station directly next to a source will result in bioaccumulation. The BPTCP found fairly minimal levels of sediment toxicity in recent testing but the harbor is considered a site of concern under the program due to accumulation of DDT, PCBs, TBT, PAHs, and zinc in mussel tissue. Further monitoring is needed here.

The harbors
- One deepwater harbor and two small-craft marinas
- Accumulation of metals, PCBs, and historic pesticides in sediment and tissue
- Support considerable marine life

The wetlands and coast
- Historic pesticide contamination
- Loss of quality habitat
- Impacts from oil spills
- Use by endangered species

Ventura Marina: The marina (the Keys area) is on the 1998 303(d) list for coliform problems. The City of Ventura monitors six stations within the Keys and the nearby Arundell Barranca

(open drain carrying mostly agricultural runoff) for coliform on a regular basis. There are currently ongoing discussions concerning the possibility of re-rerouting the barranca away from the marina. The SMWP has found moderately elevated levels of metals, DDT, and chlordane in the marina from sampling conducted in the late 1980s; however, it is not listed as a site of concern under the BPTCP.

McGrath Lake: The lake is on the 1998 303(d) list for pesticides. The BPTCP found varying amounts of sediment toxicity and sediment levels of many pesticides were very high; the lake is listed as a toxic hot spot due to sediment concentrations of DDT, chlordane, dieldrin, toxaphene and endosulfan above sediment quality guidelines. A characterization study is ongoing and restoration work is being planned. A major crude oil spill into the lake occurred in late 1993 and runoff from nearby agricultural fields is ongoing.

Open Coastline: Little is known of water quality in the Ormond Beach area. The Oxnard Treatment Plant discharges secondary effluent to the ocean off of Oxnard. The facility is currently investigating approaches to remove upstream brine dischargers in order to move toward water reclamation. Part of the reclaimed water is proposed for use in a seawater intrusion barrier project to protect the Oxnard Plain ground water basin. The ocean immediately off of the coast was part of Bight'98 and the 1994 Southern California Bight Pilot Project.

Types of permitted wastes discharged into the Misc. Ventura Coastal WMA:

Nature of Waste *Prior* to Treatment or Disposal	# of Permits	Types of Permits
Nonhazardous (designated) contaminated groundwater	1	Minor
Nonhazardous (designated) domestic sewage & industrial waste	1	Major
Nonhazardous (designated) wastes from dewatering, rec. lake overflow, swimming pool wastes, water ride wastewater, or groundwater seepage	5 4	Minor General
Nonhazardous (designated) noncontact cooling water	1	Major
Nonhazardous (designated) process waste (produced as part of industrial/manufacturing process)	1 1	Major Minor
Nonhazardous (designated) stormwater runoff	1	Minor
Nonhazardous (designated) filter backwash brine waters	1	Minor
Nonhazardous (designated) washwater waste (photo reuse washwater, vegetable washwater)	1	Minor
Inert wastes from dewatering, rec. lake overflow, swimming pool wastes, water ride wastewater, or groundwater seepage)	2	General

Hazardous wastes are those influent or solid wastes that contain toxic, corrosive, ignitable, or reactive substances (prior to treatment or disposal) managed according to applicable Department of Health Services standards
Designated wastes are those influent or solid wastes that contain **nonhazardous** wastes (prior to treatment or disposal) that pose a significant threat to water quality because of their high concentrations
Nonhazardous wastes are those influent or solid wastes that do not contain soluble pollutants or organic wastes (prior to treatment or disposal) and have little adverse impact on water quality
Inert wastes are those influent or solid wastes that do not contain soluble pollutants or organic wastes (prior to treatment or disposal) and have little adverse impact on water quality

Major discharges are POTWs with a yearly average flow of over 0.5 MGD or an industrial source with a yearly average flow of over 0.1 MGD and those with lesser flows but with acute or potential adverse environmental impacts.

Minor discharges are all other discharges that are not categorized as a Major. Minor discharges may be covered by a general permit, which are issued administratively, for those that meet the conditions specified by the particular general permit.

The table below gives examples of typical data ranges which led to the listings. See Table 7 in the Appendix for additional details on currently scheduled TMDLs as well as specific pollutants included in the TMDLs.

IMPAIRMENTS:

Impairments	Applicable Objective/Criteria	Typical Data Ranges Resulting in Impairment	303(d) Listed Waters/Reaches
Beach closures	Basin Plan narrative objective	10 - 37 days/year closed	McGrath Beach Mandalay Beach
Coliform	Basin Plan numeric objective: Inland: fecal coliform not to exceed log mean of 200 mpn/100ml in 30-day period and not more than 10% of samples exceed 400 MPN/100ml Beaches: total coliform not to exceed 1,000 MPN/100ml in more than 20% of samples in 30 days and not more than 10,000 MPN/100ml at any time	Objective was exceeded from 32 - 75% of time	Santa Clara River Estuary Beach/Surfers Knoll McGrath Beach Ventura Harbor: Ventura Keys
Sediment toxicity	Basin Plan narrative objective		McGrath Lake
Chlordane (sediment)	Basin Plan narrative objective	160 ng/g	McGrath Lake
DDT (sediment & Tissue)	Basin Plan narrative objective State Board numeric objective (tissue): Max. Tissue Residue Level 32.0 ng/g	3,000 ng/g (sediment) 700 ng/g (tissue)	McGrath Lake Port Hueneme Harbor
PCBs (tissue)	Basin Plan narrative objective State Board numeric objective (tissue): Max. Tissue Residue Level 2.2 ng/g	2,000 ng/g	Port Hueneme Harbor
PAHs (sediment)	Basin Plan narrative objective	10,000 ng/g	Port Hueneme Harbor
Zinc (sediment & tissue)	Basin Plan narrative objective	320 - 400 ng/g (tissue) 380 ng/g (sediment)	Port Hueneme Harbor Channel Islands Harbor
Lead (sediment)	Basin Plan narrative objective	180 ng/g	Channel Islands Harbor
Tributyl tin (tissue)	Basin Plan narrative objective	7,000 ng/g	Port Hueneme Harbor

CURRENTLY SCHEDULED TMDLS

Type of TMDL	Listed Waters/Reaches in TMDL	Year Scheduled for Completion (FY)
coliform	McGrath Beach Mandalay Beach	01/02
zinc	Port Hueneme Harbor	04/05

We see a need for an additional 0.7 PY for FY00/01 TMDL work conducted in this watershed.

Stakeholder Group

Ormond Beach Task Force Ormond Beach is part of the Miscellaneous Ventura Coastal WMA; the area includes a somewhat degraded wetlands which has considerable restoration potential. The Task Force was formed in 1993 and meets on an infrequent basis to address issues and projects which may affect the beach and wetlands.

Current Activities

Both existing and needed resources are presented in a table in the "Near-term Activities" subsection.

CORE REGULATORY

Continuing core regulatory activities that will be integrated into the watershed management approach include (but are not limited to) necessary renewal/revision of NPDES permits. This will be a targeted watershed for the bulk of permit renewal purposes in FY 2000-01. There are three major dischargers, 13 significant or minor dischargers under individual permits, as well as one discharger currently covered under a general permit (additional information on permits may be found in the Appendix). Compliance inspections, review of monitoring reports, response to complaints, and enforcement actions relative to the watershed's NPDES permits will continue.

Additionally, most urban areas in Ventura County, including this watershed, are implementing Best Management Practices under the Municipal Storm Water Permit (adopted in 2000). Additionally, most urban areas in Ventura County, including this watershed, are implementing Best Management Practices under the Ventura County Municipal Storm Water Program. The "Discharger" consists of the co-permittees Ventura County Flood Control District, the County of Ventura, and the Cities of Camarillo, Fillmore, Moorpark, Ojai, Oxnard, Port Hueneme, San Buenaventura, Santa Paula, Simi Valley, and Thousand Oaks. The Discharger is required to implement the approved Ventura Countywide Stormwater Quality Urban Impact Mitigation Plan (SQUIMP) by January 27, 2001. The SQUIMP shall address conditions and requirements for new development and significant redevelopment.

The Miscellaneous Ventura Coastal WMA receives municipal storm drain discharges from the City of Oxnard (part), City of Port Hueneme, and City of San Buenaventura (part).

To date, the storm water monitoring program has consisted of land-use based monitoring combined with receiving water monitoring and modeling.. The Discharger intends to sign an agreement to participate in the Regional Monitoring Program established for Southern California municipal programs under the guidance of the Southern California Coastal Water Research Project.

MONITORING AND ASSESSMENT

The Ventura Coastal drainages are being proposed for inclusion in a partial update of the Water Quality Assessment report due in 2002. Staff resources will be needed in 2000/01 to prepare the update. The monitoring needs in this WMA include staff to evaluate coastal receiving water data, sediment data analysis and interpretation, resources to integrate surface and ground water data, and resources to evaluate other information (e.g., pesticide and fertilizer use databases as well as those for grower/crop and crop timing).

McGrath Lake: A Consent Decree established a settlement with the responsible party in a 1993 crude oil spill. The settlement created a Trustee Council (California Department of Fish and Game, U.S. Fish and Wildlife Service, and California Department of Parks and Recreation) to determine how to spend $1.315 million targeted for natural resource restoration.

The Trustee Council formally requested assistance from the Regional Board to perform a study to characterize the water quality and sediments within the lake, as well as sources of contaminant inputs to the lake. The main objectives of the study were to determine whether it would be necessary or beneficial to dredge the lake to remove contaminated sediments, and

whether it would be beneficial to spend funds on habitat improvement projects in and around the lake, given the ongoing potential contaminant inputs and uncontrolled water management activities. The Regional Board funded the characterization study (contributing $100,000) using some of the money the Board received from the oil spill settlement.

A preliminary study was conducted in August 1998 to aid in selection of sampling sites for the characterization study. The characterization study was conducted in October 1998 and included:

1) water quality measurements at several locations in the lake (temperature, dissolved oxygen, pH, and nutrient data)

2) surficial sediment samples at 10 stations in the lake will be analyzed for grain size, sediment chemistry (pesticides, petroleum hydrocarbons, metals) and sediment toxicity

3) deep sediment cores at 7 stations in the lake will be subsampled for sediment chemistry analyses

4) water column measurements at one station in an agricultural drain entering the lake (pesticides, metals, and nutrients)

5) sediment chemistry (pesticides and metals) at 2 stations in agricultural drains

The characterization study demonstrated widespread sediment contamination throughout most of the lake, including high concentrations of several trace metals and pesticides. Prior to undertaking a sediment cleanup and habitat restoration program, it would be useful to eliminate or reduce on-going sources of contamination, e.g., agricultural runoff. The Trustee Council plans to release a restoration plan in 2001 and work with local stakeholders to develop solutions to these problems.

Shoreline: Beginning in 1999, a new law requires public health officials in coastal counties to conduct weekly testing, between April 1 and October 31, at beaches visited annually by more than 50,000 people and at adjacent storm drains (including natural creeks, streams, and rivers, that flow during the summer. Due to the popularity of Ventura County beaches for year-round activities, the Ventura County Board of Supervisors authorized the implementation of a program that expanded the monitoring program to all 12 months of the year. Ventura County Environmental Health Department will conduct routine surf zone sampling at 52 beach locations. Data will be reviewed by the Regional Board and used to assess current conditions of Ventura County beaches for future 305(b) reports.

Open Coastline: Our source of data for the coastal areas comes chiefly from the one POTW and two generating stations which discharge offshore as well as regional data from Bight'98 and the 1994 SCBPP. These data support compliance evaluation.

WETLANDS PROTECTION AND MANAGEMENT

The Southern California Wetlands Recovery Project has listed Ormond Beach Wetlands acquisition and preparation of a restoration plan as a priority project for FY00/01 or future funding. The project involves acquisition of 600 acres of wetlands and dunes parcels privately-

owned and implementation of an existing restoration plan for these parcels. Acquisition of land in the McGrath Lake area is also a high priority.

BASIN PLANNING

Basin Planning activities will include continued participation in both internal and external watershed planning efforts and further incorporation of watershed management and principles and watershed-specific priorities into future updates of the Basin Plan, where appropriate.

NONPOINT SOURCE PROGRAM

We are encouraging application for Proposition 13 funding for use in preparation of a watershed management plan for this watershed management area.

Groundwater

The Oxnard Forebay is a prime groundwater recharge area that is impacted by nitrogen discharges, mainly from densely populated communities using septic systems, and agricultural areas. The Regional Board undertook a study of septic systems in the area during FY98/99; in August 1999 the Board adopted a Basin Plan amendment to prohibit septic systems in the Oxnard Forebay. The amendment immediately prohibits the installation of new septic systems or the expansion of existing septic systems on lot sizes of less than five acres. Discharges from septic systems on lot sizes of less than five acres must cease by January 1, 2008. This prohibition will affect up to 3,000 septic systems and ten to fifteen thousand people. The County of Ventura has applied for Small Community Grant funding to provide adequate sewage treatment on behalf of the Saticoy and El Rio communities.

Another **319(h)** project is underway which also involves septic tanks. The Scope of Work for this project is still being developed but will involve the evaluation of several systems for nutrient removal.

A well head protection and demonstration project in the Fox Canyon Groundwater Management Area is being funded with **319(h)** monies. This project is destroying disused drinking water wells which may serve as a conduit for contamination to reach the deep water aquifer.

Currently under consideration are agreements with sister agencies in regulatory-based encouragement of Best Management Practices. Most notably is the use of a GIS layer for pesticides application available from the Department of Pesticide Regulation (DPR). Reduction of pesticides identified as contaminants of concern for a watershed might be addressed through a Management Agency Agreement (MAA) with the DPR, or through waiving adoption of waste discharge requirements on an individual basis using information gathered in databases provided by the Ventura County Agricultural Commission office.

Marinas

There are a number of marinas in this WMA, all with well-documented levels and types of pollution consistent with nonpoint sources. We have initiated enforcement actions on several commercial fishing operations to ensure compliance with state discharge requirements. We will

be focusing our 319(h) priorities for the upcoming application period on a number of areas of concern in the Region including development of education and outreach programs and implementation of management measures which are intended to reduce pollution from these nonpoint sources in marinas. A particular area of concern in Port Hueneme has been management of squid wastes from fishing vessels.

Near-term Activities

Specific resource needs are described in the Region-wide Section of this document.

A preliminary review of resources for core regulatory activities against cost factors has determined that our region is seriously underfunded for our baseline program. We will be seeking more funding for our core program activities.

The Ventura Coastal drainages are being proposed for inclusion in a partial update of the Water Quality Assessment report due in 2002. Staff resources will be needed in 2000/01 to prepare the update. The monitoring needs in this WMA include staff to evaluate coastal receiving water data, sediment data analysis and interpretation, resources to integrate surface and ground water data, and resources to evaluate other information (e.g., pesticide and fertilizer use databases as well as those for grower/crop and crop timing).

Most watershed programs look to the Regional Board as the information management agency for the collected data. To meet that need, we require additional resources related to data management and interpretation. Some of the expenditures under NPDES support the monitoring that will ultimately be used to identify and quantify nonpoint source inputs.

We will maintain involvement with stakeholder activities and pursue funding options, especially those involving implementation of nonpoint source measures (coordinate 205(j) and 319(h) activities) as well as other outreach activities such as speeches, meetings, and participation in environmental events. With additional resources we propose conducting a number of education and outreach activities including holding regional workshops and conferences with other Regional Boards as well as experts in the field, contacting marina operators individually, and offering an incentives program.

Potential Long-term Activities

Arrundell Barranca: The Regional Board staff have been approached by the City of San Buenaventura for input on a potential project to re-route the Arrundell Barranca from Ventura Harbor to the Santa Clara River estuary. The proposal calls for a constructed wetlands near the estuary to treat the Barranca's water before entering the Santa Clara River. The project is proposed as a method of dealing with periodic coliform exceedances in areas of the Ventura Harbor/Ventura Keys.

Seawater Intrusion into the Oxnard Plain: The City of Oxnard is attempting to remove high TDS inputs to their treatment plant with the ultimate goal of reuse of the wastewater for a seawater intrusion barrier project in the Oxnard Plain.

Implementation of watershed-wide biological monitoring: This is a long-term goal for all of our watersheds.

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Section 3. Regionwide Activities

There are many activities conducted at the Region which do not apply to a specific watershed; instead they represent ongoing regionwide strategies and policies, or programs which are not directly linked to the rotating watershed cycle. Also, statutory, regulatory, or funding requirements may dictate completion of some activities at odd intervals throughout the five-year watershed cycle (such as increased emphasis on pretreatment inspections). We expect that some of these activities, which include triennial reviews, water quality assessment (305(b)) reports, updating lists of impaired waterbodies (e.g. the federal 303(d) list), can be negotiated into a watershed schedule (see Monitoring and Assessment discussion under each Watershed section for proposed water quality assessment scheduling). See Table 2 below for more examples of watershed versus non-watershed related activities.

Table 2. Example Work Activities and Their Fit (or not) Into Watershed

Watershed Tasks	*Non-Watershed Tasks*
Renew permits	Issue new permits
	Develop new general permits
Integrate municipal storm water program	Issue individual industrial and storm water permits
Conduct inspections for watershed permits	Conduct inspections on new permits
Enforcement (in-cycle compliance)	Enforcement (spills, out of cycle compliance)
Implement NPS controls	Develop regional strategies to address NPS problems
TMDL/WLAs	
Develop, coordinate and implement watershed monitoring	Coordinate monitoring on a regional scale
Water Quality Assessments (State of the Watershed Reports, partial updates to 305(b) by watershed)	Biennial 305(b) Reports to USEPA
Develop watershed policies	Develop regional policies
Watershed-specific Basin Plan Updates	Regional Basin Plan Updates, Triennial Reviews (as Currently required)
Data management (input and use by watershed)	Regional Database management (development and
GIS (input of watershed-specific layers and information)	GIS (development and input of regional layers and Maintenance of system)
Watershed-specific outreach/education	General outreach education
Incorporation of CEQA and 401 Decisions into watershed planning (as groups are formed, and as timing permits)	Timely review of CEQA documents, 401 certifications per statutory deadlines

And, while the Watershed Management Initiative strives to integrate and coordinate the various Regional and State Board programs and address the highest priority funding needs for those programs, there is also need to respond to and accommodate priorities established by the individual Regional and State Boards' members, priorities established prior to the WMI which run on their own timelines, or other new mandates which may affect the way the WMI is implemented in a Region. It is important to re-state here that the WMI is not a new program but rather a way to describe our approach to integrating existing and newly evolving programs and mandates. The following describes our overall approach to implementing a number of programs (some statewide mandates) and other Board priorities.

Core Regulatory

During FY01/02, we shall be carrying out regularly scheduled permit renewals in the Santa Clara River and Calleguas Creek Watersheds. The other activities we will be conducting for this one year are on a regionwide rather than watershed scale due to a number of factors.

One activity involves renewing both officially and unofficially backlogged permits. Many backlogs were created unofficially through utilizing our original seven- rather than five-year cycle for permit renewals. These should decrease greatly as we phase into a five-year cycle but, in the meantime, there will likely continue to be some backlog for FY01/02. We also plan to renew our general permits (see below) to incorporate Basin Plan amendments and fine-tune other requirements.

Another activity which has taken up considerable time, and contributed to backlogged permits, is responding to appeals and lawsuits. At issue for a number of permits is a lack of regional nutrient objectives which has translated into a lack of permit limitations and subsequent petitions and/or lawsuits. Ideally, TMDLs would be adopted in the year proceeding permit renewals for a particular watershed . Permit limitations could then be based on allocations from the TMDLs. Also ideally, we would have state-adopted water quality objectives (or an implementation plan for federal numbers) or ecologically-relevant regional objectives for parameters such as nitrogen and phosphorus to use for development of permit limitations. These "official" numbers will likely be available in the near future but, in the meantime, we continue to experience challenges to our permit limitations (or lack thereof).

Recently enacted legislation which does not allow Board discretion to issue Time Schedule Orders without penalties has added to the difficulty of adopting permits per original schedules.

One of the final tasks of the Bay Protection and Toxic Cleanup Program was adoption of a statewide Consolidated Plan for cleanup of toxic hot spots. Water Code Section 13395 states that the Regional Board is required to reevaluate WDRs including (1) an assessment of the WDRs that may influence the creation or further pollution of the known toxic hot spot; (2) an assessment of which WDRs need to be modified to improve environmental conditions at the known toxic hot spot; and (3) a schedule for completion of any WDR modifications deemed appropriate. We were required to begin the reevaluation of WDRs associated with high priority known toxic hot spots within 120 days after final approval of the Consolidated Plan (by March 15, 2000). As part of our reevaluation, we were required to submit a list of WDRs associated with each high priority toxic hot spot within six months after final approval of the Consolidated Plan (by May 15, 2000). The priority list for moderate and low priority known toxic hot spots must be submitted within one year of final approval of the Consolidated Plan (by November 15, 2000). While we do not have to actually revise any WDRs within these timeframes, if we find that we will need to make revisions, we will need to supply a schedule. And as we renew or modify WDRs, we need to include a finding that the discharge may contribute to the pollution present at the toxic hot spot.

Core Regulatory – General Permits

There are many dischargers in this Region covered by general permits for discharges to surface water through a letter issued by the Executive Officer. This activity occurs as often

outside as within the watershed cycle. 40 CFR §122.28 provides for issuance of general permits to regulate a category of point sources if the sources:

a) Involve the same or substantially similar types of operations;

b) Discharge the same type of waste;

c) Require the same type of effluent limitations or operating conditions;

d) Require similar monitoring; and

e) Are more appropriately regulated under a general permit rather than individual permits.

General permits currently in effect include:

- NPDES Permit No. CAG914001 – for discharges of volatile organic compound contaminated groundwater to surface waters (threat/complexity rating 2B)
- NPDES Permit No. CAG994002 – for discharges of treated groundwater from construction and project dewatering to surface waters (threat/complexity rating 3B)
- NPDES Permit No. CAG994001 – for groundwater discharges from construction and project dewatering to surface waters (threat/complexity rating 3C)
- NPDES Permit No. CAG674001 – for discharges of hydrostatic test water to surface waters (threat/complexity rating 3C)
- NPDES Permit No. CAG834001 – for treated groundwater and other wastewaters from investigation and/or cleanup of petroleum fuel pollution to surface waters (threat/complexity rating 2B)
- NPDES Permit No. CAG994003 – for discharges of nonprocess wastewaters not requiring treatment systems to surface waters (threat/complexity rating 3C)

As a point of comparison, the highest threat/complexity rating is 1A and the lowest 3C.

Core Regulatory – Storm Water

Storm water activities include those involving the three municipal permits in the Region, facilities regulated under the State's general industrial permit, and construction sites regulated under the State's general construction permit.

Municipal permits

Municipal permits currently in effect include:

NPDES Permit No. CAS004003 – adopted in 1999 this is the permit for municipal storm water and urban runoff discharges within the city of Long Beach

NPDES Permit No. CAS004002 – adopted in 2000 this is the permit for municipal storm water and urban runoff discharges within the Ventura County Flood Control District, County of Ventura, and cities of Ventura County

NPDES Permit No. CAS614001 – adopted in 1996 this is the permit for municipal storm water and urban runoff discharges with the county of Los Angeles

An important part of the urban municipal permits (Los Angeles County and City of Long Beach) are the Standard Urban Storm Water Mitigation Plans (SUSMPs) and Numerical Design Standards for Best Management Practices (BMPs) which were adopted in 2000. The SUSMPs are designed to ensure that storm water pollution is addressed in one of the most effective ways possible, i.e., by incorporating BMPs in the design phase of new development and redevelopment. It provides for numerical design standards to ensure that storm water runoff is managed for water quality concerns in addition to flood protection and that pollutants carried by storm water are retained and not delivered to waterways.

Monitoring has indicated that mass emissions of pollutants to the ocean are significant from the urban watersheds such as the Los Angeles River, Ballona Creek, and Coyote Creek. Studies have found chemical concentrations of pollutants that exceed state and federal water quality criteria in storm drains flowing to the ocean and that there are adverse health impacts from swimming near them.

Municipal storm water regulations at 40CFR 122.26 require that pollutants in storm water be reduced to the maximum extent practicable (MEP). The definition of MEP has generally been applied to mean implementation of economically achievable management practices. Because storm water runoff rates can vary from storm to storm, the statistical probabilities of rainfall or runoff events become economically significant and are central to the control of pollutants through cost-effective BMPs.

The numerical design standard is that post-construction treatment BMPs be designed to mitigate (infiltrate or treat) storm water runoff from the first ¾ inch of rainfall, prior to its discharge to a storm water conveyance system. Other standards also apply; additional information on the SUSMP may be found on the Regional Board website http://www.swrcb.ca.gov/~rwqcb4. **Effective implementation of the SUSMP would be aided by 1 PY for review of city approvals of projects.**

Retail gasoline outlets (RGOs) were given a categorical exemption by State Board to the SUSMP requirements, partly because the threshold to mitigate developed by the Regional Board which was based on size and RGOs were deemed too small. **A needed special project (0.5 PY) is to develop a new threshold to mitigate for RGOs.**

The Ventura County Municipal Storm Water Permit co-permittees must implement an approved Ventura Countywide Stormwater Quality Urban Impact Mitigation Plan (SQUIMP) by 2001. The SQUIMP similarly addresses conditions and requirements for new development and significant redevelopment.

Industrial permit

The 1987 amendments to the Clean Water Act established a framework for regulating municipal and industrial storm water discharges under the NPDES Program. In 1990, the USEPA published final regulations that established application requirements for storm water permits. The regulations require that storm water associated with industrial activity that

discharges either directly to surface waters or indirectly through municipal storm drains must be regulated by an NPDES permit.

State Board adopted the Industrial Activities Storm Water General Permit in 1997. The permit requires facility operators to (1) eliminate unauthorized nonstorm water discharges, (2) develop and implement a Storm Water Pollution Prevention Plan (SWPPP), and (3) perform monitoring of storm water discharges and authorized nonstorm water discharges. Facilities that discharge storm water associated with industrial activity requiring a General Permit are listed by category in the Code of Federal Regulations. These categories include manufacturing, mining/oil, recycling, steam electric generating, and light industry, among others. There are approximately 2,600 facilities in this Region covered by the general industrial permit. Most of these sites are in the Los Angeles River Watershed with the San Gabriel River Watershed and the Domiguez Channel and LA/LB Harbor WMA also containing a considerable number. **Five to ten additional PYs would be needed to fully address all aspects of industrial storm water permitting including compliance inspections of all facilities once every five years, review of SWPPPs, and followup work.**

Construction permit

In 1990, USEPA published final regulations that establish storm water permit application requirements for specified categories of industries. The regulations provide that discharges of storm water to waters of the United States from construction projects that encompass five or more acres of soil disturbance are effectively prohibited unless the discharge is in compliance with an NPDES permit.

State Board adopted a general permit for storm water discharges associated with construction activity in 1999. It contains narrative effluent limitations and requirements to implement appropriate Best Management Practices (BMPs) which emphasize source controls.

Elimination or reduction of nonstorm water discharges is a major goal of the general permit. It prohibits the discharge of materials other than storm water and authorized nonstorm water discharges. It also requires development of a Storm Water Pollution Prevention Plan (SWPPP) and monitoring program.

There is a total of 948 sites covered under the construction storm water permit as of November 2000. The majority of sites are in Ventura and western Los Angeles Counties with 310 in the Santa Clara River Watershed and 100 in the Calleguas Creek Watershed. There are a total of 307 residential sites of 10 acres or more in the Region compared to 112 sites of less than 10 acres. There are a total of 142 commercial sites of 10 acres or more while there are 104 sites of less than 10 acres.

Monitoring and Assessment

California Water Code Section 13192 required the SWRCB to assess and report on the State monitoring programs and to prepare a proposal for a comprehensive surface water quality monitoring program. As currently envisioned, the Surface Water Ambient Monitoring Program (SWAMP) will be implemented using a scientifically sound monitoring design with meaningful indicators of the environment and the results will be readily available to the public. Ambient

monitoring serves as a measure of the overall quality of water resources and the overall effectiveness of Regional Boards prevention, regulatory, and remedial actions.

The SWAMP is intended to meet four goals:

1) Identify specific problems preventing the SWRCB, RWQCBs, and the public from realizing beneficial uses in targeted watersheds.

2) Create an ambient monitoring program that addresses all hydrologic units of the State using consistent and objective monitoring, sampling and analysis methods; consistent data quality assurance protocols; and centralized data management.

3) Document ambient water quality conditions in potentially clean and polluted areas.

4) Provide the data to evaluate the effectiveness of water quality regulatory programs in protecting beneficial uses of waters of the State.

Eventually, each of the SWRCB and RWQCBs existing monitoring programs (e.g., the State Mussel Watch Program, Toxic Substances Monitoring Program, toxicity studies, and fish/shellfish contamination studies) will be incorporated into SWAMP to ensure a coordinated approach without duplication.

Two general approaches are outlined in the current proposal for implementing SWAMP. One focuses on identifying specific problems in targeted watersheds (directed monitoring) through sampling in areas suspected to be contaminated or sampling to evaluate the status of the most sensitive beneficial use (e.g., sample frequently-consumed fish). The overall goal is to establish site-specific information in sites known or suspected to have water quality problems. Collecting information on locations which may need listing or delisting of waters under CWA Section 303(d) is a focus. The other approach involves documenting ambient water quality conditions in potentially clean and polluted areas (ambient monitoring). The overall goals is to develop a Statewide picture of the status and trends of the quality of California's water resources. It is intended that this portion of SWAMP will be implemented in each hydrologic unit of the State at least one time every five years. This portion of SWAMP is focused on collecting information on waters for which the State presently has little information and to determine the effects of diffuse sources of pollution.

Our general approach to implementing the SWAMP will be to sample in the preceding year those waters targeted under the WMI in the following year. For example, in FY00-01 we would sample in the Calleguas Creek and Santa Clara River Watersheds which are targeted under the WMI the following year. That way, each hydrologic unit in the Region would be sampled every five years. A possible exception to this approach is that we may investigate reference sites in non-targeted as well as targeted watersheds.

In general, we would utilize a stratified random approach to select sample sites (stratified to include areas around major confluences) except for our investigation into eutrophication which would utilize a uniform sampling approach and our followup work at previously identified problem sites. Depending on the number of samples deemed necessary (by the scientific review panel) in each stratum to give reliable results (and the associated costs), a more uniform

sampling approach may be utilized instead, such as uniform sampling or sampling at confluences.

There is $360,000 available in FY00/01 for sampling and analysis. The majority (~60%) of those resources are anticipated to be dedicated toward biological monitoring as opposed to chemical analyses. Biological monitoring may include freshwater toxicity tests, habitat assessments, analysis of benthic invertebrates, fish bioassessments, or sediment toxicity tests. Much of this work will be conducted through a master contract with the Department of Fish & Game.

Basin Planning

Water Quality Legislation

The Porter-Cologne Water Quality Control Act (California Water Code) was enacted by the State in 1969 and became effective January 1, 1970. This legislation authorizes the State Board to adopt, review, and revise policies for all waters of the state and directs the Regional Boards to develop regional Basin Plans.

The Clean Water Act (CWA), enacted by the federal government in 1972, was designed to restore and maintain the chemical, physical, and biological integrity of the Nation's waters. One of the national goals states that wherever attainable, water quality should provide for the protection and propagation of fish, shellfish, and wildlife, and provide for recreation in and on the water (i.e., fishable, swimmable). The CWA directs states to establish water quality standards for all "waters of the United States" and review and update such standards on a triennial basis.

The USEPA has delegated responsibility for implementation of portions of the CWA to the State and Regional Boards, including water quality planning and control programs such as the National Pollutant Discharge Elimination System (NPDES).

Besides state and federal laws, several court decisions provide guidance for basin planning. One decision reaffirmed the public trust doctrine, holding that the public trust is "an affirmation of the duty of the state to protect the people's common heritage in streams, lakes, marshlands, and tidelands, surrendering that right of protection only in rare cases when the abandonment of that right is consistent with the purposes of the trust." Public trust encompasses uses of water for commerce, navigation, fisheries, and recreation.

Basin Plans

Regional Board Basin Plans are designed to preserve and enhance water quality and protect the beneficial uses of all regional waters by providing consistent long-term standards and program guidance for the Region. Specifically, Basin Plans (i) designate beneficial uses for surface and ground waters, (ii) set narrative and numerical objectives that must be attained or maintained to protect the designated beneficial uses and conform to the state's antidegradation policy, and (iii) describe implementation programs to protect all waters in the Region. In addition, Basin Plan incorporate (by reference) all applicable State and Regional Board plans and policies and other pertinent water quality policies and regulations.

As part of the State's Continuing Planning Process, components of Basin Plans are reviewed as new data and information become available or as specific needs arise. Comprehensive updates of Basin Plans occur in response to state and federal legislative requirements and as funding becomes available. State Board and other governmental entities' (federal, state and local) plans, that can affect water quality, are incorporated into the planning process. Following adoption by Regional Boards, the Basin Plans and subsequent amendments are subject to approval by the State Board, the State Office of Administrative Law (OAL), and the United States Environmental Protection Agency (USEPA).

Recent Basin Plan Amendments

Basin Plan amendments will be completed periodically as new standards, policies, and other information are developed. TMDLs will also be adopted as Basin Plan amendments. This will generate a significant workload for Standards/TMDL staff over the next 13 years. We also anticipate that watershed efforts utilized, in part, to accomplish TMDLs will identify other possibilities for Basin Plan studies and amendments (e.g., new or revised standards, new policies).

The first TMDL was adopted by the Regional Board in 1999 (amended in 2000) to reduce trash on the East Fork of the San Gabriel River. This Basin Plan amendment has since been approved by the State Board, OAL and USEPA.

A Basin Plan amendment updating municipal and domestic water supply designations was brought to the Board for consideration in late 1998. In November 1998, the Regional Board voted to amend the Water Quality Control Plan for the Los Angeles Region (Basin Plan), by adopting a resolution to "Incorporate Changes in Beneficial Use Designations for Selected Waters." This amendment removed the beneficial use designation for "Municipal and Domestic Supply" (MUN) from eight surface waters and two ground water areas along the coast. The State Board voted to approve this amendment at the February 1999 Board hearing, however, in July 1999, the State Office of Administrative Law (OAL) issued a Notification of Disapproval due to a number of details including our responses to comments. The Regional Board resubmitted groundwater portion of the amendment, which was approved by OAL in 2000.

In 1990, the Regional Board adopted Resolution No. 90-004 (Drought Policy) which had a term of three years and provided interim relief to dischargers who experienced difficulty meeting chloride objectives because of a state-wide drought. The policy adjusted effluent limits to the lesser of 1) 250 mg/l or 2) the chloride concentration in the water supply plus 85 mg/l. In 1995, the Regional Board extended the interim limits for three years and directed staff to develop a long-term solution to deal with the impact of changing water supply, especially during droughts. In 1997, the Regional Board adopted Resolution No. 97-002 (Chloride Policy) which amended the Basin Plan by setting the chloride objective at 190 mg/l except in the Calleguas Creek and Santa Clara River Watersheds where, due to the great concern for protection of agriculture, staff were directed to determine the chloride concentrations sufficient to protect agricultural beneficial uses. The Chloride Policy has since been approved by the State Board and Office of Administrative Law (OAL).

Water Quality Objectives

The CWA (§303) requires states to develop water quality standards for all waters and to submit to the USEPA for approval all new or revised water quality standards are established for inland surface and ocean waters. Water quality standards consist of a combination of beneficial uses and water quality objectives, as well as an antidegradation policy. Water quality objectives may be expressed as either numeric limits or a narrative statement.

In addition to the federal mandate, the California Water Code (§13241) specifies that each Regional Board shall establish water quality objectives. The Water Code defines water quality objectives as "the allowable limits or levels of water quality constituents or characteristics which are established for the reasonable protection of beneficial uses of water or the prevention of nuisance within a specific area." Thus, water quality objectives are intended (i) to protect the public health and welfare and (ii) to maintain or enhance water quality in relation to the designated existing and potential beneficial uses of the water. Water quality objectives are achieved through Waste Discharge Requirements and other programs. These objectives, when compared with future water quality data, also provide the basis for identifying trends toward degradation or enhancement of regional waters.

Triennial Review Process

The California Water Code, (§13240), directs the State and Regional Boards to periodically review and update Basin Plans. Furthermore, the CWA (§303 [c]) directs states to review water quality standards every three years (triennial review) and, as appropriate, modify and adopt new standards.

In the Triennial Review Process, basin planning issues are formally identified and ranked during the public hearing process. These and other modifications to the Basin Plan are implemented through Basin Plan amendments as described below. In addition, the Regional Board can amend the Basin Plan as needed. Such amendments need not coincide with the Triennial Review Process.

The year 2000 triennial review is currently underway with the public hearing process scheduled for January or February 2001. While basin planning priorities have not yet been identified through the process, there are clearly some issues that will need time and resources in the upcoming years. Many of these issues have been raised due to EPA recommendations, new legislation and court orders. For example, in EPA's letter approving the Basin Plan, EPA identified 14 issues that should be included in the triennial review. These include: updating beneficial uses to better identify waterbodies supporting rare, threatened and endangered species, in particular; updating water quality objectives (e.g., ammonia and bacteria); and updating implementation policies and procedures (e.g., for acute and chronic toxicity objectives).

Another issue, driven by recent legislation, involves the Regional Board waiver policy. Regional Boards may issue both categorical and individual waivers. In the case of categorical waivers, the Regional Board must approve and issue categorical waiver criteria either through adopting a specific resolution or Basin Plan amendment. Once a categorical waiver is approved by the Regional Board, Regional Board staff may be delegated the responsibility to review and

approve categorical waivers. Four categorical waivers have been approved in the Region, as set forth in Resolution No. 53-5 (adopted in 1953). These are: septic tanks, swimming pool discharges, on-site drilling mud discharges from single oil wells, and discharges from private impoundments or lakes. Individual waivers are typically for construction or development projects that are short-term or one-time events.

Section 13269, Paragraph (a), of the Water Code states that certain Water Code provisions "may be waived" by a Regional Board for a specific discharge or a specific type of discharge "if the waiver is not against the public interest." However, recent legislation (Senate Bill 390, amending Section 13269) requires that all waivers or waiver categories be evaluated and renewed every 5 years. Initially, Regional Boards must evaluate and renew all waivers and waiver categories by January 1, 2003, otherwise they will automatically terminate. After this initial evaluation and renewal, Regional Boards must conduct on-going compliance monitoring and renew, every 5 years, all waivers and waiver categories. The evaluation of waivers requires an initial review of all waivers and waiver categories, as well as validation of the adequacy of waiver conditions through field sampling at a representative number of discharges granted waivers. Depending on the data generated from this exercise, the Regional Board may decide to renew the waiver category (based on the adequacy of waiver conditions and their observance), amend the conditions (based on their inadequacy as documented through field tests), or allow the waiver category to automatically terminate on 1/1/2003 (based on the documented impact on water quality). If the last option is chosen, the Regional Board will then have to determine how those discharges should be regulated—either through general WDRs or individual WDRs.

Another issue of importance is the anticipated workload associated with adopting TMDLs as Basin Plan amendments on a very short time schedule, as required by the Consent Decree.

There are a number of triennial review issues from 1995 that have not been addressed. In addition, future triennial review issues may include:

- Development of biomonitoring/biocriteria efforts
- Further work on ensuring compliance with ammonia objectives by June 2002
- Implementation issues associated with the California Toxics Rule and State Implementation Policy
- Specific refinements to certain beneficial uses; conducting regular beneficial use assessments to provide more detail – particularly for aquatic life
- Development of regional and watershed-specific policies for nonpoint sources

Proposed (Needed) Near-term (FY 2001/02) and Long-term (beyond FY 2002/03) Resource Allocation for Standards and Planning Activities

Task	Product	Near-term (H,M, or L priority)	Long-term (H,M, or L priority)	PYs	Contract ($)
Implement triennial review tasks	various	H	M	3.0	
Amend Basin Plan for adopted TMDLs	Updated Basin Plan	H		2.0	
Address waiver policy	Updated waiver policy		H	0.5	
Update Basin Plan maps, including reach boundaries	Updated graphics in Basin Plan		M	1.0	
Prepare web-based version of Basin Plan	Interactive web version		M	0.5	
Review of CEQA documents	Comments to lead agencies during project planning and development	H		1.0	
Preparation of CEQA documents (as needed)	CEQA documents		M	0.2	

We will remain committed to involvement with the 205(j) grant program for planning and assessment activities. Table 3, which follows lists our priority projects under that grant program.

Table 3. Targeted Watersheds and Projects for 2001/02 Section 205(j) Grants in the Los Angeles Region

Watershed/ Waterbody	Project Description	Outcomes/ Products
Los Angeles River Watershed	Fund one component (bioassessment) of an overall watershed monitoring program; evaluate its usefulness in future watershed assessments and as an element in a watershed-wide monitoring program; establish baseline that can be used for comparison after implementation of control measures at pollutant sources (both point and nonpoint)	Additional assessment information for Year 2002 WQA; baseline beneficial use support information
Los Angeles River Watershed	Fund collection and assembly of all monitoring data for watershed including utilizing sources such as monitoring pledged in CEQA or 401 certification documents	Historic database (mapped sampling sites) as starting point for future work
Santa Monica Bay WMA	Prioritize storm drains needing diversion; focus efforts on major problem drains for coliform TMDL implementation	Ability to focus efforts on the major problem drains
Santa Monica Bay WMA	Fund portion of watershed-wide monitoring program in Malibu, with emphasis on nutrients and coliform or bioassessment concerns in the upper portion of the watershed as part of an integrated monitoring effort jointly undertaken by local stakeholders	Produce data for TMDLs; find sources of impairments; evaluate any BMPs being implemented; assess areas of watershed not previously studied
Calleguas Creek Watershed	Hydrologic model of watershed, including the lagoon	Hydrologic model (including Mugu Lagoon)
San Gabriel River Watershed	Fund collection and assembly of all monitoring data for watershed including utilizing sources such as monitoring pledged in CEQA or 401 certification documents	Historic database (mapped sampling sites) as starting point for future work
San Gabriel River Watershed	Fund collection of bioassessment data for watershed; evaluate its usefulness in future watershed assessments and as an element in a watershed-wide monitoring program; establish baseline that can be used for comparison after implementation of control measures at pollutant sources (both point and nonpoint)	Additional assessment information for Year 2002 WQA; baseline beneficial use support information
San Gabriel River Watershed	Hydrologic model of estuary (emphasis on establishing characteristics of fresh- and saltwater mixing zone)	Hydrologic model of estuary
San Gabriel River Watershed	Develop plan for maintenance of watershed's flood control dams.	Most effective method to clean out reservoirs without beneficial use impairments
Regionwide	Regional planning to remove septic tanks in densely populated areas and hook up to sewers	A plan to remove septics in densely populated areas and reduce inputs (coliforms and nutrients) to ground water and surface water from faulty septics and congested leachfields (a plan to implement coliform and nutrient TMDLs)

Wetlands Protection and Management

Wetlands acres in the Region have diminished greatly over the past several decades as coastal development, in particular, has increased. Wetlands provide habitat, serve to slow down water flow, decrease total volume through infiltration, and filter out a number of pollutants through active uptake by plants as well as deposition in sediments. Wetlands such as coastal estuaries are a buffer zone between ocean and inland water resources and are heavily utilized by aquatic organisms. Continuous stretches of riparian habitat function as wildlife corridors to allow animal movement between increasingly isolated populations. They also serve as popular recreational destinations for residents and visitors. Unfortunately, many of our Region's wetlands are impacted by varying kinds and amounts of pollutants and alterations.

Over the past 7 years, we have embarked on a number of efforts to inventory and evaluate our Region's wetlands. These efforts have included the following:

- We funded a 1993 study, entitled *Waterbodies, Wetlands, and their Beneficial Uses in the Los Angeles Region* which provides descriptions, maps, photos, and functional values of wetlands throughout the region.

- Our Santa Monica Bay Restoration Project funded a wetlands inventory in 1993 which outlines historical changes in wetlands in the Santa Monica watershed, an inventory of current wetlands in the watershed, and potential restoration and creation projects in the watershed.

- The Regional Board continues the work of inventorying through participation in the Southern California Wetlands Recovery Project, which for the first phase effort, conducted an inventory of coastal wetlands from Santa Barbara to the U.S.-Mexico border. This inventory included information on twelve wetlands in seven watersheds for our region. When compared to estimated historical acreages, Los Angeles County has lost 93% of its wetlands while Ventura County has lost 58% of its wetlands.

  A 20-year regional wetland plan and strategy for prioritizing and restoring sites is being developed. Currently, the Project funds wetlands projects which involve planning, restoration, or acquisition. Some of the this region's wetlands given a high priority for funding include Los Cerritos Wetlands, Malibu Lagoon, Ormond Beach Wetlands, and the Ventura River estuary. More information about the Project may be found on its webpage at http:www.coastalconservancy.ca.gov/scwrp/index.html.

Water Quality Certification (401) Program

A key wetlands regulatory tool for the Regional Board is the CWA Section 401 Water Quality Certification Program which regulates discharges of dredge and fill materials to waters. The 401 certification program is one of the most effective tools the state has for regulating hydrologic modification projects, especially those which directly impact the region's diminishing acres of wetlands and riparian habitat. Program work is conducted in conjunction with U.S. Army Corps of Engineers and the California Department of Fish & Game.

Key program activities should include CEQA documents review/response (possibly involvement as lead agency), pre-construction meetings with applicants, site visits, application processing, follow-up monitoring and inspections, and enforcement. Unfortunately, the program is currently severely underfunded with only application processing being undertaken. **The program is currently funded at 2.1 PYs; the FY 00/01 statewide needs analysis for the 401 certification program indicated a needed augmentation of 13.9 PYs.** Any incremental increases in the baseline PYs would go first toward follow-up work and enforcement, then toward increased support of application processing, then coordination meetings, site visits, and CEQA documents review/response. Follow-up work is especially critical since mitigation wetlands often do not function as well as projected during the planning phase. Another very important activity that could be funded is the development of policies regarding in-stream gravel mining and use of in-stream sediment basins.

Furthermore, beginning in FY 00/01, the program began requiring in-house certification rather than sign-off by State Board. This has resulted in more detailed review of all projects, even those which would previously have been given less attention (those with little likelihood of producing impacts) with less time then being available for large projects likely to produce impacts. Another program change which occurred in the past fiscal year was allowing third-party petitions of certification decisions; previously, only the applicant was allowed to do this. This leads to potentially needing to divert scarce resources from application processing to litigation work.

Approximately 150-200 applications are processed each year. Information about projects and the program in general is available on the Regional Board website at http://www.swrcb.ca.gov/~rwqcb4/.

Recently, the Regional Board applied for USEPA wetlands protection grant funding under CWA Section 104(b)(3) for federal fiscal year 2001. The pre-proposal was competitive and the Board was asked to submit a full, detailed application. We are requesting $309,500 from USEPA to conduct a two-year study to access the effectiveness of wetlands mitigation conducted through the 401 certification program. Funds will be awarded during summer 2001.

Management of Nonpoint Source Pollution

Background

The Porter-Cologne Water Quality Control Act (Porter-Cologne), Division 7 of the California Water Code, establishes a comprehensive program for the protection of water quality and the beneficial uses of State waters. Porter-Cologne applies to both surface and ground waters, and to both point and nonpoint sources. The implementation portion of this comprehensive program should provide for the attainment of water quality standards.

The two primary federal statutes that establish a framework for addressing nonpoint source pollution in this Region are **Clean Water Act (CWA) Section 319** and the **Coastal Zone Act Reauthorization Amendments (CZARA) of 1990 Section 6217**. Together these statutes encourage states to assess water quality problems associated with nonpoint sources of pollution and to develop programs to control these sources.

- CWA Section 319 requires that, in order to be eligible for federal funding, states develop an assessment report detailing the extent of nonpoint source pollution, and a management program specifying nonpoint source controls.

- CZARA Section 6217(a) requires the state to develop and implement management measures for nonpoint source pollution to restore and protect coastal waters; establish coastal nonpoint source programs.

These programs will be implemented through changes to the state's current nonpoint source control program approved by USEPA under CWA Section 319 and through changes to the state's coastal zone management program (implemented in this state by the California Coastal Commission) approved by NOAA under Coastal Zone Management Act Section 306.

Under CZARA, California must (1) provide for the implementation of management measures that are in conformity with the USEPA *Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters* (1993) and (2) provide a process for developing and revising management measures to be applied in critical coastal areas and in areas where necessary to attain and maintain water quality standards.

Management measures are defined in CZARA as: "economically achievable measures to control the addition of pollutants from existing and new categories and classes of nonpoint sources of pollution, which reflect the greatest degree of pollution reduction achievable through application of the best available nonpoint pollution control practices, technologies, processes, siting criteria, operating methods, or other available alternatives." Mechanisms for implementation of these management measures may include, for example, permit programs, zoning, enforceable water quality standards, and general environmental laws and prohibitions by which a state exerts control over private and public lands and water uses and natural resources in the coastal zone (including those which may be implemented by agencies other than the State Water Resources Control Board and the California Coastal Commission). States may also use voluntary approaches like economic incentives if they are backed by appropriate regulations.

The State recently adopted an updated nonpoint source management plan which includes a 5-year implementation plan as well as a longer-term 15-year implementation strategy. The plan by USEPA and NOAA in July 2000. Implementation of the plan will entail the use of considerable resources at the Regional Board level. Documents relating to this plan may be found at http://www.swrcb.ca.gov/nps/html/protecting.html.

While it is clear nonpoint sources of pollution are difficult to manage, the state's current nonpoint source management plan (developed in 1988 pursuant to Clean Water Act Section 319) does present a three-tiered management approach which can be implemented sequentially or a focus may be put on one tier if deemed effective in a particular situation:

- **Tier 1**, self-determined implementation of best management practices (BMPs); acknowledges the advantages of property and business owners pursuing creation of site-specific or business-specific programs of waste management tailored to their budget.

- **Tier 2**, regulatory-based encouragement of BMPs, may occur when voluntary implementation is lacking. Encouragement may be effected through Regional Board

waiving of waste discharge requirements if compliance with BMPs occurs. Or, BMPs may be enforced indirectly by entering into management agency agreements (MAAs) with agencies which have the authority to enforce. These MAAs would reference the specific BMPs to be used and the means of implementation.

- The Regional Board can adopt and enforce requirements on any waste discharge including those from nonpoint sources. **Tier 3** in the nonpoint source management hierarchy involves prescribing effluent limitations which would in turn require implementation of BMPs in order to insure compliance.

The State's Nonpoint Source Management Plan supports Regional Boards actively promoting voluntary implementation of BMPs but also supports that, when necessary, the Regional Boards exercise their regulatory authority over nonpoint sources in order to achieve water quality objectives. This Regional Board utilizes the full range of nonpoint source management options. A discussion of the overall approach to management of nonpoint source pollution used in this Region follows while specific nonpoint source issues and implementation activities relative to individual watersheds are described in the appropriate watershed section.

Proposition 13 Funding

The passage of the Costa-Machado Water Act of 2000 (Proposition 13) provided for the availability of water quality grants under three subaccounts: (1) Chapter 6, Article 2, Watershed Protection Program, (2) Chapter 7, Article 2, Nonpoint Source Pollution Control Program, and (3) Chapter 7, Article 5, Coastal Nonpoint Source Control Program.

The Watershed Protection Program provides funding for development of local watershed management plans as a priority and, additionally, funding for implementation of nonpoint source control projects that are consistent with local watershed plans and Regional Board water quality control plans. The Nonpoint Source Control and Coastal Nonpoint Source Control Programs provide funding for implementation of nonpoint source control projects that are consistent with local watershed plans and Regional Board water quality control plans.

There are more specific requirements for funding under each subaccount but all three include the a number of criteria be used in the project ranking and selection process. Criteria include (but are not limited to) that the project: consider the entire ecosystem for protection or restoration; address the root causes of degradation, rather than the symptoms, has definable targets and desired future conditions; and that the project helps protect intact or nearly intact ecosystems and watersheds.

Sixty percent of the funding is required to go to the six southern California counties. Funding levels are considerably higher than that available through CWA Section 319(h) and will be a critical component of nonpoint source work in this Region.

Our Approach

The State's Nonpoint Source Management Plan puts an emphasis on prioritization of nonpoint source categories as well as those waters impacted by nonpoint source pollution. It also states that management activities and implementation schedules needs are to be identified (e.g. monitoring for source identification, education, training, regulation, interagency agreements,

and employment of BMPs). As is discussed elsewhere, many of these activities are severely underfunded. However, with that in mind, the following presents this Region's goals and objectives for the implementation of the State's Nonpoint Source Management Plan. Program objectives which apply most specifically to particular watersheds are highlighted and enlarged upon in the appropriate watershed section, as appropriate. The following program objectives will serve as a basis for workplan development; the final list of tasks will be dependent on the level of funding. The current funding level of these objectives are also included below and further described in Table 8.

Nonpoint Source Program Goals

Long-term Program Goal: improve water quality by implementing the management measures identified in the California Management Measures for Polluted Runoff Report (CAMMPR) by 2013

- Facilitate implementation of watershed management plans for prevention and control of nonpoint source pollution throughout the Region
- Expand our nonpoint source pollution control efforts in the Region
- Encourage more implementation of management measures in targeted watersheds
- Track implementation of management practices

Nonpoint Source Program Objectives

1) Program management – We shall oversee implementation of the Nonpoint Source Program in this Region through a variety of activities including fulfilling reporting requirements for the program, attending nonpoint source program roundtable meetings, and preparing and tracking annual workplan tasks. *Funded*

2) Contract management - In order to encourage planning and implementation of appropriate management measures, we shall explore funding opportunities and assume responsibility for administering and tracking contracts through which federal and state funds can be directed toward finding solutions to nonpoint source problems. Table 4 identifies our high priority projects for funding through the Section 319(h) grant program. Table 5 identifies our high priority projects for funding through Proposition 13 funding. (Note: high priority projects for funding through the 205(j) grant program are listed in Appendix 4.8). *Partially Funded*

3) Establishment of regional and/or watershed strategies – We intend to focus on developing regional (and where appropriate, watershed-specific) strategies to address nonpoint source pollution from agriculture (including investigation of use of nutrients, pesticides, and irrigation return water at large farming operations, nurseries and horse stables), urban (specifically new and existing development, golf courses and septic tanks, the latter will be focused on densely populated communities and areas where ground water is a source of drinking water), marinas and hydromodifications. *Partially funded*

4) Increase coordination of nonpoint source program with TMDLs through identification and reporting on the primary sources of nonpoint source pollutants with associated loadings; increase coordination of the nonpoint source program with the WMI. *Partially funded*

5) Identify and prioritize management measures to control NPS activities and promote implementation of these specific management measures to reduce or eliminate nonpoint source pollution problems throughout the Region (see Table 6 for summary of Regional NPS Problems by Management Measure Category). *Partially funded*

- For **agriculture**, high priority NPS/CZARA Management Measures include: a) for **traditional agriculture**, erosion and sediment control, nutrient management, pesticide management, irrigation water management, and education/outreach; for **horse stables**, management of wastewater and runoff from confined animal facilities, grazing management, and education/outreach; for **nurseries**, nutrient management, pesticide management, irrigation water management, and education/outreach.

- For **urban**, high priority NPS/CZARA Management Measures include: a) watershed protection and runoff from new and existing development, b) for **septic systems** new and operating onsite disposal systems, and c) for **golf courses** pollution prevention/education.

- For **marinas**, medium priority NPS/CZARA Management Measures include: control of solid wastes, fish wastes, liquid material, and petroleum; boat cleaning and maintenance; maintenance of sewage facilities; and public education.

- For **hydromodification management**, low-medium priority NPS/CZARA Management Measures include: channelization and channel modification; streambank and shoreline erosion control; and education/outreach.

- For **wetlands, riparian areas & vegetated treatment systems**, low-medium priority NPS/CZARA Management Measures include protection of wetlands and riparian areas, restoration of wetlands and riparian areas, and education/outreach.

6) Increase participation in public outreach and education activities through technology transfer, public presentations and preparation of education packages. We will participate on technical advisory committees, regional workshops, and agency meetings to promote implementation of nonpoint source management measures through. *Partially funded*

Table 7 describes our short-term program objectives as they relate to our long-term goals. Table 8 summarizes our proposed FY2001/02 activities (potential workplan activities), describes the current level of funding, and defines where and at what level additional funding is needed. **We anticipate needing an additional 14.0 PYs to accomplish these tasks which are necessary to implement the State's upgraded NPS Plan.** Any incremental increase in staff levels would go toward: 1) greater identification, education, and promotion of stakeholder involvement, 2) increased determination of the effectiveness of BMPs and Management Measures implemented, 3) establishment of a more effective policy to address pollutants from septic systems, confined animal facilities, mobile businesses, in-stream gravel mining, and agricultural runoff, and 4) quantification of the effectiveness of mitigation used to replace wetlands and riparian areas impacted by development.

Table 4. High Priority Projects for FY 2001/02 319(h) Funding

Project Number	Project Description	Geographic Area/Watershed *(* denotes Category 1 Priority Watersheds)*	NPS Management Measures *(as listed in State's Nonpoint Source Management Plan)*	Watershed Restoration Action Strategy
R4 - 1	Pilot projects: trash reduction, management of horse corral runoff, golf course irrigation water runoff, urban runoff, or implementation of septic correction measures (NOT related to a NPDES permit). Leads to demonstration of effective ways to reduce loadings from these constituents, mainly, trash, nutrients, and coliform, all of which are causing impairments.	Los Angeles River Watershed*	3.4.B. 3.6.A. 1.B.	Los Angeles-San Gabriel Rivers Watershed Council. *The Los Angeles-San Gabriel Watershed, an Integrated Vision of the Future*, 1997
R4 - 2	Restore aquatic and riparian habitats; enhance recreational uses. Leads to protection and enhancement of beneficial uses	Los Angeles River Watershed*	6.B.	Los Angeles-San Gabriel Rivers Watershed Council. *The Los Angeles-San Gabriel Watershed, an Integrated Vision of the Future*, 1997
R4 - 3	Restore wetlands (Malibu, Topanga, and Trancas Lagoons). Leads to protection and restoration of beneficial uses	Santa Monica Bay WMA*	6.B.	Santa Monica Bay Restoration Project. *Santa Monica Bay Restoration Plan*, 1995.
R4 - 4	Pilot projects: trash reduction, management of horse corral runoff, golf course irrigation water runoff, urban runoff, or implementation of septic correction measures (NOT related to a NPDES permit). Leads to demonstration of effective ways to reduce loadings from these constituents, mainly, trash, nutrients, and coliform, all of which are causing impairments	Santa Monica Bay WMA*	3.4.B. 3.6.A. 1.B.	Santa Monica Bay Restoration Project. *Santa Monica Bay Restoration Plan*, 1995.
R4 – 5	Implement comprehensive erosion control projects, with expected demonstrable improvements, in previously identified top three problem subwatersheds in terms of sediment production. Leads to significant reduction in sediment and pesticide loads to Mugu Lagoon.	Calleguas Creek Watershed*	1.A. 1.G. 5.3.A.	Natural Resources Conservation Service. *Calleguas Creek Watershed Erosion and Sediment Control Plan for Mugu Lagoon*, 1995.
R4 – 6	Habitat enhancement/ riparian restoration. Leads to restoration and protection of beneficial uses	Calleguas Creek Watershed*	6.B.	Natural Resources Conservation Service. *Calleguas Creek Watershed Erosion and Sediment Control Plan for Mugu Lagoon*, 1995.
R4 – 7	Reduce nutrients, pesticides, and sediments in irrigation water that flows to surface water or infiltrates to ground water. Leads to implementation of measures needed to comply with TMDLs and de-list impairments.	Calleguas Creek Watershed*	1.C. 1.D. 1.F. 1.G.	Natural Resources Conservation Service. *Calleguas Creek Watershed Erosion and Sediment Control Plan for Mugu Lagoon*, 1995.

Table 4. High Priority Projects for FY 2001/02 319(h) Funding

Project Number	Project Description	Geographic Area/Watershed *(* denotes Category 1 Priority Watersheds)*	NPS Management Measures *(as listed in State's Nonpoint Source Management Plan)*	Watershed Restoration Action Strategy
R4 – 8	Restore aquatic and riparian habitats; enhance recreational uses. Leads to protection and enhancement of beneficial uses.	San Gabriel River Watershed*	6.B.	California Regional Water Quality Control Board, Los Angeles Region. *East Fork San Gabriel River Litter TMDL*, 1999. Los Angeles-San Gabriel Rivers Watershed Council. *The Los Angeles-San Gabriel Watershed, an Integrated Vision of the Future*, 1997.
R4 – 9	Trash reduction projects in upper San Gabriel River; elsewhere in watershed, management of horse corral runoff, golf course irrigation water runoff, urban runoff, or implementation of septic correction measures (NOT related to a NPDES permit). Leads to trash reduction in upper San Gabriel River (implementation of trash TMDL).	San Gabriel River Watershed*	3.4.B., 3.6.A, 1.B	California Regional Water Quality Control Board, Los Angeles Region. *East Fork San Gabriel River Litter TMDL*, 1999. Los Angeles-San Gabriel Rivers Watershed Council. *The Los Angeles-San Gabriel Watershed, an Integrated Vision of the Future*, 1997.
R4 – 10	Restore aquatic and riparian habitats; enhance recreational uses.	Los Cerritos Channel/Alamitos Bay WMA*	6.B.	None
R4 – 11	Restore aquatic and riparian habitats; enhance recreational uses. Leads to protection and enhancement of beneficial uses.	Santa Clara River Watershed *	6.B.	Santa Clara River Enhancement and Management Plan Steering Committee. *Draft Santa Clara River Enhancement and Management Plan.* City of Santa Clarita. *Santa Clara River Corridor Plan.*
R4 – 12	GIS repository for watersheds of Region; use in TMDLs a high priority.	Regionwide		California Regional Water Quality Control Board, Los Angeles Region. *Watershed Management Initiative Chapter*, 2000.
R4 - 13	GIS repository for water and wetland mitigation data.	Regionwide		None

Table 5. High Priority Projects for FY 2001/02 Proposition 13 Funding

Project Number	Project Description	Geographic Area/Watershed *(* denotes Category 1 Priority Watersheds)*	NPS Management Measures *(as listed in State's Nonpoint Source Management Plan)*	Watershed Restoration Action Strategy
Watershed Protection Program				
R4 – 1	Finalize development of Watershed Management Plan	Santa Monica Bay WMA* (Topanga Creek Watershed)		
R4 – 2	Develop Watershed Management Plan	Los Cerritos Channel WMA*		
R4 – 3	Finalize development of Watershed Management Plan	Calleguas Creek Watershed *		
R4 – 4	Finalize development of Watershed Management Plan	San Gabriel River Watershed*		
R4 - 5	Finalize development of *Santa Clara River Enhancement and Management Plan*	Santa Clara River Watershed*		
R4 – 6	Finalize development of Watershed Management Plan	Los Angeles River Watershed*		
R4 – 7	Develop Watershed Management Plan	Dominguez Channel and LA/LB Harbor WMA*		
R4 – 8	Implement priority projects identified in the *Steelhead Trout Restoration and Recovery Plan*	Ventura River Watershed		Entrix, Inc. *Steelhead Trout Restoration and Recovery Plan*, 1997.
R4 – 9	Implement priority projects identified in the *Calleguas Creek Watershed Erosion and Sediment Control Plan for Mugu Lagoon*	Calleguas Creek Watershed*	1.A. 1.G. 5.3.A.	Natural Resources Conservation Service. *Calleguas Creek Watershed Erosion and Sediment Control Plan for Mugu Lagoon*, 1995.
R4 – 10	Implement priority projects identified in the *Santa Monica Bay Restoration Plan*	Santa Monica Bay WMA*	3.4.B. 3.6.A. 1.B.	Santa Monica Bay Restoration Project. *Santa Monica Bay Restoration Plan*, 1995.
R4 – 11	Implement priority restoration and enhancement projects identified by the Southern California Wetlands Recovery Project	Santa Monica Bay WMA* Ventura River Watershed Misc. Ventura Coastal WMA* Los Cerritos Channel WMA*	6.B.	Current fiscal year workplan adopted by Board of Governors
R4 - 12	Implement priority restoration projects identified in the draft *Watershed, Wetlands, and Riparian Restoration Plan* for Calleguas Creek	Calleguas Creek Watershed*	6.B.	draft *Watershed, Wetlands, and Riparian Restoration Plan* for Calleguas Creek

Table 5. High Priority Projects for FY 2001/02 Proposition 13 Funding

Nonpoint Source Pollution Control Program				
R4 - 12	Implement priority projects identified in the *Calleguas Creek Watershed Erosion and Sediment Control Plan for Mugu Lagoon*	Calleguas Creek Watershed*	1.A. 1.G. 5.3.A.	Natural Resources Conservation Service. *Calleguas Creek Watershed Erosion and Sediment Control Plan for Mugu Lagoon*, 1995.
R4 - 13	Trash reduction projects in upper San Gabriel River (implementation of trash TMDL); elsewhere in watershed, management of horse corral runoff, golf course irrigation water runoff, urban runoff, nursery runoff, or implementation of septic correction measures (activities related to a stormwater permit ARE eligible: those related to other NPDES permits are not).	San Gabriel River Watershed*	3.4.B. 3.6.A 1.B	California Regional Water Quality Control Board, Los Angeles Region. *East Fork San Gabriel River Litter TMDL*, 1999. Los Angeles-San Gabriel Rivers Watershed Council. *The Los Angeles-San Gabriel Watershed, an Integrated Vision of the Future*, 1997.
R4 – 14	Reduce nutrients, pesticides, and sediments in irrigation water that flows to surface water or infiltrates to ground water. Leads to implementation of measures needed to comply with TMDLs and de-list impairments.	Calleguas Creek Watershed*	1.C. 1.D. 1.F. 1.G.	Natural Resources Conservation Service. *Calleguas Creek Watershed Erosion and Sediment Control Plan for Mugu Lagoon*, 1995.
R4 - 15	Trash reduction, management of horse corral runoff, golf course irrigation water runoff, urban runoff, nursery runoff, or implementation of septic correction measures (activities related to a stormwater permit ARE eligible: those related to other NPDES permits are not). Leads to demonstration of effective ways to reduce loadings from these constituents, mainly, trash, nutrients, and coliform, all of which are causing impairments.	Los Angeles River Watershed*	3.4.B. 3.6.A. 1.B.	California Regional Water Quality Control Board, Los Angeles Region. *East Fork San Gabriel River Litter TMDL*, 1999. Los Angeles-San Gabriel Rivers Watershed Council. *The Los Angeles-San Gabriel Watershed, an Integrated Vision of the Future*, 1997
R4 - 16	Trash reduction, management of horse corral runoff, golf course irrigation water runoff, urban runoff, nursery runoff, or implementation of septic correction measures (activities related to a stormwater permit ARE eligible: those related to other NPDES permits are not). Leads to demonstration of effective ways to reduce loadings from these constituents, mainly, trash, nutrients, and coliform, all of which are causing impairments.	Santa Monica Bay WMA**	3.4.B. 3.6.A. 1.B.	Santa Monica Bay Restoration Project. *Santa Monica Bay Restoration Plan*, 1995.

Table 5. High Priority Projects for FY 2001/02 Proposition 13 Funding

Coastal Nonpoint Source Control Program				
R4 - 17	Coastal-oriented trash reduction, management of horse corral runoff, golf course irrigation water runoff, urban runoff, nursery runoff, impacts from boating activities, or implementation of sewer collection system improvements or septic correction measures (activities related to a stormwater permit ARE eligible: those related to other NPDES permits are not). Leads to demonstration of effective ways to reduce loadings to the coast from these constituents, mainly, trash, nutrients, and coliform, all of which are causing impairments.	Los Angeles River Watershed*	3.4.B. 3.6.A. 1.B.	Los Angeles-San Gabriel Rivers Watershed Council. *The Los Angeles-San Gabriel Watershed, an Integrated Vision of the Future*, 1997
R4 - 18	Coastal-oriented trash reduction, management of horse corral runoff, golf course irrigation water runoff, urban runoff, nursery runoff, impacts from boating activities, or implementation of sewer collection system improvements or septic correction measures (activities related to a stormwater permit ARE eligible: those related to other NPDES permits are not). Leads to demonstration of effective ways to reduce loadings to the coast from these constituents, mainly, trash, nutrients, and coliform, all of which are causing impairments.	Santa Monica Bay WMA*	3.4.B. 3.6.A. 1.B.	Santa Monica Bay Restoration Project. *Santa Monica Bay Restoration Plan*, 1995.
R4 - 19	Coastal-oriented trash reduction, management of horse corral runoff, golf course irrigation water runoff, urban runoff, nursery runoff, impacts from boating activities, or implementation of sewer collection system improvements or septic correction measures (activities related to a stormwater permit ARE eligible: those related to other NPDES permits are not). Leads to demonstration of effective ways to reduce loadings to the coast from these constituents, mainly, trash, nutrients, and coliform, all of which are causing impairments.	San Gabriel River Watershed*	3.4.B. 3.6.A. 1.B.	California Regional Water Quality Control Board, Los Angeles Region. *East Fork San Gabriel River Litter TMDL*, 1999. Los Angeles-San Gabriel Rivers Watershed Council. *The Los Angeles-San Gabriel Watershed, an Integrated Vision of the Future*, 1997

Table 5. High Priority Projects for FY 2001/02 Proposition 13 Funding

R4 - 20	Coastal-oriented trash reduction, management of horse corral runoff, golf course irrigation water runoff, urban runoff, nursery runoff, impacts from boating activities, or implementation of sewer collection system improvements or septic correction measures (activities related to a stormwater permit ARE eligible: those related to other NPDES permits are not). Leads to demonstration of effective ways to reduce loadings to the coast from these constituents, mainly, trash, nutrients, and coliform, all of which are causing impairments.	Los Cerritos Channel WMA*	3.4.B. 3.6.A. 1.B.	

TABLE 6. REGIONAL NPS* PROBLEMS BY MANAGEMENT MEASURE CATEGORY

	Pollutants impairing or threatening Beneficial Uses arranged by Management Measure Category					
Watershed	Agriculture	Silviculture	Urban	Marinas & Recreational Boating	Hydromodifi-cation	Wetlands & Vegetated Treatment Systems
Calleguas Creek Watershed	nitrogen sediment toxicity siltation toxicity salts selenium historic pesticides chlorpyrifos		nitrogen sediment toxicity siltation toxicity mercury other metals historic pesticides chlorpyrifos PCBs trash		siltation	
Los Angeles River Watershed	nitrogen chlorpyrifos historic pest.		nitrogen chlorpyrifos historic pest. trash selenium other metals coliform PCBs oil VOCs			
Miscellaneous Ventura Coastal Waters WMA	sediment toxicity historic pesticides		sediment toxicity historic pesticides Coliform PCBs PAHs metals	Coliform PCBs PAHs metals TBT		
Santa Clara River Watershed	historic pesticides nitrogen salts		historic pesticides nitrogen coliform trash			
San Gabriel River Watershed	nitrogen coliform toxicity		nitrogen coliform toxicity PCBs trash arsenic mercury other metals chloride abnormal fish histology			

* Problems may be partially or fully due to NPS. Point sources may also be contributing to the problem.

TABLE 6. REGIONAL NPS* PROBLEMS BY MANAGEMENT MEASURE CATEGORY (cont'd)

	Pollutants impairing or threatening Beneficial Uses arranged by Management Measure Category					
Watershed	Agriculture	Silviculture	Urban	Marinas & Recreational Boating	Hydromodifi-cation	Wetlands & Vegetated Treatment Systems
Santa Monica Bay WMA	coliform		coliform	coliform	exotic vegetation	reduced tidal flushing
	nitrogen		nitrogen PCBs sediment toxicity benthic comm. effects toxicity PAHs arsenic mercury other metals hist. pesticides trash fish consumption advisory debris salts	metals PCBs sediment toxicity benthic comm. effects toxicity PAHs TBT	habitat alteration hydromodification reduced tidal flushing	exotic vegetation
Dominguez Channel and LA/LB Harbors WMA			coliform sediment toxicity benthic comm. effects PCBs historic pesticides PAHs metals nitrogen trash	coliform sediment toxicity benthic comm. effects PCBs historic pesticides PAHs metals TBT		
Los Cerritos Channel and Alamitos Bay WMA			historic pesticides PCBs sediment toxicity PAHs metals nitrogen coliform			
Ventura River Watershed	eutroph. DDT selenium		eutroph. metals trash		diversions	Diversions

* Problems may be partially or fully due to NPS. Point sources may also be contributing to the problem.

TABLE 7 – SHORT TERM OBJECTIVES

This table lists our specific short-term (1-5 years) objectives and the long-term goals to which they are linked

Objectives	Program Goal that the Objective Fulfills	2000	2001	2002	2003	2004	Management Measures
NPS Program management	Goals 2 and 4	X	X	X	X	X	
319(h)/205(j) contract management	Goals 1, 2 and 3	X	X	X	X	X	
Identify Primary sources of NPS impacts to water quality	Goals 1 and 2	X					
Identify and Prioritize Management Measures for NPS activities	Goals 1 and 2	X					
Increase coordination of NPS program with TMDLs and WMI	Goals 1 and 2	X	X	X	X	X	
Establishment of regional/watershed strategies	Goals 1 and 2	X	X	X	X	X	3.1A
Coordinate with other regulatory agencies and stakeholders to control NPS	Goals 1, 2 and 3	X	X	X	X	X	
Increase participation in outreach, education, workshops, TACs	Goals 2 and 3	X	X	X	X	X	1G,3.6A,4.3A
Promote implementation of high priority Management Measures for Agriculture and Urban Areas	Goals 2 and 3	X	X	X	X	X	1A,1C,1D,1E,1F,1G, 3.4A,3.4B,3.6A
Promote implementation of medium and low priority Management Measures for Marina's, Hydromodifications and Wetland and Riparian Area	Goals 2, 3 and 4	X		X	X	X	4.2A,4.2B,4.2C,4.2D, 4.2E,4.2F,4.3A 5.1.A,5.1.B,5.3.A, 5.4A, 6.0A, 6.0B, 6.0C

Long-Term Goal: Improve water quality by implementing Management Measures by 2013

- Program Goal 1: Facilitate implementation of watershed management plans for prevention and control of nonpoint source pollution throughout the Region
- Program Goal 2: Expand our nonpoint source pollution control efforts in the Region
- Program Goal 3: Encourage more implementation of Management Measures in targeted watersheds
- Program Goal 4: Track implementation of management practices

TABLE 8: PROPOSED SFY 2001/02 RESOURCE ALLOCATION

Task	Product	Management Measure(s)	Staff or Contract	Cost
NPS Program management	Annual Reports, Identify primary NPS impacts and prioritize management measures to control NPS activities		0.7	70,000
319(h)/205(j) contract management	Database to track projects & develop report summary, Contract QA/QC, Contract outreach		**0.7** 1.0	**70,000** 100,000
Increase coordination of NPS program with TMDLs and WMI	Better coordination of projects and increased participation in TMDL development and implementation		**0.1** 0.5	**10,000** 50,000
Establishment of regional/watershed strategies	Coordinated planning		**0.2**	**20,000**
Coordinate with other regulatory agencies and stakeholders to control NPS	Increase participation in outreach, education, workshops, TACs	1G,3.6A,4.3A, 5.4A, 6D	**0.2** 0.5	**20,000** 50,000
Promote implementation of high priority Management Measures for Agriculture And Urban Areas	Reduction of NPS impacts, summary of BMP's implemented, Enforcement of Non-compliance	1A, 1B,1C,1D,1E, 1F,1G,3.1A, 3.1B, 3.1C, 3.2A, 3.2B, 3.3A, 3.4A, 3.4B, 3.6A,	**0.9** 7.5	**90,000** 750,000
Promote implementation of medium and low priority Management Measures for Marina's, hydromodifi-cations, and wetland and riparian areas	Develop database to track projects and expand GIS system to confirmation project & mitigation locations	4.1A,4.2A,4.2B, 4.2C,4.2D,4.2E, 4.2F,4.3A,5.1A, 5.1.B,5.3.A, 5.4A, 6A, 6B, 6D	**0.1** 3.0	**10,000** 300,000
Coordinated planning	CEQA Review for watershed Management & large or regional projects	3.1A, 3.1B, 5.1B, 6A	1.5	150,000
Total funded staff Total unfunded staff			**2.9PYs** 14	**290,000** 1,400,000

STAFF COST ≥ 1 PY $100,000 (costs in **bold** are those with anticipated resources; costs not in bold are those currently without resources). Contract costs are for the entire contract even if multi-year.

Regional Board Enforcement Strategy

The statewide Water Quality Enforcement Policy adopted by State Board in 1996 is intended to make all enforcement consistent, predictable, and fair throughout the state. On March 3, 1997, the Regional Board adopted Resolution No. 97-005 which confirmed the Board's desire to carry out enforcement in a manner consistent with State Board's enforcement policy and that Regional Board staff prepare a regional enforcement strategy consistent with State Board's enforcement policy. The Resolution directed staff to implement the Regional Enforcement Strategy. The statewide enforcement policy is currently in the process of being revised.

The statewide Water Quality Enforcement Policy upon which the Region Board Enforcement Strategy is based states that "(v)iolations of Waste Discharge Requirements (WDRs) or applicable statutory or regulatory requirements should result in a prompt enforcement response against the discharger. At a minimum, the Regional Board staff must bring the following to the attention of their Regional Board for possible enforcement action:" effluent limit violations/other permit violations - major dischargers; effluent limit violations/other permit violations - other NPDES/WDR dischargers; toxicity violations - all NPDES dischargers; violations of compliance schedules and enforcement orders - all dischargers; failure to submit

reports/deficient reports (excluding stormwater); violations of POTW pretreatment programs; stormwater permit violations/deficiencies/failure to submit reports; other violations and enforcement actions; and spills (generally, non-permittees).

Board staff are also involved in a number of interagency environmental task/strike forces including the U.S.E.P.A. Environmental Strike Force, Los Angeles County Strike Force, Ventura County Strike Force, and Santa Monica Mountains Task Force.

Data Management And GIS

The State Water Information Management system (SWIM) is an organizational-wide database that was designed to facilitate electronic reporting, tracking, and analysis of regional data and information. The two modules that have been developed so far have incorporated the core structure of the Waste Discharger System (WDS) and information for the Underground Investigations (UGI). The modular structure of the database allows inclusion of new programs without redesigning the data model. WDS has now been shut down and converted statewide to SWIM. We continue to develop and pilot new models and tools. Currently under development is a query by address tool, expanded ad-hoc query tool, and environmental data entry and retrieval tools.

SWIM now tracks information on permits, both NPDES and non-NPDES. This module expands the old database in several ways. We can now record the permit limits and can perform compliance checking of electronic data against these limits. Data submitted electronically are also available for evaluation by region or watershed or through a number of other filters. Data is also available for historic permits. Previously only data from the current fiscal year was online.

The Underground Investigations (UGI) module is a replacement for Region 4's Well Investigation Program (WIP) database. This module tracks the progress of WIP facilities, and provides reports to USEPA. This module could be expanded to track the progress of facilities in other programs such as Above Ground Tanks, Department of Defense, or Spills, Leaks, Investigation, and Cleanup should the need arise. This module could also be expanded to evaluate groundwater treatment methods, to track contaminants spatially, and to tie into Region 4's geographic information system (GIS).

The new database is Windows-based and uses pull-down menus to ensure consistency of data.

This past year we took the first steps to move our GIS from a limited "special project" oriented tool to a region- and program-wide standard tool. These steps include making Arcview available to all staff, having all coverages converted to standard projection and "served" from a central location, and developing custom interfaces for the UGT, WIP, and TMDL programs.

Over time, we expect to expand the capabilities of the system, by 1) adding new components to the system, 2) linking the data to geographic layers, 3) linking our system with others such as USEPA and 4) providing access by the public to certain information.

Specific needs include:

- A tool to search the entire database by address (currently under development)
- GIS connectivity with our database, to allow analysis of data using our GIS. This would facilitate watershed management
- Update coordinate fields in SWIM (to develop coverages, such as facility and sampling locations)
- Obtain additional GIS coverages, such as elevation contours, hydrogeologic basins, wetlands, land use
- Develop coverages to be available on the internet
- Develop a catalog of available maps
- Add a module to track 401 Certification application tracking and compliance
- Add a module to track CEQA documents
- Develop tools to perform TMDL analysis
- Internet connectivity, to allow the dischargers, other agencies, and the public to query the database
- A module to facilitate the input and storage of volunteer monitoring data
- Ability to scan in permits and reports and make them available electronically over the LAN and the internet
- Input information from other programs, such as SLIC, DOD and Underground Tanks
- Insure data compatibility with Southern California Coastal Water Research Project (SCCWRP) data

An estimate of minimum staff needs to coordinate this increased effort is 2 PYs/year. This would increase in future years as more demands are placed on our system. Significant contract dollars would also be needed. Exact costs are not available at this time.

Other Region-wide Activities

Other activities may be undertaken at odd intervals during the watershed cycle. These include, among others, processing applications for new permits, reviewing CEQA and NEPA documents, reviewing and commenting on requests for Section 401 water quality certification, landfill regulation, site (including DOD/DOE) cleanups, well investigation program activities, leaking underground storage tank cleanups, routine public outreach, and responding to spills, complaints (unrelated to permits), and special requests from the Regional Board (Table 2). Some of the other region-wide strategies and programs the Regional Board implements are described in more detail below.

BEACHES/COASTAL WATERSHED ACTIVITIES

This Region's coastal resources support many of our most valuable beneficial uses. Our beaches, from Ventura through Zuma, Malibu, Venice and Long Beach are world-renowned. The Region's coastal estuaries, dunes, and wetlands are nearly gone and what is left are highly degraded. These resources, while inherently valuable as natural resources, also have a high economic value to the State with many vacationers naming beaches and lakes as their prime vacation destination. These beaches and coastal resources are a huge tourist dollar generator.

Concurrently, our Region's ports and marinas are support valuable beneficial uses providing important avenues of trade as well as recreational boating opportunities and marine habitat. They too are impacted by the need to dredge and dispose of sediments often contaminated by upstream watershed sources.

It is clear the impacts to beaches, bays, coastal wetlands and estuaries, and near shore waters is especially critical to address from both an economic and ecological perspective. The Regional Board is focussing on protecting these resources through a combination of integrated coastal planning with an aggressive effort to assess and control watershed loadings of key pollutants - pathogens, trash and sediment (particularly contaminated) - which continue to degrade coastal areas and increase the costs of dredging. Also part of this effort will be a WEBsite which will provide access to "realtime" pathogen data for our beaches. These efforts are described in greater detail under individual watersheds. As funding is located for these issues, they will be coordinated Beaches/Coastal Watersheds activities. Specific elements that have funding are described below.

Contaminated Sediment Long-term Management Strategy

The Los Angeles County's coastline includes two of the nation's largest commercial ports and several major marina complexes and small-vessel harbors. Maintenance of authorized depths in existing channels and berthing areas and expansion and modernization of ports, harbors, and marinas, requires periodic dredging in virtually all of these facilities. Some of the sediments dredged from these harbors contain elevated levels of heavy metals, pesticides, and other contaminants. In most cases, the concentrations of these contaminants do not approach hazardous levels. However, the sediments contain enough contaminants that they are not suitable for unconfined ocean disposal. Additionally, the State's Bay Protection and Toxic Cleanup Program has identified bays and estuaries containing areas with contaminated sediments. Remediation of these sites may require dredging and disposal of this material. Disposal of any contaminated dredged materials requires special management, such as placement in a confined aquatic disposal site, capping, or disposal in an upland site. Additionally, some ports and harbors have considered other management techniques, such as treatment and beneficial re-use.

Recently, the ports and harbors have delayed or canceled several dredging projects because of contaminated sediment issues. The regulatory agencies evaluated disposal options for these projects on a case-by-case basis without the benefit of a regional perspective on management alternatives, cumulative impacts, and long-term solutions to prevent re-contamination of sediment. This approach has led to public concern over the ecological and human health implications of contaminated dredged material disposal. To resolve these issues, the regulatory and resource agencies, ports and harbors, environmental groups, and other interested parties agreed to establish a task force. The mission of the Contaminated Sediment Task Force (CSTF) is to prepare a Contaminated Sediment Long-Term Management Strategy (Strategy) for the Los Angeles region (limited to Los Angeles County). Past projects suggest that the major sources of contaminated dredge material will continue to be Marina del Rey Harbor, the ports of Los Angeles and Long Beach, and the mouth of the Los Angeles River.

The members of the CSTF agreed that the Strategy will consider confined aquatic and upland disposal, sediment treatment, beneficial re-use, other management techniques, and contamination source control. The CSTF agreed on a number of goals including identifying the scope of the contaminated sediment problem, an analysis of management and disposal alternatives, development of a unified regulatory approach, and identify inputs of contaminants to coastal waters and ongoing regional efforts to reduce such inputs with a view towards promoting efforts that would reduce the inflow of contaminants. Initially, the CSTF will work with existing watershed management programs.

The CSTF was established through a Memorandum of Understanding (MOU) among the state and federal agencies with regulatory jurisdiction over dredging and disposal activities, as identified by SB 673, and other agencies representing ports, harbors, and marinas. The following agencies are signatory to that MOU: U.S. Army Corps of Engineers; U.S. Environmental Protection Agency; California Coastal Commission; Regional Water Quality Control Board, Los Angeles Region; County of Los Angeles Department of Beaches and Harbors; City of Long Beach; Port of Long Beach; and Port of Los Angeles.

The CSTF will carry out its operation by two main committees (Executive and Management Committees), and five strategy development committees (Watershed Management and Source Reduction, Aquatic Disposal and Dredging Operations, Upland and Beneficial Re-use, Sediment Screening Thresholds, and Implementation Committees). The membership of the Management Committee includes those parties that signed the MOU and one organization selected to represent the environmental community (Heal the Bay). This committee is the main decision-making group with the CSTF. The Executive Committee consists of the chief executives of the four major agencies that regulate and manage dredging and disposal in Southern California. This committee will facilitate final agency concurrence, adoption, and implementation of the completed strategy. The strategy development committees will develop specific elements of the long-term management plan.

The CSTF has developed and is implementing an Interim Dredge Material Management Plan , and is required to complete the Contaminated Sediment Long-Term Management Strategy by January 1, 2003. The program is funded at the Regional Board and the Coastal Commission at 1 PY each per year over a five-year time period. The CSTF received $2,033,000 from the legislature to conduct studies to answer specific questions and fill data gaps necessary to allow completion of the long-term management plan.

The CSTF has a web site which may be consulted for additional information: http://www.ceres.ca.gov/coastalcomm/sediment/sdindex.html.

Regional Monitoring of Ocean Waters

The Southern California Bight Pilot Project conducted a survey in 1994 to assess the spatial extent and magnitude of ecological disturbances on the mainland shelf between Point Conception in Central California to the California-Mexico border. The survey was a cooperative effort between four large discharger agencies (City of Los Angeles, County Sanitation Districts of Los Angeles County, Orange County Sanitation District, and City of San Diego), regulators (U.S. Environmental Protection Agency, State Water Resources Control Board, and Los Angeles, Santa Ana, and San Diego Regional Water Quality Control Boards), as well as the Southern California Coastal Water Research Project, and the Santa Monica Bay Restoration Project. Monitoring focused on benthic infauna, sediment chemistry, sediment toxicity, demersal fish/invertebrate populations (trawling), water quality (CTD measurements), and bioaccumulation (fish tissue with species not consumed by humans). Final reports were published in 1998.

The Santa Monica Bay Restoration Project has developed a conceptual framework for ecosystem monitoring within Santa Monica Bay. Some components of this framework are being utilized. In1995, a regional sampling program was implemented for bacteriological

monitoring at shoreline and inshore stations with high recreational use within the bay (a cooperative effort by City of Los Angeles, County Sanitation Districts of Los Angeles County, and Los Angeles County Department of Health Services).

Work on a regional sampling program to assess the loadings of contaminants entering the bay is also continuing. In the meantime, the Southern California Coastal Water Research Project (SCWRP) is working on a model POTW monitoring program for the four largest southern California dischargers (City of Los Angeles, Los Angeles County Sanitation Districts, Orange County Sanitation District, and City of San Diego) which will be available in 2000.

A second regional survey of the Southern California Bight was conducted in 1998. Rather than simply repeating the 1994 survey, the participants in the 1998 survey agreed to expand the monitoring program to include a larger geographic scope (including enclosed bays, harbors and estuaries, the Mexican coastline south of California, and offshore channel islands), new monitoring components (microbiology, greater emphasis on stormwater runoff impacts) and additional participants (small point source dischargers, stormwater groups and other interested parties, including volunteer monitoring programs being implemented by environmental organizations). Most of the sampling occurred over a six-week period from late July to early September, although certain components (water quality, microbiology) were performed during different time periods. Sampling of benthic infauna and sediment chemistry took place at approximately 250 stations, sediment toxicity at approximately 200 stations, and demersal fish/invertebrate populations and bioaccumulation at approximately 175 stations. The microbiology sampling was conducted at approximately 250 stations once per week over a 5-week period in August-September 1998 (dry season) and February-March 1999 (wet season). The water quality component included sampling once during dry weather (September-October) and twice during wet weather along several transect lines throughout the Bight.

As the monitoring data becomes available, it will be analyzed and discussed by the subcommittees and Steering Committee of the Bight'98 project, which include representatives from the participating agencies. Final reports are published as the data analysis is completed. The final reports for the microbiology studies have been released; other reports should come out in 2001 (e.g., toxicity, demersal fish/macroinvertebrate abundance, sediment chemistry, benthic infaunal communities and bioaccumulation) due to the longer time period required to analyze these types of samples. More information about the Bight and other related projects may be found on the SCWRP webpage http://www.sccwrp.org/.

USEPA's Environmental Monitoring and Assessment Program (EMAP) first visited the Bight to conduct regional monitoring in 1994, contributing to the funding of the Southern California Bight Pilot Project. However, EMAP was unable to provide funding for the Bight'98 survey. Planning is underway to conduct another bight-wide regional survey in 2002 and EMAP is planning to participate in this effort.

Coastal Ambient Monitoring Program (CAMP)/Seafood Monitoring

Governor Wilson's Executive Order W-162-97 (issued October 8, 1997) required Cal/EPA to inventory existing ocean and coastal water quality monitoring programs and make recommendations for a comprehensive program for monitoring water quality and reducing pollution within coastal watersheds, bays, estuaries, lagoons and nearshore ocean waters. The State Water Resources Control Board was assigned the responsibility to implement this

mandate (funded by AB 1581 and AB 1429). SB 753 required the SWRCB to establish a statewide monitoring program to assess human health risks associated with recreational fishing and seafood consumption (Coastal Fish Contamination Study). A screening study was initiated during 1999 to assess approximately ten sites and supplement the information already available for Santa Monica Bay. However, oceanic conditions associated with an El Nino event precluded adequate collection of fish samples during 1999, so the screening study was extended into 2000 The goal is to develop a regional (Region 4 coastline, not just Santa Monica Bay) sampling program during 2001, which will probably keep most of the original framework created by the Bay Restoration Project, but expand it throughout the region. An inventory of coastal water quality monitoring programs has been prepared for Southern California with the assistance of SCCWRP; it can be accessed at: http://www.sfei.org/camp.

Other Regional Monitoring Programs (SMW/TSMP and BPCTP)

State Mussel Watch/Toxic Substances Monitoring Programs (SMW/TSMP): Water column monitoring for toxic substances can be unreliable since toxic substances are often transported intermittently and can be missed with standard "grab" sampling of water. In addition, harmful levels of toxicants are often present in such low concentrations that detecting them can be difficult and expensive. In some cases, a more realistic and cost-effective approach is to test the flesh of fish and other aquatic organisms that bioaccumulate these compounds in their tissues and concentrate toxicants through the food web.

In 1977, two biomonitoring programs were initiated by State Board: the Toxic Substances Monitoring and State Mussel Watch Programs. The Los Angeles Region is active in both programs which are implemented jointly by the State Board and the California Department of Fish and Game. Tissue samples collected under the TSMP are usually fish but can also include benthic invertebrates. The tissue is analyzed for trace metals and synthetic organic chemicals. The fish are generally collected from inland fresh waters but are occasionally collected from estuaries. The SMWP provides similar documentation of the quality of coastal marine and estuarine waters. Mussels, which are sessile (attached) bivalve invertebrates, serve as indicator organisms and provide a localized measurement of water quality, as they accumulate trace metals and synthetic organic chemicals in their tissues. Mussels are generally transplanted into the test site from "clean" areas of the state (generally Bodega Bay) although occasionally local, "resident" mussels are collected. Other types of shellfish can be used at times and sediments have, at times, been collected. The focus of TSMP sampling in the region has tended to be trend monitoring while the SMWP has been used more for "hot spot" identification although with lesser resources available in recent years, the SMWP has moved away from hot spot identification in favor of long-term trend monitoring at fewer sites in recent years. Data from these two programs have been critical in determining beneficial use impairments in coastal waters.

For FY00/01, the SWMP will seek to maintain a number of "long-term" sites in the LA/LB Harbor area as well as along the open coast in Santa Monica Bay . The TSMP will look toward evaluating targeted watersheds for this fiscal year, namely, the San Gabriel River (mostly in the estuary) and the Los Cerritos Channel Watershed.

Bay Protection and Toxic Cleanup Program (BPTCP): In 1989, state legislation added Sections 13390 through 13396 to the California Water Code which established the BPTCP. The program has four main goals: 1) to provide protection of existing and future beneficial uses of

bays and estuarine waters, 2) to identify and characterize toxic hot spots, 3) to plan for cleanup or other mitigating actions of toxic hot spots, and 4) to develop effective strategies to control toxic pollutants, abate existing sources of toxicity, and prevent new sources of toxicity.

While in its identification and characterization phase, the program implemented regional monitoring at each of the coastal Regions. Sediment toxicity tests, chemical analyses, and benthic community surveys were used to classify each bay or estuarine waterbody. Waters were generally "pre-screened" for contamination using toxicity tests; if enough was found, more intensive monitoring followed to confirm the existence and spatial extent of monitoring. Using this approach, the Santa Monica Bay/Palos Verdes Shelf, parts of, Consolidated Slip/Dominguez Channel, Cabrillo Pier, Mugu Lagoon/Calleguas Creek, McGrath Lake, Los Angeles River Estuary, Marina Del Rey, and Marina Del Rey Entrance Channel were identified as candidate toxic hot spots. A number of other waters were identified as sites of concern.

State Board adopted a statewide, consolidated cleanup plan in June 1999 with Office of Administrative approval following in November 1999. Regional cleanup plans deal specifically with high priority candidate toxic hot spots; detailed cleanup plans were not required for moderate priority candidate toxic hot spots or sites of concern although listed in the document. Identified remediation/cleanup alternatives for toxic hot spots range from specific actions such as in-site capping, issuing waste discharge requirements, or dredging to more regional/watershed activities such as long-term management of contaminated sediments or proactive application of the watershed management approach as a preventive measure. At this point, no specific funding source has been identified to pay for remediation activities although potential funding mechanisms are addressed in the statewide consolidated cleanup plan. The best chance for obtaining funds for cleanup appears to be through the use of Supplemental Environmental Projects (SEPs) from enforcement actions or by partnering with other groups within the context of the watershed management approach to take advantage of local efforts. Funding for staff resources ended in June 1999.

Now that the Consolidated Plan has been approved, the Regional Board is required to reevaluate WDRs in compliance with Water Code Section 13395. The reevaluation shall consist of (1) an assessment of the WDRs that may influence the creation or further pollution of the known toxic hot spot; (2) an assessment of which WDRs need to be modified to improve environmental conditions at the known toxic hot spot; and (3) a schedule for completion of any WDR modifications deemed appropriate. We were required to begin the reevaluation of WDRs associated with high priority known toxic hot spots (i.e., Palos Verdes Shelf, Consolidated Slip, Cabrillo Beach, Mugu Lagoon, McGrath Lake) within 120 days after final approval of the Consolidated Plan (i.e., by March 15, 2000). As part of this reevaluation, we were required to develop a list of the WDRs associated with each high priority toxic hot spot (within six months after final approval of the Consolidated Plan (i.e., by May 15, 2000). The priority list for moderate and low priority known toxic hot spots (i.e., Ballona Creek Entrance Channel, Marina del Rey, Los Angeles River Estuary) must be developed within one year of final approval of the Consolidated Plan (i.e., by November 15, 2000). We do not have to actually revise any WDRs within these timeframes, but if we find that we will need to make revisions, we will need to supply a schedule. And as we renew or modify WDRs, we need to include a finding that the discharge may contribute to the pollution present at the toxic hot spot.

The program also has a website which may be consulted for additional information: http://www.swrcb.ca.gov/bptcp.

Funding Needs For Non-TMDL Programs (Watershed and Regionwide Activities)

This table presents resource needs (FY01/02) which are non-TMDL-related for watershed and regionwide activities. TMDL resource needs are described later in this section of the document.

Water-shed	Monitoring/ Special studies/ data handling	WQA	Standards/ planning	NPDES	Storm-water	Non-Chapter 15	NPS strategy imple-mentation	Wet-lands	TOTAL (PYs)	Con-tracts ($)
Santa Clara River	0.2	0.3	0.7	1.2	1.0	0.75	1.8	1.8	7.75	45,000
Calle-guas Creek	0.3	0.4	0.5	1.1	0.7	0.65	1.8	1.6	7.05	10,000
Domin-guez Ch. & LA/LB Harbor	0.3	0.75	0.2	0.8	1.2	0.5	1.0	1.3	5.3	---
Santa Monica Bay	0.2	---	0.5	5.2	2.0	3.0	1.8	1.4	14.1	210,000
Los Angeles River	0.3	---	0.5	1.4	1.9	0.5	1.8	1.5	7.9	220,000
San Gabriel River	0.3	---	0.5	1.9	1.9	0.5	1.8	1.4	8.3	25,000
Los Cerritos	0.1	---	0.2	0.2	0.3	0.1	0.9	1.3	3.1	---
Channel Islands	---	---	0.1	0.1	---	0.1	0.1	---	0.4	---
Ventura River	0.1	0.2	0.2	0.4	0.3	0.1	1.0	1.4	3.7	---
Misc. Ventura Coastal	0.2	0.3	0.2	0.7	0.7	0.3	1.0	1.3	4.7	$10,000
Region-wide	---	---	0.4	---	---	0.5	1.2	0.9	3.0	200,000

TMDL Scheduling And Development

Table 7 (in Appendix 4.7) shows 303(d) listed waterbodies/reaches by watershed. Clearly, there are a large number of waters in the Region which are impaired by a number of constituents (764 individual impairments were listed in the submittal to State Board). The overriding problem associated with TMDL development needs to be reiterated here, namely, staff resources at the Regional Board to either directly conduct or be involved in stakeholder-

led TMDL investigations and in general stay dedicated to nonpoint source activities are still minimal. Specific TMDL resource needs for the next three fiscal years are defined in the resource planning matrix in the next section of this document. **In general, depending on the watershed, it is anticipated that 0.5 -2.0 PYs/watershed more will be needed** at a minimum to make additional headway on TMDLs and implementation of our nonpoint source strategy (as well as augment point source regulation, where needed); this need will increase as we add more TMDLs in the next two years to fully accomplish our TMDL mandate. Additionally, AB1740 (Ducheny) was enacted in 2000 and requires that to the extent interest is expressed by the public, and resources are available, each regional Board shall establish for each watershed where a water body is listed as impaired, an Advisory Committee consisting of the public and interested stakeholders who wish to be involved in the process of adoption and implementation of the corrective actions necessary to eliminate the impairment.

However, with a seemingly impossible workload before us, there is a reasonable and logical way to collapse or group TMDLs to make the most effective use of resources we currently have and any which we may obtain in the future. This is largely due to the fact that some of the "pollutants" for which a water may be listed are actually "effects" of pollutants. Table 7 reflects this collapsed approach. For example, many reaches of the Los Angeles River are listed for ammonia. Some of the same reaches are listed for pH problems while other reaches are listed for algae, scum, and odors. It is very likely the presence of these "pollutants" are interrelated. Excessive nitrogen (reflected here as high levels of ammonia) may lead to a condition of eutrophication (excessive nutrient loading) which can influence pH levels as well as promote increased algal growth. Scum may be evident due to floating algal material and odors may result when excessive algae starts to die off. Thus, it is reasonable to group together these TMDLs (calling it a "nitrogen and related effects" TMDL) and approach the problem by determining the sources of nitrogen loading into the watershed and the appropriate allocations in order to reduce loadings.

Another example relates to the Malibu Creek Watershed. Many of its reaches are listed as impaired due to coliform. Other reaches are listed for swimming restrictions or shellfish harvesting advisories (an effect of elevated coliform levels). It is reasonable to group together these various reaches and "pollutants" together when performing a TMDL. USEPA has produced a number of documents relating to TMDL development; these may be found on the Internet at http://www.epa.gov/owow/tmdl/.

Table 7A lists all of the TMDLs in the Region as well as a schedule for completion. All TMDLs must be completed by 2011 (as requested by U.S. EPA and State Board and per a consent decree). Table 7B lists all TMDLs that we will have started in the next five years (although some will be completed after that time period). It also gives more detail about the scheduling of activities such as actual TMDL development, formation of implementation strategies, and Basin Plan amendments for the next three fiscal years. Table 7C is a resource planning and project management tool detailing resource needs and intermediate milestones for all TMDLs that we will have started in the next three years. More information on TMDLs scheduled for each watershed may be found in the appropriate watershed section.

The following three tables summarize our near-term annual TMDL watershed resource needs (PYs and contract dollars) for the next three fiscal years, beyond what we expect to receive with current funding levels. These needs are also reflected in our resource allocation matrices (for the out-years). **It should be emphasized that we see need for an additional 14.8 PYs during the current fiscal year (FY00/01).**

Near-term Annual (FY00/01) TMDL Watershed Resource Needs (PYs and Contract Dollars)

Watershed	Pollutants	Monitoring/ Assessment	TMDL Develop -ment	Implement- ation Plan Develop- ment	Basin Plan Amendment	TOTAL (PYs)	Contracts ($)
Calleguas Creek	nitrogen, salts, chloride	0.3	1.6	0.2	0.4	2.5	$50,000
Santa Monica Bay	Coliform, nutrients, trash, metals	0.2	3.4	0.2	0.4	4.2	$230,000
LA River	Coliform, nitrogen, trash	0.4	0.7	0.4	0.4	1.9	$100,000
Dominguez Channel/LA -LB Harbors	Coliforms	0.2	0.3	0.2	0.4	1.1	$50,000
Ventura Coastal WMA	Coliform,	0.2	0.3	0.2	---	0.7	---
Los Cerritos WMA	none scheduled for FY00/01	0.2	---	---	---	0.2	---
Santa Clara River	Coliform, nitrogen,	0.2	1.1	0.4	0.4	2.2	$100,000
San Gabriel River	Nitrogen, metals,	0.4	0.9	0.1	---	1.4	$200,000
Ventura River	Eutroph.	0.2	0.9	0.2	---	1.3	$50,000
Channel Islands	no 303(d) waters	0.2	---	---	---	0.2	---
TOTALS		**2.5**	**9.2**	**1.9**	**2.0**	**15.6**	**$780,000**

Additionally, 1 PY each is needed for a region-wide data compiler/interpreter/report-writer and a public outreach person to coordinate workshops and meetings regarding 303(d) list topics.

As has been mentioned many times previously, a major impediment to completing these TMDLs per a 13-year schedule is the less than adequate resources for this program.

Near-term Annual (FY01/02) TMDL Watershed Resource Needs (PYs and Contract Dollars)

Watershed	Pollutants	Monitoring/ Assessment	TMDL Develop -ment	Implement- ation Plan Develop- ment	Basin Plan Amendment	TOTAL (PYs)	Contracts ($)
Calleguas Creek	Salts, pesticides, nutrients	0.8	1.9	0.6	0.4	2.8	$125,000
Santa Monica Bay	Coliform, nutrients, trash, PCBs, Metals	0.6	4.9	0.8	0.6	6.9	$225,000
LA River	Coliform, nitrogen, trash, metals	1.2	0.9	---	---	2.1	$50,000
Dominguez Channel/LA -LB Harbors	coliform	0.4	---	---	0.2	0.6	---
Ventura Coastal WMA	Coliforms	0.4	---	---	0.2	0.6	---
Los Cerritos WMA	NH_3	---	0.5	---	---	0.5	---
Santa Clara River	Eutroph., coliform, nitrogen	0.8	1.2	---	0.4	2.4	$40,000
San Gabriel River	Nitrogen, metals, coliform	1.0	1.2	0.2	0.4	2.8	$50,000
Ventura River	Eutroph.	---	0.3	0.2	---	0.5	$50,000
Channel Islands	no 303(d) waters	---	---	---	---	---	
TOTALS		**5.2**	**10.0**	**108**	**2.2**	**19.2**	**$530,000**

Additionally, 1 PY each is needed for a region-wide data compiler/interpreter/report-writer and a public outreach person to coordinate workshops and meetings regarding 303(d) list topics.

As has been mentioned many times previously, a major impediment to completing these TMDLs per a 13-year schedule is the less than adequate resources for this program.

Near-term Annual (FY02/03) TMDL Watershed Resource Needs (PYs and Contract Dollars)

Watershed	Pollutants	Monitoring/ Assessment	TMDL Develop -ment	Implement- ation Plan Develop- ment	Basin Plan Amendment	TOTAL (PYs)	Contracts ($)
Calleguas Creek	Salts, pesticides, PCBs	0.8	2.4	0.4	0.4	4.0	$125,000
Santa Monica Bay	Coliform, nutrients, PCBs, Metals	1.2	2.8	0.8	0.4	5.2	$225,000
LA River	Metals	---	0.3	0.2	---	0.5	$50,000
Dominguez Channel/LA -LB Harbors	none scheduled for FY02/03 (startup work)	---	---	---	---	---	---
Ventura Coastal WMA	PAHs, zinc	---	1.7	0.2	---	1.9	$60,000
Los Cerritos WMA	Pesticides, metals, PAHs, NH_3	0.2	3.4	0.2	---	3.8	$125,000
Santa Clara River	Chloride, eutroph., trash	0.4	1.2	0.2	---	1.8	$50,000
San Gabriel River	Nitrogen, Coliform	0.4	0.7	0.4	0.2	1.7	$40,000
Ventura River	Eutroph.	0.4	---	---	0.2	0.6	---
Channel Islands	no 303(d) waters	---	---	---	---	---	
TOTALS		**3.4**	**12.5**	**2.4**	**1.2**	**19.5**	**$675,000**

Additionally, 1 PY each is needed for a region-wide data compiler/interpreter/report-writer and a public outreach person to coordinate workshops and meetings regarding 303(d) list topics.

As has been mentioned many times previously, a major impediment to completing these TMDLs per a 13-year schedule is the less than adequate resources for this program.

With an anticipated near-term augmentation need of 14-19 PYs/year, we are actively seeking funds for this effort.

If we were required to redirect other resources (assuming we had the flexibility, which for the most part we don't), it would have a disastrous impact on our other programs. This magnitude of redirection would require almost a 50% reduction in our NPDES program which is already severely underfunded based on the number of facilities we regulate. Alternatively, we could cease all enforcement efforts and about one-third of our surface water regulatory program. None of these are acceptable alternatives.

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Section 4 . *Appendices*

Appendix 4.1 NPDES Wastewater Permit Reissuance (2000 – 2005)

Los Angeles Regional Water Quality Control Board
Permits to be Renewed During FY 2001/2002

Discharger*	Facility	City	NPDES#	WDID#	CI#	TTWQ	Exp. Date	Renewal Quarter	Order No.	Waste Type
SANTA CLARA RIVER WATERSHED										
majors										
City of Santa Paula/OMI	Santa Paula WWRP, NPDES	SANTA PAULA	CA0054224	4A560108001	1759	1	3/10/02	1st Q	97-041	DDOMIND
Los Angeles County San Dist	Valencia WWRP, NPDES	VALENCIA	CA0054216	4A190107023	4993	1	5/10/00	2nd Q	95-081	DDOMIND
Los Angeles County San Dist	Saugus WWRP, NPDES	SAUGUS	CA0054313	4A190107021	2960	1	5/10/00	2nd Q	95-080	DDOMIND
San Buenaventura City Of	Ventura WWRP, NPDES	VENTURA (CORPORATE NAME SAN BUENAVENTURA)	CA0053651	4A560107001	1822	1	5/10/00	1st Q	95-074	DDOMIND
minors										
Castaic Lake Water Agency	Earl Schmidt Filtration Plant	CASTAIC	CA0059030	4A190116001	6544	3	3/10/02	2nd Q	97-030	DMISCEL
Dept. Of Water Resources	William E. Warne Power Plant	PYRAMID LAKE	CA0059188	4A190805002	6610	3	4/10/04	2nd Q	99-015	DPROCES
H. R. Textron Inc.	Valencia Facility	VALENCIA	CA0003271	4A192332001	6024	3	9/10/01	3rd Q	96-066	DMISCEL
H. R. Textron Inc.	Valencia Facility	VALENCIA	CA0064017	4A192332003	7727	3	9/10/01	3rd Q	96-078	HCNWTRS
Harris Water Conditioning	Culligan Water	VENTURA (CORPORATE NAME SAN BUENAVENTURA)	CA0060267	4A561037001	6818	3	11/10/01	3rd Q	96-095	DMISCEL
Keysor-Century Corp	Pvc-Pva Copolymer Mfg, Saugus	SAUGUS	CA0057126	4A192000001	1954	2	5/10/03	2nd Q	98-032	DSTORMS
Los Angeles City of DWP	Castaic Power Plant	CASTAIC	CA0055824	4A193500005	6112	2	2/10/03	2nd Q	98-020	DPROCES
Los Angeles City of DWP	Tunnel Nos. 1&4	SANTA CLARITA	CA0058432	4B190106061	6313	3	1/10/03	2nd Q	98-006	DCNWTRS
Los Angeles County Parks & Rec	Val Verde Co. Park Swim Pool	SAUGUS	CA0062561	4A190107086	7140	3	3/10/02	2nd Q	97-062	DMISCEL
Metropolitan Water Dist. Of SC	Foothill Feeder Power Plant	CASTAIC	CA0059641	4A190115006	6743	3	9/10/03	2nd Q	98-066	DNONCON
National Technical Systems	Rye Canyon Road Facility	VALENCIA	CA0064122	4A191152001	7793	3	4/10/02	2nd Q	97-048	DNONCON
Rayne Water Systems Of Ventura	Soft Water Sales & Svc,Ventura	VENTURA (CORPORATE NAME SAN BUENAVENTURA)	CA0002658	4A569002001	3070	3	10/10/01	3rd Q	96-082	DFILBRI
Santa Clarita, City Of	Outdoor Project Homes	SANTA CLARITA	CA0061638	4A191142001	6945	3	9/10/01	3rd Q	96-079	DMISCEL
Six Flags Magic Mountain	Amusement Park, Valencia	VALENCIA	CA0003352	4A199002002	6045	2	1/10/03	3rd Q	98-005	DMISCEL
Texaco Group Inc.	Pacific Coast Pipeline Site	FILLMORE	CA0063240	4A561057001	7346	3	9/10/00	3rd Q	95-146	DCNWTRS
Ventura Regional San District	Fillmore WWTP, NPDES	FILLMORE	CA0059021	4A560101002	6523	2	4/10/97	1st Q	92-023	DDOMIND
general permits										
Castaic Lake Water Agency	Lateral Extension Pipeline	LOS ANGELES (COUNTY)	CAG994001	4A196000397	7882	3	4/10/02	4th Q	97-045	DMISCEL
Chevron U.S.A. Inc.	Former Service Station 9-2521	OXNARD	CAG834001	4A566600124	8012	2	4/10/02	4th Q	97-046	HCNWTRS
Enloe Well Drilling	Peter J. Pictchess Honor Ranch	SAUGUS	CAG994001	4A196000492	8040	3	4/10/02	4th Q	97-045	IMISCEL
HMH Construction Co. Inc.	Northfield Business Park proj.	OXNARD	CAG994001	4A566000441	7947	3	4/10/02	4th Q	97-045	DMISCEL

Los Angeles Regional Water Quality Control Board
Permits to be Renewed During FY 2001/2002 (cont'd)

Discharger*	Facility	City	NPDES#	WDID#	CI#	TTWQ	Exp. Date	Renewal Quarter	Order No.	Waste Type
Los Angeles County San Dist	Dist. 32 Main Trunk Sewer	VALENCIA	CAG994001	4A196000424	7906	3	4/10/02	4th Q	97-045	DMISCEL
Los Angeles County San Dist	Valencia Water Reclamation	VALENCIA	CAG994001	4A196000102	7296	3	4/10/02	4th Q	97-045	DMISCEL
McDonald's Restaurant	GW-Mcdonald's Restaurant	GORMAN	CAG994001	4A196000160	7464	3	4/10/02	4th Q	97-045	DMISCEL
Mobil Oil Corp.	Newhall Station	SANTA CLARITA	CAG834001	4A196600132	8178	2	4/10/02	4th Q	97-046	DWSHWTR
Mobil Oil Corp.	Service Station # 18-KCM	SANTA CLARITA	CAG834001	4B196600125	8035	2	4/10/02	4th Q	97-046	DCNWTRS
Ogden Constructors	Santa Paula Improvement,Reach2	SANTA PAULA	CAG994001	4A566000472	8002	3	4/10/02	4th Q	97-045	IMISCEL
Robinson Development Services	Sand Canyon Bridge Widening	SANTA CLARITA	CAG994001	4A196000506	8078	3	4/10/02	4th Q	97-045	IMISCEL
San Buenaventura City Of	Ventura WWRP	VENTURA (CORPORATE NAME SAN BUENAVENTURA)	CAG994001	4A566000381	7648	3	4/10/02	4th Q	97-045	DMISCEL
Santa Clarita Community Colleg	College Of The Canyons	SANTA CLARITA	CAG994003	4A196400040	7324	3	5/10/03	4th Q	98-055	DMISCEL
Santa Clarita, City Of	GW - Four Oak Wells	SANTA CLARITA	CAG994001	4A196000323	7812	3	4/10/02	4th Q	97-045	DMISCEL
Santa Clarita, City Of	Golden Valley Road Extension	SANTA CLARITA	CAG994001	4A196000510	8090	3	4/10/02	4th Q	97-045	IMISCEL
Southern California Gas Co.	Lines 235/335	SANTA CLARITA	CAG674001	4A196300108	8091	3	4/10/02	4th Q	97-047	IMISCEL
Valencia Co.	Avenue Scott Bridge	SANTA CLARITA	CAG994001	4A196000473	8004	3	4/10/02	4th Q	97-045	IMISCEL
Valencia Co.	Decoro Drive Bridge	SANTA CLARITA	CAG994001	4A196000534	8153	3	4/10/02	4th Q	97-045	IMISCEL
Valencia Co.	Del Lago Dewatering Proj.	SANTA CLARITA	CAG994001	4A196000455	7968	3	4/10/02	4th Q	97-045	IMISCEL
Valencia Co.	East Creek Channel Lining Proj	SANTA CLARITA	CAG994001	4A196000539	8165	3	4/10/02	4th Q	97-045	IMISCEL
Valencia Co.	South River Dewatering Proj.	SANTA CLARITA	CAG994001	4A196000467	7990	3	4/10/02	4th Q	97-045	IMISCEL
Valencia Water Company	Water Well No. 205	SANTA CLARITA	CAG994001	4B196000466	7989	3	4/10/02	4th Q	97-045	IMISCEL
Valencia Water Company	Wells 10, S6, S7, and S8	SANTA CLARITA	CAG994001	4A196000499	8054	3	4/10/02	4th Q	97-045	IMISCEL
CALLEGUAS CREEK WATERSHED										
majors										
Camarillo Sanitary District	Camarillo WWRP, NPDES	CAMARILLO	CA0053597	4A560100001	1278	1	5/10/01	2nd Q	97-125	DDOMIND
Simi Valley, City Of	Simi Valley WWRP, NPDES	SIMI VALLEY	CA0055221	4A560110001	3021	1	5/10/01	2nd Q	97-122	DDOMIND
Thousand Oaks City Of DPW	Hill Canyon WWRP, NPDES	CAMARILLO	CA0056294	4A560112001	4917	1	5/10/01	2nd Q	97-123	DDOMIND
minors										
Camrosa Water District	Camrosa WWRP, NPDES	CAMARILLO	CA0059501	4A560106003	6769	3	12/10/03	2nd Q	00-009	DDOMEST
Emery Worldwide	Pti Technologics	NEWBURY PARK	CA0064050	4A562443001	7743	2	11/10/01	2nd Q	96-090	HCNWTRS
Exxon Co., U.S.A.	22 Sites Groundwater Assessmen	LOS ANGELES	CA0063304	4B191015005	7394	1	4/10/05	3rd Q	00-042	DMISCEL
Northrop Grumman Corp. Masd	Newbury Park - NPDES	NEWBURY PARK	CA0062588	4A562436001	7093	2	8/31/05	3rd Q	00-126	HCNWTRS

Los Angeles Regional Water Quality Control Board
Permits to be Renewed During FY 2001/2002 (cont'd)

Discharger*	Facility	City	NPDES#	WDID#	CI#	TTWQ	Exp. Date	Renewal Quarter	Order No.	Waste Type
Rockwell Science Center LLC	Tank Leak-Hillcrest Facility	NEWBURY PARK	CA0060348	4A562074001	6808	3	5/10/01	2nd Q	96-048	HCNWTRS
Teleflex Control Systems	The Talley Site, Newbury Park	NEWBURY PARK	CA0059609	4A562397002	6729	2	2/10/02	2nd Q	97-032	HCNWTRS
Thousand Oaks City Of DPW	Olsen Road WWRP, NPDES	THOUSAND OAKS	CA0056359	4A560112002	4761	2	5/10/01	2nd Q	97-124	DDOMIND
Tosco Corp.	Tosco Gasoline Service Station		CA0064343	4B192131032	8089	3	11/9/04	3rd Q	99-130	DCNWTRS
Transit Mixed Concrete Co.	Sand&Gravel,Ponds-Overflow	MOORPARK	CA0059315	4A562022001	6658	3	5/10/01	2nd Q	96-046	DMISCEL
Ventura Co Water Works Dist.	Moorpark WWTP	MOORPARK	CA0063274	4A560103003	7513	2	12/10/03	2nd Q	00-049	DDOMIND
general permits										
Calleguas Municipal Water Dist	Calleguas Conduit North Branch	SIMI VALLEY	CAG994001	4A566000508	8087	3	4/10/02	4th Q	97-045	DMISCEL
Calleguas Municipal Water Dist	Fairview Pump Station	MOORPARK	CAG994001	4A566000049	7149	3	4/10/02	4th Q	97-045	DMISCEL
Calleguas Municipal Water Dist	Grimes Canyon Road Wellfiel	MOORPARK	CAG994001	4A566000190	7556	3	4/10/02	4th Q	97-045	DMISCEL
Calleguas Municipal Water Dist	Grimes Canyon Wellfield #2	MOORPARK	CAG994001	4A566000317	7817	3	4/10/02	4th Q	97-045	DMISCEL
Calleguas Municipal Water Dist	Well Nos. ASR-17 and ASR-18	MOORPARK	CAG994001	4A566000464	7985	3	4/10/02	4th Q	97-045	IMISCEL
Former Wendy ARCO	Former Wendy ARCO Service St	NEWBURY PARK	CAG834001	4A566600117	7876	2	4/10/02	4th Q	97-046	HCNWTRS
Mobil Oil Corp.	Tank Leak-Mobil Ss#11-H7a	NEWBURY PARK	CAG834001	4A566600116	7192	2	4/10/02	4th Q	97-046	HCNWTRS
Oxnard Community College	Tank Leak-Oxnard Community Col	OXNARD	CAG834001	4A566600099	7771	2	4/10/02	4th Q	97-046	HCNWTRS
Thousand Oaks City of	Unit W & F Interceptor - II	THOUSAND OAKS	CAG994001	4A566000477	8009	3	4/10/02	4th Q	97-045	IMISCEL
Unocal Corp.	Former Unocal Station #4687	THOUSAND OAKS	CAG834001	4A566000129	8150	2	4/10/02	4th Q	97-046	DCNWTRS
US Navy Naval Air Weapons Stat	Tank Leak-Navy Exchange Gas St	POINT MUGU	CAG834001	4A566600084	6961	2	4/10/02	4th Q	97-046	HCNWTRS
Ventura Co Water Works Dist.	Moorpark WWTP	MOORPARK	CAG674001	4A566300107	8086	3	4/10/02	4th Q	97-047	IMISCEL

***General permit dischargers will be reviewed and may not be "renewed" but allowed to continue with enrollment**

Santa Clara River Watershed

CAG834001 3
CAG994001 18
CAG994003 1
CAG674001 1

DDOMIND 5
DMISCEL 14
DPROCESS 2
HCNWTRS 2
DSTORMS 1
DNONCON 2
DFILBRI 1
DCNWTRS 3
IMISCEL 12
DWSHWTR 1

Calleguas Creek Watershed

CAG834001 5
CAG994001 6
CAG674001 1

DDOMIND 5
DDOMEST 1
HCNWTRS 8
DMISCEL 6
DCNWTRS 2
IMISCEL 3

Los Angeles Regional Water Quality Control Board
Permits to be Renewed During FY 2002/2003

Discharger*	Facility	City	NPDES#	WDID#	CI#	TTWQ	Exp. Date	Renewal Quarter	Order No.	Waste Type
DOMINGUEZ CHANNEL-LA/LB HARBOR WMA										
majors										
Arco Petroleum Products Co.	Watson Refinery	CARSON	CA0000680	4B192010008	5424	2	8/10/98	1st Q	93-051	DCNWTRS
Equilon Enterprises LLC	Carson Plant	CARSON	CA0000809	4B192108004	6108	2	11/10/98	1st Q	93-073	DSTORMS
Equilon Enterprises LLC	L.A. Refining Co. (Wilmington)	WILMINGTON	CA0003778	4B192121001	5427	1	9/16/04	1st Q	99-093	HCONTAC
LA City Bureau of Sanitation	Terminal Island WWTP	SAN PEDRO	CA0053856	4B190106005	2171	1	2/10/98	2nd Q	93-014	DDOMEST
Long Beach Generation LLC	Long Beach Generation Station	LONG BEACH	CA0001171	4B192111002	5764	1	11/10/99	2nd Q	94-130	DNONCON
Los Angeles City of DWP	Harbor Generating Station	WILMINGTON	CA0000361	4B193500004	2020	1	1/10/00	2ndQ	95-027	DNONCON
Mobil Oil Corp.	Torrance Refinery, NPDES	TORRANCE	CA0055387	4B192079002	5742	1	1/10/98	1st Q	93-003	HSTORMS
Tosco Corp.	L.A.Refinery, Wilmington Plant	WILMINGTON	CA0000035	4B192131002	6103	1	3/10/98	1st Q	93-019	HSTORMS
Tosco Corp.	L.A.Refinery, Carson Plant	CARSON	CA0063185	4B192131026	7352	2	12/10/98	1st Q	94-001	DSTORMS
Tutor-Saliba Team	Alameda Mid-Corridor Trench Pj	LYNWOOD	CA0064351	4B191340001	8084	1	12/31/01	1st Q	99-143	DMISCEL
minors										
AIR PRODUCTS AND CHEMICALS,INC	Hydrogen Plant & Related Fac.	WILMINGTON	CA0063363	4B191285001	7466	2	10/10/99	3rd Q	94-116	DSTORMS
Al Larson Boat Shop	Al Larson Boat Shop	TERMINAL ISLAND	CA0061051	4B192538001	6920	3	5/10/02	3rd Q	97-079	DSTORMS
Arco C.Q.C. Kiln, Inc.	Arco C.Q.C. Kiln, Inc.	WILMINGTON	CA0059153	4B192208003	6571	2	12/10/00	3rd Q	96-004	DSTORMS
Arco Pipe Line Co.	Carson Crude Oil Terminal	CARSON	CA0060232	4B192010019	6810	3	5/10/02	2nd Q	97-075	DSTORMS
Arco Products Co.	Marine Terminal,1,Berth 121,LB	LONG BEACH	CA0059285	4B192010015	6643	3	5/10/05	2nd Q	00-089	DSTORMS
Arco Terminal Services Corp.	Long Beach Marine Terminal 2	LONG BEACH	CA0000442	4B192010018	6802	2	12/10/01	2nd Q	97-006	DSTORMS
Arco Terminal Services Corp.	Long Beach Marine Terminal 3	LONG BEACH	CA0000451	4B192010003	6023	3	9/10/00	2nd Q	95-141	DSTORMS
California Sulphur Co.	Sulfur Pelletizing, Wilmington	WILMINGTON	CA0059064	4B192143001	6546	2	2/10/02	2nd Q	97-021	DSTORMS
Churchill Downs California Co.	Hollywood Park	INGLEWOOD	CA0064211	4B191303001	8100	3	9/10/04	2nd Q	99-105	DMISCEL
Dow Chemical Co.	Long Beach Marine Terminal	LONG BEACH	CA0064165	4B192614001	7873	2	2/10/03	2nd Q	98-019	DWSHWTR
Edoco	Edoco	CARSON	CA0002941	4B192034001	4420	3	1/10/99	3rd Q	94-012	DSTORMS
Elixir Industries	Tank Leak-Elixir Industries	GARDENA	CA0062537	4B192575001	7104	3	12/10/01	4th Q	97-005	HCNWTRS
Equilon Enterprises LLC	Carson Sulfur Recovery Plant	CARSON	CA0002020	4B192121002	1511	2	6/10/05	2nd Q	00-113	DSTORMS
Equilon Enterprises LLC	Mormon Island Marine Terminal	WILMINGTON	CA0003557	4B192108009	1596	3	5/10/05	2nd Q	00-086	DSTORMS
Exxon Co., U.S.A.	22 Sites Groundwater Assessmen	LOS ANGELES	CA0063304	4B191015005	7394	1	4/10/05	4th Q	00-042	DMISCEL
Fairchild Holding Corp.	Tank Leak-Voi-Shan Redondo Bch	REDONDO BEACH	CA0060631	4B192525001	6841	3	2/10/02	4th Q	97-020	HCNWTRS
Gardena, City Of,	Primm Memorial Swimming Pool	GARDENA	CA0056413	4B190118001	4152	3	7/10/00	1st Q	95-097	DFILBRI
GATX Tank Storage Terminals Co	San Pedro Marine Terminal	SAN PEDRO	CA0001911	4B192124001	4192	2	2/10/01	2nd Q	96-010	DMISCEL

Los Angeles Regional Water Quality Control Board
Permits to be Renewed During FY 2002/2003 (cont'd)

Discharger	Facility	City	NPDES#	WDID#	CI#	TTWQ	Exp. Date	Renewal Quarter	Order No.	Waste Type
GATX Tank Storage Terminals Co	Los Angeles Harbor Terminal	SAN PEDRO	CA0055816	4B192238001	5935	2	3/10/00	4th Q	95-036	DSTORMS
GATX Tank Storage Terminals Co	Carson Terminal	CARSON	CA0056863	4B192238002	5244	2	5/10/05	4th Q	00-087	DSTORMS
GATX Tank Storage Terminals Co	Berth 172, L.A.Marine Terminal	WILMINGTON	CA0060178	4B192407002	6822	2	7/10/00	4th Q	95-091	DSTORMS
Harbor Cogeneration Company	Harbor Cogeneration Company	WILMINGTON	CA0060003	4B192520001	6797	2	4/10/02	3rd Q	97-053	DFILBRI
Hitco Carbon Composites, Inc	Hitco/Defence Prod Div,	GARDENA	CA0059048	4B192128001	6520	3	5/10/98	3rd Q	93-028	DNONCON
Honeywell Inc.	Torrance Facility	TORRANCE	CA0058688	4B192354002	6417	3	2/10/99	3rd Q	94-014	DNONCON
Honeywell Inc.	Tank Leak-Honeywell Inc.	GARDENA	CA0062162	4B191263001	7015	3	2/10/02	4th Q	97-022	HCNWTRS
Long Beach City Of	Southeast Resource Recovery	LONG BEACH	CA0059544	4B190105017	6707	3	7/10/98	3rd Q	97-084	DSTORMS
Los Angeles City of DWP	Harbor Steam Plant,N Skim Tank	WILMINGTON	CA0056383	4B190106039	6004	3	11/10/97	4th Q	92-085	DSTORMS
Los Angeles City of DWP	Harbor Steam Plant,Skim Pond	WILMINGTON	CA0056448	4B190106040	6005	3	5/10/02	4th Q	97-080	DSTORMS
Los Angeles City of DWP	Harbor G.S. - Marine Tank Farm	WILMINGTON	CA0057037	4B190106046	6155	3	12/10/01	2nd Q	97-003	DSTORMS
Los Angeles City of DWP	Olympic Tank Farm Skim Pond	WILMINGTON	CA0057568	4B190106051	6211	3	6/10/00	4th Q	95-066	DSTORMS
Los Angeles County Parks & Rec	Lennox County Park	LOS ANGELES	CA0062766	4B191289001	7532	3	4/10/01	1st Q	96-029	DMISCEL
Metropolitan Stevedore Co.	Metropolitan Stevedore Co.	LONG BEACH	CA0057746	4B192078001	5354	2	5/10/02	3rd Q	97-078	DSTORMS
Mobil Oil Corp.	Southwestern Terminal-Area I	TERMINAL ISLAND	CA0003689	4B192079001	1558	3	3/10/02	1st Q	97-060	DPROCES
Morton International, Inc.	Tank Leak-Bee Chemical Co.	GARDENA	CA0060992	4B192539001	6922	3	2/10/02	4th Q	97-023	HCNWTRS
Morton International, Inc.	Morton Salt - Long Beach	LONG BEACH	CA0061476	4B192543001	6949	3	5/10/02	1st Q	97-081	DSTORMS
Northrop Grumman Corp. Masd	El Segundo Facility	EL SEGUNDO	CA0059226	4B192081002	6609	3	11/10/99	1st Q	94-119	DNONCON
Paktank Corp. - Los Angeles	Petroleum & Chemical Terminal	WILMINGTON	CA0055247	4B199019001	5985	2	4/10/99	2nd Q	94-036	DSTORMS
Paktank Corp. - Los Angeles	Wilmington Liq. Bulk Terminals	WILMINGTON	CA0063177	4B199019002	7298	2	3/10/00	2nd Q	95-041	HSTORMS
Permalite Repro Media Corp.	Permalite Repro Media Corp.	CARSON	CA0059871	4B192512001	6759	2	8/10/01	1st Q	96-067	DSTORMS
Petro Diamond Terminal Company	Marine Terminal, Berth 83, Lb	LONG BEACH	CA0059358	4B192197001	6677	3	12/10/99	2nd Q	95-009	DSTORMS
Plaskolite West, Inc.	Continental Acrylics, Inc.	COMPTON	CA0060798	4B192533001	6895	3	1/10/00	3rd Q	95-026	DCONTAC
Port of Los Angeles	Anaheim St. Viaduct Project	LOS ANGELES	CA0063851	4B190106095	7591	2	8/10/00	1st Q	95-121	DCNWTRS
Port of Los Angeles	New Dock Street Pump Statio	TERMINAL ISLAND	CA0064157	4B191310001	7856	3	11/10/02	1st Q	97-138	DMISCEL
Praxair, Inc.	Praxair, Wilmington	WILMINGTON	CA0001848	4B192140001	5428	2	11/10/00	2nd Q	95-156	DCONTAC
Redman Equipment & Mfg Co	Torrance Heat Exchanger Mfg&Rp	TORRANCE	CA0058726	4B192090001	6465	3	4/10/05	3rd Q	00-065	DSTORMS
Rhodia Inc.	Dominguez Ind Chem Plant	CARSON	CA0058629	4B192007002	6379	2	8/10/99	3rd Q	94-092	DSTORMS
San Pedro Boatworks	San Pedro Boatworks-Berth 44	SAN PEDRO	CA0061042	4B192536001	6918	3	4/10/02	3rd Q	97-059	DSTORMS
Shore Terminal LLC	Wilmington Marine Terminal	WILMINGTON	CA0055263	4B192263001	5915	2	5/10/00	2nd Q	95-072	DSTORMS
Southern Ca. Marine Institute	Southern Ca. Marine Institute	TERMINAL ISLAND	CA0058556	4B191035001	6362	3	12/10/99	1st Q	95-010	DMISCEL

Los Angeles Regional Water Quality Control Board
Permits to be Renewed During FY 2002/2003 (cont'd)

Discharger	Facility	City	NPDES#	WDID#	CI#	TTWQ	Exp. Date	Renewal Quarter	Order No.	Waste Type
Southwest Marine, Inc.	Southwest Marine, Inc.	TERMINAL ISLAND	CA0000868	4B192017002	2061	3	10/10/00	3rd Q	95-143	DNONCON
The Jankovich Co.	The Jankovich Co.-Berth 74	SAN PEDRO	CA0002798	4B192108007	6078	2	1/10/01	3rd Q	96-011	DSTORMS
Tidelands Oil Production Co.	Wilmington And Terminal Island	WILMINGTON	CA0001813	4B192023001	6080	2	7/10/99	1st Q	94-063	DSTORMS
Tosco Corp.	Los Angeles Terminal West	LOS ANGELES	CA0059846	4B192131013	6773	2	5/10/02	1st Q	97-082	DSTORMS
Tri-Union Seafoods, LLC	Plant Nos. 1 & 2	SAN PEDRO	CA0000469	4B192089001	5796	1	5/10/02	4th Q	97-077	DNONCON
TRW Inc.	Hawthorne Site	HAWTHORNE	CA0063916	4B192557002	7698	2	6/10/01	4th Q	96-060	HCNWTRS
TRW Inc.	Space Park Facility	REDONDO BEACH	CA0063924	4B192557003	7697	2	6/10/01	4th Q	96-059	HCNWTRS
Ultramar Inc.	Marine Term, Berth 164	WILMINGTON	CA0055719	4B192023002	2165	3	7/10/99	2nd Q	94-064	DSTORMS
United States Borax & Chem Cor	Wilmington Plant	WILMINGTON	CA0000787	4B192129002	1449	2	12/10/01	3rd Q	97-004	HNONCON
US Navy Defense Logistics Agen	Defense Fuel Supply Pier 12 Lb	LONG BEACH	CA0060496	4B190705002	6877	3	11/10/99	3rd Q	94-125	DSTORMS
Western Fuel Oil Co.	Western Fuel Oil Co.	SAN PEDRO	CA0001902	4B192137001	0907	2	7/10/01	2nd Q	96-064	DSTORMS
Westside Concrete Co.	Greene's Ready-Mixed Concrete	TORRANCE	CA0002992	4B192047001	6007	3	5/10/00	4th Q	95-070	DSTORMS
Westway Terminal Company	Westway Terminal-Berths 70-71	SAN PEDRO	CA0002186	4B192407001	5960	2	7/10/00	3rd Q	97-139	DSTORMS
general permits										
AboveNet Communications, Inc.	Silverado Aquifer Testing	EL SEGUNDO	CAG994001	4B196000551	8188	3	4/10/02	2nd Q	97-045	IMISCEL
AIR PRODUCTS AND CHEMICALS,INC	Carson Hydrogen Plant	CARSON	CAG994003	4B196400054	8061	3	5/10/03	4th Q	98-055	DNONCON
Arco Petroleum Products Co.	Tank Leak-4000 W. Redondo Beac	TORRANCE	CAG834001	4B196600007	7253	2	4/10/02	4th Q	97-046	HCNWTRS
California Water Service Co.	Ht-Hill Tank	TORRANCE	CAG674001	4B196300054	7680	3	4/10/02	3rd Q	97-047	DMISCEL
California Water Service Co.	Ht-Reservoir #1	TORRANCE	CAG674001	4B196300053	7678	3	4/10/02	3rd Q	97-047	DMISCEL
California Water Service Co.	Gw-Well #32 & #33	TORRANCE	CAG994001	4B196000310	7781	3	4/10/02	2nd Q	97-045	DMISCEL
California Water Service Co.	Well # 98	LONG BEACH	CAG994001	4B196000521	8133	3	4/10/02	2nd Q	97-045	IMISCEL
California Water Service Co.	Wells 19A, 75A, 77 & 79	CARSON	CAG994001	4B196000380	7846	3	4/10/02	2nd Q	97-045	DMISCEL
Caltrans	Dominguez Channel Watershed	GARDENA	CAG994001	4B196000287	7732	3	4/10/02	2nd Q	97-045	DMISCEL
Defense Fuel Support Point	DFSP San Pedro-Pump House Area	SAN PEDRO	CAG834001	4B196600122	7565	2	4/10/02	4th Q	97-046	DCNWTRS
Department of Navy	Former LB Naval Sta, NEX Gas S	LONG BEACH	CAG834001	4B196600123	7566	2	4/10/02	4th Q	97-046	HCNWTRS
El Segundo, City of	Palot Test Well Facility	EL SEGUNDO	CAG994002	4B196100021	7911	3	4/10/02	4th Q	97-043	DMISCEL
Equilon Enterprises LLC	Tank Leak-2186 Redondo Bch Bl.	TORRANCE	CAG834001	4B196600030	7366	2	4/10/02	4th Q	97-046	HCNWTRS
GATX Tank Storage Terminals Co	Carson Terminal	CARSON	CAG674001	4B196300118	8156	3	4/10/02	3rd Q	97-047	DMISCEL
GATX Tank Storage Terminals Co	Ht-Gatx, Carson	CARSON	CAG674001	4B196300004	7107	3	4/10/02	3rd Q	97-047	DMISCEL
GATX Tank Storage Terminals Co	Gaffey Street Terminal	SAN PEDRO	CAG674001	4B196300119	8157	3	4/10/02	3rd Q	97-047	DMISCEL
GATX Tank Storage Terminals Co	Ht-Berth 118-119	SAN PEDRO	CAG674001	4B196300023	7332	3	4/10/02	3rd Q	97-047	DMISCEL

Los Angeles Regional Water Quality Control Board
Permits to be Renewed During FY 2002/2003 (cont'd)

Discharger*	Facility	City	NPDES#	WDID#	CI#	TTWQ	Exp. Date	Renewal Quarter	Order No.	Waste Type
GATX Tank Storage Terminals Co	Ht-Berth 172	WILMINGTON	CAG674001	4B196300020	7291	3	4/10/02	3rd Q	97-047	DMISCEL
GATX Tank Storage Terminals Co	Westway Terminal, Berth 79	SAN PEDRO	CAG914001	4B196800027	8077	2	4/10/02	4th Q	97-044	DMISCEL
Heinz Pet Products Div.	Heinz Pet Products	TERMINAL ISLAND	CAG994003	4B196400065	5795	3	5/10/03	4th Q	98-055	DNONCON
LA Co Dept of Public Works	Dominguez Gap Barrier 1,2, &3	WILMINGTON	CAG994001	4B196000497	6089	3	4/10/02	2nd Q	97-045	DMISCEL
LA Co Dept of Public Works	Dominguez Gap Barrier 1,2, &3	WILMINGTON	CAG994001	4B196000497	6089	3	4/10/02	2nd Q	97-045	DMISCEL
LA Co Dept of Public Works	Griffith St. Storm Drain Proj	CARSON	CAG994002	4B196100057	8177	3	4/10/02	4th Q	97-043	NCNWTRS
Los Angeles City of DWP	Marine Tank Farm	WILMINGTON	CAG674001	4B196300040	7495	3	4/10/02	3rd Q	97-047	DMISCEL
Los Angeles City of DWP	Pipeline Terminal Island	SAN PEDRO	CAG674001	4B196300103	8045	3	4/10/02	3rd Q	97-047	IMISCEL
Los Angeles City of DWP	Los Angeles Harbor WRP	SAN PEDRO	CAG994002	4B196100023	7929	3	4/10/02	4th Q	97-043	DMISCEL
Mobil Oil Corp.	Southeast Terminal II	TERMINAL ISLAND	CAG674001	4B196300098	8000	3	4/10/02	3rd Q	97-047	DMISCEL
Mobil Oil Corp.	Southwestern Terminal-Area I	TERMINAL ISLAND	CAG674001	4B196300090	7952	3	4/10/02	3rd Q	97-047	DMISCEL
Port Of Long Beach	Port Access Demonstration	LONG BEACH	CAG994001	4B196000179	7510	3	4/10/02	2nd Q	97-045	DMISCEL
Port Of Long Beach	Henry Ford Sewer Pump Station	LONG BEACH	CAG994002	4B196100016	7889	3	4/10/02	4th Q	97-043	DMISCEL
Port of Los Angeles	West Basin ICTF Project	SAN PEDRO	CAG994002	4B196100038	8117	3	4/10/02	4th Q	97-043	DMISCEL
SFPP, LP	Watson Station	CARSON	CAG674001	4B196300121	8170	3	4/10/02	3rd Q	97-047	IMISCEL
Southern California Edison	EPTC Pipeline (Dominguez Ch)		CAG674001	4B196300109	8094	3	4/10/02	3rd Q	97-047	IMISCEL
Southern California Edison	EPTC Pipeline (LA/LB Harbors)		CAG674001	4B196300110	8095	3	4/10/02	3rd Q	97-047	IMISCEL
Southern California Edison	EPTC Pipeline (Dominguez Ch)		CAG994002	4B196100039	8124	3	4/10/02	4th Q	97-043	DMISCEL
Southern California Edison	EPTC Pipeline (LA/LB Harbors)		CAG994002	4B196100041	8126	3	4/10/02	4th Q	97-043	DMISCEL
Southern California Water Co.	Dalton Well	GARDENA	CAG994001	4B196000486	8014	3	4/10/02	2nd Q	97-045	NMISCEL
Southern California Water Co.	Ocean Gate Well	HAWTHORNE	CAG994001	4B196000447	7959	3	4/10/02	2nd Q	97-045	DMISCEL
Southern California Water Co.	Southwest District	CARSON	CAG994001	4B196000394	7878	3	4/10/02	2nd Q	97-045	DMISCEL
Southern California Water Co.	Yukon Wells 1 & 2	INGLEWOOD	CAG994001	4B196000485	8026	3	4/10/02	2nd Q	97-045	NMISCEL
Southern California Water Co.	Chicago & Compton Doty Wells	LAWNDALE	CAG994002	4B196100026	7958	3	4/10/02	4th Q	97-043	DMISCEL
Southern California Water Co.	Goldmedal Plant	HAWTHORNE	CAG994003	4B196400037	7916	3	5/10/03	4th Q	98-055	DMISCEL
Southern California Water Co.	Truro Fe & Mn Filtration Plant	INGLEWOOD	CAG994003	4B196400045	8027	3	5/10/03	4th Q	98-055	NFILBRI
Syart Parking Structures, Inc.	Tank Leak-SYART PARKING STRUCT	GARDENA	CAG834001	4B196600036	7374	2	4/10/02	4th Q	97-046	HCNWTRS
Tesoro Petroleum	Target Store-290	GARDENA	CAG914001	4B196800023	8038	2	4/10/02	4th Q	97-044	IMISCEL

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Permits to be Renewed During FY 2002/2003 (cont'd)

Discharger*	Facility	City	NPDES#	WDID#	CI#	TTWQ	Exp. Date	Renewal Quarter	Order No.	Waste Type
Tosco Corp.	Ht-L. A. Refinery, Wilmington	WILMINGTON	CAG674001	4B196300024	7337	3	4/10/02	3rd Q	97-047	DMISCEL
Water Repenishment Dist Of S.C	West Basin Observation Well	TORRANCE	CAG994001	4B196000162	7470	3	4/10/02	2nd Q	97-045	DMISCEL
Wyndham Hotels & Resorts	Wyndham Hotel at L.A. Airport	LOS ANGELES	CAG994003	4B196400060	4581	3	5/10/03	4th Q	98-055	IMISCEL

***General permit dischargers will be reviewed and may not be "renewed" but allowed to continue with enrollment**

CAG674001 16
CAG834001 5
CAG914001 2
CAG994001 13
CAG994002 9
CAG994003 5

NMISCEL 2
NCNWTRS 1
DCNWTRS 3
DSTORMS 38
HCONTACT 1
HSTORMS 3
DMISCEL 37
DWSHWTR 1
HCNWTRS 10
DFILBRI 2
DNONCON 9
DPROCESS 1
IMISCEL 9
NFILBRI 1
DCONTAC 2
DDOMEST 1
HNONCON 1

Los Angeles Regional Water Quality Control Board
Permits to be Renewed During FY 2003/2004

Discharger*	Facility	City	NPDES#	WDID#	CI#	TTWQ	Exp. Date	Renewal Quarter	Order No.	Waste Type
SANTA MONICA BAY WMA										
majors										
AES Redondo Beach, LLC	Redondo Generating Station	REDONDO BEACH	CA0001201	4B192111003	0536	1	5/10/05	1st Q	00-085	DPROCES
Chevron U.S.A. Inc.	El Segundo Refinery	EL SEGUNDO	CA0000337	4B192113001	1603	1	8/10/02	1st Q	97-112	HSTORMS
El Segundo Power, L.L.C.	El Segundo Generating Station	EL SEGUNDO	CA0001147	4B192111001	4667	1	5/10/05	1st Q	00-084	DPROCES
Equilon Enterprises LLC	Shell Station #204-1944-0100	CULVER CITY	CA0064289	4B191312001	8030	1	6/10/04	3rd Q	99-065	DCNWTRS
LA City Bureau of Sanitation	Hyperion WWTP, NPDES	PLAYA DEL REY	CA0109991	4B190106002	1492	1	2/10/99	2nd Q	94-021	DDOMIND
Las Virgenes MWD	Tapia WWRP, NPDES	CALABASAS	CA0056014	4B190104001	4760	1	10/10/02	2nd Q	97-135	DDOMIND
Los Angeles City of DWP	Scattergood Generating Station	PLAYA DEL REY	CA0000370	4B193500003	1886	1	5/10/05	1st Q	00-083	DCONTAC
Los Angeles County San Dist	JWPCP, Carson NPDES	CARSON	CA0053813	4B190107013	1758	1	5/10/02	2nd Q	97-090	DDOMIND
Mobil Oil Corp.	Service Station #18-FX-5	CULVER CITY	CA0064301	4B192079027	8055	1	6/10/04	3rd Q	99-062	DCNWTRS
minors										
4201 Wilshire, LLC	HARBOR ASSOCIATES	LOS ANGELES	CA0054861	4B191083001	5225	3	6/10/02	2nd Q	97-097	DMISCEL
Adams Plaza	Adams Plaza	LOS ANGELES	CA0058297	4B191101001	6302	3	6/10/02	2nd Q	97-101	DNONCON
Beverly Springs Medical Center	Beverly Hot Springs	LOS ANGELES	CA0062189	4B191266001	7023	3	6/10/02	2nd Q	97-098	DMISCEL
Cushman & Wakefield Of Calif.	American City Bank Building	LOS ANGELES	CA0055361	4B191121001	2556	3	7/10/02	2nd Q	97-103	DNONCON
Exxon Co., U.S.A.	22 Sites Groundwater Assessmen	LOS ANGELES	CA0063304	4B191015005	7394	1	4/10/05	3rd Q	00-042	DMISCEL
Holiday Inns, Inc.	Holiday Inns	LOS ANGELES	CA0053490	4B191070002	5569	3	6/10/02	2nd Q	97-095	DMISCEL
LA Co Dept of Public Works	Malibu Mesa WWRP, NPDES	MALIBU	CA0059099	4B190107048	6599	1	3/10/99	2nd Q	94-027	DDOMEST
Los Angeles County MTA	Metro Lines-Segments 2b & 3	LOS ANGELES	CA0059714	4B192515001	6763	1	4/10/02	3rd Q	97-050	HCNWTRS
Mark Wilshire Apt Tower	Los Angeles Apartment Bldg	LOS ANGELES	CA0053091	4B191019001	5839	3	6/10/02	2nd Q	97-092	DNONCON
Mobil Oil Corp.	Tank Leak-Mobil Ss#18-LDM	LOS ANGELES	CA0064262	4B192079026	8041	3	4/10/04	3rd Q	99-038	DCNWTRS
Pine Realty, Inc.	Gateway West Bldg, La	LOS ANGELES	CA0053287	4B191067001	5854	3	7/10/02	2nd Q	97-094	DMISCEL
Pivotal Century Plaza Hotel	Century Plaza Hotel & Tower	LOS ANGELES	CA0055638	4B191080001	5144	3	7/10/02	2nd Q	97-096	DMISCEL
Redondo Beach, City of	Seaside Lagoon	REDONDO BEACH	CA0064297	4B190143001	8034	3	6/10/04	2nd Q	99-057	DMISCEL
RMR Properties	Rmr Properties	LOS ANGELES	CA0054615	4B191086001	5881	3	6/10/02	2nd Q	97-100	DMISCEL
Salvation Army, The	Red Shield Yth & Community Ctr	LOS ANGELES	CA0055409	4B191016001	0565	3	6/10/02	2nd Q	97-091	DMISCEL
Santa Monica,City Of	Santa Monica Water Trt. Plant	LOS ANGELES	CA0054101	4B190122001	4904	2	7/10/05	2nd Q	00-075	DFILBRI
Stocker Resources, Inc.	Inglewood Oil Fd,Baldwin Hills	LOS ANGELES	CA0057827	4B192113018	6240	2	3/10/99	3rd Q	94-028	DSTORMS
University Of Southern Calif.	University Park Swimming Pool	LOS ANGELES	CA0054453	4B191035003	5451	3	6/10/02	4th Q	97-093	DMISCEL
UNOVA, Inc.	UNOVA, Inc.	BEVERLY HILLS	CA0055786	4B191112001	5656	3	5/10/98	4th Q	93-031	DNONCON

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Discharger*	Facility	City	NPDES#	WDID#	CI#	TTWQ	Exp. Date	Renewal Quarter	Order No.	Waste Type
West Basin Municipal Water Dis	West Basin WWRP, NPDES	EL SEGUNDO	CA0063401	4B190137001	7449	3	5/10/05	2nd Q	00-091	DDOMEST
West Basin Municipal Water Dis	Carson Regional WRP	CARSON	CA0064246	4B190137004	7972	3	4/10/00	2nd Q	99-014	DMISCEL
general permits										
100 N. La Cienega Part Lawry's	GW-Lawry's Prime Rib Restauran	BEVERLY HILLS	CAG834001	4B196000051	7153	2	4/10/02	3rd Q	97-046	DMISCEL
100 N. La Cienega Part Lawry's	GW-Lawry's Prime Rib Restauran	BEVERLY HILLS	CAG994001	4B196000051	7153	3	4/10/02	4th Q	97-045	DMISCEL
1800 Rosecrans Partners, LLC	Former Fairchild Controls	MANHATTAN BEACH	CAG914001	4B196800019	7984	2	4/10/02	2nd Q	97-044	DMISCEL
331 North Naple LLC	Gw-Office Building	BEVERLY HILLS	CAG994001	4B196000284	7738	3	4/10/02	4th Q	97-045	DMISCEL
5055 Wilshire Limited Partner	5055 Wilshire Limited	LOS ANGELES	CAG994001	4B196000021	7078	3	4/10/02	4th Q	97-045	DMISCEL
585 North Rossmore, Ltd.	Gw-585 North Rossmore, Ltd.	LOS ANGELES	CAG994001	4B196000237	6958	3	4/10/02	4th Q	97-045	DMISCEL
Allied Signal Aerospace	Sepulveda Site	LOS ANGELES	CAG914001	4B196800022	8032	2	4/10/02	2nd Q	97-044	DCNWTRS
Amir Development Co.	Wilshire/Carson Office Build	BEVERLY HILLS	CAG994001	4B196000357	6688	3	4/10/02	4th Q	97-045	DMISCEL
Anti-Defamation League	Office Building	LOS ANGELES	CAG994001	4B196000359	6740	3	4/10/02	4th Q	97-045	DMISCEL
Arco Petroleum Products Co.	Tank Leak-Arco Station #1507	HOLLYWOOD	CAG834001	4B196600014	7282	2	4/10/02	3rd Q	97-046	HCNWTRS
Arden Realty Group, Inc.	Comstock Building	LOS ANGELES	CAG994001	4B196000416	6927	3	4/10/02	4th Q	97-045	DMISCEL
Arden Realty Group, Inc.	New Wilshire Bldg.	LOS ANGELES	CAG994001	4B196000362	6806	3	4/10/02	4th Q	97-045	DMISCEL
Atria West	Gw-Office Building East.	LOS ANGELES	CAG994001	4B196000013	7070	3	4/10/02	4th Q	97-045	DMISCEL
Atria West	Gw-Office Building West	LOS ANGELES	CAG994001	4B196000014	7071	3	4/10/02	4th Q	97-045	DMISCEL
B. N. Y. California Inc.	Gw-B. N. Y. California Inc.	BEVERLY HILLS	CAG994001	4B196000016	7073	3	4/10/02	4th Q	97-045	DMISCEL
Bernard Cohen	Former Pierce Service Station	LOS ANGELES	CAG834001	4B196600114	7851	2	4/10/02	3rd Q	97-046	DMISCEL
Beverly Connection, Ltd.	Shopping Mall	LOS ANGELES	CAG994001	4B196000363	6845	3	4/10/02	4th Q	97-045	DMISCEL
Beverly Hills, City Of	Gw-City Of Beverly Hills	BEVERLY HILLS	CAG994001	4B196000142	7400	3	4/10/02	4th Q	97-045	DMISCEL
Beverly Hills, City Of	Site "A"South Parking Struct	BEVERLY HILLS	CAG994001	4B196000356	6684	3	4/10/02	4th Q	97-045	DMISCEL
Braille Institute Of America	Gw-Braille Institute Of Americ	LOS ANGELES	CAG994001	4B196000131	7364	3	4/10/02	4th Q	97-045	DMISCEL
California Fed. Enterprises	The Wilshire	LOS ANGELES	CAG994001	4B196000367	6881	3	4/10/02	4th Q	97-045	DMISCEL
Caltrans	Santa Monica Bay Watershed	LOS ANGELES	CAG994001	4B196000288	7733	3	4/10/02	4th Q	97-045	DMISCEL
Capital Salvage	Capital Salvage	LOS ANGELES	CAG994003	4B196400032	5852	3	5/10/03	2nd Q	98-055	DMISCEL
Casden Properties, Inc.	Park La Brea, Parcel A	LOS ANGELES	CAG994002	4B196100055	8159	3	4/10/02	3rd Q	97-043	DCNWTRS
Casden Properties, Inc.	Park La Brea, Parcel C	LOS ANGELES	CAG994002	4B196100042	8132	3	4/10/02	3rd Q	97-043	DCNWTRS
CBS, Inc. Television City	Gw2-Cbs, Inc.	LOS ANGELES	CAG994002	4B196100007	7275	3	4/10/02	3rd Q	97-043	DMISCEL
Cedars-Sinai Medical Center	Cedars-Sinai Medical Cente	LOS ANGELES	CAG994001	4B196000515	8106	3	4/10/02	4th Q	97-045	DMISCEL
Cedars-Sinai Medical Center	Cedars-Sinai Medical Cente	LOS ANGELES	CAG994001	4B196000236	5840	3	4/10/02	4th Q	97-045	DMISCEL

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Discharger	Facility	City	NPDES#	WDID#	CI#	TTWQ	Exp. Date	Renewal Quarter	Order No.	Waste Type
Cedars-Sinai Medical Center	Cedars-Sinai Medical Cente	LOS ANGELES	CAG994002	4B196100010	7814	3	4/10/02	3rd Q	97-043	DMISCEL
Center For Early Education	VOC-Center For Early Education	LOS ANGELES	CAG914001	4B196800010	6832	2	4/10/02	2nd Q	97-044	HCNWTRS
Center West	Center West	LOS ANGELES	CAG994001	4B196000361	6795	3	4/10/02	4th Q	97-045	DMISCEL
Channel Gateway L.P.	Gw-Residential Condominiums	LOS ANGELES	CAG994001	4B196000314	7799	3	4/10/02	4th Q	97-045	DMISCEL
Charnock LLP	Charnock Wellfield LLP	LOS ANGELES	CAG834001	4B196600121	7912	2	4/10/02	3rd Q	97-046	HCNWTRS
Children's Hospital Los Angele	Children's Hospital	LOS ANGELES	CAG994001	4B196000103	7299	3	4/10/02	4th Q	97-045	DMISCEL
Clark - Swall Ltd.	Clark-Swall Ltd.	LOS ANGELES	CAG994001	4B196000417	7003	3	4/10/02	4th Q	97-045	DMISCEL
Coastfed Properties	Coastfed Properties	BEVERLY HILLS	CAG994001	4B196000421	6733	3	4/10/02	4th Q	97-045	DMISCEL
Cochran Property Corp.	Cochran Ave. Apt	LOS ANGELES	CAG994001	4B196000337	6979	3	4/10/02	4th Q	97-045	DMISCEL
Copperfield Investment & Devel	Gw-Wilshire-Highland Bldg.	LOS ANGELES	CAG994001	4B196000239	5856	3	4/10/02	4th Q	97-045	DMISCEL
CWD Cloverdale Ii Associates	Gw-328 Cloverdale Apts	LOS ANGELES	CAG994001	4B196000242	7000	3	4/10/02	4th Q	97-045	DMISCEL
Delta Towers Joint Venture	Century Plaza Towers, Offices	LOS ANGELES	CAG994001	4B196000408	5835	3	4/10/02	4th Q	97-045	DMISCEL
Douglas Emmett Realty Advisors	One Westwood- Douglas Emmett R	LOS ANGELES	CAG994001	4B196000540	8129	3	4/10/02	4th Q	97-045	IMISCEL
Douglas, Emmett & Co.	Wilshire Landmark II Building	LOS ANGELES	CAG994001	4B196000420	6837	3	4/10/02	4th Q	97-045	DMISCEL
ExxonMobil Corporation	Former Exxon Station 7-7221	LOS ANGELES	CAG834001	4B196600130	8146	2	4/10/02	3rd Q	97-046	DCNWTRS
Fansteel, Inc.	Precision Sheet Metal	LOS ANGELES	CAG914001	4B196800018	7983	2	4/10/02	2nd Q	97-044	DMISCEL
G & L Realty Corp.	Office Building Parking Garage	BEVERLY HILLS	CAG994001	4B196000365	6848	3	4/10/02	4th Q	97-045	DMISCEL
George & Erika Kabor Family Tr	La Cienega Center	BEVERLY HILLS	CAG994002	4B196100025	7938	3	4/10/02	3rd Q	97-043	DMISCEL
Goldrich & Kest Management Co.	GW-Museum Terrace Apartment	LOS ANGELES	CAG994001	4B196000339	6748	3	4/10/02	4th Q	97-045	DMISCEL
Gramercy Apartment Limited Par	Gw-Gramercy Apartment	LOS ANGELES	CAG994001	4B196000075	7233	3	4/10/02	4th Q	97-045	DMISCEL
Greenwood And Co.	Gw-Cotner Plaza	LOS ANGELES	CAG994001	4B196000129	7235	3	4/10/02	4th Q	97-045	DMISCEL
Hansohl Healthland	Tank Leak-Hansohl Healthland	LOS ANGELES	CAG834001	4B196600039	7389	2	4/10/02	3rd Q	97-046	HCNWTRS
Holt Regency / Daniel Rafalian	Gw-1200 Holt Ave. Condo	LOS ANGELES	CAG994001	4B196000025	7119	3	4/10/02	4th Q	97-045	DMISCEL
House Ear Institute	Gw2-House Ear Institute	LOS ANGELES	CAG994002	4B196100004	6946	3	4/10/02	3rd Q	97-043	DMISCEL
HPG Management	Gw-618 Detroit Apts.	LOS ANGELES	CAG994001	4B196000256	7001	3	4/10/02	4th Q	97-045	DMISCEL
HPG Management	Gw1-616 S. Bumside Apartment	LOS ANGELES	CAG994001	4B196000235	6955	3	4/10/02	4th Q	97-045	DMISCEL
HPG Management	Gw2-360 S. Detroit Apartment	LOS ANGELES	CAG994002	4B196100006	7091	3	4/10/02	3rd Q	97-043	DMISCEL
HPG Management	Gw2-Hancock Park Place Apts	LOS ANGELES	CAG994002	4B196100005	7072	3	4/10/02	3rd Q	97-043	DMISCEL
Huntley Drive Apartment	Huntley Drive Apartment	LOS ANGELES	CAG994001	4B196000283	7728	3	4/10/02	4th Q	97-045	DMISCEL
Hy - Max Building Corp.	Oakhurst Condo.	BEVERLY HILLS	CAG994001	4B196000401	7891	3	4/10/02	4th Q	97-045	DMISCEL
Il Mook Kang	Gw-Maplewood Apts.	LOS ANGELES	CAG994001	4B196000247	7004	3	4/10/02	4th Q	97-045	DMISCEL

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Discharger*	Facility	City	NPDES#	WDID#	CI#	TTWQ	Exp. Date	Renewal Quarter	Order No.	Waste Type
Institute Plaza	Gw-Institute Plaza	LOS ANGELES	CAG994001	4B196000053	7154	3	4/10/02	4th Q	97-045	DMISCEL
IRISH CONSTRUCTION	Playa Del Rey Residential Area	PLAYA DEL REY	CAG994001	4B196000543	8176	3	4/10/02	4th Q	97-045	IMISCEL
JMB Group Trust III	Century Park Plaza	LOS ANGELES	CAG994001	4B196000514	8105	3	4/10/02	4th Q	97-045	DMISCEL
K-G Properties	Gw-K-G Properties	LOS ANGELES	CAG994001	4B196000018	7075	3	4/10/02	4th Q	97-045	DMISCEL
L. Flynt, Ltd.	Great Western Savings Center	BEVERLY HILLS	CAG994001	4B196000348	5690	3	4/10/02	4th Q	97-045	DMISCEL
LA City Bureau of Sanitation	Marina Interceptor Sewer Line	LOS ANGELES	CAG994001	4B196000517	8110	3	4/10/02	4th Q	97-045	DMISCEL
LA Co Dept of Public Works	Gw-Hollyhills Drain Unit 4	LOS ANGELES	CAG994001	4B196000211	7600	3	4/10/02	4th Q	97-045	DMISCEL
LA Co Dept of Public Works	Gw-Hollyhills Drain Unit 5	LOS ANGELES	CAG994001	4B196000212	7601	3	4/10/02	4th Q	97-045	DMISCEL
LA Co Dept of Public Works	West Coast Barrier Proj, 1	EL SEGUNDO	CAG994001	4B196000351	6092	3	4/10/02	4th Q	97-045	DMISCEL
LA Co Dept of Public Works	West Coast Barrier Proj, 2	MANHATTAN BEACH	CAG994001	4B196000352	6093	3	4/10/02	4th Q	97-045	DMISCEL
LA Co Dept of Public Works	West Coast Barrier Proj, 3&4	MANHATTAN BEACH	CAG994001	4B196000353	6094	3	4/10/02	4th Q	97-045	DMISCEL
LA Co Dept of Public Works	West Coast Barrier Proj, 5	HERMOSA BEACH	CAG994001	4B196000354	6096	3	4/10/02	4th Q	97-045	DMISCEL
LA Co Dept of Public Works	West Coast Barrier Proj, 6	REDONDO BEACH	CAG994001	4B196000410	6097	3	4/10/02	4th Q	97-045	DMISCEL
LA Co Dept of Public Works	West Coast Barrier Proj, 7	REDONDO BEACH	CAG994001	4B196000411	6098	3	4/10/02	4th Q	97-045	DMISCEL
LA Co Dept of Public Works	West Coast Barrier Proj, 8	REDONDO BEACH	CAG994001	4B196000412	6099	3	4/10/02	4th Q	97-045	DMISCEL
LA Co Dept of Public Works	West Coast Barrier Proj, 9	EL SEGUNDO	CAG994001	4B196000415	6778	3	4/10/02	4th Q	97-045	DMISCEL
Las Virgenes MWD	Gw-Tapia Groundwater Discharge	CALABASAS	CAG994001	4B196000037	7128	3	4/10/02	4th Q	97-045	DMISCEL
Laxfuel Corp.	Tank Leak-Laxfuel Corp.	LOS ANGELES	CAG834001	4B196600100	7568	2	4/10/02	3rd Q	97-046	HCNWTRS
Le Montrose Hotel	Gw2-Le Montrose Hotel	WEST (BR. P.O.NAME FOR WEST HOLLYWOOD)	CAG994002	4B196100008	7649	3	4/10/02	3rd Q	97-043	DMISCEL
Los Angeles City of DWP	Stone Hollywood Trunk Line - 3	LOS ANGELES	CAG674001	4A196300106	8073	3	4/10/02	2nd Q	97-047	IMISCEL
Los Angeles City of DWP	Stone Hollywood Trunk Line - 4	LOS ANGELES	CAG674001	4B196300099	7934	3	4/10/02	2nd Q	97-047	DMISCEL
Los Angeles City of DWP	Franklin Reservoir	LOS ANGELES	CAG994001	4B196000434	7937	3	4/10/02	4th Q	97-045	DMISCEL
Los Angeles City of DWP	Hollywood Reservior	LOS ANGELES	CAG994001	4B196000269	7696	3	4/10/02	4th Q	97-045	DMISCEL
Los Angeles City of DWP	Stone Hollywood Trunk Line - 3	LOS ANGELES	CAG994001	4B196000505	8074	3	4/10/02	4th Q	97-045	IMISCEL
Los Angeles City of DWP	Stone Hollywood Trunk Line - 4	LOS ANGELES	CAG994001	4B196000470	7935	3	4/10/02	4th Q	97-045	DMISCEL
Los Angeles City Of Muni. Aud.	Los Angeles Convention Center	LOS ANGELES	CAG994003	4B196400033	5900	3	5/10/03	2nd Q	98-055	DMISCEL
Los Angeles County MTA	Tank Leak-Division 7	WEST (BR. P.O.NAME FOR WEST HOLLYWOOD)	CAG834001	4B196600111	7141	2	4/10/02	3rd Q	97-046	HCNWTRS
Los Angeles County Muse.Of Nat	George C Page Museum	LOS ANGELES	CAG994002	4B196100056	6739	3	4/10/02	3rd Q	97-043	IMISCEL
Los Angeles County San Dist	Calabasas Landfill	AGOURA HILLS	CAG994001	4B196000293	7749	3	4/10/02	4th Q	97-045	DMISCEL

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Los Angeles Free Clinic Inc.	Los Angeles Free Clinic Inc.	LOS ANGELES	CAG994001	4B196000364	6846	3	4/10/02	4th Q	97-045	DMISCEL
Macerich Marina Limited Partne	Gw-Marina Market Place	MARINA DEL REY	CAG994001	4B196000167	6834	3	4/10/02	4th Q	97-045	DMISCEL
Malibu, City Of	Big Rock Mesa Drainage Facilit	MALIBU	CAG994001	4B196000419	6896	3	4/10/02	4th Q	97-045	DMISCEL
Maple Associates, Ltd	407 North Maple Drive	BEVERLY HILLS	CAG994001	4B196000544	8180	3	4/10/02	4th Q	97-045	IMISCEL
Marsh Holtzman	Gw-Wilshire Place	LOS ANGELES	CAG994001	4B196000137	7615	3	4/10/02	4th Q	97-045	DMISCEL
Masselin Manor	Masselin Manor Apartment	LOS ANGELES	CAG994001	4B196000334	6789	3	4/10/02	4th Q	97-045	DMISCEL
Medical Landmark Associates	Gw-San Vicente Convalescent	LOS ANGELES	CAG994001	4B196000171	7496	3	4/10/02	4th Q	97-045	DMISCEL
Mercury Casualty Company	Home Office Buliding	LOS ANGELES	CAG994001	4B196000332	6714	3	4/10/02	4th Q	97-045	DMISCEL
Metropolitan Water Dist. Of SC	Venice Power Plant	LOS ANGELES	CAG994003	4B196400035	7589	3	5/10/03	2nd Q	98-055	DMISCEL
Miotel Hotel	VOC-HOTEL SOFITEL LOS ANGELES	LOS ANGELES	CAG914001	4B196800009	6847	2	4/10/02	2nd Q	97-044	HCNWTRS
Mobil Oil Corp.	Tank Leak-Mobil Ss#11-Fx5	CULVER CITY	CAG834001	4B196600051	7425	2	4/10/02	3rd Q	97-046	HCNWTRS
Mobil Oil Corp.	Tank Leak-Mobil Ss#18-LDM	LOS ANGELES	CAG834001	4B196600102	7783	2	4/10/02	3rd Q	97-046	HCNWTRS
MPI, Ltd.	Gw-Mpi, Ltd.	BEVERLY HILLS	CAG994001	4B196000200	7573	3	4/10/02	4th Q	97-045	DMISCEL
N & R Hayworth Property	N & R Hayworth Property	LOS ANGELES	CAG994001	4B196000372	6987	3	4/10/02	4th Q	97-045	DMISCEL
NPS Management Corp.	West Hollywood Facility	WEST (BR. P.O.NAME FOR WEST HOLLYWOOD)	CAG994002	4B196100003	6976	3	4/10/02	3rd Q	97-043	DMISCEL
One Haemet Institute	Office-1030 Robertson Blvd. La	LOS ANGELES	CAG914001	4B196800011	6902	2	4/10/02	2nd Q	97-044	HCNWTRS
Orlando-Melrose Place Lofts	Orlando-Melrose Place Lofts	LOS ANGELES	CAG994002	4B196100043	8138	3	4/10/02	3rd Q	97-043	IMISCEL
PacificTheatres Corp.	Robertson Plaza	LOS ANGELES	CAG994001	4B196000409	5858	3	4/10/02	4th Q	97-045	DMISCEL
Panda Estate Investment, Inc.	Doheny Estates	BEVERLY HILLS	CAG994001	4B196000370	6975	3	4/10/02	4th Q	97-045	DMISCEL
Paramount Pictures Inc.	Marathon Office Building	LOS ANGELES	CAG994001	4B196000077	7234	3	4/10/02	4th Q	97-045	DMISCEL
Park La Brea	Park La Brea	LOS ANGELES	CAG994001	4B196000081	7243	3	4/10/02	4th Q	97-045	DMISCEL
Park Place Terrace Limited	Gw-Part Place Terrace	LOS ANGELES	CAG994001	4B196000080	7242	3	4/10/02	4th Q	97-045	DMISCEL
Pepperdine University	Gulls Way	MALIBU	CAG994001	4B196000224	7635	3	4/10/02	4th Q	97-045	DMISCEL
Peter Georgeanni	Gw-753 N. Wilcox Apts.	LOS ANGELES	CAG994001	4B196000238	6959	3	4/10/02	4th Q	97-045	DMISCEL
Playa Capital Co., LLC	Tank Leak-Playa Vista Site	LOS ANGELES	CAG834001	4B196600119	6839	2	4/10/02	3rd Q	97-046	HCNWTRS
Playa Capital Co., LLC	Gw-Playa Vista Development Pro	LOS ANGELES	CAG994001	4B196000243	7648	3	4/10/02	4th Q	97-045	DMISCEL
PMG, Inc.	Gw-Tiffany Court Apts.	LOS ANGELES	CAG994001	4B196000234	6749	3	4/10/02	4th Q	97-045	DMISCEL
Preferred Realty Advisors Inc.	GW - Lake View Apartments	LOS ANGELES	CAG994001	4B196000335	6835	3	4/10/02	4th Q	97-045	DMISCEL
Prentiss Properties Ltd. Inc.	Office Building, La	LOS ANGELES	CAG994001	4B196000414	6705	3	4/10/02	4th Q	97-045	DMISCEL
RealTech, Inc.	Maple Plaza	BEVERLY HILLS	CAG994001	4B196000358	6704	3	4/10/02	4th Q	97-045	DMISCEL

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Discharger*	Facility	City	NPDES#	WDID#	CI#	TTWQ	Exp. Date	Renewal Quarter	Order No.	Waste Type
Reno Apartments	GW - Reno Apartments	LOS ANGELES	CAG994001	4B196000336	6900	3	4/10/02	4th Q	97-045	DMISCEL
Roman Catholic Archbishop L.A.	University Catholic Center	LOS ANGELES	CAG994001	4B196000342	7836	3	4/10/02	4th Q	97-045	DMISCEL
S. K. Management	Gw-Apartment At Detroit St.	LOS ANGELES	CAG994001	4B196000007	7061	3	4/10/02	4th Q	97-045	DMISCEL
S. K. Management	The Monet	LOS ANGELES	CAG994001	4B196000008	7062	3	4/10/02	4th Q	97-045	DMISCEL
Santa Monica,City Of	Charnock Mun. Water Wellfield	LOS ANGELES	CAG834001	4B196600113	7841	2	4/10/02	3rd Q	97-046	HCNWTRS
Santa Monica,City Of	Moss Ave. Pump Station	SANTA MONICA	CAG994001	4B196000384	7852	3	4/10/02	4th Q	97-045	DMISCEL
Santa Monica,City Of	PCH Sewer Replacement	SANTA MONICA	CAG994001	4B196000503	8071	3	4/10/02	4th Q	97-045	DMISCEL
Santee Dairies, Inc.	Copeland Beverage Group	LOS ANGELES	CAG994003	4B196400031	2214	3	5/10/03	2nd Q	98-055	DMISCEL
Shapiro, Gary,Evelyn & Leonard	Gw-Tiger Co.	LOS ANGELES	CAG994001	4B196000020	7077	3	4/10/02	4th Q	97-045	DMISCEL
Shell Oil Products Co.	Tank Leak-Shell Oil Gasoline S	WEST (BR. P.O.NAME FOR WEST HOLLYWOOD)	CAG834001	4B196600112	7086	2	4/10/02	3rd Q	97-046	HCNWTRS
Shorenstein Co., L.P.	Wilshire Rodeo Plaza	BEVERLY HILLS	CAG994001	4B196000355	6679	3	4/10/02	4th Q	97-045	DMISCEL
Shuwa Investment Co.	1900-01 Avenue Of The Stars	LOS ANGELES	CAG994001	4B196000349	5850	3	4/10/02	4th Q	97-045	DMISCEL
Sikh Study Circle, Inc.	Gw-Sikh Study Circle, Inc.	LOS ANGELES	CAG994001	4B196000249	7693	3	4/10/02	4th Q	97-045	DMISCEL
Sony Pictures Entertainment	Gw-The Culver Studios	CULVER CITY	CAG994002	4B196100019	7567	3	4/10/02	3rd Q	97-043	DMISCEL
Southern California Water Co.	Charnock Plant	LOS ANGELES	CAG994002	4B196100018	7360	3	4/10/02	3rd Q	97-043	DMISCEL
Southern California Water Co.	Sentney Filtration Plant	CULVER CITY	CAG994002	4B196100030	7994	3	4/10/02	3rd Q	97-043	DMISCEL
Star Property Fund, LP	Star Property Fund, LP	BEVERLY HILLS	CAG994001	4B196000371	6978	3	4/10/02	4th Q	97-045	DMISCEL
State Farm Mutual Auto Ins Co	Insurance Office, Westlake Vil	WESTLAKE VILLAGE	CAG994003	4B196400034	5842	3	5/10/03	2nd Q	98-055	DMISCEL
Steve P. Rados, Inc.	Sunset Pumping Plant	LOS ANGELES	CAG994001	4B196000312	7787	3	4/10/02	4th Q	97-045	DMISCEL
Temple Beth Am	Gw-Temple Beth Am	LOS ANGELES	CAG994001	4B196000067	7309	3	4/10/02	4th Q	97-045	DMISCEL
The Korean Times Los Angeles	Fremont Plaza	LOS ANGELES	CAG994001	4B196000413	6682	3	4/10/02	4th Q	97-045	DMISCEL
Third Fairfax, LLC	Gw-K-Mart	LOS ANGELES	CAG994001	4B196000233	7646	3	4/10/02	4th Q	97-045	DMISCEL
Tishman Speyer Properties	The Tower	LOS ANGELES	CAG994001	4B196000360	6788	3	4/10/02	4th Q	97-045	DMISCEL
TMC Realty	Ticketmaster Building	WEST (BR. P.O.NAME FOR WEST HOLLYWOOD)	CAG994001	4B196000388	6685	3	4/10/02	4th Q	97-045	DMISCEL
Tooley & Co.	Corp. Headquarters	BEVERLY HILLS	CAG994001	4B196000369	6904	3	4/10/02	4th Q	97-045	DMISCEL
Topa Management Corp.	Gateway East Office Bldg, La	LOS ANGELES	CAG994001	4B196000350	5853	3	4/10/02	4th Q	97-045	DMISCEL
Tosco / 76 Products Co.	Tank Leak-Unocal Ss #1715	LOS ANGELES	CAG834001	4B196600075	6897	2	4/10/02	3rd Q	97-046	HCNWTRS
Transamerica Senior Living,Inc	Beverly Hills Clark Plaza	BEVERLY HILLS	CAG994001	4B196000525	8107	3	4/10/02	4th Q	97-045	IMISCEL
Two Calif Plaza/Arden Realty	Tank Leak-Arden Realty Inc.	BEVERLY HILLS	CAG834001	4B196600044	7406	2	4/10/02	3rd Q	97-046	HCNWTRS

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Discharger*	Facility	City	NPDES#	WDID#	CI#	TTWQ	Exp. Date	Renewal Quarter	Order No.	Waste Type
Two Rodeo Associates	Two Rodeo Associates	BEVERLY HILLS	CAG994001	4B196000373	7002	3	4/10/02	4th Q	97-045	DMISCEL
Unisys Corporation	VOC-Memorex Corp	WESTLAKE VILLAGE	CAG914001	4B196800008	6723	2	4/10/02	2nd Q	97-044	HCNWTRS
University of California LA	University of California LA	LOS ANGELES	CAG994001	4B196000532	8151	3	4/10/02	4th Q	97-045	
Unocal Corp.	Tank Leak-Unocal Ss #2124	LOS ANGELES	CAG834001	4B196600010	7619	2	4/10/02	3rd Q	97-046	HCNWTRS
Unocal Corp.	Tank Leak-Unocal Ss #5894	RANCHO PALOS VERDES	CAG834001	4B196600110	7816	2	4/10/02	3rd Q	97-046	HCNWTRS
Urban Retail Property	Century City Shopping Center	LOS ANGELES	CAG994001	4B196000407	5834	3	4/10/02	4th Q	97-045	DMISCEL
Villa Marina East Board of Dir	Villa Marina East V	MARINA DEL REY	CAG994001	4B196000402	7892	3	4/10/02	4th Q	97-045	DMISCEL
Water Repenishment Dist Of S.C	South Torrance Test Wells	TORRANCE	CAG994001	4B196000386	7861	3	4/10/02	4th Q	97-045	DMISCEL
W-B Ltd	GW-12100 Wilshire Blvd.	LOS ANGELES	CAG994001	4B196000297	7754	3	4/10/02	4th Q	97-045	DMISCEL
Wells Fargo Bank	Nc-Data Processing Center	LOS ANGELES	CAG994003	4B196400002	6641	3	5/10/03	2nd Q	98-055	DNONCON
West Basin Municipal Water Dis	West Basin Water Recycling	EL SEGUNDO	CAG674001	4B196300039	7492	3	4/10/02	2nd Q	97-047	DMISCEL
Wilshire Borgata Owner Assoc.	Gw-60 Units Condominium	LOS ANGELES	CAG994001	4B196000161	7465	3	4/10/02	4th Q	97-045	DMISCEL
Wilshire Owners Association	Wilshire Owners Association	LOS ANGELES	CAG994001	4B196000366	6879	3	4/10/02	4th Q	97-045	DMISCEL
Wilshire West Executive Center	Wilshire West Executive Center	LOS ANGELES	CAG994001	4B196000422	6953	3	4/10/02	4th Q	97-045	DMISCEL
Wilshire West Partners	Gw-Wilshire Renaissance Apts.	LOS ANGELES	CAG994002	4B196100020	6977	3	4/10/02	3rd Q	97-043	DMISCEL
World Oil Marketing Co.	Tank Leak-Station 16	SANTA MONICA	CAG834001	4B196600076	7651	2	4/10/02	3rd Q	97-046	HCNWTRS
World Oil Marketing Co.	Tank Leak-World Oil Marketing2	LOS ANGELES	CAG834001	4B196600101	7788	2	4/10/02	3rd Q	97-046	HCNWTRS
World Oil Marketing Co.	World Oil Station No. 62	BEVERLY HILLS	CAG834001	4B196600115	7860	2	4/10/02	3rd Q	97-046	HCNWTRS
Writers Guild Of America West	Gw-Fairfax Plaza	LOS ANGELES	CAG994001	4B196000153	7454	3	4/10/02	4th Q	97-045	DMISCEL

***General permit dischargers will be reviewed and may not be "renewed" but allowed to continue with enrollment**

CAG674001 3
CAG834001 20
CAG914001 7
CAG994001 114
CAG994002 16
CAG994003 6

DCNWTRS 7
DCONTAC 1
DDOMEST 2
DDOMIND 3
DFILBRI 1
DMISCEL 142
DNONCON 5
DPROCESS 2
DSTORMS 1
HCNWTRS 22
HSTORMS 1
IMISCEL 8

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Discharger*	Facility	City	NPDES#	WDID#	CI#	TTWQ	Exp. Date	Renewal Quarter	Order No.	Waste Type
LOS ANGELES RIVER WATERSHED										
majors										
Burbank, City Of Public Works	Burbank WWRP, NPDES	BURBANK	CA0055531	4B190101001	4424	1	5/10/03	1st Q	98-052	DDOMIND
LA City Bureau of Sanitation	L.A.-Glendale WWRP, NPDES	LOS ANGELES	CA0053953	4B190106001	5675	1	5/10/03	1st Q	98-047	DDOMIND
LA City Bureau of Sanitation	Tillman WWRP, NPDES	VAN NUYS	CA0056227	4B190106004	5695	1	5/10/03	1st Q	98-046	DDOMIND
Las Virgenes MWD	Tapia WWRP, NPDES	CALABASAS	CA0064271	4B191040004	8059	1	11/15/01	1st Q	99-066	DDOMEST
Southern California Edison	Dominguez Hills Fuel Oil Fac	COMPTON	CA0052949	4B192111004	5841	3	4/10/04	2nd Q	99-043	DMISCEL
The Boeing Company	Rocketdyne Div. - Santa Susana	SIMI HILLS	CA0001309	4B562013002	6027	1	5/10/03	2nd Q	98-051	DSTORMS
minors										
3M Pharmaceuticals	3M Pharmaceuticals	NORTHRIDGE (NORTH LOS ANGELES)	CA0063312	4B192594001	7482	2	4/10/03	1st Q	98-033	HCNWTRS
Arco Terminal Services Corp.	East Hynes Facility	LONG BEACH	CA0059561	4B192010016	6710	3	2/10/02	2nd Q	97-019	DSTORMS
Bank Of America	Nt & Sa L.A. Data Center	LOS ANGELES	CA0057690	4B192475001	6203	2	8/10/02	3rd Q	97-126	DMISCEL
Celotex Corporation	Asphalt Roofing Mfg, La	LOS ANGELES	CA0001899	4B192355001	0642	2	11/10/03	3rd Q	98-097	DSTORMS
Chevron U.S.A. Inc.	Van Nuys Terminal	VAN NUYS	CA0059293	4B192113025	6659	3	3/10/01	2nd Q	96-018	DSTORMS
Coltec Industries Inc.	Former Menasco Aerosystem Faci	BURBANK	CA0064319	4B191318001	8044	3	9/16/04	2nd Q	99-088	DCNWTRS
Consolidated Drum Recondition	Oil Drum Recycling, South Gate	SOUTH GATE	CA0059242	4B192178001	6637	3	2/10/02	3rd Q	97-024	DSTORMS
Dial Corp, The	Southwest Grease Business	COMMERCE	CA0062022	4B192545001	6984	3	4/10/04	3rd Q	99-045	DSTORMS
Edington Oil Co.	Long Beach Refinery - Rainfall	LONG BEACH	CA0057363	4B192326003	6181	2	11/10/03	2nd Q	98-095	DSTORMS
Exxon Co., U.S.A.	Exxon Company U.S.A.	RANCHO DOMINGUEZ	CA0058971	4B192134001	6522	3	5/10/04	4th Q	99-058	DSTORMS
Exxon Co., U.S.A.	22 Sites Groundwater Assessmen	LOS ANGELES	CA0063304	4B191015005	7394	1	4/10/05	2nd Q	00-042	DMISCEL
Filtrol Corp.	Filtrol Corp.	LOS ANGELES	CA0057886	4B192488001	6242	2	3/10/02	2nd Q	97-056	DSTORMS
Kaiser Aluminum Extruded Prod.	Kaiser Aluminum Extruded Prod.	COMMERCE	CA0000892	4B192389001	6010	3	4/10/04	1st Q	99-044	DPROCES
Kaiser Marquardt, Inc.	Ramjet Testing, Van Nuys	VAN NUYS	CA0003344	4B192070001	1265	3	5/10/03	2nd Q	98-054	DCONTAC
Lincoln Avenue Water Co.	South Coulter Water Treatment	ALTADENA	CA0064068	4B191300001	7752	3	12/10/01	1st Q	97-002	DMISCEL
Los Angeles City of DWP	General Office Building	LOS ANGELES	CA0056855	4B190106035	4135	3	4/10/02	4th Q	97-054	DMISCEL
Los Angeles City of DWP	Tunnel # 105	NEWHALL	CA0064149	4B190106099	7839	3	1/10/03	4th Q	98-007	DMISCEL
Los Angeles City Of Rec&Parks	Los Angeles Zoo Griffith Park	LOS ANGELES	CA0056545	4B190106036	4551	2	5/10/03	2nd Q	98-053	DDOMEST
Los Angeles County MTA	Metro Lines-Segments 1 & 2a	LOS ANGELES	CA0064092	4B192515004	7759	1	4/10/02	1st Q	97-049	HCNWTRS
Los Angeles Turf Club	Santa Anita Park	ARCADIA	CA0064203	4B191319001	8102	3	9/10/04	1st Q	99-109	DMISCEL
Mairoll, Inc.	Voi-Shan Chatsworth	CHATSWORTH	CA0064084	4B191306001	7762	3	2/10/02	4th Q	97-016	DMISCEL
MCA / Universal City Studios	Universal City Studios	UNIVERSAL CITY (MOVIE STUDIO)	CA0002739	4B199017001	5988	3	10/10/01	4th Q	96-083	DFILBRI

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Discharger*	Facility	City	NPDES#	WDID#	CI#	TTWQ	Exp. Date	Renewal Quarter	Order No.	Waste Type
McWhorter Technologies, Inc.	McWhorter Technologies, Inc.	LYNWOOD	CA0063908	4B191297001	7655	2	5/10/04	2nd Q	99-053	DCNWTRS
Metropolitan Water Dist. Of SC	Rio Hondo Power Plant	SOUTH GATE	CA0059633	4B190115005	6742	3	4/10/02	3rd Q	97-051	DNONCON
Owens-Brockway Glass Container	Glass Container Div, Vernon	VERNON	CA0056464	4B192085002	6079	2	2/10/02	3rd Q	97-017	DNONCON
Pabco Paper Products	Paperboard & Carton Mfg,Vernon	VERNON	CA0057274	4B192486001	4671	3	11/10/03	3rd Q	98-098	DSTORMS
Pacific Refining Co.	Former Western Fuel Oil	SAN PEDRO	CA0064190	4B191311001	7865	2	7/10/03	4th Q	98-060	DMISCEL
Pasadena, City Of, DWP	Dept. Of Water & Power	PASADENA	CA0063355	4B190138001	7576	3	5/10/03	3rd Q	98-057	DNONCON
Sta - Lube, Inc.	Sta - Lube, Inc.	RANCHO DOMINGUEZ	CA0064025	4B191293001	7742	2	11/10/01	1st Q	96-089	DPROCES
Water Repenishment Dist Of S.C	West Coast Basin Desalter	TORRANCE	CA0064238	4B190140001	7949	3	4/10/02	2nd Q	99-042	DFILBRI
general permits										
550 S. Hope Street Associates	Gw-550 S. Hope St. Building	LOS ANGELES	CAG994001	4B196000003	7063	3	4/10/02	4th Q	97-045	DMISCEL
5th Street Properties, LLC	Trillium Towers	WOODLAND HILLS	CAG994001	4B196000398	6833	3	4/10/02	4th Q	97-045	DMISCEL
Ah Warner Center Properties	Gw-Warner Center Plaza 3	WOODLAND HILLS	CAG994001	4B196000313	7792	3	4/10/02	4th Q	97-045	DMISCEL
Alpha Therapeutic Corp	Blood Fractionation & Process	LOS ANGELES	CAG994003	4B196400043	6453	3	5/10/03	4th Q	98-055	DNONCON
Aramark Uniform Services	Former Aratex Services	LONG BEACH	CAG914001	4B196800021	7395	2	4/10/02	2nd Q	97-044	DCNWTRS
Arco Pipe Line Co.	Ht-West Hynes Pump Station	LONG BEACH	CAG674001	4B196300062	7770	3	4/10/02	3rd Q	97-047	DMISCEL
Bank Of America	Gw-Koll Mang. Services	LOS ANGELES	CAG994001	4B196000028	7099	3	4/10/02	4th Q	97-045	DMISCEL
Brytoco Engr. & Const. Co. Inc	Compton Creek Bridge	RANCHO DOMINGUEZ	CAG994001	4B196000489	8033	3	4/10/02	4th Q	97-045	IMISCEL
Burbank, City Of Public Servic	Gw-Burbank Public Service Dept	BURBANK	CAG994001	4B196000043	7132	3	4/10/02	4th Q	97-045	DMISCEL
Burbank, City Of Public Servic	Gw2-Reservoir Forebay	BURBANK	CAG994002	4B196100009	7316	3	4/10/02	3rd Q	97-043	DMISCEL
California American Water Co.	Gw-Arlington Well # 2	LOS ANGELES	CAG994001	4B196000149	7441	3	4/10/02	4th Q	97-045	DMISCEL
California Credit Union	California Credit Union	LOS ANGELES	CAG994001	4B196000427	6882	3	4/10/02	4th Q	97-045	DMISCEL
California Water Service Co.	GW-Compton Creek Water Wells	LONG BEACH	CAG994001	4B196000311	7782	3	4/10/02	4th Q	97-045	NMISCEL
California Water Service Co.	Well # 94	LONG BEACH	CAG994001	4B196000374	7831	3	4/10/02	4th Q	97-045	DMISCEL
California Water Service Co.	Well # 97	LONG BEACH	CAG994001	4B196000442	7948	3	4/10/02	4th Q	97-045	DMISCEL
California Water Service Co.	Well #'s 15 & 16	LONG BEACH	CAG994001	4B196000375	7830	3	4/10/02	4th Q	97-045	DMISCEL
Caltrans	LA-105 Garfield/Ardis Ave.	DOWNEY	CAG914001	4B196800025	8068	2	4/10/02	2nd Q	97-044	DCNWTRS
Caltrans	Los Angeles River Watershed	LOS ANGELES	CAG994001	4B196000286	7731	3	4/10/02	4th Q	97-045	DMISCEL
Capital & Conuties U.S.A.,Inc.	Capital & Counties U.S.A.,Inc.	LOS ANGELES	CAG994001	4B196000493	6972	3	4/10/02	4th Q	97-045	HCNWTRS
CarrAmerica Realty Corp.	CarrAmerica Office Building	WOODLAND HILLS	CAG994001	4B196000474	6917	3	4/10/02	4th Q	97-045	DNONCON
Citadel Realty, Inc.	Fidelity Federal Bank Bldg.	GLENDALE	CAG994003	4B196400025	6236	3	5/10/03	4th Q	98-055	DMISCEL
Coast Packing Co.	Nc-Coast Packing Co.	VERNON	CAG994003	4B196400003	7652	3	5/10/03	4th Q	98-055	DNONCON

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Compton Municipal Water Dept.	Municipal Water Supply Wells	COMPTON	CAG994002	4B196100044	8147	3	4/10/02	3rd Q	97-043	DMISCEL
Cornerstone Suburban Office,L	First Financial plaza	ENCINO	CAG994001	4B196000399	6713	3	4/10/02	4th Q	97-045	DMISCEL
Crescenta Valley Water Distric	Water Well No. 15	VERDUGO CITY	CAG994002	4B196100059	8181	3	4/10/02	3rd Q	97-043	DMISCEL
Dba "Ultimate"	Nc-Dba "Ultimate"	LOS ANGELES	CAG994003	4B196400005	7679	3	5/10/03	4th Q	98-055	DNONCON
DTSC/England & Assoc.	Former Southland Oil Site	COMMERCE	CAG914001	4B196800033	8152	2	4/10/02	2nd Q	97-044	DCNWTRS
East Pasadena Water Co.	Water Well No. 10	PASADENA	CAG994001	4B196000550	8131	3	4/10/02	4th Q	97-045	IMISCEL
Equilon Enterprises LLC	Shell Station	LYNWOOD	CAG834001	4B196600131	8169	2	4/10/02	4th Q	97-046	DCNWTRS
Fashion Square Car Wash	Fashion Square Car Wash	SHERMAN OAKS	CAG834001	4B196600127	8081	2	4/10/02	4th Q	97-046	DCNWTRS
Former Shell SS/Equilon Enter.	Hanna's Arco	LOS ANGELES	CAG834001	4B196600019	7609	2	4/10/02	4th Q	97-046	HCNWTRS
G & K Management Co., Inc.	Gw-Grand Promenade	LOS ANGELES	CAG994001	4B196000135	7611	3	4/10/02	4th Q	97-045	DMISCEL
Glendale Adventist Med. Center	Physicians Medical Terrace	GLENDALE	CAG994003	4B196400017	7448	3	5/10/03	4th Q	98-055	DNONCON
Glendale Ii Associates, Ltd.	Nc-Glendale Galleria Office	GLENDALE	CAG994003	4B196400006	6683	3	5/10/03	4th Q	98-055	DNONCON
Glendale Memorial Hospital	Health Center	GLENDALE	CAG994003	4B196400022	6903	3	5/10/03	4th Q	98-055	DMISCEL
Grand Central Square	Gw-Parking Structure	LOS ANGELES	CAG994001	4B196000035	7127	3	4/10/02	4th Q	97-045	DMISCEL
Gross Enterprises, Inc.	Encino Exexutive Plaza	ENCINO	CAG994002	4B196100014	6722	3	4/10/02	3rd Q	97-043	DMISCEL
Home Savings	Gw-Sherman Oaks Branch	SHERMAN OAKS	CAG994001	4B196000144	7407	3	4/10/02	4th Q	97-045	DMISCEL
Interstate Brands Corp.	Tank Leak-Interstate Brands	GLENDALE	CAG834001	4B196600103	7212	2	4/10/02	4th Q	97-046	HCNWTRS
James Ratkovich Real Estate	The Pacific	LONG BEACH	CAG994001	4B196000453	6973	3	4/10/02	4th Q	97-045	DMISCEL
Jet Propulsion Laboratory	Jet Propulsion Lab.	PASADENA	CAG994001	4B196000430	7480	3	4/10/02	4th Q	97-045	DMISCEL
LA Co Dept of Public Works	Alamitos Barrier Project 1,2&3	LONG BEACH	CAG994001	4B196000501	8066	3	4/10/02	4th Q	97-045	DMISCEL
LA Co Dept of Public Works	Gw-Storm Drain Project 9037	LONG BEACH	CAG994001	4B196000182	7517	3	4/10/02	4th Q	97-045	DMISCEL
LA Co Dept of Public Works	Le Sage Avenue Drain	WOODLAND HILLS	CAG994001	4B196000425	7907	3	4/10/02	4th Q	97-045	DMISCEL
LA Co Dept of Public Works	Project 9037 Unit 4	LONG BEACH	CAG994002	4B196100058	8162	3	4/10/02	3rd Q	97-043	IMISCEL
Laeroc 1998 Income Fund, L.P.	Carbon Cannister Water Trt Sys	LOS ANGELES	CAG994003	4B196400048	6915	3	5/10/03	4th Q	98-055	DCNWTRS
Lasmo Oil & Gas Inc.	Carson Tank Farm	CARSON	CAG834001	4B196600077	7642	2	4/10/02	4th Q	97-046	HCNWTRS
Long Beach Building Materials	Long Beach Building Materials	LONG BEACH	CAG834001	4B196600128	8123	2	4/10/02	4th Q	97-046	ICNWTRS
Los Angeles City of DWP	East Valley Water Recycling Pj	SAN FERNANDO	CAG674001	4B196300089	7943	3	4/10/02	3rd Q	97-047	DMISCEL
Los Angeles City of DWP	Roscoe Tank Line No. 2	CANOGA PARK	CAG674001	4B196300097	7999	3	4/10/02	3rd Q	97-047	DMISCEL
Los Angeles City of DWP	Headwork Pilot Well Test	BURBANK	CAG914001	4B196800020	7991	2	4/10/02	2nd Q	97-044	DMISCEL
Los Angeles City of DWP	Pollock Wells Treatment Plant	LOS ANGELES	CAG914001	4B196800016	7637	2	4/10/02	2nd Q	97-044	DMISCEL
Los Angeles City of DWP	Stone Inlet Line Flow Control	SHERMAN OAKS	CAG994001	4B196000426	7909	3	4/10/02	4th Q	97-045	DMISCEL

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Discharger	Facility	City	NPDES#	WDID#	CI#	TTWQ	Exp. Date	Renewal Quarter	Order No.	Waste Type
Los Angeles City Of Gen. Serv.	Nc-Los Angeles City Hall	LOS ANGELES	CAG994003	4B196400008	7774	3	5/10/03	4th Q	98-055	DNONCON
Los Angeles County Parking Aut	Gw-Walt Disney Hall Parking	LOS ANGELES	CAG994001	4B196000076	7227	3	4/10/02	4th Q	97-045	DMISCEL
Los Angeles Times	Gw-Office Bldg. 145 S. Spring	LOS ANGELES	CAG994001	4B196000033	7117	3	4/10/02	4th Q	97-045	DMISCEL
Los Angeles Times	Parking Structure 205 W. 2nd.	LOS ANGELES	CAG994003	4B196400049	6994	3	5/10/03	4th Q	98-055	DMISCEL
Los Angeles Times	Parking Structure 213 S.Spring	LOS ANGELES	CAG994003	4B196400046	6854	3	5/10/03	4th Q	98-055	DMISCEL
Los Angeles Times	Parking Structure 220 S.Spring	LOS ANGELES	CAG994003	4B196400051	7013	3	5/10/03	4th Q	98-055	DMISCEL
Los Angeles Unified School Dis	Tank Leak-Los Angeles Unified	LOS ANGELES	CAG834001	4B196600066	7521	2	4/10/02	4th Q	97-046	HCNWTRS
Lubricating Specialties Co.	Lubricating Specialties Co.	VERNON	CAG994003	4B196400044	6761	3	5/10/03	4th Q	98-055	DSTORMS
Macy's West	Macy's West Glendale	GLENDALE	CAG994003	4B196400023	6224	3	5/10/03	4th Q	98-055	DMISCEL
Maguire Partners	The Gas Company Tower	LOS ANGELES	CAG994003	4B196400050	7005	3	5/10/03	4th Q	98-055	DCNWTRS
Maguire Thomas Partners	Glendale Center	GLENDALE	CAG994003	4B196400014	5755	3	5/10/03	4th Q	98-055	DNONCON
Mammoth Apartments, LLC	Mammoth Apartments	SHERMAN OAKS	CAG994001	4B196000546	8172	3	4/10/02	4th Q	97-045	IMISCEL
Metropolitan Water Dist. Of SC	Greg Avenue Power Plant	SUN VALLEY	CAG994003	4B196400029	7588	3	5/10/03	4th Q	98-055	DMISCEL
Mitsui Fudosan (U.S.A.) Inc.	Gw-Sanwa Bank Plaza	LOS ANGELES	CAG994001	4B196000324	6986	3	4/10/02	4th Q	97-045	DMISCEL
Mobil Oil Corp.	Vernon Terminal	VERNON	CAG674001	4B196300120	8160	3	4/10/02	3rd Q	97-047	IMISCEL
Mobil Oil Corp.	Tank Leak-Mobil Ss#11-Frn	ENCINO	CAG834001	4B196600097	7760	2	4/10/02	4th Q	97-046	HCNWTRS
Monrovia, City of	Well # 6	MONROVIA	CAG994001	4B196000387	7870	3	4/10/02	4th Q	97-045	DMISCEL
Newlowe Properties	Newlowe Properties	LOS ANGELES	CAG914001	4B196800012	7837	2	4/10/02	2nd Q	97-044	DMISCEL
Norwalk, City Of	Gw-G. W. Wells Nos. 3, 4, 5, 8	NORWALK	CAG994001	4B196000063	7188	3	4/10/02	4th Q	97-045	DMISCEL
One California Plaza	Gw-One California Plaza	LOS ANGELES	CAG994001	4B196000193	7560	3	4/10/02	4th Q	97-045	DMISCEL
Pacific Pipeline System, Inc.	West Hynes Station	LONG BEACH	CAG674001	4B196300115	8122	3	4/10/02	3rd Q	97-047	DMISCEL
Pico Water District	Gw-Pico Water District	PICO RIVERA	CAG994001	4B196000114	7317	3	4/10/02	4th Q	97-045	DMISCEL
Red Lion Hotel	Red Lion Hotel	GLENDALE	CAG994003	4B196400015	7353	3	5/10/03	4th Q	98-055	DNONCON
Robert Chan	B.C. Plaza	LOS ANGELES	CAG994003	4B196400047	6885	3	5/10/03	4th Q	98-055	DMISCEL
Sherman Car Inc.	Sherman Car Inc	LONG BEACH	CAG834001	4B196600126	8062	2	4/10/02	4th Q	97-046	IMISCEL
Sierracin/Sylmar Corp.	Nc-Sierracin.Sylmar Corp.	SYLMAR	CAG994003	4B196400009	6008	3	5/10/03	4th Q	98-055	DNONCON
Smith & Hricik	550 N. Brand Office Building	GLENDALE	CAG994003	4B196400018	6894	3	5/10/03	4th Q	98-055	DNONCON
Soledad Enrichment Action, Inc	Gw-W. San Fernando Courthouse	CHATSWORTH	CAG994001	4B196000093	7273	3	4/10/02	4th Q	97-045	DMISCEL
South Gate, City Of	Gw-South Gate Park Reservoir	SOUTH GATE	CAG994001	4B196000071	7295	3	4/10/02	4th Q	97-045	DMISCEL
South Gate, City Of	Gw-Well-Head Wts Const.	SOUTH GATE	CAG994001	4B196000105	7304	3	4/10/02	4th Q	97-045	DMISCEL
Southern California Edison	EPTC Pipeline (Los Angele Riv)		CAG674001	4B196300111	8096	3	4/10/02	3rd Q	97-047	IMISCEL

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Discharger*	Facility	City	NPDES#	WDID#	CI#	TTWQ	Exp. Date	Renewal Quarter	Order No.	Waste Type
Southern California Edison	Tank Leak-Compton Service Cen.	COMPTON	CAG834001	4B196600108	7210	2	4/10/02	4th Q	97-046	HCNWTRS
Southern California Edison	GW-EDISON PIPELINE & TERMINAL	LOS ANGELES	CAG994001	4B196000322	7811	3	4/10/02	4th Q	97-045	DMISCEL
SOUTHERN CALIFORNIA GAS CO	Line120 Pipeline Relocation Pj	VAN NUYS	CAG674001	4B196300117	8155	3	4/10/02	3rd Q	97-047	IMISCEL
Southern California Gas Co.	Ht-Line 765	LONG BEACH	CAG674001	4B196300041	7501	3	4/10/02	3rd Q	97-047	DMISCEL
Southern California Water Co.	Chanslor Well	BELL	CAG994001	4B196000519	8112	3	4/10/02	4th Q	97-045	IMISCEL
Southern California Water Co.	Century Site	PARAMOUNT	CAG994002	4B196100049	8140	3	4/10/02	3rd Q	97-043	IMISCEL
Southern California Water Co.	Clara Site	BELL GARDENS	CAG994002	4B196100054	8145	3	4/10/02	3rd Q	97-043	NMISCEL
Southern California Water Co.	Gage Site Water Wells	BELL GARDENS	CAG994002	4B196100061	8184	3	4/10/02	3rd Q	97-043	DCNWTRS
Southern California Water Co.	Goodyear Site	LOS ANGELES	CAG994002	4B196100045	8134	3	4/10/02	3rd Q	97-043	IMISCEL
Southern California Water Co.	Nadeau Site	LOS ANGELES	CAG994002	4B196100052	8143	3	4/10/02	3rd Q	97-043	IMISCEL
Southern California Water Co.	Priory Site	BELL GARDENS	CAG994002	4B196100050	8141	3	4/10/02	3rd Q	97-043	IMISCEL
Southern California Water Co.	Hoffman Plant	CUDAHY	CAG994003	4B196400056	8064	3	5/10/03	4th Q	98-055	IMISCEL
Thrifty Oil Co.	Thrifty Oil Co. # 132	TARZANA	CAG834001	4B196600118	6942	2	4/10/02	4th Q	97-046	HCNWTRS
Tract 349 Mutual Water Company	Well 2 & 3 and 2 Tanks	CUDAHY	CAG994003	4B196400059	8070	3	5/10/03	4th Q	98-055	IMISCEL
Two Calif Plaza/Arden Realty	Two Calif Plaza/Equity Office	LOS ANGELES	CAG994001	4B196000027	7098	3	4/10/02	4th Q	97-045	DMISCEL
United Storm Water, Inc.	Storm Drain Cleaning I	LOS ANGELES	CAG994002	4B196100034	8024	3	4/10/02	3rd Q	97-043	DMISCEL
United Storm Water, Inc.	Storm Drain Cleaning II	LOS ANGELES	CAG994002	4B196100035	8025	3	4/10/02	3rd Q	97-043	DMISCEL
University Of Southern Calif.	Center for Health Professions	LOS ANGELES	CAG994001	4B196000450	7961	3	4/10/02	4th Q	97-045	DMISCEL
Voit Management Co., LP	Plaza Six, Warner Center	WOODLAND HILLS	CAG994001	4B196000389	6926	3	4/10/02	4th Q	97-045	DMISCEL
Walnut Park Mutual Water Co.	Well # 11	HUNTINGTON PARK	CAG994001	4B196000437	7942	3	4/10/02	4th Q	97-045	DMISCEL
Walt Disney Co., The	Riverside Bldg.	BURBANK	CAG994002	4B196100022	7922	3	4/10/02	3rd Q	97-043	DMISCEL
Warner Brothers Inc.	Warner Brothers Studio Facilit	BURBANK	CAG994003	4B196400053	8060	3	5/10/03	4th Q	98-055	IMISCEL
Warner Corporate Center	GW2-Warner Corperate Center	WOODLAND HILLS	CAG994002	4B196100001	7794	3	4/10/02	3rd Q	97-043	DMISCEL
Water Repenishment Dist Of S.C	Dominguez Monitoring Wells	WILMINGTON	CAG994001	4B196000403	7895	3	4/10/02	4th Q	97-045	DMISCEL

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Discharger*	Facility	City	NPDES#	WDID#	CI#	TTWQ	Exp. Date	Renewal Quarter	Order No.	Waste Type
Westland Investment	Central Stocker Ltd.	GLENDALE	CAG994003	4B196400011	6762	3	5/10/03	4th Q	98-055	DNONCON
World Oil Marketing Co.	Tank Leak-World Oil Marketing1	ARTESIA	CAG834001	4B196600080	7667	2	4/10/02	4th Q	97-046	HCNWTRS
WRC Properties, Inc.	Office Bldg.- 330 N. Brand	GLENDALE	CAG994003	4B196400016	7862	3	5/10/03	4th Q	98-055	DNONCON
ZERO CORP.-ZERO WEST DIVISION	ZERO CORP.-ZERO WEST DIVISION	BURBANK	CAG994001	4B196000531	7399	3	4/10/02	4th Q	97-045	DCNWTRS

***General permit dischargers will be reviewed and may not be "renewed" but allowed to continue with enrollment**

CAG674001 8
CAG834001 12
CAG914001 6
CAG994001 42
CAG994002 15
CAG994003 26

DCNWTRS 11
DCONTACT 1
DDOMEST 2
DDOMIND 3
DFILBRI 2
DMISCEL 67
DNONCON 16
DPROCES 2
DSTORMS 11
HCNWTRS 11
ICNWTRS 1
IMISCEL 16
NMISCEL 2

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Discharger*	Facility	City	NPDES#	WDID#	CI#	TTWQ	Exp. Date	Renewal Quarter	Order No.	Waste Type
SAN GABRIEL RIVER WATERSHED										
majors										
AES Alamitos, L.L.C.	Alamitos Generating Station	LONG BEACH	CA0001139	4B192111006	6113	1	5/10/05	1st Q	00-082	DPROCES
Cenco Refining Co.	Santa Fe Springs Refinery	SANTA FE SPRINGS	CA0057177	4B192093001	6154	1	4/10/05	1st Q	00-068	DSTORMS
Los Angeles City of DWP	Haynes Generating Station	LONG BEACH	CA0000353	4B193500002	2769	1	5/10/05	1st Q	00-081	DCONTAC
Los Angeles County San Dist	Pomona WWRP, NPDES	POMONA	CA0053619	4B190107019	0755	1	5/10/00	2nd Q	95-078	DDOMIND
Los Angeles County San Dist	Whittier Narrows WWRP, NPDES	EL MONTE	CA0053716	4B190107016	2848	1	5/10/00	2nd Q	95-082	DDOMIND
Los Angeles County San Dist	San Jose Creek WWRP, NPDES	WHITTIER	CA0053911	4B190107020	5542	1	5/10/00	2nd Q	95-079	DDOMIND
Los Angeles County San Dist	Los Coyotes WWRP, NPDES	CERRITOS (DAIRY VALLEY)	CA0054011	4B190107015	5059	1	5/10/00	2nd Q	95-077	DDOMIND
Los Angeles County San Dist	Long Beach WWRP, NPDES	LONG BEACH	CA0054119	4B190107014	5662	1	5/10/00	2nd Q	95-076	DDOMIND
minors										
Ball-Foster Glass Container Co	Ball Glass Container Corp.	EL MONTE	CA0000884	4B192262001	5720	3	11/10/03	1st Q	98-096	DPROCES
California Dairies Inc.	Milk Process Plant, Artesia	ARTESIA	CA0057371	4B192454001	6166	3	12/9/04	2nd Q	99-136	DMISCEL
California State University	CSU, Long Beach, Pool, Etc	LONG BEACH	CA0054267	4B190800001	2952	3	4/10/99	4th Q	94-034	DMISCEL
Covina Irrigating Co.	Treatment Plant #1	GLENDORA	CA0060577	4B192526001	6849	3	12/9/04	1st Q	99-137	DPROCES
Exxon Co., U.S.A.	22 Sites Groundwater Assessmen	LOS ANGELES	CA0063304	4B191015005	7394	1	4/10/05	1st Q	00-042	DMISCEL
Golden West Refining Co.	Santa Fe Springs Refinery	SANTA FE SPRINGS	CA0055115	4B192162001	6083	2	3/10/05	3rd Q	00-051	DSTORMS
Hemlock Mutual Water Company	Hemlock Mutual Water Company	EL MONTE	CA0059552	4B191152001	6706	3	7/10/02	4th Q	97-108	DWSHWTR
LACnty. FairHotel&Expo Complex	Fairplex	POMONA	CA0064254	4B190144001	8101	3	9/10/04	4th Q	99-107	DMISCEL
Libbey Glass Inc.	City Of Industry Facility	CITY OF INDUSTRY (CORPORATE NAME INDUSTRY)	CA0001821	4B192085001	2955	3	11/10/04	2nd Q	99-132	DCONTAC
Los Angeles City of DWP	Tank H, J Area, Haynes Plt. Lb	LONG BEACH	CA0056995	4B190106042	6142	3	2/10/05	3rd Q	00-028	DSTORMS
Los Angeles City of DWP	Tank A,B,C,D Area,Haynes Pl,Lb	LONG BEACH	CA0057649	4B190106007	6208	3	2/10/05	3rd Q	00-025	DSTORMS
Los Angeles City of DWP	Tank E Area, Haynes Plt, Lb	LONG BEACH	CA0057665	4B190106049	6209	3	2/10/05	3rd Q	00-026	DSTORMS
Los Angeles City of DWP	Tank F,G Area,Haynes Plt, Lb	LONG BEACH	CA0057673	4B190106050	6210	3	2/10/05	3rd Q	00-027	DSTORMS
Lubricating Specialties Co.	Pico Rivera, Oil Blending	PICO RIVERA	CA0059013	4B192127001	6521	3	4/10/02	3rd Q	97-052	DSTORMS
Metropolitan Water Dist. Of SC	Weymouth Softening&Filtration	LA VERNE	CA0057070	4B190115004	6141	3	10/28/05	3rd Q	99-102	IMISCEL
Norwalk Industries Co.	Ecology Auto Wrecking	SANTA FE SPRINGS	CA0056928	4B199032001	6041	1	5/10/02	1st Q	97-076	DSTORMS
Royal Catering	Royal Catering, El Monte	EL MONTE	CA0053392	4B191106001	5849	2	6/10/05	3rd Q	00-112	DSTORMS
SFPP, LP	Norwalk Pump Station	NORWALK	CA0063509	4B192597001	7497	1	5/10/05	1st Q	00-088	HCNWTRS

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Discharger*	Facility	City	NPDES#	WDID#	CI#	TTWQ	Exp. Date	Renewal Quarter	Order No.	Waste Type
TRW Inc.	Ground Water Treatment	CITY OF INDUSTRY (CORPORATE NAME INDUSTRY)	CA0064114	4B192557004	7531	3	4/10/02	3rd Q	97-057	HCNWTRS
U.S. Gypsum Co.	U.S. Gypsum Co.	LA MIRADA	CA0063461	4B191287001	7481	2	4/10/05	2nd Q	00-066	HCNWTRS
Unocal Corp.	Former La Mirada Plant	LA MIRADA	CA0063975	4B192131031	7688	3	11/10/04	2nd Q	99-138	DCONTAC
US Navy Defense Fuel Supply Ce	Defense Fuel Supply - Norwalk	NORWALK	CA0059137	4B190705001	6572	3	10/10/04	3rd Q	99-133	DSTORMS
Wheelabrator Norwalk Energy Co	State Hospital Cogeneration Pt	NORWALK	CA0059927	4B191168001	6767	3	12/10/05	3rd Q	00-008	DNONCON
general permits										
Ashland Chemical Company	Ashland Chemical Company	SANTA FE SPRINGS	CAG914001	4B196800001	7785	2	4/10/02	4th Q	97-044	HCNWTRS
B F Goodrich Aerospace	B F Goodrich Aerospace Carbon	SANTA FE SPRINGS	CAG994003	4B196400039	7963	3	5/10/03	4th Q	98-055	DMISCEL
Bell Gardens, City Of, DPW	Gw-Domestic Water Well	BELL GARDENS	CAG994001	4B196000276	7708	3	4/10/02	4th Q	97-045	DMISCEL
Bumble Bee Seafoods, Inc.	Santa Fe Springs Facility	SANTA FE SPRINGS	CAG994003	4B196400062	6913	3	5/10/03	4th Q	98-055	DNONCON
California American Water Co.	Hall Well Site	TEMPLE CITY (RUDELL)	CAG994001	4B196000446	7957	3	4/10/02	4th Q	97-045	DMISCEL
California American Water Co.	Longden Well	SAN MARINO	CAG994001	4B196000377	7843	3	4/10/02	4th Q	97-045	DMISCEL
Caltrans	LA-105 Woodruff Ave	DOWNEY	CAG914001	4B196800026	8069	2	4/10/02	4th Q	97-044	DCNWTRS
Caltrans	Route 10 Pavement Rehab. Pj.	POMONA	CAG994001	4B195000504	8072	3	4/10/02	4th Q	97-045	DMISCEL
Caltrans	San Gabriel River Watershed	WHITTIER	CAG994001	4B196000285	7730	3	4/10/02	4th Q	97-045	DMISCEL
Carrier Corporation	VOC-Carrier Coporation	CITY OF INDUSTRY (CORPORATE NAME INDUSTRY)	CAG914001	4B196800002	7786	2	4/10/02	4th Q	97-044	HCNWTRS
Cerritos, City Of	C-5 Water Well	CERRITOS (DAIRY VALLEY)	CAG994001	4B196000538	8164	3	4/10/02	4th Q	97-045	IMISCEL
Cerritos, City Of	Gw-Cerritos Sheriff Station	CERRITOS (DAIRY VALLEY)	CAG994001	4B196000216	7604	3	4/10/02	4th Q	97-045	DMISCEL
Downey, City Of, Water Supply	Gw-Water Supply Well # 11	DOWNEY	CAG994001	4B196000148	7431	3	4/10/02	4th Q	97-045	DMISCEL
Eric Realty	VOC-Eric Realty	LA MIRADA	CAG914001	4B196800006	7798	2	4/10/02	4th Q	97-044	HCNWTRS
Fairchild Holding Corp.	Fairchild Fasteners Screwcorp	INDUSTRY (CORPORATE NAME FOR CITY OF INDUSTRY)	CAG914001	4B196800017	7980	2	4/10/02	4th Q	97-044	DMISCEL
Goulds Pumps Inc.	Goulds Pumps Inc.	INDUSTRY (CORPORATE NAME FOR CITY OF INDUSTRY)	CAG674001	4B196300092	7965	3	4/10/02	3rd Q	97-047	DMISCEL
Hamilton Standard Controls	Spectrol Electronics	INDUSTRY (CORPORATE NAME FOR CITY OF INDUSTRY)	CAG994001	4B196000436	7620	3	4/10/02	4th Q	97-045	DMISCEL
Hermetic Seal Corp.	Hermetic Seal Corp.	ROSEMEAD	CAG914001	4B196800031	7699	2	4/10/02	4th Q	97-044	HCNWTRS
Hermetic Seal Corp.	Hermetic Seal Corp.	ROSEMEAD	CAG994003	4B196400038	2937	3	5/10/03	4th Q	98-055	DMISCEL
J. A. B. Holdings, Inc.	J. A. B. Holdings	EL MONTE	CAG914001	4B196800015	7402	2	4/10/02	4th Q	97-044	DMISCEL
Jayeast Partnership	Central Plaza	CERRITOS (DAIRY VALLEY)	CAG994003	4B196400061	6914	3	5/10/03	4th Q	98-055	DCNWTRS
Kinneloa Irrigation Dist.	Gw-K3 Water Well	PASADENA	CAG994001	4B196000011	7066	3	4/10/02	4th Q	97-045	DMISCEL

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Discharger*	Facility	City	NPDES#	WDID#	CI#	TTWQ	Exp. Date	Renewal Quarter	Order No.	Waste Type
La Habra Heights Co. Water Dis	Well # 10	LA HABRA HEIGHTS	CAG994001	4B196000444	7953	3	4/10/02	4th Q	97-045	DMISCEL
La Verne, City of	Wheeler Park	LA VERNE	CAG994001	4B196000429	7914	3	4/10/02	4th Q	97-045	DMISCEL
Lansco Die Casting, Inc.	Lansco Die Casting Inc.	CITY OF INDUSTRY (CORPORATE NAME INDUSTRY)	CAG994003	4B196400058	8075	3	5/10/03	4th Q	98-055	IMISCEL
Long Beach Water Dept.	Commision 19 & 20 Water Wells	LONG BEACH	CAG994001	4B196000379	7845	3	4/10/02	4th Q	97-045	DMISCEL
Long Beach Water Dept.	Commission 21, 22, & 23 Wells	LONG BEACH	CAG994001	4B196000535	8161	3	4/10/02	4th Q	97-045	IMISCEL
Long Beach Water Dept.	Wise 1A Water Well	LONG BEACH	CAG994001	4B196000516	8088	3	4/10/02	4th Q	97-045	IMISCEL
Main San Gabriel Basin Water	Strategic Well Testing	AZUSA	CAG994001	4B196000279	7718	3	4/10/02	4th Q	97-045	DMISCEL
McKesson Corporation	VOC-Former McKesson Facilty	SANTA FE SPRINGS	CAG914001	4B196800003	7789	2	4/10/02	4th Q	97-044	HCNWTRS
Montebello Land & Water Co	Well No. 14, Southeast Corner	LOS ANGELES	CAG994001	4B196000465	7988	3	4/10/02	4th Q	97-045	DMISCEL
PASADENA CITY OF	Well #59	PASADENA	CAG994001	4B196000449	7960	3	4/10/02	4th Q	97-045	DMISCEL
Pasadena, City Of, DWP	Gw-Garfield Well	PASADENA	CAG994001	4B196000042	7151	3	4/10/02	4th Q	97-045	DMISCEL
Rockview Dairies, Inc.	Gw-Potable Water Well	SOUTH GATE	CAG994001	4B196000315	7801	3	4/10/02	4th Q	97-045	DMISCEL
Rowland Water District	Well # 1	INDUSTRY (CORPORATE NAME FOR CITY OF INDUSTRY)	CAG994002	4B196100029	7978	3	4/10/02	3rd Q	97-043	DMISCEL
San Gabriel Basin WQ Authority	Whittier Narrows Early Action	SOUTH EL MONTE	CAG914001	4B196800030	8056	2	4/10/02	4th Q	97-044	DCNWTRS
San Gabriel Valley Water Co.	San Gabriel Valley Water-Pt.2	EL MONTE	CAG674001	4B196300069	7857	3	4/10/02	3rd Q	97-047	DMISCEL
San Gabriel Valley Water Co.	Plant 1 & Well 1E	EL MONTE	CAG994001	4B196000476	8011	3	4/10/02	4th Q	97-045	IMISCEL
San Gabriel Valley Water Co.	Plant B7 -Well B7E	CITY OF INDUSTRY (CORPORATE NAME INDUSTRY)	CAG994001	4B196000264	7703	3	4/10/02	4th Q	97-045	DMISCEL
San Gabriel Valley Water Co.	Plant No. 8 Well 8F	EL MONTE	CAG994001	4B196000445	7955	3	4/10/02	4th Q	97-045	DMISCEL
San Gabriel Valley Water Co.	Plant W1 & Well W1C & W1E	WHITTIER	CAG994001	4B196000475	8010	3	4/10/02	4th Q	97-045	IMISCEL
San Gabriel Valley Water Co.	SGVWC Plant B5	CITY OF INDUSTRY (CORPORATE NAME INDUSTRY)	CAG994001	4B196000331	7826	3	4/10/02	4th Q	97-045	DMISCEL
San Gabriel Valley Water Co.	San Gabriel Valley Water W6	WHITTIER	CAG994001	4B196000382	7849	3	4/10/02	4th Q	97-045	IMISCEL
San Gabriel Valley Water Co.	San Gabriel Valley Water Co	CITY OF INDUSTRY (CORPORATE NAME INDUSTRY)	CAG994001	4B196000248	7657	3	4/10/02	4th Q	97-045	DMISCEL
South Montebello Irrigation	Gw-Water Well # 6	MONTEBELLO	CAG994001	4B196000319	7803	3	4/10/02	4th Q	97-045	DMISCEL
South Montebello Irrigation	Gw-Water Well #7	MONTEBELLO	CAG994001	4B196000321	7808	3	4/10/02	4th Q	97-045	DMISCEL
Southern California Edison	Alamitos Generating Station	LONG BEACH	CAG674001	4B196300100	8007	3	4/10/02	3rd Q	97-047	DMISCEL
Southern California Edison	EPTC Pipeline (San Gabriel Ri)		CAG674001	4B196300104	8079	3	4/10/02	3rd Q	97-047	IMISCEL

Los Angeles Regional Water Quality Control Board
Permits to be Renewed During FY 2005/2006 (cont'd)

Discharger*	Facility	City	NPDES#	WDID#	CI#	TTWQ	Exp. Date	Renewal Quarter	Order No.	Waste Type
Southern California Edison	EPTC Pipeline (San Gabriel Ri)		CAG994002	4B196100040	8125	3	4/10/02	3rd Q	97-043	DMISCEL
Southern California Water Co.	Central District	SANTA FE SPRINGS	CAG994001	4B196000383	7850	3	4/10/02	4th Q	97-045	DMISCEL
Southern California Water Co.	Harrison Well #2	CLAREMONT	CAG994001	4B196000318	7802	3	4/10/02	4th Q	97-045	DMISCEL
Southern California Water Co.	Centralia Site	HAWAIIAN GARDENS	CAG994002	4B196100046	8135	3	4/10/02	3rd Q	97-043	IMISCEL
Southern California Water Co.	Hawaiian Site	HAWAIIAN GARDENS	CAG994002	4B196100047	8136	3	4/10/02	3rd Q	97-043	IMISCEL
Southern California Water Co.	Imperial Site	NORWALK	CAG994002	4B196100053	8144	3	4/10/02	3rd Q	97-043	IMISCEL
Southern California Water Co.	Juan Site	HAWAIIAN GARDENS	CAG994002	4B196100048	8139	3	4/10/02	3rd Q	97-043	IMISCEL
Southern California Water Co.	Vine Site	ARTESIA	CAG994002	4B196100051	8142	3	4/10/02	3rd Q	97-043	IMISCEL
Southern California Water Co.	DACE Plant	NORWALK	CAG994003	4B196400055	8063	3	5/10/03	4th Q	98-055	IMISCEL
Southern California Water Co.	Encinita WTP	TEMPLE CITY (RUDELL)	CAG994003	4B196400057	8065	3	5/10/03	4th Q	98-055	IMISCEL
Spyglass Homeowners Associatio	Gw-Sptglass Homeowners Assoc.	WHITTIER	CAG994001	4B196000188	7555	3	4/10/02	4th Q	97-045	DMISCEL
Suburban Water Systems	La Mirada Plant	LA MIRADA	CAG994001	4B196000278	7717	3	4/10/02	4th Q	97-045	DMISCEL
Suburban Water Systems	Plant 139, Well #2,4,5,6	WEST COVINA	CAG994001	4B196000215	7607	3	4/10/02	4th Q	97-045	DMISCEL
Suburban Water Systems	Plant 140	LOS ANGELES	CAG994001	4B196000133	7368	3	4/10/02	4th Q	97-045	DMISCEL
Suburban Water Systems	Plant 147, Well 3	LA PUENTE	CAG994001	4B196000494	8047	3	4/10/02	4th Q	97-045	IMISCEL
Suburban Water Systems	Plant 409, Well # 2	LA MIRADA	CAG994001	4B196000152	7446	3	4/10/02	4th Q	97-045	DMISCEL
The Boeing Company	C1 (Long Beach) Facility	LONG BEACH	CAG994003	4B196400063	6116	3	5/10/03	4th Q	98-055	DSTORMS
TRW Inc.	Monadnock Facility	CITY OF INDUSTRY (CORPORATE NAME INDUSTRY)	CAG994001	4B196000343	7531	3	4/10/02	4th Q	97-045	DMISCEL
World Oil Marketing Co.	World Oil Station # 61	CERRITOS (DAIRY VALLEY)	CAG834001	4B196600063	7494	2	4/10/02	3rd Q	97-046	HCNWTRS
Xerox Corporation	VOC-Xerox Pomona Facility	POMONA	CAG914001	4B196800005	6783	2	4/10/02	4th Q	97-044	HCNWTRS
LOS CERRITOS CHANNEL WMA										
minors										
Arco Petroleum Products Co.	Tank Leak-16804 Downey Ave.	PARAMOUNT	CA0059731	4B192208004	6730	3	4/10/96	1st Q	91-048	HCNWTRS
Arco Pipe Line Co.	Hathaway Terminal Tank Farm	SIGNAL HILL	CA0058343	4B192187001	6297	3	2/10/02	1st Q	97-018	DSTORMS
Long Beach Unified School Dist	Millikan High Sch Natatorium	LONG BEACH	CA0056120	4B190120001	1003	3	4/10/02	4th Q	97-055	DFILBRI
Paramount Petroleum Corp.	Paramount Refinery	PARAMOUNT	CA0056065	4B192348001	6038	2	10/10/04	1st Q	99-131	DSTORMS
general permits										
Certified Alloy Products, Inc.	Certified Alloy Products, Inc.	LONG BEACH	CAG994003	4B196400064	6734	3	5/10/03	4th Q	98-055	DSTORMS
Equilon Enterprises LLC	Tank Leak-Signal Hill Bulk Plt	LONG BEACH	CAG834001	4B196600025	7338	2	4/10/02	4th Q	97-046	HCNWTRS

Los Angeles Regional Water Quality Control Board
Permits to be Renewed During FY 2005/2006 (cont'd)

Discharger*	Facility	City	NPDES#	WDID#	CI#	TTWQ	Exp. Date	Renewal Quarter	Order No.	Waste Type
LA Co Dept of Public Works	Alamitos Barrier Project 1,2&3	LONG BEACH	CAG994001	4B196000500	6056	3	4/10/02	4th Q	97-045	DMISCEL
Long Beach Water Dept.	Ocean Bl. Peninsula Sewer Proj	LONG BEACH	CAG994001	4B196000542	8174	3	4/10/02	4th Q	97-045	IMISCEL
Long Beach Water Dept.	S12 Sewer Force & Gravity Main	LONG BEACH	CAG994001	4B196000548	8179	3	4/10/02	4th Q	97-045	IMISCEL
Pinnacle Communities, Inc.	Pinnacle Communities	SEAL BEACH	CAG994001	4B196000513	8098	3	4/10/02	4th Q	97-045	DMISCEL
Southern California Edison	EPTC Pipeline (San Gabriel Ri)		CAG674001	4B196300104	8079	3	4/10/02	4th Q	97-047	IMISCEL
CHANNEL ISLANDS WMA										
major										
Avalon, City Of	Avalon WWTP, NPDES	AVALON	CA0054372	4B190100001	0066	1	7/10/99	2nd Q	94-069	DDOMEST
minors										
Southern California Edison	Pebbly Beach Desalination Plt	AVALON	CA0061191	4B192111010	6899	2	11/10/94	1st Q	89-117	DFILBRI
US Navy Naval Air Weapons Stat	San Nicholas Island Desalinati	SAN NICHOLAS ISLAND	CA0061794	4A560703007	6971	3	7/10/05	3rd Q	00-074	DFILBRI
US Navy Region Southwest	NALF, San Clemente Island WWTP	SAN CLEMENTE ISLAND	CA0110175	4B190703003	6432	1	5/7/10	2nd Q	00-090	DDOMEST
University Of Southern Calif.	Wrigley Institute For Environ.	TWO HARBORS	CA0056651	4B191035002	6068	3	1/10/01	3rd Q	96-006	DMISCEL

***General permit dischargers will be reviewed and may not be "renewed" but allowed to continue with enrollment**

San Gabriel River Watershed

CAG674001 4	DCNWTRS 3
CAG834001 1	DCONTAC 3
CAG914001 10	DDOMIND 5
CAG994001 35	DMISCEL 41
CAG994002 7	DNONCON 2
CAG994003 8	DPROCES 3
	DSTORMS 11
	DWSHWTR 1
	HCNWTRS 10
	IMISCEL 17

Los Cerritos Channel WMA

CAG994003 1	HCNWTRS 2
CAG834001 1	DSTORMS 3
CAG994001 4	DFILBRI 1
CAG674001 1	DMISCEL 2
	IMISCEL 3

Channel Islands WMA

	DDOMEST 2
	DFILBRI 2
	DMISCEL 1

Waste Types Categories (prior to treatment or disposal)

DCNWTRS – nonhazardous contaminated groundwater
DNONCON – nonhazardous noncontact cooling water
DPROCES – nonhazardous process waste (produced as part of industrial/manufacturing process)
DSTORMS – nonhazardous stormwater runoff
HCNWTRS – hazardous contaminated groundwater
DFILBRI – nonhazardous filter backwash brine waters
DDOMIND – nonhazardous domestic sewage & industrial waste
DWSHWTR – nonhazardous washwater waste (photo reuse washwater, vegetable washwater)
IMISCEL – inert wastes from dewatering, rec. lake overflow, swimming pool wastes, water ride wastewater, or groundwater seepage
DMISCEL – nonhazardous wastes from dewatering, rec. lake overflow, swimming pool wastes, water ride wastewater, or groundwater seepage
HCNWTRS – hazardous contaminated groundwater
DCONTAC – nonhazardous contact cooling water
DDOMEST – nonhazardous domestic sewage
NMISCEL – nonhazardous wastes from dewatering, rec. lake overflow, swimming pool wastes, water ride wastewater, or groundwater seepage
ICNWTRS – inert contaminated groundwater

Hazardous – influent or solid wastes that contain toxic, corrosive, ignitable, or reactive substances (prior to treatment or disposal) managed according to applicable Department of Health Services standards
Designated – influent or solid wastes that contain nonhazardous wastes (prior to treatment or disposal) that pose a significant threat to water quality because of their high concentrations
Inert – influent or solid wastes that do not contain soluble pollutants or organic wastes (prior to treatment or disposal) and have little adverse impact on water quality
Nonhazardous – influent or solid wastes that do not contain soluble pollutants or organic wastes (prior to treatment or disposal) and have little adverse impact on water quality

Appendix 4.2 NPDES Storm Water Wastewater Permit Reissuance

There are three Municipal Storm Water Permits in Region 4:

The Ventura County Municipal Storm Water Permit is scheduled for renewal in 2005.

The Los Angeles County Municipal Storm Water Permit is scheduled for renewal in 2002.

The City of Long Beach Municipal Storm Water Permit is scheduled for renewal in 2004.

Appendix 4.3 NPDES Pretreatment Wastewater Permit Reissuance

The following are the Pretreatment Programs in Region 4 and their schedule for audit. The pretreatment compliance inspections are scheduled annually in years than an audit is not performed:

PROGRAM	AUDIT
Burbank	2002
Camarillo SD	2003
Las Virgenes MWD	2002
Los Angeles CSD	2004
City of Los Angeles	2004
Ojai Valley SD	2002
Oxnard	2001
San Buenaventura	2005
Simi Valley CSD	2001
Thousand Oaks	2001
Moorpark WTP	2005
Santa Paula	2001

Appendix 4.4 NPDES Compliance

All major NPDES dischargers will be inspected at least once per year. All minors will be inspected at least once during the life of the permit.

Appendix 4.5 Chapter 15 Permit Reissuance

Landfill Waste Discharge Requirements
Status and Proposed Reissuance for Priority Watersheds

Groundwater programs (including landfills) have not been officially integrated into the watershed approach. We expect to integrate these programs increasingly over the next several years. In the meantime, to the extent practicable, landfill issues will be considered when completing "State of the Watershed Reports" and designing watershed monitoring programs.

Our current priority (for the next two years) are the Santa Clara River Watershed, Calleguas Creek Watershed, and Dominguez Channel WMA. We are providing the current status and projected revision dates for landfills in these watersheds:

Santa Clara River Watershed

Wayside Landfill	Current WDR: Adopted in 1975 Landfill is closed WDR will be revised in 2001 to reflect closure/postclosure requirements
Chiquita Canyon Landfill	Current WDR: Adopted in 1998
Bailard Coastal Landfills	Current WDR: Adopted in 1988 Landfill is closed WDR will be rescinded in 2000
Bailard Landfill	Current WDR: Adopted in 1993* Landfill is closed WDR was updated in 2000
Coastal Landfill	Current WDR: Adopted in 1988 Landfill is closed WDR was updated in 2000
Santa Clara Disposal Site	Current WDR: Adopted in 1983* Landfill is closed WDR was updated in 2000
Toland Road Disposal Site	Current WDR: Adopted in 1996

Calleguas Creek Watershed

Simi Valley Landfill	Current WDR: Adopted in 1990 WDR will be updated in 2000

Dominguez Channel WMA

City of Los Angeles, Gaffey St Site	Current WDR: Adopted in 1955 Landfill is closed WDR will be rescinded in 2002

* Indicates that WDRs were revised in 1993 to reflect 40 CFR, Part 258 (Subtitle D) requirements)

Appendix 4.6 Non-Chapter 15 Waste Discharge Requirements (WDRs)

Non-Chapter 15 Waste Discharge Requirements (WDRs)
DRAFT Review and Update Strategy
Los Angeles Region
FY 2001/2002 and 2002/2003

The Groundwater Regulatory Unit Programs (WDRs and landfills) have not yet been officially integrated into the watershed approach. We expect to integrate (stepwise) these programs in the next several years. The workplans for the next two years will focus on reducing the review backlog, and to the extent practicable, reviewing and renewing (if appropriate) permits in the targeted watersheds. These facilities will also be considered when designing watershed monitoring programs.

The following tables list all WDRs in the Santa Clara River and Calleguas Creek Watersheds (targeted watersheds in FY01/02), the Dominguez Channel WMA, (targeted watershed for FY02/03), and all WDRs due for review in FY01/02 and 02/03.

Non-Chapter 15 Active Permits in Santa Clara River and Calleguas Creek Watersheds by Threat to Water Quality (FY01/02)

Discharger	Facility	City	WDID#	Expiration Date	Waste Type
SANTA CLARA RIVER WATERSHED					
threat to water quality 1					
Los Angeles County San Dist	Saugus WWRP, Non-NPDES	SAUGUS	4A190107083	4/27/90	DDOMIND
Los Angeles County San Dist	Valencia WWRP, Non-NPDES	VALENCIA	4A190107084	4/27/90	DDOMIND
San Buenaventura City Of	Ventura WWRP, Non-NPDES	VENTURA (CORPORATE NAME SAN BUENAVENTURA)	4A560107002	4/27/90	DDOMIND
Valencia Co.	Natural River Management Plan	SANTA CLARITA	4A191290001	10/28/14	IMISCEL
threat to water quality 2					
Acton Crescent Bay Development	Tract 52883	ACTON	4A196500020	7/22/06	DDOMEST
Acton Plaza Shopping Center	Shopping Center	ACTON	4A191149001	4/4/03	DDOMEST
Andika / Kaiser	St-Tract 49684	ACTON	4A196500011	7/22/06	DDOMEST
Aquinas, Thomas, College	Santa Paula College	SANTA PAULA	4A561000001	2/28/99	DDOMEST
Crown Valley Community Church	Crown Valley Community Church	ACTON	4A191147001	5/30/02	DDOMEST
Gavina & Sons Inc.	St-T.T. 45695	ACTON	4A196500016	7/22/06	DDOMEST
Gene Lesniar	St-Tract 48391	ACTON	4A196500004	7/22/06	DDOMEST
Golden Valley Muni. Water Dist	Gorman WWTP, Non-NPDES	GORMAN	4A190107001	8/19/04	DDOMIND
Hale & Associates	St-22284/Todd Landis	ACTON	4A196500015	7/22/06	DDOMEST
LA Co Dept of Public Works	Lake Hughes Community WWTP	LAKE HUGHES	4B190134001	3/31/05	DDOMEST
Los Angeles County Health Dept	Acton Rehabilitation Center	ACTON	4A190107024	7/14/05	DDOMEST
Los Angeles County Health Dept	Warm Springs Rehabilition Ctr.	CASTAIC	4A190107005	2/26/04	DDOMEST
Los Angeles County Prob Dept	Mendenhall-Munz Boys Camp WWTP	LAKE HUGHES	4A190107076	9/23/04	DDOMEST
Myron Wolter	St-Tt48818	ACTON	4A196500001	7/22/06	DDOMEST
Nova Development Company	Tract 52882	ACTON	4A196500019	7/22/06	DDOMEST
Paradise Ranch Mobile Home Par	Sewage Disp, Castaic	CASTAIC	4A191030001	3/27/99	DDOMEST
Saticoy Food Corp	Vegetable Proc, Santa Paula	SATICOY	4A562408001	9/14/10	DWSHWTR
Sierra View Certer	Commercial Development	ACTON	4A191148001	10/17/02	DDOMEST
Tower Investment	St-Tract 50385	AGUA DULCE	4A196500013	7/22/06	DDOMEST
Ventura Co Water Works Dist.	Piru WWTP, Non-NPDES	FILLMORE	4A560114006	9/16/09	DDOMEST
Ventura Co Water Works Dist.	Todd Road Jail Facility	SANTA PAULA	4A560121001	8/21/99	DDOMEST
Ventura Regional San District	Fillmore WWTP, Non-NPDES	FILLMORE	4A560101001	4/5/07	DDOMIND
Ventura Regional San District	Saticoy S.D. WWTP, Non-NPDES	SATICOY	4A560109001	7/19/07	DDOMIND
Ventura Regional San District	Montalvo WWTP, Non-NPDES	VENTURA (CORPORATE NAME SAN BUENAVENTURA)	4A560102001	4/5/07	DDOMIND
Weary & Associates	Tract 52637	ACTON	4A196500021	7/22/06	DDOMEST
threat to water quality 3					
Cen Fed Bank	Tract 49240	ACTON	4A561051001	4/18/06	DDOMEST
Crown Valley Bldg. Supply	Crown Valley Bldg. Supply	ACTON	4A561052001	9/5/06	DDOMEST
Equilon Enterprises LLC	Shell Oil Co.	ACTON	4A192108021	5/11/10	DDOMEST
Fm H Partnerships L.P.	E Z Take Out	ACTON	4A191145001	4/18/06	DDOMEST
Foodmaker Inc.	Jack In The Box	ACTON	4A191288001	5/11/10	DDOMEST
Greystone Homes, Inc.	River Street Property	FILLMORE	4A566700013	1/25/08	IMISCEL
H. R. Textron Inc.	Valencia Facility	VALENCIA	4A192332004	6/30/04	NCNWTRS

Non-Chapter 15 Active Permits in Santa Clara River and Calleguas Creek Watersheds by Threat to Water Quality (FY01/02) (cont'd)

Discharger	Facility	City	WDID#	Expiration Date	Waste Type
Limoneira Co.	Limoneira&Olivelands Sewer Frm	SANTA PAULA	4A565014002	1/21/03	DDOMEST
Los Angeles County Fire Dept	Fire Camp #11, Acton	ACTON	4A190107079	6/10/08	DDOMEST
Los Angeles County Fire Dept	Camp #16 Correction Inmate Fac	PALMDALE	4A190707001	9/27/11	DDOMEST
Pan American Seed Co.	Pan American Seed, Santa Paula	SANTA PAULA	4A565015001	6/18/02	DPROCES
Sierra Height Mobile Home Est.	Mobile Home Estate	CANYON COUNTRY	4A561036001	10/18/05	DDOMEST
Trans Technology Corp.	Non-NPDES	CANYON COUNTRY	4A192528002	2/24/04	DCNWTRS
Watt Enterprises Ltd.	Building A, Santiago Square	ACTON	4A191144001	4/18/06	DDOMEST
CALLEGUAS CREEK WATERSHED					
threat to water quality 1					
Camarillo Sanitary District	Camarillo WWRP, Non-NPDES	CAMARILLO	4A560100002	9/28/90	DDOMIND
Camrosa Water District	Camrosa WWRP, Non-NPDES	CAMARILLO	4A560106001	4/5/07	DDOMEST
Simi Valley, City Of	Simi Valley WWRP, Non-NPDES	SIMI VALLEY	4A560110003	4/27/90	DDOMIND
threat to water quality 2					
Northrop Grumman Corp. Masd	Newbury Park - Non-NPDES	NEWBURY PARK	4A562436002	10/25/01	HCNWTRS
Ventura Co Water Works Dist.	Moorpark WWTP, Non-NPDES	MOORPARK	4A560103002	4/13/10	DDOMIND
threat to water quality 3					
American Premier Underwriters	G & H Technology Inc.	CAMARILLO	4A561059001	9/16/04	DCNWTRS
Crumpler & Kruger Real Estate	Tierra Rejada Golf Club	VENTURA (COUNTY)	4A561060001	1/26/13	DDOMEST
Galley Enterprises	Village Carwash	THOUSAND OAKS	4B191301001	1/26/13	DCNWTRS
Gillibrand, P. W., Company	Sand & Gravel Plant, Tapo Cyn	SIMI VALLEY	4A562402001	6/12/12	DPROCES
Mushrooms Etc.	Mushrooms Etc.	CAMARILLO	4A562430001	9/18/01	DWSHWTR
Rockwell Science Center LLC	Tank Leak-Rockwell Internation	THOUSAND OAKS	4A562074002	1/22/08	HCNWTRS
Thrifty Oil Co.	Tank Leak-Arco SS#9614	THOUSAND OAKS	4A562433001	4/20/04	HCNWTRS
Transit Mixed Concrete Co.	Sand&Gravel,Ponds-Percolation	MOORPARK	4A562022002	3/24/98	DWSHWTR

Non-Chapter 15 Active Permits in the Dominguez Channel WMA, by Threat to Water Quality (FY02/03)

Discharger	Facility	City	WDID#	Exp. Date	Waste Type
DOMINGUEZ CHANNEL WMA					
threat to water quality 1					
Port Of Long Beach	Dredging-Pier T Marine Termina	LONG BEACH	4B190105030	11/2/03	DDREDGS
threat to water quality 2					
GATX Tank Storage Terminals Co	Carson-Closure Of Surface Impo	CARSON	4B192238004	10/28/04	DCNSOIL
Port Of Long Beach	Dredging-L.B.Harbor 5 Yr Maint	LONG BEACH	4B190105026	6/30/02	DDREDGS
Port of Los Angeles	Dredging-Berths 238-239	SAN PEDRO	4B190106098	12/31/98	DDREDGS
Shell Oil Products Co.	Former Shell Wilmington Plant	CARSON	4B192108020	10/28/04	DCNSOIL
Tosco Corp.	L.A.Refinery-Wilm. Land Treat	WILMINGTON	4B192131028	12/7/06	DCNSOIL
threat to water quality 3					
Hugo Neu-Proler Co.	Hugo Neu-Proler Co.	TERMINAL ISLAND	4B191298001	3/29/11	HCNSOIL
Lasmo Oil & Gas Inc.	Carson Tank Farm	CARSON	4B192516001	1/22/02	DCNWTRS
Mobil Oil Corp.	Mobil Oil Corp.	TORRANCE	4B192079025	1/26/13	DCNSOIL
Port Of Long Beach	Dredging-Berths J245-J247	LONG BEACH	4B190105031	6/30/00	DDREDGS
Port Of Long Beach	Dredging-Terminal Island Conta	LONG BEACH	4B190105033	6/30/03	DDREDGS
Port of Los Angeles	Berth 71 Maintenance Dredging	SAN PEDRO	4B190106110	6/30/02	DDREDGS
Port of Los Angeles	Dredging-Berth 144 Wharf Rep.	SAN PEDRO	4B190106103	5/18/13	DDREDGS
Port of Los Angeles	Dredging-Channel Deepening	SAN PEDRO	4B190106109	8/3/13	DDREDGS

Non-Chapter 15 Active Permits in Region 4, by Threat to Water Quality, then Review Date FY01/02

Discharger	Facility	City	WDID#	Exp. Date	Waste Type
threat to water quality 2					
Crown Valley Community Church	Crown Valley Community Church	ACTON	4A191147001	5/30/02	DDOMEST
Northrop Grumman Corp. Masd	Newbury Park - Non-NPDES	NEWBURY PARK	4A562436002	10/25/01	HCNWTRS
Port Of Long Beach	Dredging-L.B.Harbor 5 Yr Maint	LONG BEACH	4B190105026	6/30/02	DDREDGS
threat to water quality 3					
Dept Of Parks And Recreation	Topanga State Park	TOPANGA	4B190801002	6/18/02	DDOMEST
Lasmo Oil & Gas Inc.	Carson Tank Farm	CARSON	4B192516001	1/22/02	DCNWTRS
Mushrooms Etc.	Mushrooms Etc.	CAMARILLO	4A562430001	9/18/01	DWSHWTR
Pan American Seed Co.	Pan American Seed, Santa Paula	SANTA PAULA	4A565015001	6/18/02	DPROCES
Pictsweet Mushroom Farms	Pictsweet Mushroom Farms	VENTURA (CORPORATE NAME SAN BUENAVENTURA)	4A562428001	6/18/02	DMISCEL
Port of Los Angeles	Berth 71 Maintenance Dredging	SAN PEDRO	4B190106110	6/30/02	DDREDGS
Rose Hills Memorial Park Asso	Whittier Facility	WHITTIER	4B199010001	6/18/02	DMISCEL

Non-Chapter 15 Active Permits in Region 4, by Threat to Water Quality, then Review Date FY02/03

Discharger	Facility	City	WDID#	Exp. Date	Waste Type
threat to water quality 2					
Acton Plaza Shopping Center	Shopping Center	ACTON	4A191149001	4/4/03	DDOMEST
BKK Corporation	Cogeneration Plant	WEST COVINA	4B190308007	12/5/02	DNONCON
Chevron U.S.A. Inc.	El Segundo Groundwater Recycle	EL SEGUNDO	4B192113002	8/25/02	DMISCEL
LA Co Dept of Public Works	Debris Basins Maintenance	LOS ANGELES	4B190107103	9/10/02	IDREDGS
Sierra View Certer	Commercial Development	ACTON	4A191148001	10/17/02	DDOMEST
threat to water quality 3					
22601 PCH Associates	Retail Shopping Center	MALIBU	4B191171001	8/20/02	DDOMEST
Ferro Cast Company	Ventura Non-NPDES, Wash Water	VENTURA (CORPORATE NAME SAN BUENAVENTURA)	4A562366002	9/24/02	DWSHWTR
Limoneira Co.	Limoneira&Olivelands Sewer Frm	SANTA PAULA	4A565014002	1/21/03	DDOMEST
Long Beach City Of	Dredging-East Beach Area	LONG BEACH	4B190105006	2/18/03	DDREDGS
Long Beach City Of	Dredging-West Beach Area	LONG BEACH	4B190105018	2/18/03	DDREDGS
Port Of Long Beach	Dredging-Terminal Island Conta	LONG BEACH	4B190105033	6/30/03	DDREDGS

Appendix 4.7 303(d) Listings/TMDL Schedules

Table 7A. Summary Schedule for TMDL Development (by watershed)

TABLE 7A. SUMMARY SCHEDULE FOR TMDL DEVELOPMENT
Assumes these activities are funded to adhere to this schedule

Ventura River Watershed

303(d) Listed Waterbody(Reach)	Pollutant	Type of TMDL	TMDL Start Date - FY (start of monitoring)	TMDL Completion Date - FY (Basin Plan Amendment)	Comments
Ventura River Estuary	DDT	DDT	2001/02	2005/06	Further assessment needed
Ventura River Reach 2 (Main St. to Weldon Canyon)	algae	eutroph.	2000/01	2004/05	nitrogen monitoring
Ventura River Reach 1 (estuary to Main St.)	algae				
Ventura River Estuary	algae, eutroph.				
Ventura River Reach 4 (Coyote Creek to Camino Cielo Rd.)	pumping, water diversions	diversions	2001/02	2005/06	
Ventura River Reach 3 (Weldon Canyon to confl. w/ Coyote Cr.)	pumping, water diversions				
Ventura River Reach 2 (Main St. to Weldon Canyon)	Cu, Zn	metals	2001/02	2005/06	further monitoring
Ventura River Reach 2 (Main St. to Weldon Canyon)	Ag				
Ventura River Reach 1 (estuary to Main St.)	Cu, Zn				
Ventura River Reach 1 (estuary to Main St.)	Ag				
Ventura River Estuary	trash	trash	2001/02	2005/06	
Ventura River Reach 2 (Main St. to Weldon Canyon)	Se	selenium	2001/02	2005/06	

TABLE 7A. SUMMARY SCHEDULE FOR TMDL DEVELOPMENT
Assumes these activities are funded to adhere to this schedule

Miscellaneous Ventura Coastal WMA

303(d) Listed Waterbody(Reach)	Pollutant	Type of TMDL	TMDL Start Date - FY (start of monitoring)	TMDL Completion Date - FY (Basin Plan Amendment)	Comments
Ventura Harbor: Ventura Keys	Coliform	coliform	2001/02	2006/07	
McGrath Lake	chlordane, DDT, other pesticides	hist. pest. and effects	2001/02	2006/07	
McGrath Lake	sediment				
Port Hueneme Harbor	DDT, PCBs	hist. organics	2001/02	2006/07	
Port Hueneme Harbor	PAHs	PAHs	2001/02	2006/07	
McGrath Beach	Coliform	coliform and its effects	2000/01	2001/02	
McGrath Beach	beach closures				
Mandalay Beach	beach closures				
Port Hueneme Harbor	Zn	zinc	2002/03	2004/05	
Channel Islands Harbor	Pb, Zn	metals	2006/07	2010/11	
Port Hueneme Harbor	TBT	TBT	2006/07	2010/11	Further assessment needed TBT levels have likely dropped

TABLE 7A. SUMMARY SCHEDULE FOR TMDL DEVELOPMENT
Assumes these activities are funded to adhere to this schedule

Santa Clara River Watershed

303(d) Listed Waterbody(Reach)	Pollutant	Type of TMDL	TMDL Start Date - FY (start of monitoring)	TMDL Completion Date - FY (Basin Plan Amendment)	Comments
Santa Clara River Estuary	ChemA, toxaphene	hist. pest.	2001/02	2006/07	
Santa Clara River Reach 8 (W Pier Hwy 99 to Bouquet Cyn Rd Bridge)	chloride	chloride	1997/98	2001/02	
Santa Clara River Reach 7 (Blue Cut to West Pier Hwy 99)	chloride				
Santa Clara River Reach 3 (Dam to abv Sp. Crk./blw Timber Cyn)	chloride				
Santa Clara River Reach 9 (Bouquet Cyn Rd. to abv Lang Gaging)	coliform	coliform	2001/02	2005/06	
Santa Clara River Reach 8 (W Pier Hwy 99 to Bouquet Cyn Rd Bridge)	coliform				
Santa Clara River Estuary	Coliform				
Santa Clara River Estuary Beach/Surfers Knoll	Coliform				
Wheeler Canyon/Todd Barranca	nitrate + nitrite	nitrogen and its effects	2001/02	2002/03	
Torrey Canyon Creek	nitrate + nitrite				
Brown Barranca/Long Canyon	nitrate + nitrite				
Mint Canyon Creek Reach 1	nitrate + nitrite				
Santa Clara River Reach 8 (W Pier Hwy 99 to Bouquet Cyn Rd Bridge)	NH3, nitrate + nitrite				
Santa Clara River Reach 8 (W Pier Hwy 99 to Bouquet Cyn Rd Bridge)	org. enrichment/l				
Santa Clara River Reach 7 (Blue Cut to West Pier Hwy 99)	NH3, nitrate + nitrite				
Santa Clara River Reach 3 (Dam to abv Sp. Crk./blw Timber Cyn)	NH3				
Elizabeth Lake	Eutroph.	eutroph. and its effects	2002/03	2004/05	
Elizabeth Lake	DO, pH				
Lake Hughes	Eutroph.				
Lake Hughes	fish kills				
Lake Hughes	algae				
Lake Hughes	odors				
Munz Lake	Eutroph.				
Elizabeth Lake	trash	trash	2004/05	2004/05	
Munz Lake	trash				
Lake Hughes	trash				

TABLE 7A. SUMMARY SCHEDULE FOR TMDL DEVELOPMENT
Assumes these activities are funded to adhere to this schedule

Calleguas Creek Watershed

303(d) Listed Waterbody(Reach)	Pollutant	Type of TMDL	TMDL Start Date - FY (start of monitoring)	TMDL Completion Date - FY (Basin Plan Amendment)	Comments
Fox Barranca	nitrate + nitrite	Nitrogen and its effects	1997/98	2001/02	
Arroyo Las Posas Reach 1 (Lewis/Somis Rd. to Fox Barranca)	NH3				
Arroyo Las Posas Reach 1 (Lewis/Somis Rd. to Fox Barranca)	nitrate + nitrite				
Arroyo Las Posas Reach 2 (Fox Barranca to Moorpark Fwy (23))	NH3				
Arroyo Las Posas Reach 2 (Fox Barranca to Moorpark Fwy (23))	nitrate + nitrite				
Arroyo Simi Reach 1 (Moorpark Fwy (23) to Brea Cyn)	NH3				
Calleguas Creek Reach 1 (estuary to 0.5 mi. S. of Broome Rd.)	NH3				
Calleguas Creek Reach 1 (estuary to 0.5 mi. S. of Broome Rd.)	nitrogen				
Calleguas Creek Reach 2(0.5 mi. S. of Broome Rd. to Potrero Rd.)	NH3				
Calleguas Creek Reach 2(0.5 mi. S. of Broome Rd. to Potrero Rd.)	nitrogen				
Calleguas Creek Reach 3 (Potrero to Somis Rd.)	nitrate + nitrite				
Conejo Creek/Arroyo Conejo N. Fork	NH3				
Conejo Creek Reach 1 (confl. Calleguas to Santa Rosa Rd)	NH3				
Conejo Creek Reach 1 (confl. Calleguas to Santa Rosa Rd)	algae				
Conejo Creek Reach 1 (confl. Calleguas to Santa Rosa Rd)	low DO/org. enrichment				
Conejo Creek Reach 2 (Santa Rosa Rd. to Tho. Oaks city limit)	NH3				
Conejo Creek Reach 2 (Santa Rosa Rd. to Tho. Oaks city limit)	algae				
Conejo Creek Reach 2 (Santa Rosa Rd. to Tho. Oaks city limit)	low DO/org. enrichment				
Conejo Creek Reach 3 (Tho. Oaks city limit to Lynn Rd.)	NH3				
Conejo Creek Reach 3 (Tho. Oaks city limit to Lynn Rd.)	algae				
Conejo Creek Reach 4 (above Lynn Rd.)	NH3				
Conejo Creek Reach 4 (above Lynn Rd.)	algae				
Conejo Creek Reach 4 (above Lynn Rd.)	Low DO/org. enrichment				
Revolon Slough Main Branch (Mugu Lagoon to Central Ave.)	nitrogen				
Revolon Slough Main Branch (Mugu Lagoon to Central Ave.)	algae				
Beardsley Channel (above Central Ave.)	nitrogen				
Beardsley Channel (above Central Ave.)	algae				
Mugu Lagoon	nitrogen				
Duck pond agric. drain/Mugu Drain/Oxnard Drain	nitrogen				

TABLE 7A. SUMMARY SCHEDULE FOR TMDL DEVELOPMENT
Assumes these activities are funded to adhere to this schedule

Calleguas Creek Watershed

303(d) Listed Waterbody(Reach)	Pollutant	Type of TMDL	TMDL Start Date - FY (start of monitoring)	TMDL Completion Date - FY (Basin Plan Amendment)	Comments
Conejo Creek Reach 1 (confl. Calleguas to Santa Rosa Rd)	toxicity	water-soluble pest. and effects	1997/98	2003/04	
Conejo Creek Reach 2 (Santa Rosa Rd. to Tho. Oaks city limit)	toxicity				
Conejo Creek Reach 3 (Tho. Oaks city limit to Lynn Rd.)	toxicity				
Conejo Creek Reach 4 (above Lynn Rd.)	toxicity				
Calleguas Creek Reach 1 (estuary to 0.5 mi. S. of Broome Rd.)	toxicity				
Calleguas Creek Reach 2(0.5 mi. S. of Broome Rd. to Potrero Rd.)	toxicity				
Duck pond agric. drain/Mugu Drain/Oxnard Drain	toxicity				
Revolon Slough Main Branch (Mugu Lagoon to Central Ave.)	toxicity				
Revolon Slough Main Branch (Mugu Lagoon to Central Ave.)	chlorpyrifos				
Beardsley Channel (above Central Ave.)	toxicity				
Beardsley Channel (above Central Ave.)	chlorpyrifos				
Fox Barranca	Boron, sulfate, TDS	salts	1997/98	2003/04	
Tapo Canyon Reach 1	Boron, chloride, sulfate, TDS				
Arroyo Simi Reach 1 (Moorpark Fwy (23) to Brea Cyn)	Boron, chloride, sulfate, TDS			(2000/01 for chlorides)	
Arroyo Simi Reach 2 (above Brea Canyon)	Boron, sulfate, TDS				
Arroyo Las Posas Reach 2 (Fox Barranca to Moorpark Fwy (23))	chloride, sulfate, TDS				
Arroyo Las Posas Reach 1 (Lewis/Somis Rd. to Fox Barranca)	chloride, sulfate, TDS				
Calleguas Creek Reach 3 (Potrero to Somis Rd.)	chloride, TDS				
Conejo Creek/Arroyo Conejo N. Fork	sulfate, TDS				
Conejo Creek Reach 1 (confl. Calleguas to Santa Rosa Rd)	sulfate, TDS				
Conejo Creek Reach 2 (Santa Rosa Rd. to Tho. Oaks city limit)	chloride, sulfate, TDS				
Conejo Creek Reach 3 (Tho. Oaks city limit to Lynn Rd.)	sulfate, TDS				
Conejo Creek Reach 4 (above Lynn Rd.)	chloride, sulfate, TDS				

TABLE 7A. SUMMARY SCHEDULE FOR TMDL DEVELOPMENT
Assumes these activities are funded to adhere to this schedule

Calleguas Creek Watershed

303(d) Listed Waterbody(Reach)	Pollutant	Type of TMDL	TMDL Start Date - FY (start of monitoring)	TMDL Completion Date - FY (Basin Plan Amendment)	Comments
Arroyo Las Posas Reach 1 (Lewis/Somis Rd. to Fox Barranca)	DDT	historic pest. and effects	1997/98	2004/05	
Arroyo Las Posas Reach 2 (Fox Barranca to Moorpark Fwy (23))	DDT	and vehicle of transport			
Conejo Creek/Arroyo Conejo N. Fork	chlordane, DDT				
Conejo Creek Reach 1 (confl. Calleguas to Santa Rosa Rd)	ChemA, dacthal, DDT, endosulfan, toxaphene				
Conejo Creek Reach 2 (Santa Rosa Rd. to Tho. Oaks city limit)	ChemA, dacthal, DDT, endosulfan, toxaphene				
Conejo Creek Reach 3 (Tho. Oaks city limit to Lynn Rd.)	ChemA, dacthal, DDT, endosulfan, toxaphene				
Conejo Creek Reach 4 (above Lynn Rd.)	ChemA, dacthal, DDT, endosulfan, toxaphene				
Calleguas Creek Reach 1 (estuary to 0.5 mi. S. of Broome Rd.)	sediment toxicity				
Calleguas Creek Reach 1 (estuary to 0.5 mi. S of Broome Rd.)	ChemA, chlordane, DDT, endosulfan, toxaphene				
Calleguas Creek Reach 2(0.5 mi. S. of Broome Rd. to Potrero Rd.)	sediment toxicity				
Calleguas Creek Reach 2 (0.5 mi. S of Broome Rd. to Potrero Rd.)	ChemA, chlordane, dacthal, DDT, endosulfan, toxaphene				
Duck pond agric. drain/Mugu Drain/Oxnard Drain #2	ChemA, DDT, chlordane, toxaphene				
Revolon Slough Main Branch (Mugu Lagoon to Central Ave.)	ChemA, chlordane, dacthal, DDT, dieldrin, endosulfan, toxaphene				
Beardsley Channel (above Central Ave.)	ChemA, chlordane, dacthal, DDT, dieldrin, endosulfan, toxaphene				
Mugu Lagoon	siltation				

TABLE 7A. SUMMARY SCHEDULE FOR TMDL DEVELOPMENT
Assumes these activities are funded to adhere to this schedule

Calleguas Creek Watershed

303(d) Listed Waterbody(Reach)	Pollutant	Type of TMDL	TMDL Start Date – FY (start of Monitoring)	TMDL Completion Date - FY (Basin Plan Amendment)	Comments
Mugu Lagoon	Sediment toxicity	historic pest. and effects and vehicle of transport (cont'd)			
Duck pond agric. drain/Mugu Drain/Oxnard Drain #2	sediment toxicity				
Mugu Lagoon	Chlordane, dacthal, DDT, endosulfan, toxaphene				
Arroyo Simi Reach 1 (Moorpark Fwy (23) to Brea Cyn)	Cr, Ni, Ag, Zn	metals	2002/03	2005/06	
Conejo Creek Reach 3 (Tho. Oaks city limit to Lynn Rd.)	Cd, Cr, Ni, Ag				
Conejo Creek Reach 2 (Santa Rosa Rd. to Tho. Oaks city limit)	Cd, Cr, Ni, Ag				
Conejo Creek Reach 1 (confl. Calleguas to Santa Rosa Rd)	Cd, Cr, Ni, Ag				
Calleguas Creek Reach 1 (estuary to 0.5 mi. S of Broome Rd.)	PCBs	PCBs	2001/02	2004/05	
Calleguas Creek Reach 2 (0.5 mi. S of Broome Rd. to Potrero Rd.)	PCBs				
Revolon Slough Main Branch (Mugu Lagoon to Central Ave.)	PCBs				
Beardsley Channel (above Central Ave.)	PCBs				
Mugu Lagoon	PCBs				
Rio de Santa Clara/Oxnard Drain #3	PCBs	sed.-bound organics	2005/06	2008/09	
Rio de Santa Clara/Oxnard Drain #3	ChemA, chlordane, DDT, toxaphene	And effects			
Rio de Santa Clara/Oxnard Drain #3	sediment toxicity				
Mugu Lagoon	Hg	mercury	2005/06	2008/09	
Mugu Lagoon	Cu, Ni, Zn	other metals	2005/06	2008/09	
Revolon Slough Main Branch (Mugu Lagoon to Central Ave.)	trash	trash	2005/06	2008/09	
Beardsley Channel (above Central Ave.)	trash				
Rio de Santa Clara/Oxnard Drain #3	nitrogen	nitrogen	2005/06	2008/09	
Arroyo Simi Reach 1 (Moorpark Fwy (23) to Brea Cyn)	Se	selenium	2005/06	2008/09	
Revolon Slough Main Branch (Mugu Lagoon to Central Ave.)	Se				

TABLE 7A. SUMMARY SCHEDULE FOR TMDL DEVELOPMENT
Assumes these activities are funded to adhere to this schedule

Dominguez Channel and Los Angeles/Long Beach Harbor WMA

303(d) Listed Waterbody(Reach)	Pollutant	Type of TMDL	TMDL Start Date - FY (start of monitoring)	TMDL Completion Date - FY (Basin Plan Amendment)	Comments
Dominguez Channel Estuary (to Vermont)	benthic comm. effects	PCBs, DDT, other hist. Pest. and their effects	2004/05	2007/08	
Dominguez Channel Estuary (to Vermont)	ChemA, chlordane, DDT, PCBs				
Dominguez Channel Estuary (to Vermont)	aldrin, dieldrin				
Dominguez Channel (above Vermont)	ChemA, chlordane, DDT, PCBs				
Dominguez Channel (above Vermont)	aldrin, dieldrin				
Los Angeles Harbor: Consolidated Slip	benthic comm. effects				
Los Angeles Harbor: Consolidated Slip	DDT, PCBs				
Los Angeles Harbor: Consolidated Slip	chlordane				
Los Angeles Harbor (part. Main Ch., Fish Hbr, Cabrillo Pier, and breakwater)	DDT, PCBs				
Los Angeles Harbor: Southwest Slip	DDT, PCBs				
Los Angeles Harbor: Southwest Slip	sediment toxicity				
San Pedro Bay nearshore and offshore zone: Cabrillo Pier area	DDT, PCBs				
San Pedro Bay nearshore and offshore zone: Cabrillo Pier area	sediment toxicity				
Cabrillo Beach (Inner)	DDT, PCBs				
Long Beach Harbor, part. Main Ch., SE Basin, West Basin, Pier J, and breakwater	benthic comm. effects				
Long Beach Harbor, part. Main Ch., SE Basin, West Basin, Pier J, and breakwater	DDT, PCBs				
Long Beach Harbor, part. Main Ch., SE Basin, West Basin, Pier J, and breakwater	sediment toxicity				
Machado Lake (Harbor Lake)	ChemA, chlordane, DDT, PCBs				
Dominguez Channel (above Vermont)	PAHs	PAHs	2004/05	2007/08	
Dominguez Channel Estuary (to Vermont)	PAHs				
Los Angeles Harbor: Consolidated Slip	PAHs				
Los Angeles Harbor (part. Main Ch., Fish Hbr, Cabrillo Pier, and breakwater)	PAHs				
Long Beach Harbor, part. Main Ch., SE Basin, West Basin, Pier J, and breakwater	PAHs				
San Pedro Bay nearshore and offshore zone: Cabrillo Pier area	PAHs				
Los Angeles Harbor (part. Main Ch., Fish Hbr, Cabrillo Pier, and breakwater)	beach closure	Effects of coliform	2000/01	2001/02	Further Assessment Needed
Cabrillo Beach (Inner)	beach closures				

TABLE 7A. SUMMARY SCHEDULE FOR TMDL DEVELOPMENT
Assumes these activities are funded to adhere to this schedule

Dominguez Channel and Los Angeles/Long Beach Harbor WMA

303(d) Listed Waterbody(Reach)	Pollutant	Type of TMDL	TMDL Start Date - FY (start of monitoring)	TMDL Completion Date - FY (Basin Plan Amendment)	Comments
Torrance Carson Channel	Cu, Pb	Metals	2003/04	2006/07	
Wilmington Drain	Cu, Pb				
Dominguez Channel (above Vermont)	Cu, Pb				
Dominguez Channel (above Vermont)	Cr				
Dominguez Channel (above Vermont)	Zn				
Dominguez Channel Estuary (to Vermont)	Cu, Pb				
Dominguez Channel Estuary (to Vermont)	Cr				
Dominguez Channel Estuary (to Vermont)	Zn				
Los Angeles Harbor: Consolidated Slip	Pb				
Los Angeles Harbor: Consolidated Slip	Cr, Zn				
Machado Lake (Harbor Lake)	algae, eutroph.	nitrogen and its effects	2006/07	2010/11	
Machado Lake (Harbor Lake)	NH3				
Machado Lake (Harbor Lake)	odors				
Wilmington Drain	NH3	ammonia	2005/06	2007/08	
Dominguez Channel (above Vermont)	NH3				
Dominguez Channel Estuary (to Vermont)	NH3				
San Pedro Bay nearshore and offshore zone: Cabrillo Pier area	Zn, Cu, Cr	metals	2006/07	2010/11	
Los Angeles Harbor: Consolidated Slip	TBT	TBT	2006/07	2010/11	Further assessment
Los Angeles Harbor (part. Main Ch., Fish Hbr, Cabrillo Pier, and breakwater)	TBT				
Dominguez Channel (above Vermont)	coliform	coliform	2000/01	2001/02	
Dominguez Channel Estuary (to Vermont)	coliform				
Torrance Carson Channel	coliform				
Wilmington Drain	coliform				
Machado Lake (Harbor Lake)	trash	trash	2006/07	2007/08	

TABLE 7A. SUMMARY SCHEDULE FOR TMDL DEVELOPMENT
Assumes these activities are funded to adhere to this schedule

Santa Monica Bay WMA

303(d) Listed Waterbody(Reach)	Pollutant	Type of TMDL	TMDL Start Date - FY (start of monitoring)	TMDL Completion Date - FY (Basin Plan Amendment)	Comments
Marina del Rey Harbor Beach	beach closures	coliform and its effect	1998/99	2002/03	
Marina del Rey Harbor Beach	coliform				
Marine del Rey Harbor - Back Basins	coliform				
Medea Creek Reach 2 (abv. confl. with Lindero)	coliform	coliform and its effect	1998/99	2001/02	
Medea Creek Reach 1 (lake to confl. with Lindero)	coliform				
Las Virgenes Creek	coliform				
Malibu Lagoon	swimming restrictions				
Malibu Lagoon	shellfish harvesting ad.				
Malibu Creek: lagoon to Malibu Lake	coliform				
Stokes Creek	Coliform				
Lindero Creek Reach 1	coliform				
Lindero Creek Reach 2 (above lake)	coliform				
Palo Comado	Coliform				
Malibu Beach	beach closures	coliform and its effect	1998/99	2001/02	
Malibu Lagoon Beach (Surfrider)	coliform				
Dockweiler Beach	beach closures				
Dockweiler Beach	coliform				
Redondo Beach	beach closures				
Redondo Beach	coliform				
Santa Monica Beach	beach closures				
Santa Monica Beach	coliform				
Paradise Cove Beach	beach closures				
Paradise Cove Beach	coliform				
Topanga Beach	beach closures				
Topanga Beach	coliform				
Las Flores Beach	coliform				
Torrance Beach	beach closures				
Torrance Beach	coliform				
Trancas Beach (Broad Beach)	beach closures				
Trancas Beach (Broad Beach)	coliform				
Will Rogers Beach	beach closures				
Will Rogers Beach	coliform				
Big Rock Beach	coliform				
Cabrillo Beach (Outer)	beach closures				
Cabrillo Beach (Outer)	coliform				
Venice Beach	beach closures				
Venice Beach	coliform				
Dan Blocker Memorial Beach	coliform				
Leo Carillo Beach (south of County line)	Beach closures				
Leo Carillo Beach (south of County line)	coliform				
Long Point Beach	coliform				
Big Rock Beach	beach closures				

TABLE 7A. SUMMARY SCHEDULE FOR TMDL DEVELOPMENT
Assumes these activities are funded to adhere to this schedule

Santa Monica Bay WMA

303(d) Listed Waterbody(Reach)	Pollutant	Type of TMDL	TMDL Start Date - FY (start of monitoring)	TMDL Completion Date - FY (Basin Plan Amendment)	Comments
Whites Point Beach	beach closures	coliform and its effect (cont'd)			
Point Dume Beach	beach closures				
Las Tunas Beach	beach closures				
Point Vicente Beach	beach closures				
Malaga Cove Beach	beach closures				
Lunada Bay Beach	beach closures				
Zuma (Westward Beach)	beach closures				
Point Fermin Park Beach	beach closures				
Puerco Beach	beach closures				
Portugese Bend Beach	beach closures				
Royal Palms Beach	beach closures				
Sea Level Beach	beach closures				
Rocky Point Beach	beach closures				
Resort Point Beach	beach closures				
Robert H. Meyer Memorial Beach	beach closures				
Abalone Cove Beach	beach closures				
Flat Rock Point Beach Area	beach closures				
Escondido Beach	beach closures				
Carbon Beach	beach closures				
Castlerock Beach	beach closures				
La Costa Beach	beach closures				
Bluff Cove Beach	beach closures				
Inspiration Point Beach	beach closures				
Nicholas Canyon Beach	Beach closures				
Palos Verdes Shoreline Point Beach	pathogens				
Santa Monica Canyon	coliform				
Ashland Avenue Drain	coliform				
Sepulveda Canyon	coliform				
Ballona Creek Estuary	coliform	coliform and its effect	1998/99	2002/03	
Ballona Creek Estuary	shellfish harvesting adv.				

TABLE 7A. SUMMARY SCHEDULE FOR TMDL DEVELOPMENT
Assumes these activities are funded to adhere to this schedule

Santa Monica Bay WMA

303(d) Listed Waterbody(Reach)	Pollutant	Type of TMDL	TMDL Start Date - FY (start of monitoring)	TMDL Completion Date - FY (Basin Plan Amendment)	Comments
Malibu Lagoon	eutroph.	nutrients and their effect	1998/99	2001/02	
Malibu Creek: Lagoon to Malibu Lake	nutrients (algae)				
Malibu Creek: lagoon to Malibu Lake	unnatural scum/foam				
Las Virgenes Creek	nutrients (algae)				
Las Virgenes Creek	unnatural scum/foam				
Las Virgenes Creek	low DO, org. enrichment				
Lindero Creek Reach 2 (above lake)	unnatural scum/foam				
Lindero Creek Reach 2 (above lake)	algae				
Lindero Creek Reach 1	unnatural scum/foam				
Lindero Creek Reach 1	algae				
Medea Creek Reach 2 (abv. confl. with Lindero)	algae				
Medea Creek Reach 1 (lake to confl. with Lindero)	algae				
Malibou Lake	algae, eutroph.				
Malibou Lake	low DO, org. enrichment				
Lake Lindero	eutroph., algae				
Lake Lindero	odors				
Westlake Lake	NH3				
Westlake Lake	eutroph., algae				
Westlake Lake	low DO, org. enrichment				
Lake Sherwood	NH3				
Lake Sherwood	Eutroph., algae				
Lake Sherwood	low DO, org. enrichment				
Lake Calabasas	NH3				
Lake Calabasas	Eutroph.				
Lake Calabasas	Low DO, org. enrichment				
Lake Calabasas	pH				
Ballona Wetland	trash	trash	1998/99	2000/01	
Ballona Creek	trash				
Santa Monica Bay Nearshore and Offshore Zone	Hg	metals	2000/01	2003/04	
Santa Monica Bay Nearshore and Offshore Zone	Cd, Cu, Pb, Ni, Ag, Zn				
Santa Monica Bay Nearshore and Offshore Zone	chlordane	chlordane	2004/05	2005/06	
Santa Monica Bay Nearshore amd Offshore Zone	DDT, PCBs	pest. and hist. PCBs, and effects	2005/06	2009/10	
Santa Monica Bay Nearshore and Offshore Zone	sediment toxicity				
Santa Monica Bay Nearshore and Offshore Zone	fish consumption advisory				
Nicholas Canyon Beach	DDT, PCBs				
Paradise Cove Beach	DDT, PCBs				
Robert H. Meyer Memorial Beach	DDT, PCBs				
Point Dume Beach	DDT, PCBs				
Sea Level Beach	DDT, PCBs				

TABLE 7A. SUMMARY SCHEDULE FOR TMDL DEVELOPMENT
Assumes these activities are funded to adhere to this schedule

Santa Monica Bay WMA

303(d) Listed Waterbody(Reach)	Pollutant	Type of TMDL	TMDL Start Date - FY (start of monitoring)	TMDL Completion Date - FY (Basin Plan Amendment)	Comments
Whites Point Beach	DDT, PCBs	hist. PCBs, pest. and Effects (cont'd)			
Trancas Beach (Broad Beach)	DDT, PCBs				
Topanga Beach	DDT, PCBs				
Royal Palms Beach	DDT, PCBs				
Point Fermin Park Beach	DDT, PCBs				
Redondo Beach	DDT, PCBs				
Puerco Beach	DDT, PCBs				
Portugese Bend Beach	DDT, PCBs				
Amarillo Beach	DDT, PCBs				
Zuma (Westward Beach)	DDT, PCBs				
Malibu Lagoon Beach (Surfrider)	DDT, PCBs				
La Costa Beach	DDT, PCBs				
Big Rock Beach	DDT, PCBs				
Bluff Cove Beach	DDT, PCBs				
Cabrillo Beach (Outer)	DDT, PCBs				
Carbon Beach	DDT, PCBs				
Castlerock Beach	DDT, PCBs				
Escondido Beach	DDT, PCBs				
Flat Rock Point Beach Area	DDT, PCBs				
Inspiration Point Beach	DDT, PCBs				
Las Tunas Beach	DDT, PCBs				
Abalone Cove Beach	DDT, PCBs				
Malaga Cove Beach	DDT, PCBs				
Las Flores Beach	DDT, PCBs				
Long Point Beach	DDT, PCBs				
Malibu Beach	DDT				
Palos Verdes Shoreline Point Beach	pesticides				
Marina del Rey Harbor - Back Basins	DDT, PCBs, chlordane	hist. PCBs, pest. and effects	2001/02	2003/04	
Marina del Rey Harbor - Back Basins	dieldrin				
Marina del Rey Harbor - Back Basins	benthic comm. effects				
Marina del Rey Harbor - Back Basins	fish consumption advisory				
Ballona Creek	PCBs, DDT, ChemA, chlordane, dieldrin	hist. PCBs, pest. and effects	2001/02	2004/05	
Ballona Creek	sediment toxicity				
Ballona Creek Estuary	PCBs, DDT, chlordane				
Ballona Creek Estuary	sediment toxicity				
Sepulveda Canyon	NH3	ammonia	2006/07	2009/10	
Pico Kenter Drain	NH3				
Marina del Rey Harbor - Back Basins	Pb	metals	2001/02	2004/05	
Marina del Rey Harbor - Back Basins	Cu, Zn				
Topanga Cyn Creek	Pb	metals and their effects	2004/05	2006/07	
Sepulveda Canyon	Pb				
Pico Kenter Drain	Pb				
Pico Kenter Drain	Cu				
Pico Kenter Drain	toxicity				
Santa Monica Canyon	Pb				

TABLE 7A. SUMMARY SCHEDULE FOR TMDL DEVELOPMENT
Assumes these activities are funded to adhere to this schedule

Santa Monica Bay WMA

303(d) Listed Waterbody(Reach)	Pollutant	Type of TMDL	TMDL Start Date - FY (start of monitoring)	TMDL Completion Date - FY (Basin Plan Amendment)	Comments
Ballona Creek	Pb, Ag	metals and their effects	2000/01	2003/04	
Ballona Creek	As, Cu, Cd				
Ballona Creek	toxicity				
Ballona Creek Estuary	Pb, Zn				
Ballona Wetland	As				
Westlake Lake	chlordane	hist. pest.	2006/07	2009/10	
Malibou Lake	chlordane, PCBs				
Lake Calabasas	DDT				
Ashland Avenue Drain	low DO, org. enrichment	DO	2006/07	2008/09	Drain is diverted during dry weather flow
Medea Creek Reach 2 (abv. confl. with Lindero)	trash	trash	2005/06	2006/07	
Medea Creek Reach 1 (lake to confl. with Lindero)	trash				
Lake Lindero	trash				
Lindero Creek Reach 2 (above lake)	trash				
Lindero Creek Reach 1	trash				
Malibu Creek: lagoon to Malibu Lake	trash				
Las Virgenes Creek	trash				
Pico Kenter Drain	trash	trash	2008/09	2009/10	
Ballona Wetland	exotic vegetation	unknown	2006/07	2009/10	
Ballona Wetland	habitat alteration, hydromodi-fication, reduced tidal flushing				
Santa Monica Bay Nearshore and Offshore Zone	debris	debris	2006/07	2009/10	
Lake Lindero	chloride, spec. cond.	chloride	2006/07	2009/10	
Westlake Lake	Pb	metals	2005/06	2007/08	
Westlake Lake	Cu				
Malibou Lake	Cu				
Lake Sherwood	Hg				
Lake Calabasas	Zn				
Lake Calabasas	Cu				
Lake Lindero	Se				
Triunfo Cyn Creek Reach 1	Pb, Hg				
Triunfo Cyn Creek Reach 2	Pb, Hg				
Medea Creek Reach 2 (abv. confl. with Lindero)	Se				
Medea Creek Reach 1 (lake to confl. with Lindero)	Se				
Las Virgenes Creek	Se				
Lindero Creek Reach 2 (above lake)	Se				
Lindero Creek Reach 1	Se				
Ashland Avenue Drain	toxicity	N/A	2006/07	2009/10	Cause of toxicity needs to be determined. Drain is diverted during dry weather flow.
Ballona Creek	TBT	TBT	2006/07	2009/10	TBT levels have likely dropped since last sampling.
Marina del Rey Harbor - Back Basins	TBT				
Malibu Lagoon	benthic comm. effects	N/A	2006/07	2009/10	Cause needs to be determined

TABLE 7A. SUMMARY SCHEDULE FOR TMDL DEVELOPMENT
Assumes these activities are funded to adhere to this schedule

Los Angeles River Watershed

303(d) Listed Waterbody (Reach)	Pollutant	Type of TMDL	TMDL Start Date - FY (start of monitoring)	TMDL Completion Date - FY (Basin Plan amendment)	Comments
Sepulveda Channel/Canyon	NH3	nitrogen and related effects	1999/00	2001/02	
Tujunga Wash (d/s Hansen Dam to Los Angeles River)	NH3				
Tujunga Wash (d/s Hansen Dam to Los Angeles River)	scum, odors				
Los Angeles River Reach 5 (within Sepulveda Basin)	NH3				
Los Angeles River Reach 5 (within Sepulveda Basin)	scum, odors				
Los Angeles River Reach 4 (Sepulveda Dam to Riverside Dr.)	NH3				
Los Angeles River Reach 4 (Sepulveda Dam to Riverside Dr.)	scum, odors				
Los Angeles River Reach 3 (Riverside Dr. to Figueroa St.)	NH3				
Los Angeles River Reach 3 (Riverside Dr. to Figueroa St.)	odors, scum				
Los Angeles River Reach 2 (Figueroa St. to u/s Carson St.)	NH3				
Los Angeles River Reach 2 (Figueroa St. to u/s Carson St.)	odors, scum				
Los Angeles River Reach 1(u/s Carson St. to estuary)	NH3				
Los Angeles River Reach 1(u/s Carson St. to estuary)	pH				
Los Angeles River Reach 1(u/s Carson St. to estuary)	scum				
Burbank Western Channel	NH3				
Burbank Western Channel	Algae				
Verdugo Wash (Reaches 1 & 2)	algae				
Arroyo Seco Rch 1 (d/s Devil's Gate Dam) & Rch 2 (W. Holly Ave. to Devil's Gate)	algae				
Rio Hondo Reach 1 (Santa Ana Fwy to Los Angeles River)	NH3				
Rio Hondo Reach 1 (Santa Ana Fwy to Los Angeles River)	pH				
Rio Hondo Reach 2 (from Whittier Narrows Flood Control Basin to Spreading Grounds)	NH3				
Compton Creek	pH				
Tujunga Wash (d/s Hansen Dam to Los Angeles River)	coliform	coliform	1999/00	2001/02	
Los Angeles River Reach 6 (u/s of Sepulveda Basin)	coliform				
Los Angeles River Reach 4 (Sepulveda Dam to Riverside Dr.)	coliform				
Los Angeles River Reach 2 (Figueroa St. to u/s Carson St.)	coliform				
Los Angeles River Reach 1(u/s Carson St. to estuary)	coliform				
Verdugo Wash (Reaches 1 & 2)	Coliform				
Arroyo Seco Rch 1 (d/s Devil's Gate Dam) & Rch 2 (W. Holly Ave. to Devil's Gate)	Coliform				
Rio Hondo Reach 1 (Santa Ana Fwy to Los Angeles River)	coliform				
Rio Hondo Reach 2 (from Whittier Narrows Flood Control Basin to Spreading Grounds)	coliform				
Compton Creek	coliform				

TABLE 7A. SUMMARY SCHEDULE FOR TMDL DEVELOPMENT
Assumes these activities are funded to adhere to this schedule

Los Angeles River Watershed

303(d) Listed Waterbody (Reach)	Pollutant	Type of TMDL	TMDL Start Date - FY (start of monitoring)	TMDL Completion Date - FY (Basin Plan amendment)	Comments
Tujunga Wash (d/s Hansen Dam to Los Angeles River)	trash	trash	1999/00	2000/01	
Los Angeles River Reach 5 (within Sepulveda Basin)	trash				
Los Angeles River Reach 4 (Sepulveda Dam to Riverside Dr.)	trash				
Los Angeles River Reach 3 (Riverside Dr. to Figueroa St.)	trash				
Los Angeles River Reach 2 (Figueroa St. to u/s Carson St.)	trash				
Los Angeles River Reach 1(u/s Carson St. to estuary)	trash				
Burbank Western Channel	trash				
Verdugo Wash (Reaches 1 & 2)	trash				
Arroyo Seco Reach 1 (d/s Devil's Gate Dam) & Reach 2 (W. Holly Ave. to Devil's Gate)	trash				
Rio Hondo Reach 1 (Santa Ana Fwy to Los Angeles River)	trash				
Tujunga Wash (d/s Hansen Dam to Los Angeles River)	Cu	metals	2000/01	2003/04	
Compton Creek	Cu, Pb				
Burbank Western Channel	Cd				
Los Angeles River Reach 1(u/s Carson St. to estuary)	Pb				
Los Angeles River Reach 2 (Figueroa St. to u/s Carson St.)	Pb				
Los Angeles River Reach 4 (Sepulveda Dam to Riverside Dr.)	Pb				
Rio Hondo Reach 1 (Santa Ana Fwy to Los Angeles River)	Cu, Zn				
Monrovia Cyn Creek	Pb				
Aliso Canyon Wash	Se				
Peck Rd Lake	trash	trash	2008/09	2010/11	
Echo Park Lake	trash				
Lincoln Park Lake	trash				
Los Angeles River Reach 5 (within Sepulveda Basin)	chlorpyrifos	pesticide	2007/08	2010/11	
Peck Rd Lake	low DO, org. enrichment	nitrogen and its effects	2007/08	2010/11	
Peck Rd Lake	odors				
Lincoln Park Lake	NH3				
Lincoln Park Lake	Low DO				
Lincoln Park Lake	Eutroph.				
Lincoln Park Lake	odors				
Echo Park Lake	pH				
Echo Park Lake	Eutroph., NH3, algae				
Echo Park Lake	odors				

TABLE 7A. SUMMARY SCHEDULE FOR TMDL DEVELOPMENT
Assumes these activities are funded to adhere to this schedule

Los Angeles River Watershed

303(d) Listed Waterbody (Reach)	Pollutant	Type of TMDL	TMDL Start Date - FY (start of monitoring)	TMDL Completion Date - FY (Basin Plan amendment)	Comments
Los Angeles River Reach 5 (within Sepulveda Basin)	ChemA	historic pest.	2002/03	2005/06	
Echo Park Lake	PCBs	PCBs and historic pest.	2007/08	2010/11	
Peck Rd Lake	DDT, chlordane				
Peck Rd Lake	Pb	metals	2007/08	2010/11	
Lincoln Park Lake	Pb				
Echo Park Lake	Cu, Pb				
Los Angeles River Reach 5 (within Sepulveda Basin)	oil	oil	2007/08	2010/11	Further assessment needed
Los Angeles River Reach 2 (Figueroa St. to u/s Carson St.)	oil				
Los Angeles River Reach 6 (u/s of Sepulveda Basin)	Volatile organics	VOCs	2007/08	2010/11	

San Gabriel River Watershed

303(d) Listed Waterbody(Reach)	Pollutant	Type of TMDL	TMDL Start Date - FY (start of monitoring)	TMDL Completion Date - FY (Basin Plan Amendment)	Comments
San Gabriel River Reach 3 (Whittier Narrows to Ramona)	toxicity	nitrogen and its effects	1999/00	2002/03	
San Gabriel River Reach 2 (Firestone to Whittier Narrows Dam)	NH3				
San Gabriel River Reach 1 (Estuary to Firestone)	NH3				
San Gabriel River Reach 1 (Estuary to Firestone)	algae				
San Gabriel River Reach 1 (Estuary to Firestone)	toxicity				
San Jose Creek Reach 2 (Temple to I-10 at White Ave.)	NH3				
San Jose Creek Reach 2 (Temple to I-10 at White Ave.)	algae				
San Jose Creek Reach 1 (SG confluence to Temple St.)	NH3				
San Jose Creek Reach 1 (SG confluence to Temple St.)	algae				
Coyote Creek	NH3				
Coyote Creek	algae				
Coyote Creek	toxicity				
Walnut Creek	toxicity				
Walnut Creek	pH				
San Gabriel River East Fork	trash	trash	1998/99	1999/00	Completed
Legg Lake	trash	trash	2000/01	2008/09	
Puddingstone Reservoir	DDT, PCBs, chlordane	PCBs & pest.	2000/01	2005/06	
El Dorado Lakes	Hg	metals	2000/01	2005/06	
El Dorado Lakes	Cu, Pb				
Puddingstone Reservoir	Hg				
Legg Lake	Cu, Pb				
Santa Fe Dam Park Lake	Pb, Cu				
Coyote Creek	abnormal fish histology	Dependent on cause	2000/01	2005/06	Further Assessment needed - cause of abnormalities unknown
San Gabriel River Reach 1 (Estuary to Firestone)	abnormal fish histology				
San Gabriel River Estuary	abnormal fish histology				
El Dorado Lakes	algae, NH3, eutroph.	nitrogen and its effects	2001/02	2003/04	
El Dorado Lakes	pH				
Crystal Lake	algae, nutrients				
Legg Lake	NH3				
Legg Lake	pH				
Legg Lake	odors				
Puddingstone Reservoir	low DO, org. enrichment				
Santa Fe Dam Park Lake	pH				
San Gabriel River Reach 2 (Firestone to Whittier Narrows Dam)	Pb	metals	2000/01	2004/05	
San Gabriel River Estuary	As				
Coyote Creek	Ag				

San Gabriel River Watershed

303(d) Listed Waterbody(Reach)	Pollutant	Type of TMDL	TMDL Start Date - FY (start of monitoring)	TMDL Completion Date - FY (Basin Plan Amendment)	Comments
San Jose Creek Reach 1 (SG confluence to Temple St.)	coliform	coliform	2000/01	2002/03	
San Jose Creek Reach 2 (Temple to I-10 at White Ave.)	coliform				
San Gabriel River Reach 2 (Firestone to Whittier Narrows Dam)	coliform				
San Gabriel River Reach 1 (Estuary to Firestone)	coliform				
Coyote Creek	coliform				

Los Cerritos Channel and Alamitos Bay WMA

303(d) Listed Waterbody(Reach)	Pollutant	Type of TMDL	TMDL Start Date - FY (start of monitoring)	TMDL Completion Date - FY (Basin Plan Amendment)	Comments
Colorado Lagoon	DDT, PCBs, chlordane	hist. pest. and effects	2001/02	2004/05	
Colorado Lagoon	dieldrin				
Colorado Lagoon	sediment				
Colorado Lagoon	PAHs	runoff - metals & PAHs	2001/02	2004/05	
Colorado Lagoon	Pb, Zn				
Los Cerritos Channel	Zn	metals	2001/02	2004/05	
Los Cerritos Channel	Cu, Pb				
Los Cerritos Channel	NH3	ammonia	2001/02	2004/05	
Los Cerritos Channel	coliform	coliform	2001/02	2004/05	

Table 7B. Detailed Schedule of TMDL Activities (started in the next five years

Watershed	Waterbody (Reach)	Pollutant	Develop Technical TMDL	Develop Implementation Plan	Basin Plan Amendment
Calleguas Creek WMA	Conejo Creek/Arroyo Conejo N. Fork Calleguas Creek Reaches 1, 2 and 3 Duck pond ag drain/Mugu Drain/Oxnard Drain #2 Conejo Creek Reaches 1, 2, 3, and 4 Rio de Santa Clara (tributary to Mugu Lagoon) Arroyo Las Posas Reaches 1 and 2 Revolon Slough and Beardsley Wash Arroyo Simi Reach 1 Fox Barranca Mugu Lagoon	Nitrogen and its effects: nitrate + nitrite nitrogen ammonia algae low DO/org. enrichment	00/01 RB/SH co-leads	01/02 RB/SH co-lead	01/02 RB lead
	Fox Barranca Tapo Canyon Reach 1 Arroyo Simi Reaches 1 and 2 Arroyo Las Posas Reaches 1 and 2 Calleguas Creek Reach 3	Salts: boron sulfate TDS (total dissolved solids)	01/02 for other salts RB lead	03/04 for other salts RB/SH co-lead	03/04 for other salts RB lead
	Conejo Creek/Arroyo Conejo N Fork Conejo Creek Reaches 1, 2, 3 and 4	chloride	00/01 for chlorides	00/01 for chlorides	00/01 for chlorides
	Revolon Slough and Beardsley Wash Calleguas Creek Reaches 1 and 2 Duck pond ag drain/Mugu Drain/Oxnard Drain #2 Conejo Creek Reaches 1, 2, 3 and 4	Water-soluble pesticides and effects: chlorpyrifos toxicity	01/02 RB lead	02/03 RB/SH co-lead	02/03 RB lead
	Arroyo Las Posas Reaches 1 and 2 Conejo Creek/Arroyo Conejo N. Fork Conejo Creek Reaches 1, 2, 3 and 4 Calleguas Creek Reaches 1 and 2 Duck pond ag drain/Mugu Drain/Oxnard Drain #2 Revolon Slough and Beardsley Wash Mugu Lagoon	Historic pesticides and effects, siltation: DDT dacthal endosulfan ChemA toxaphene dieldrin sediment toxicity	03/04 RB lead	03/04 RB/SH co-lead	04/05 RB lead
	Arroyo Simi Reach 1 Conejo Creek Reach 3 Conejo Creek Reach 2 Conejo Creek Reach 1	Metals: Cr, Ni, Ag, Zn Cd	04/05 RB lead	05/06 RB/SH co-lead	05/06 RB lead

Table 7B. Detailed Schedule of TMDL Activities (started in the next five years)

Watershed	Waterbody (Reach)	Pollutant	Develop Technical TMDL	Develop Implementation Plan	Basin Plan Amendment
	Calleguas Creek Reach 1 (estuary to 0.5 mi. S of Broome Rd.) Calleguas Creek Reach 2 (0.5 mi. S of Broome Rd. to Potrero Rd.) Revolon Slough Main Branch (Mugu Lagoon to Central Ave.) Beardsley Channel (above Central Ave.) Mugu Lagoon	PCBs	03/04	03/04	04/05
Santa Monica Bay WMA - Malibu Creek Watershed	Medea Creek Reaches 1 and 2 Las Virgenes Creek Lindero Creek Reaches 1 and 2 Stokes Creek Palo Comado Malibu Creek: lagoon to Malibu Lake Malibu Lagoon	Coliform and effects: coliform swimming restrictions shellfish harvesting advisory	00/01 RB/SH co-lead	00/01 RB/SH co-lead	01/02 RB lead
	Lake Calabasas Lake Sherwood Westlake Lake Lake Lindero Malibou Lake Lindero Creek Reaches 1 and 2 Medea Creek Reaches 1 and 2 Las Virgenes Creek Malibu Creek: lagoon to Malibu Lake Malibu Lagoon	Nutrients and their effects (Phase I): ammonia pH low dissolved oxygen algae eutrophication organic enrichment unnatural foam/scum nutrients odors	00/01 RB/SH co-lead	01/ 02 RB/SH co-lead	01/02 RB lead
Santa Monica Bay WMA - Marina del Rey Harbor	Marina del Rey Harbor Beach Marina del Rey Harbor - Back Basins	Coliform and its effects: coliform beach closures	01/02 RB/SH co-lead	02/03 RB/SH co-lead	02/03 RB lead

Table 7B. Detailed Schedule of TMDL Activities (started in the next five years)

Watershed	Waterbody (Reach)	Pollutant	Develop Technical TMDL	Develop Implementation Plan	Basin Plan Amendment
	Marina del Rey Harbor - Back Basins	Historic PCBs, pesticides and effects: DDT, PCBs, chlordane PCBs chlordane dieldrin benthic comm. effects fish consumption advisory	03/04 RB/SH co-lead	03/04 RB/SH co-lead	03/ 04 RB lead
	Marina del Rey Harbor - Back Basins	metals: Pb, Cu, Zn	03/04 RB/SH co-lead	03/04 RB/SH co-lead	04/ 05 RB lead
Santa Monica Bay WMA - greater Santa Monica Bay	Greater Santa Monica Bay beaches	coliforms, pathogens, beach closures (Phase I)	00/01 RB/SH co-lead	00/01 RB/SH co-lead	01/ 02 RB lead
	Santa Monica Bay Nearshore and Offshore Zone	Metals: Hg, Cd, Cu, Pb, Ni, Ag, Zn	02/03 RB/SH co-lead	02/03 RB/SH co-lead	03/ 04 RB lead
	Santa Monica Bay Nearshore and Offshore Zone	chlordane	04/05 RB/SH co-lead	05/06 RB/SH co-lead	05/06 RB lead
Santa Monica Bay WMA - Ballona Creek	Ballona Creek Ballona Wetland	trash	99/00 RB/SH co-lead	00/01 RB/SH co-lead	00/01 RB lead
	Ballona Estuary	coliform shellfish harvesting advisory	01/02 RB/SH co-lead	01/02 RB/SH co-lead	02/03 RB lead
	Ballona Creek Ballona Creek Estuary Ballona Wetland	Metals and its effects: Pb, Ag, As, Cu, Cd, Zn toxicity	02/03 RB/SH co-lead	02/03 RB/SH co-lead	03/04 RB lead

Table 7B. Detailed Schedule of TMDL Activities (started in the next five years)

Watershed	Waterbody (Reach)	Pollutant	Develop Technical TMDL	Develop Implementation Plan	Basin Plan Amendment
	Ballona Creek Ballona Creek Estuary Ballona Creek Estuary	Historic PCBs , Pesticides and effects: PCBs DDT ChemA chlordane dieldrin sediment toxicity	03/04 RB/SH co-lead	03/04 RB/SH co-lead	04/05 RB lead
	Topanga Cyn Creek Sepulveda Canyon Pico Kenter Drain Pico Kenter Drain Pico Kenter Drain Santa Monica Canyon	Metals and its effects: Pb, CU toxicity	05/06	06/07	06/07
Los Angeles River WMA	Los Angeles River Reaches 1, 2, 3, 4, and 5 Burbank Western Channel Verdugo Wash Reaches 1 and 2 Arroyo Seco Reach 1 Rio Hondo Reaches 1 and 2 Compton Creek Sepulveda Channel/Canyon Tujunga Wash (d/s Hansen Dam to LA River)	Nitrogen and related effects: ammonia pH algae scum odors	00/01 RB lead	00/01 RB/SH co-lead	01/02 RB lead
	Los Angeles River Reaches 1, 2, 4, and 6 Tujunga Wash (d/s Hansen Dam to LA River) Verdugo Wash Reaches 1 and 2 Arroyo Seco Reach 1 Rio Hondo Reaches 1 and 2 Compton Creek	Coliform	00/01 RB lead	00/01 RB/SH co-lead	01/ 02 RB lead
	Los Angeles River Reaches 1, 2, 3, 4, and 5 Burbank Western Channel Verdugo Wash Reaches 1 and 2 Arroyo Seco Reach 1 Rio Hondo Reach 1 Tujunga Wash (d/s Hansen Dam to LA River)	Trash	99/00 RB lead	00/01 RB/SH co-lead	00/01 RB lead

Table 7B. Detailed Schedule of TMDL Activities (started in the next five years)

Watershed	Waterbody (Reach)	Pollutant	Develop Technical TMDL	Develop Implementation Plan	Basin Plan Amendment
	Los Angeles River Reaches 1, 2, and 4 Burbank Western Channel Compton Creek Monrovia Canyon Creek Rio Hondo Reach 1 Tujunga Wash (d/s Hansen Dam to LA River) Aliso Canyon Creek	Metals: copper lead zinc selenium cadmium	02/03 RB lead	02/03 RB/SH co-lead	03/04 RB lead
	Los Angeles River Reach 5 (within Sepulveda Basin)	Historic pesticide: chemA	04/05 RB lead	05/06 RB/SH co-lead	05/06 RB lead
Dominguez Channel WMA	Cabrillo Pier area Cabrillo Beach (inner)	beach closures	01/02 RB/SH co-lead	01/02 RB/SH co-lead	01/02 RB lead
	Dominguez Channel Estuary (to Vermont) Dominguez Channel (above Vermont) Los Angeles Harbor: Consolidated Slip Los Angeles Harbor (part. Main Ch., Fish Hbr, Cabrillo Pier, and breakwater) Los Angeles Harbor: Southwest Slip San Pedro Bay nearshore and offshore zone: Cabrillo Pier area Cabrillo Beach (Inner) Long Beach Harbor, part. Main Ch., SE Basin, West Basin, Pier J, and breakwater Machado Lake (Harbor Lake)	Historic pesticides and their effects: ChemA, chlordane, DDT, PCBs aldrin, dieldrin sediment toxicity, benthic comm. effects	06/07	07/08	07/08
	Dominguez Channel Estuary (to Vermont) Dominguez Channel (above Vermont) Los Angeles Harbor: Consolidated Slip Los Angeles Harbor (part. Main Ch., Fish Hbr, Cabrillo Pier, and breakwater) San Pedro Bay nearshore and offshore zone: Cabrillo Pier area Cabrillo Beach (Inner) Long Beach Harbor, part. Main Ch., SE Basin, West Basin, Pier J, and breakwater	PAHs	06/07	07/08	07/08

Table 7B. Detailed Schedule of TMDL Activities (started in the next five years)

Watershed	Waterbody (Reach)	Pollutant	Develop Technical TMDL	Develop Implementation Plan	Basin Plan Amendment
	Torrance Carson Channel Wilmington Drain Dominguez Channel (above Vermont) Dominguez Channel Estuary (to Vermont) Los Angeles Harbor: Consolidated Slip	Metals: Cu, Pb, Cr, Zn,	05/06	06/07	06/07
	Torrance Carson Channel Wilmington Drain Dominguez Channel (above Vermont) Dominguez Channel Estuary (to Vermont)	Coliform	01/02	01/02	01/02
Ventura Coastal WMA	McGrath Beach Mandalay Beach	Coliform and its effects: coliform beach closures	01/ 02 RB/SH co-lead	01/02 RB/SH co-lead	01/ 02 RB lead
	Ventura Harbor: Ventura Keys	coliform	05/06	06/07	06/07
	McGrath Lake	Historic Pesticides and their effects: Chlordane, DDT, other pesticides Sediment toxicity	05/06	06/07	06/07
	Port Hueneme Harbor	Historic Organics DDT, PCBs	05/06	06/07	06/07
	Port Hueneme Harbor	PAHs	05/06	06/07	06/07
	Port Hueneme Harbor	Zn	03/04	03/ 04	04/05
Ventura River Watershed	Ventura River Estuary	DDT	04/05	05/06	05/06
	Ventura River Reach 2 (Main St. to Weldon Canyon) Ventura River Reach 1 (estuary to Main St.) Ventura River Estuary	eutrophication	03/04	03/04	04/05

Table 7B. Detailed Schedule of TMDL Activities (started in the next five years)

Watershed	Waterbody (Reach)	Pollutant	Develop Technical TMDL	Develop Implementation Plan	Basin Plan Amendment
	Ventura River Reach 2 (Main St. to Weldon Canyon) Ventura River Reach 1 (estuary to Main St.)	Metals: Cu, Zn, Ag,	04/05	05/06	05/06
	Ventura River Estuary	Trash	04/05	05/06	05/06
	Ventura River Reach 2 (Main St. to Weldon Canyon)	Se	04/05	05/06	05/06
Santa Clara River WMA	Santa Clara River Reaches 3, 7, and 8	Chloride	00/01 RB/SH co-lead	99/00 RB/SH co-lead	01/02 RB lead
	Santa Clara River Reaches 3, 7, and 8 Mint Canyon Reach 1 Brown Barranca/Long Canyon Torrey Canyon Creek Wheeler Canyon/Todd Barranca	Nitrogen and its effects: nitrate + nitrite ammonia organic enrichment low dissolved oxygen	01/02 RB/SH co-lead	01/02 RB/SH co-lead	02/03 RB lead
	Santa Clara River Estuary	Historic Pesticides: ChemA, toxaphene	05/06	06/07	06/07
	Santa Clara River Reach 9 (Bouquet Cyn Rd. to abv Lang Gaging) Santa Clara River Reach 8 (W Pier Hwy 99 to Bouquet Cyn Rd Bridge) Santa Clara River Estuary Santa Clara River Estuary Beach/Surfers Knoll	Coliform	04/05	05/06	05/06
	Elizabeth Lake Munz Lake Lake Hughes	Eutrophication and its effects: Low DO, fish kills, algae odors	03/04	03/04	04/05
	Elizabeth Lake Munz Lake Lake Hughes	Trash	04/05	04/05	04/05

Table 7B. Detailed Schedule of TMDL Activities (started in the next five years)

Watershed	Waterbody (Reach)	Pollutant	Develop Technical TMDL	Develop Implementation Plan	Basin Plan Amendment
San Gabriel River WMA	San Gabriel River Reaches 1, 2, and 3 San Jose Creek Reaches 1 and 2 Walnut Creek Coyote Creek	Nitrogen and its effects: ammonia toxicity pH algae	01/02 RB/SH co-lead	01/02 RB/SH co-lead	02/03 RB lead
	San Gabriel River East Fork	Trash	99/00 RB/SH co-lead	99/00 RB/SH co-lead	RB adoption on 10/29/99
	San Gabriel River Reach 2 San Gabriel River Estuary Coyote Creek	Metals: Pb As Ag	04/05 RB/SH co-lead	04/05 RB/SH co-lead	04/05 RB lead
	San Gabriel River Reaches 1 and 2 San Jose Creek Reaches 1 and 2 Coyote Creek	coliform	02/03 RB/SH co-lead	02/03 RB/SH co-lead	02/03 RB lead
	Puddingstone Reservoir	PCBs and Pesticides: DDT, chlordane, PCs	04/05	05/06	05/06
	El Dorado Lakes Puddingstone Reservoir Legg Lake Santa Fe Dam Park Lake	Metals: Hg, Cu, Pb	04/05	05/06	05/06
	Coyote Creek San Gabriel River Reach 1 (Estuary to Firestone) San Gabriel River Estuary	abnormal fish histology Cause unknown	04/05	05/06	05/06
	El Dorado Lakes Puddingstone Reservoir Legg Lake Santa Fe Dam Park Lake Crystal Lake	Nitrogen and its effects: Eutrophication, algae, NH3, pH, Nutrients, orders, low DO, enrichment	03/04	03/04	03/04

Table 7B. Detailed Schedule of TMDL Activities (started in the next five years)

Watershed	Waterbody (Reach)	Pollutant	Develop Technical TMDL	Develop Implementation Plan	Basin Plan Amendment
Los Cerritos Channel and Alamitos Bay WMA	Colorado Lagoon	Historic pesticides and effects: DDT, PCBs, Chlordane, Dieldrin Sediment toxicity	03/04	04/05	04/05
	Colorado Lagoon	Metals & PAHs: Zn, Cu, Pb, PAHs	03/04	04/05	04/05
	Los Cerritos Channel	Metals: Zn, Cu, Pb	03/04	04/05	04/05
	Los Cerritos Channel	Ammonia	03/04	04/05	04/05
	Los Cerritos Channel	coliform	03/04	04/05	04/05

Table 7C. Detailed TMDL Tasks Schedule (next three years)

Table 7C. Detailed TMDL Tasks Schedule (next three years)

Calleguas Creek – Nitrogen and Its Effects
Consent Decree: March 2002

Tasks	FY	Staff Resources	Contracts	Products	Completion Dates
TMDL Development					
Problem Statement	99/00	(1/10 py) (st)		Problem statement write-up	6/00
Numeric Target	00/01	(2/5) py)(st)		Rationale for numeric targets	9/00
Source Analysis	00/01	(3/5 py)(st)	$25,000	Write-up of source analysis	11/00
Allocations	00/01	(2/5 py)	$25,000	Numeric allocations and rationale	7/01
Implementation Planning					
Implementation Plan	00/01	(1/5 py)		Report	8/01
Basin Plan Amendment	01/02	(1/5 py)		Draft Basin Plan Amendment	2/02
Implementation					
Monitoring	01/02	(1/5py)		Monitoring data and QA/QC	2/02
Reevaluation	01/02	(1/5 py)		Report of reevaluation findings	3/02

Calleguas Creek – Salts
Consent Decree: NA

Tasks	FY	Staff Resources	Contracts	Products	Completion Dates
TMDL Development					
Problem Statement	00/01	(1/10 py)		Problems statement write-up	4/01
Numeric Target	00/01	(2/5 py)		Rationale for numeric targets	6/01
Source Analysis	01/02	(2/5 py)		Write-up of source analysis	10/01
Allocations	01/02	(3/10 py)	$25,000	Numeric allocations and rationale	3/02
Implementation Planning					
Implementation Plan	01/02	(1/5 py)		Report	3/02
Basin Plan Amendment	02/03	(1/5 py)		Draft Basin Plan Amendment	6/03
Implementation					
Monitoring	02/03	(1/5 py)		Monitoring data and QA/QC	3/03
Reevaluation	02/03	(1/5 py)		Report of reevaluation findings	4/03

Calleguas Creek – Chloride
Consent Decree: 3/01

Tasks	FY	Staff Resources	Contracts	Products	Completion Dates
TMDL Development					
Problem Statement	99/00	(1/10 py) (fed)		Problem statement write-up	1/00
Numeric Target	99/00	(2/5py)(fed)		Rationale for numeric target	12/99
Source Analysis	99/00	(2/5py)(fed)		Write-up of source analysis	12/99
Allocations	99/00	(1/5py)(fed)		Numeric allocations and Rationale	2/00
Implementation Planning					
Implementation Plan	99/00	(1/5py)		Report	12/00
Basin Plan Amendment	00/01	(1/10 py)(st)		Draft Basin Plan Amendment	3/01
Implementation					
Monitoring	00/01	(2/5 py)		Monitoring data and QA/QC	7/01
Reevaluation	00/01	(1/5 py)(st)		Report of reevaluation findings	8/01

Table 7C. Detailed TMDL Tasks Schedule (next three years)

Calleguas Creek – Water-Soluble Pesticides and Effects
Consent Decree: March 2005

Tasks	FY	Staff Resources	Contracts	Products	Completion Dates
TMDL Development					
Problem Statement	01/02	(1/10 py)		Problems statement write-up	1/02
Numeric Target	01/02	(2/5 py)		Rationale for numeric targets	3/02
Source Analysis	02/03	(2/5 py)	$50,000	Write-up of source analysis	8/02
Allocations	02/03	(3/10 py)	$50,000	Numeric allocations and rationale	5/03
Implementation Planning					
Implementation Plan	01/02	(1/5 py)		Report	6/03
Basin Plan Amendment	03/04	(1/5 py)		Basin Plan Amendment	2/04
Implementation					
Monitoring	05/06	(1/5 py)		Monitoring data and QA/QC	1/06
Reevaluation	06/07	(1/5 py)		Report of reevaluation findings	1/07

Calleguas Creek - Historic Pesticides and Effects
Consent Decree: March 2005

Tasks	FY	Staff Resources	Contracts	Products	Completion Dates
TMDL Development					
Problem Statement	02/03	(1/10 py)		Problems statement write-up	1/03
Numeric Target	02/03	(2/5 py)	$25,000	Rationale for numeric targets	3/03
Source Analysis	03/04	(2/5 py)	$25,000	Write-up of source analysis	8/03
Allocations	03/04	(3/10 py)	$25,000	Numeric allocations and rationale	5/04
Implementation Planning					
Implementation Plan	03/04	(1/5 py)		Report	6/04
Basin Plan Amendment	04/05	(1/5 py)		Basin Plan Amendment	1/05
Implementation					
Monitoring	06/07	(1/5 py)		Monitoring data and QA/QC	1/07
Reevaluation	07/08	(1/5 py)		Report of reevaluation findings	1/08

Calleguas Creek – PCBs
Consent Decree: March 2005

Tasks	FY	Staff Resources	Contracts	Products	Completion Dates
TMDL Development					
Problem Statement	02/03	(1/10 py)		Problems statement write-up	1/03
Numeric Target	02/03	(2/5 py)		Rationale for numeric targets	3/03
Source Analysis	03/04	(2/5 py)	$25,000	Write-up of source analysis	8/03
Allocations	03/04	(3/10 py)	$25,000	Numeric allocations and rationale	5/04
Implementation Planning					
Implementation Plan	03/04	(1/5 py)		Report	6/04
Basin Plan Amendment	04/05	(1/5 py)		Draft Basin Plan Amendment	1/05
Implementation					
Monitoring	06/07	(1/5 py)		Monitoring data and QA/QC	2/07
Reevaluation	07/08	(1/5 py)		Report of reevaluation findings	4/08

Table 7C. Detailed TMDL Tasks Schedule (next three years)

Santa Monica Bay WMA – Malibu Creek – Coliform and Effects
Consent Decree: March 2002

Tasks	FY	Staff Resources	Contracts	Products	Completion Dates
TMDL Development					
Problem Statement	98/99	(1/10 py)		Problem statement write-up	5/99
Numeric Target	00/01	(2/5 py)(fed)		Rationale for numeric targets	10/ 01
Source Analysis	00/01	(2/5 py)(fed)		Write-up of source analysis	1/ 01
Allocations	00/01	(3/10 py)	$50 K modeling (fed)	Numeric allocations and rationale, Model for coliform and nutrients	4/ 01
Implementation Planning					
Implementation Plan	01/02	(1/5 py)		Report	4/01
Basin Plan Amendment	01/02	(1/5 py)		Draft Basin Plan Amendment	8/01
Implementation				Monitoring data and QA/QC	
Monitoring		(1/5 py)		Report of reevaluation findings	3/03
Reevaluation		(1/5 py)		Problem statement write-up	4/05

Santa Monica Bay WMA – Malibu Creek – Nutrients and Effects
Consent Decree: March 2002

Tasks	FY	Staff Resources	Contracts	Products	Completion Dates
TMDL Development					
Problem Statement	99/00	(1/10 py)		Problem statement write-up	5/99
Numeric Target	99/00	(2/5 py)(fed)		Rationale for numeric targets	10/ 01
Source Analysis	00/01	(2/5 py)(fed)		Write-up of source analysis	1/ 01
Allocations	00/01	(3/10 py)	$50 K modeling (fed)	Model for coliform and nutrients in Malibu Lagoon	4/ 01
Implementation Planning					
Implementation Plan	00/01	(1/5 py)		Report	4/01
Basin Plan Amendment	00/01	(1/5 py)		Draft Basin Plan Amendment	6/01
Implementation				Monitoring data and QA/QC	
Monitoring		(1/5 py)		Report of reevaluation findings	3/03
Reevaluation		(1/5 py)		Problem statement write-up	4/05

Table 7C. Detailed TMDL Tasks Schedule (next three years)

Santa Monica Bay WMA – Marina del Rey – Coliform and Effects
Consent Decree: March 2003

Tasks	FY	Staff Resources	Contracts	Products	Completion Dates
TMDL Development					
Problem Statement	00/01	(1/10 py)		Problems statement write-up	1/01
Numeric Target	00/01	(2/5 py)		Rationale for numeric targets	3/01
Source Analysis	01/02	(2/5 py)	$20,000	Write-up of source analysis	9/01
Allocations	01/02	(3/10 py)	$30,000	Numeric allocations and rationale	4/02
Implementation Planning					
Implementation Plan	01/02	(1/5 py)		Report	5/02
Basin Plan Amendment	02/03	(1/5 py)		Draft Basin Plan Amendment	12/02
Implementation					
Monitoring	03/04	(1/5 py)		Monitoring data and QA/QC	11/03
Reevaluation	04/05	(1/5 py)		Report of reevaluation findings	12/04

Santa Monica Bay WMA – Marina del Rey –Historic PCBs, Pesticides and Effects
Consent Decree: March 2005

Tasks	FY	Staff Resources	Contracts	Products	Completion Dates
TMDL Development					
Problem Statement	01/02	(1/10 py)		Problems statement write-up	1/03
Numeric Target	02/03	(2/5 py)		Rationale for numeric targets	3/03
Source Analysis	02/03	(2/5 py)	$50,000	Write-up of source analysis	5/03
Allocations	02/03	(3/10 py)	$50,000	Numeric allocations and rationale	9/03
Implementation Planning					
Implementation Plan	03/04	(1/5 py)		Report	11/03
Basin Plan Amendment	03/04	(1/5 py)		Draft Basin Plan Amendment	06/04
Implementation					
Monitoring	05/06	(1/5 py)		Monitoring data and QA/QC	9/05
Reevaluation	06/07	(1/5 py)		Report of reevaluation findings	11/06

Santa Monica Bay WMA – Marina del Rey –Metals
Consent Decree: March 2005

Tasks	FY	Staff Resources	Contracts	Products	Completion Dates
TMDL Development					
Problem Statement	02/03	(1/10 py)		Problems statement write-up	12/02
Numeric Target	02/03	(2/5 py)		Rationale for numeric targets	2/03
Source Analysis	03/04	(2/5 py)	$25,000	Write-up of source analysis	7/03
Allocations	03/04	(3/10 py)	$25,000	Numeric allocations and rationale	4/04
Implementation Planning					
Implementation Plan	03/04	(1/5 py)		Report	5/04
Basin Plan Amendment	04/05	(1/5 py)		Draft Basin Plan Amendment	12/04
Implementation					
Monitoring	05/06	(1/5 py)		Monitoring data and QA/QC	2/06
Reevaluation	06/07	(1/5 py)		Report of reevaluation findings	4/07

Table 7C. Detailed TMDL Tasks Schedule (next three years)

Santa Monica Bay WMA – Beaches – Coliform and Effects
Consent Decree: March 2002

Tasks	FY	Staff Resources	Contracts	Products	Completion Dates
TMDL Development					
Problem Statement	99/00	(1/10 py)		Problems statement write-up	12/99
Numeric Target	99/00	(2/5 py)	$100,000	Rationale for numeric targets	1/00
Source Analysis	00/01	(2/5 py)	$130,000	Write-up of source analysis	7/00
Allocations	00/01	(3/10 py)		Numeric allocations and rationale	11/00
Implementation Planning					
Implementation Plan	00/01	(1/5 py)		Report	5/01
Basin Plan Amendment	01/02	(1/5 py)		Draft Basin Plan Amendment	11/01
Implementation					
Monitoring	02/03	(1/5 py)		Monitoring data and QA/QC	11/02
Reevaluation	03/04	(1/5 py)		Report of reevaluation findings	12/03

Santa Monica Bay WMA –Nearshore & Offshore – Metals
Consent Decree: March 2004

Tasks	FY	Staff Resources	Contracts	Products	Completion Dates
TMDL Development					
Problem Statement	01/02	(1/10 py)		Problems statement write-up	12/01
Numeric Target	01/02	(2/5 py)		Rationale for numeric targets	2/02
Source Analysis	01/02	(2/5 py)	$50,000	Write-up of source analysis	6/02
Allocations	02/03	(3/10 py)	$50,000	Numeric allocations and rationale	10/02
Implementation Planning					
Implementation Plan	02/03	(1/5 py)		Report	2/03
Basin Plan Amendment	03/04	(1/5 py)		Draft Basin Plan Amendment	9/03
Implementation					
Monitoring	04/05	(1/5 py)		Monitoring data and QA/QC	10/04
Reevaluation	05/06	(1/5 py)		Report of reevaluation findings	12/05

Santa Monica Bay WMA – Ballona Creek – Trash
Consent Decree: March 2001

Tasks	FY	Staff Resources	Contracts	Products	Completion Dates
TMDL Development					
Problem Statement	98/99	(1/10 py)		Problems statement write-up	4/99
Numeric Target	99/00	(2/5 py)		Rationale for numeric targets	11/99
Source Analysis	99/00	(2/5 py)		Write-up of source analysis	12/99
Allocations	99/00	(3/10 py)		Numeric allocations and rationale	12/99
Implementation Planning					
Basin Plan Amendment	00/01	(1/5 py)		Report	3/01
Implementation					
Monitoring	02/03	(1/5 py)		Monitoring data and QA/QC	3/03
Reevaluation	02/03	(1/5 py)		Report of reevaluation findings	4/03

Table 7C. Detailed TMDL Tasks Schedule (next three years)

Santa Monica Bay WMA – Ballona Creek – Coliform and Effects
Consent Decree: March 2006

Tasks	FY	Staff Resources	Contracts	Products	Completion Dates
TMDL Development					
Problem Statement	00/01	(1/10 py)		Problems statement write-up	7/00
Numeric Target	00/01	(2/5 py)		Rationale for numeric targets	9/00
Source Analysis	00/01	(2/5 py)	$20,000	Write-up of source analysis	2/01
Allocations	01/02	(3/10 py)	$20,000	Numeric allocations and rationale	11/01
Implementation Planning					
Implementation Plan	01/02	(1/5 py)		Report	12/01
Basin Plan Amendment	02/03	(1/5 py)		Draft Basin Plan Amendment	7/02
Implementation					
Monitoring	03/04	(1/5 py)		Monitoring data and QA/QC	12/03
Reevaluation	03/04	(1/5 py)		Report of reevaluation findings	3/04

Santa Monica Bay WMA – Ballona Creek –Metals and Effects
Consent Decree: March 2004

Tasks	FY	Staff Resources	Contracts	Products	Completion Dates
TMDL Development					
Problem Statement	01/02	(1/10 py)		Problems statement write-up	7/01
Numeric Target	01/02	(2/5 py)		Rationale for numeric targets	9/01
Source Analysis	01/02	(2/5 py)	$25,000	Write-up of source analysis	2/02
Allocations	02/03	(3/10 py)	$25,000	Numeric allocations and rationale	11/02
Implementation Planning					
Implementation Plan	02/03	(1/5 py)		Report	12/02
Basin Plan Amendment	03/04	(1/5 py)		Draft Basin Plan Amendment	7/03
Implementation					
Monitoring	04/05	(1/5 py)		Monitoring data and QA/QC	4/05
Reevaluation	05/06	(1/5 py)		Report of reevaluation findings	5/06

Santa Monica Bay WMA – Ballona Creek – Historic PCBs, Pesticides and Effects
Consent Decree: March 2004

Tasks	FY	Staff Resources	Contracts	Products	Completion Dates
TMDL Development					
Problem Statement	02/03	(1/10 py)		Problems statement write-up	7/02
Numeric Target	02/03	(2/5 py)		Rationale for numeric targets	9/02
Source Analysis	02/03	(2/5 py)	$25,000	Write-up of source analysis	11/02
Allocations	03/04	(3/10 py)	$25,000	Numeric allocations and rationale	11/03
Implementation Planning					
Implementation Plan	03/04	(1/5 py)		Report	12/03
Basin Plan Amendment	04/05	(1/5 py)		Draft Basin Plan Amendment	7/04
Implementation					
Monitoring	05/06	(1/5 py)		Monitoring data and QA/QC	9/06
Reevaluation	06/07	(1/5 py)		Report of reevaluation findings	12/07

Table 7C. Detailed TMDL Tasks Schedule (next three years)

Los Angeles River – Nitrogen and Effects
Consent Decree: March 2003

Tasks	FY	Staff Resources	Contracts	Products	Completion Dates
TMDL Development					
Problem Statement	00/99	(1/10 py)		EPA Development	2/99
Numeric Target	00/99	(2/5 py)		EPA Development	4/99
Source Analysis	99/00	(2/5 py)		EPA Development	8/99
Allocations	99/00	(3/10 py)		EPA Development	02/00
Implementation Planning					
Implementation Plan	00/01	(1/5 py)			01/01
Basin Plan Amendment	01/02	(1/5 py)			08/01
Implementation					
Monitoring	02/03	(1/5 py)			02/03
Reevaluation	03/04	(1/5 py)			04/04

Los Angeles River – Coliform
LA River Coliform

Tasks	FY	Staff Resources	Contracts	Products	Completion Dates
TMDL Development					
Problem Statement	99/00	(1/10 py)		EPA Development	4/00
Numeric Target	99/00	(2/5 py)		EPA Development	6/00
Source Analysis	00/01	(2/5 py)		EPA Development	12/00
Allocations	00/01	(3/10 py)		EPA Development	4/01
Implementation Planning					
Implementation Plan	00/01	(1/5 py)			4/01
Basin Plan Amendment	01/02	(1/5 py)			8/01
Implementation					
Monitoring	02/03	(1/5 py)			4/03
Reevaluation	03/04	(1/5 py)			6/04

Los Angeles River – Trash
Consent Decree: March 2001

Tasks	FY	Staff Resources	Contracts	Products	Completion Dates
TMDL Development					
Problem Statement	98/99	(1/10 py)		Problem statement write-up	4/99
Numeric Target	99/00	(2/5 py)		Rationale for numeric targets	11/99
Source Analysis	99/00	(2/5 py)		Write-up of source analysis	12/99
Allocations	99/00	(3/10 py)		Numeric allocations and rationale	12/99
Implementation Planning					
Implementation Plan	00/01	(1/5 py)		Report	1/00
Basin Plan Amendment	01/02	(1/5 py)		Draft Basin Plan Amendment	1/01
Implementation					
Monitoring	03/04	(1/5 py)		Monitoring data and QA/QC	4/04
Reevaluation	03/04	(1/5 py)		Report of reevaluation findings	5/05

Table 7C. Detailed TMDL Tasks Schedule (next three years)

Los Angeles River – Metals
Consent Decree: March 2004

Tasks	FY	Staff Resources	Contracts	Products	Completion Dates
TMDL Development					
Problem Statement	01/02	(1/10 py)		Problems statement write-up	9/01
Numeric Target	01/02	(2/5 py)		Rationale for numeric targets	1/ 02
Source Analysis	01/02	(2/5 py)	$50,000	Write-up of source analysis	7/02
Allocations	02/03	(3/10 py)	$50,000	Numeric allocations and rationale	11/02
Implementation Planning					
Implementation Plan	02/03	(1/5 py)		Report	11/02
Basin Plan Amendment	02/03	(1/5 py)			7/02
Implementation					
Monitoring	03/04	(1/5 py)		Monitoring data and QA/QC	11/03
Reevaluation	03/04	(1/5 py)		Report of reevaluation findings	12/03

Dominguez Channel WMA - Coliform

Tasks	FY	Staff Resources	Contracts	Products	Completion Dates
TMDL Development					
Problem Statement	00/01	(1/10 py)		Problems statement write-up	7/00
Numeric Target	00/01	(2/5 py)		Rationale for numeric targets	7/00
Source Analysis	00/01	(2/5 py)	$20,000	Write-up of source analysis	3/01
Allocations	01/02	(3/10 py)	$20,000	Numeric allocations and rationale	8/01
Implementation Planning					
Implementation Plan	01/02	(1/5 py)		Report	9/01
Basin Plan Amendment	01/02	(1/5 py)		Draft Basin Plan Amendment	2/02
Implementation					
Monitoring	04/05	(1/5 py)		Monitoring data and QA/QC	12/04
Reevaluation	05/06	(1/5 py)		Report of reevaluation findings	1/ 06

Ventura Coastal WMA – McGrath Beach – Coliform and Effects

Tasks	FY	Staff Resources	Contracts	Products	Completion Dates
TMDL Development					
Problem Statement	00/01	(1/10 py)(st)		Problem statement write-up	8/00
Numeric Target	00/01	(2/5 py)		Rationale for numeric targets	12/00
Source Analysis	00/01	(2/5 py)	$10,000	Write-up of source analysis	5/01
Allocations	01/02	(3/10 py)		Numeric allocations and rationale	11/01
Implementation Planning					
Implementation Plan	01/02	(1/5 py)		Report	11/01
Basin Plan Amendment	01/02	(1/5 py)		Draft Basin Plan Amendment	6/02
Implementation					
Monitoring	04/05	(1/5 py)		Monitoring data and QA/QC	11/04
Reevaluation	05/06	(1/5 py)		Report of reevaluation findings	12/05

Table 7C. Detailed TMDL Tasks Schedule (next three years)

Ventura Coastal WMA – Port Hueneme – Zinc

Tasks	FY	Staff Resources	Contracts	Products	Completion Dates
TMDL Development					
Problem Statement	02/03	(1/10 py)		Problems statement write-up	11/02
Numeric Target	02/03	(2/5 py)		Rationale for numeric targets	1/03
Source Analysis	02/03	(2/5 py)	$25,000	Write-up of source analysis	6/03
Allocations	03/04	(3/10 py)	$25,000	Numeric allocations and rationale	4/04
Implementation Planning					
Implementation Plan	03/04	(1/5 py)		Report	4/04
Basin Plan Amendment	04/05	(1/5 py)		Draft Basin Plan Amendment	11/04
Implementation					
Monitoring	06/07	(1/5 py)		Monitoring data and QA/QC	12/06
Reevaluation	08/09	(1/5 py)		Report of reevaluation findings	1/08

Ventura River – Eutrophication

Tasks	FY	Staff Resources	Contracts	Products	Completion Dates
TMDL Development					
Problem Statement	02/03	(1/10 py)		Problems statement write-up	11/02
Numeric Target	02/03	(2/5 py)		Rationale for numeric targets	1/03
Source Analysis	02/03	(2/5 py)	$50,000	Write-up of source analysis	6/03
Allocations	03/04	(3/10 py)	$50,000	Numeric allocations and rationale	3/04
Implementation Planning					
Implementation Plan	03/04	(1/5 py)		Report	4/04
Monitoring	06/07	(1/5 py)		Monitoring data and QA/QC	8/06
Reevaluation	07/08	(1/5 py)		Report of reevaluation findings	9/07
Basin Plan Amendment	04/05	(1/5 py)		Draft Basin Plan Amendment	11/04
Implementation					

Santa Clara River WMA - Chloride

Tasks	FY	Staff Resources	Contracts	Products	Completion Dates
TMDL Development				Changing Objectives no TMDL	
Problem Statement	98/99	(1/10 py)		Problem statement write-up	4/99
Numeric Target	99/00	(2/5 py)		Rationale for numeric targets	8/99
Source Analysis	99/00	(2/5 py)		Write-up of source analysis	12/99
Allocations		(3/10 py)		Numeric allocations and rationale	N/A
Implementation Planning	99/00				12/99
Implementation Plan		(1/5 py)		Report	
Basin Plan Amendment	01/02	(1/5 py)		Draft Basin Plan Amendment	8/01
Implementation					
Monitoring	02/03	(1/5 py)		Monitoring data and QA/QC	3/03
Reevaluation	02/03	(1/5 py)		Report of reevaluation findings	3/03

Table 7C. Detailed TMDL Tasks Schedule (next three years)

Santa Clara River WMA –Nitrogen and Effects

Tasks	FY	Staff Resources	Contracts	Products	Completion Dates
TMDL Development					
Problem Statement	00/01	(1/10 py)(st)		Problems statement write-up	4/01
Numeric Target	00/01	(2/5 py)		Rationale for numeric targets	3/01
Source Analysis	01/02	(2/5 py)	$50,000	Write-up of source analysis	8/01
Allocations	01/02	(3/10 py)	$50,000	Numeric allocations and rationale	5/02
Implementation Planning					
Implementation Plan	01/02	(1/5 py)		Report	6/02
Basin Plan Amendment	02/03	(1/5 py)		Draft Basin Plan Amendment	1/03
Implementation					
Monitoring	04/05	(1/5 py)		Monitoring data and QA/QC	1/05
Reevaluation	05/06	(1/5 py)		Report of reevaluation findings	2/06

San Gabriel River –Nitrogen and Effects

Tasks	FY	Staff Resources	Contracts	Products	Completion Dates
TMDL Development					
Problem Statement	00/01	(1/10 py)(st)		Problems statement write-up	12/00
Numeric Target	00/01	(2/5 py)		Rationale for numeric targets	1/01
Source Analysis	00/01	(2/5 py)	$50,000	Write-up of source analysis	5/01
Allocations	00/01	(3/10 py)	$50,000	Numeric allocations and rationale	3/ 02
Implementation Planning					
Implementation Plan	01/02	(1/5 py)		Report	4/02
Basin Plan Amendment	02/03	(1/5 py)			11/02
Implementation					
Monitoring	03/04	(1/5 py)		Monitoring data and QA/QC	1/04
Reevaluation	04/05	(1/5 py)		Report of reevaluation findings	2/05

San Gabriel River – East Fork – Trash (COMPLETED) Approved by OAL 9/00, approved by USEPA 12/00

Tasks	FY	Staff Resources	Contracts	Products	Completion Dates
TMDL Development					
Problem Statement					
Numeric Target					
Source Analysis					
Allocations					
Implementation Planning					
Implementation Plan	99/00	(1/5 py)		Implementation Plan	02/01/00
Monitoring	99/00	(1/5 py)		Monitoring Plan	02/01/00
Reevaluation		(1/5 py)			04/ 00
Basin Plan Amendment	99/00	(1/5 py)			10/28/99
Implementation	02/03			Full Implementation	05/01/03

Table 7C. Detailed TMDL Tasks Schedule (next three years)

San Gabriel River – Metals

Tasks	FY	Staff Resources	Contracts	Products	Completion Dates
TMDL Development					
Problem Statement	02/03	(1/10 py)(st)		Problems statement write-up	6/03
Numeric Target	03/04	(2/5 py)		Rationale for numeric targets	8/03
Source Analysis	03/04	(2/5 py)	$50,000	Write-up of source analysis	1/04
Allocations	04/05	(3/10 py)	$50,000	Numeric allocations and rationale	10/04
Implementation Planning					
Implementation Plan	04/05	(1/5 py)		Report	11/04
Basin Plan Amendment	04/05	(1/5 py)		Draft Basin Plan Amendment	6/05
Implementation					
Monitoring	07/08	(1/5 py)		Monitoring data and QA/QC	12/07
Reevaluation	08/09	(1/5 py)		Report of reevaluation findings	1/09

San Gabriel River – Coliform

Tasks	FY	Staff Resources	Contracts	Products	Completion Dates
TMDL Development					
Problem Statement	00/01	(1/10 py)		Problems statement write-up	5/01
Numeric Target	01/02	(2/5 py)		Rationale for numeric targets	7/01
Source Analysis	01/02	(2/5 py)	$20,000	Write-up of source analysis	12/01
Allocations	02/03	(3/10 py)	$20,000	Numeric allocations and rationale	9/02
Implementation Planning					
Implementation Plan	02/03	(1/5 py)		Report	10/02
Basin Plan Amendment	02/03	(1/5 py)		Draft Basin Plan Amendment	5/03
Implementation					
Monitoring	04/05	(1/5 py)		Monitoring data and QA/QC	10/04
Reevaluation	05/06	(1/5 py)		Report of reevaluation findings	11/05

San Gabriel River – Lakes – Nitrogen and Effects

Tasks	FY	Staff Resources	Contracts	Products	Completion Dates
TMDL Development					
Problem Statement	01/02	(1/10 py)		Problems statement write-up	5/02
Numeric Target	02/03	(2/5 py)		Rationale for numeric targets	7/02
Source Analysis	02/03	(2/5 py)	$25,000	Write-up of source analysis	12/02
Allocations	03/04	(3/10 py)	$25,000	Numeric allocations and rationale	9/03
Implementation Planning					
Implementation Plan	03/04	(1/5 py)		Report	10/03
Basin Plan Amendment	03/04	(1/5 py)		Draft Basin Plan Amendment	5/04
Implementation					
Monitoring	05/06	(1/5 py)		Monitoring data and QA/QC	5/06
Reevaluation	06/07	(1/5 py)		Report of reevaluation findings	6/07