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# **1998 CALIFORNIA 305(b) REPORT ON WATER QUALITY**

**Prepared As Required By**

**FEDERAL CLEAN WATER ACT SECTION 305(b)**

**STATE WATER RESOURCES CONTROL BOARD**

**MAY 1999**



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## I. INTRODUCTION

Every two years, the State Water Resources Control Board (SWRCB) submits a report on the State's water quality to the U.S. Environmental Protection Agency (U.S. EPA) pursuant to Section 305(b) of the Federal Clean Water Act. The report provides water quality information to the general public and serves as the basis for the U.S. EPA's 1998 National Water Quality Inventory Report to Congress. Water quality assessment information from California's nine Regional Water Quality Control Boards (RWQCBs) has been compiled and presented in the terminology and tables requested in the U.S. EPA's 1998 305(b) Guidelines.

The 1998 California 305(b) Report on Water Quality [305(b) Report] is presented in three sections titled Background, Surface Water Assessment, and Ground Water Assessment. Information on total waters assessed is presented in the Background section. The Surface Water Assessment section presents tables for the summary of designated use support, individual beneficial use support, the major causes and sources impacting designated beneficial uses, and the public health concerns related to elevated levels of toxicants, fish consumption advisories, and numbers of beach closures. This section also contains a discussion on surface water monitoring programs and a plan for achieving comprehensive assessments. For the Ground Water Assessment section, tables are presented for causes and sources impacting the beneficial uses of ground water for individual water bodies as well as statewide totals.

Assessment information used for compiling and reporting the 305(b) report is contained in the U.S. EPA's Water body System (WBS) database, structured for the purpose of producing the 305(b) Report. Gaining a spatial and temporal understanding of California's water quality is a continual process. Use of the WBS database enhances the State's assessment capabilities by tracking assessment decisions made for individual water bodies. It should be noted that not all water bodies in the State have been catalogued into the WBS database. Table 1 presents the extent of information in the WBS database.

In the last two years an effort to georeference California's WBS database revealed that the data often lacked spatial information as to which portions of a particular water body had beneficial use impairments. To remedy this, the State of California has developed an ArcView interface to the WBS, called the GeoWBS. This program

**TABLE 1. WATER BODY COVERAGE IN THE WBS DATABASE**

<b>WATER BODY TYPE</b>	<b>TOTAL AREAL EXTENT IN CA</b>	<b>AREAL EXTENT OF WATER BODIES IN WBS<sup>a</sup></b>	<b>AREAL EXTENT OF ASSESSED WATER BODIES IN WBS</b>	<b>NO. OF WATER BODIES ASSESSED</b>	<b>PERCENT OF TOTAL AREAL EXTENT ASSESSED</b>
Bays and Harbors (acres)	Not Available	515,338	497,036	45	Not Available
Coastal Shoreline (miles)	1,609 <sup>b</sup>	1,092	919	114	57
Estuaries (acres)	Not Available	104,601	78,931	54	Not Available
Ground Water (sq miles)	Not Available	82,011	63,581	352	Not Available
Lakes/Reservoirs (acres)	1,672,684 <sup>b</sup>	859,336	741,482	303	44
Ocean and Open Bay (acres)	Not Available	319,835	317,496	25	Not Available
Rivers/Streams (miles)	211,513 <sup>b</sup>	24,545	17,479	783	7
Saline Lakes (acres)	Not Available	436,242	432,908	11	Not Available
Wetlands, Freshwater (acres)	Not Available	149,518	67,104	85	Not Available
Wetlands, Tidal (acres)	Not Available	126,294	71,104	8	Not Available

a - Includes water bodies with a condition rating of unknown.

b - Estimates obtained from the 1994 U.S. EPA Reach File 3/Digital Line Graph data. Estimates were not updated for 1998. Lake estimates are for perennial and intermittent lakes.

allows users to spatially define water bodies using ArcView 3.0, based on the following data coverages: River Reach File Version 3 (RF3) for rivers and shoreline, a lake's coverage from the California Department of Fish and Game which nests with RF3, and a ground water basin coverage from SWRCB. In addition the program provides RWQCBs the ability to geographically define water bodies for those types of water bodies where no existing statewide coverage exists (e.g., wetlands, bays and harbors). SWRCB and RWQCB staff were trained in the use of the GeoWBS in May 1998, and they will begin using this system to meet the Section 305(b) electronic reporting requirements starting in 1999.

## II. BACKGROUND

### A. Total Surface Waters

Most of the data presented in Table 2 are from the RF3 computerized database and the U.S. Geological Survey Digital Line Graph traces. These databases do not estimate acreage for California estuaries, harbors, bays, or wetlands. Instead, the estimates shown in Table 2 for these water bodies are obtained from the SWRCB's WBS database, and therefore only reflect those water bodies assessed and not total waters.

TABLE 2. ATLAS INFORMATION

TOPIC	VALUE
1998 State Population Estimate <sup>1</sup>	33,252,000
State Surface Area in Square Miles <sup>2</sup>	158,693
Number of Water Basins <sup>3</sup>	12
Total Miles of Rivers and Streams <sup>2</sup>	211,513
– Perennial River Miles (Subset) <sup>2</sup>	64,438
– Intermittent Stream Miles (Subset) <sup>2</sup>	124,615
– Ditch and Canal Miles (Subset) <sup>2</sup>	22,059
– Border Miles of Shared River/Streams (Subset) <sup>2</sup>	401
Number of Lakes/Reservoirs/Ponds <sup>2</sup>	10,141
Acres of Lakes/Reservoirs/Ponds <sup>2</sup>	1,672,684
Acres of Saline Lakes <sup>3</sup>	436,242
Acres of Estuaries/Harbors/Bays <sup>3</sup>	619,939
Miles of Ocean Shoreline <sup>2</sup>	1,609
Acres of Wetlands <sup>3</sup>	275,811

<sup>1</sup> The State population estimate is calculated annually by the California Department of Finance Demographic Unit.

<sup>2</sup> Estimates obtained from the 1994 U.S. EPA Reach File Version 3/Digital Line Graph data. Estimates were not updated for 1998. Lake estimates are for perennial and intermittent lakes.

<sup>3</sup> Estimates of estuaries, harbors and bays, saline lakes, and wetlands tabulated from the SWRCB's 1998 WBS database.

## **B. Regional Overview**

California is divided into hydrological regions that form the boundaries for the nine RWQCBs. The mission of the RWQCBs is to develop and enforce water quality objectives and implementation plans which best protect area waters at the regional level. This is a challenging task which must recognize local differences in climate, topography, geology, and hydrology. Additionally, the RWQCBs must consider all the competing uses of their region's water including the needs of the environment, industry, agriculture, and municipal districts.

The foundation for pollution control in each region is its "Basin Plan" which identifies the region's water bodies, their beneficial uses (Appendix I), objectives to protect those uses, and a plan to achieve those objectives.

The RWQCBs issue waste discharge requirements and permits to control discharges to surface water, ground water, or wetlands from both point and nonpoint sources; enforce pollution control requirements; take action against violators; and monitor water quality.

The following regional overview is adapted from the SWRCB and RWQCBs Biennial Report, 1995-1996. Each section includes a brief description with a summary of information on the RWQCB's water quality challenges and accomplishments.



### **North Coast Region (Region 1)**

Remote wilderness and towering redwoods characterize the North Coast Region, which stretches from the Oregon border to Marin County. A land of wet coastal mountains and drier valleys, it accounts for just 15 percent of the State's land area, but 40 percent of its freshwater runoff. Its 320-mile-long coastline includes numerous estuaries and several environmentally sensitive areas protected by State law.

Recreation and tourism are mainstays of the local economy as are timber harvesting and commercial and sport fishing. The area's population centers around Humboldt Bay and Santa Rosa, headquarters for the RWQCB.

#### ***Challenges***

- Preserve the region's excellent surface waters by developing and implementing the Watershed Management Initiative. The Russian River and Klamath River watersheds are the first to be addressed by the initiative.
- Pursue efforts to control nonpoint source pollution, including logging and agriculture, by seeking and obtaining cooperation of local stakeholders.
- Control the use of herbicides on forested lands, a contentious public issue, by continuing outreach efforts and collaboratively encouraging the use of Best Management Practices.

#### ***Accomplishments***

- Implemented the Russian River Action Plan which requires dischargers to meet high standards and prohibits wastewater discharges into the river during low-flow conditions. Large portions of the annual

wastewater treatment plant effluent are recycled. Effluent is discharged to the Russian River only when recreational use is minimal and typically, at one percent of river flow.

- Adopted a cutting edge policy on underground petroleum tanks, Interim Fuels Policy 93-59, which predated and foreshadowed the Lawrence Livermore National Laboratory Report. The RWQCB's policy emphasized source removal and assistance to the public--particularly those with economic hardships.
- Developed and implemented successful control strategies founded on Basin Plan actions which anticipated important water quality issues. Examples include the policy for on-site waste treatment for septic tank and associated discharges and the use of Best Management Practices for logging on federal lands.



### **San Francisco Bay Region (Region 2)**

The San Francisco Bay lies at the heart of the Bay Region. Home to large numbers of migratory birds and other animals, the region also supports a population of over six million residents. RWQCB offices are in Oakland.

Santa Clara County's "Silicon Valley" is home to high tech computer and electronics industries. Six petroleum refineries make up the largest category of industrial waste discharges to the Bay. They and other heavy industries are found along the shoreline from Richmond to Pittsburg. Despite this region's urbanization, the wine industry in Napa and dairies in Marin continue to be important agricultural industries.

#### **Challenges**

- Reduce the levels of mercury, nickel, copper, polychlorinated biphenyls (PCBs), polynuclear aromatic hydrocarbons (PAHs), and pesticides in the Bay.
- Continue to monitor and remediate the approximately 8,000 cases of known leaking underground storage tanks which have impacted local ground water.
- Reduce habitat losses, mostly due to historical wetland filling that continue to threaten wildlife.
- Continue to inform the public of the 1994 RWQCB study which found that no more than two meals per month should include fish from the Bay.
- Develop strategies to curb urban runoff and upstream nonpoint pollution sources including Central Valley agriculture and Sierra abandoned mines that pose a threat to the Bay.
- Reduce local stream problems including erosion from construction sites and runoff from agricultural operations.
- Identify sediment hot spots which threaten the food chain and complicate issues of dredge spoils disposal.



### ***Accomplishments***

- Implemented regulatory programs resulting in significant reductions in pollutants over the last 30 years, despite a growing population.
- Implemented a program to control urban runoff that resulted in national recognition from U.S. EPA for two county programs under permit from the RWQCB.
- Assessed over \$4 million in fines over the last five years as part of its general enforcement program. About 70 percent of this money has been used for local environmental improvement projects.
- Implemented a vigorous enforcement program to control erosion from construction sites.
- Initiated the cleanup of 1,000 underground tanks.



### **Central Coast Region (Region 3)**

The Central Coast Region extends from Santa Clara County south to northern Ventura County. Its 300 miles include urban Santa Cruz and the Monterey Peninsula, agricultural Salinas and Santa Maria Valley, and the Santa Barbara coastal plain. Agriculture and related food processing activities are the major industries.

#### ***Challenges:***

- Develop a regional monitoring program by creating a scientific oversight group and obtaining regular peer reviews of monitoring programs.
- Implement the Watershed Management Initiative by evaluating and assessing water quality within the priority and targeted watersheds.
- Implement the SWRCB's newly adopted Containment Zone Policy.

#### ***Accomplishments***

- Implemented startup phase of the Morro Bay National Estuary Program including the development of public participation and data management strategies.
- Formed Salinas River Watershed Team to manage water resource problems by integrating all existing RWQCB regulatory and water quality protection programs into one unit, considering stakeholders' interests and promoting cooperative efforts.
- Adopted the San Lorenzo Wastewater Management Plan, in conjunction with the County Board of Supervisors, to manage and improve approximately 13,000 individual on-site sewage disposal systems in the 138 square mile San Lorenzo River Watershed. Primary uses of the San Lorenzo River include recreation, fishery habitat, and municipal water supply for 85,000 customers.

- Developed plan to implement a watershed project in Elkhorn Slough that takes a "farmer-first" approach. The project will receive \$81,000 over two years and will demonstrate best management practices for Slough farmers. By considering social and economic conditions, the RWQCB intends to build long-term personal relationships and achieve long-term resource management.
- Completed a study of San Luis Obispo County's inactive metal mines in four priority watersheds including Chorro Creek, Las Tablas Creek, Santa Rosa Creek, and San Simeon Creek. Phased remedial recommendations are being formulated, and the study's final report is scheduled for release in fall 1997.
- Directed Unocal Corporation to provide funding for an Environmental Impact Report to review the remediation of a plume at Avila Beach that is threatening ocean waters.
- Directed the National Park Service (Channel Islands National Park) to abate rangeland and road management practices which degrade riparian habitat and water quality and induce sediment transport into surface waters of Santa Rosa Island.



### **Los Angeles Region (Region 4)**

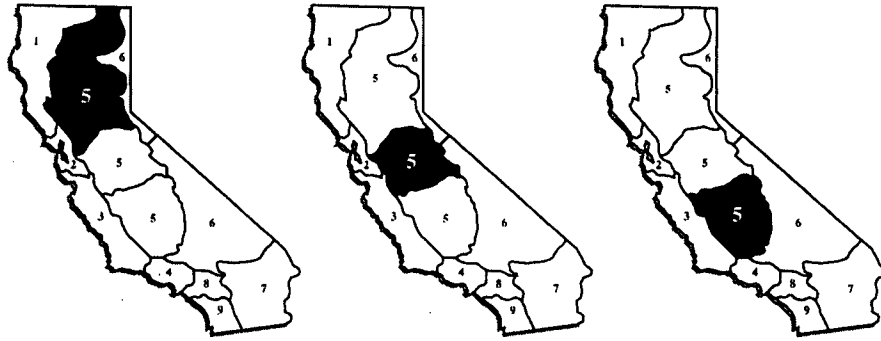
With ten million residents, the Los Angeles Region is the most densely populated of all the Regions. It encompasses all the coastal watersheds of Los Angeles and Ventura Counties, along with very small portions of Kern and Santa Barbara Counties. Land use within the Region varies considerably. In Ventura County, agriculture and open space exist alongside urban residential and commercial uses. In southern Los Angeles County, the predominant land uses include urban residential, commercial, and industrial. In northern Los Angeles County, open space is steadily being transformed into residential communities. Water imported from other areas now meets about half of the region's potable water demands. Restrictions on imported water, as well as drought conditions, have necessitated voluntary water conservation measures.

### ***Challenges***

- Continue to implement watershed management. In areas such as the Santa Monica Bay and Los Angeles River Watersheds, efforts will focus on controlling pollutants from both point and nonpoint sources. In areas such as the Calleguas Creek Watershed, where agriculture is vital to the local economy, efforts will also focus on salts; assessing significant sources of salts, the risk of adverse impact to crops and cost-effective ways to protect waters for irrigation.
- Continue to assess ground water contamination throughout the region and close low-risk sites, while also focusing efforts on cleanup of high-risk cases of contamination in such highly urbanized areas as the San Fernando and San Gabriel Valleys.
- Address issues concerning landfill seismic criteria.

### ***Accomplishments***

- Adopted the Los Angeles County Municipal Stormwater Permit, which combined with the Ventura County Stormwater Permit, provides the entire region with storm water protection. Los Angeles has the largest number of co-permittees (85) of any Municipal Stormwater Permit in the nation.
- Issued 4,329 joint (U.S. EPA/RWQCB) "No Further Action" letters releasing businesses from liability for regional ground water cleanups in both San Fernando Valley and San Gabriel Valley Superfund areas. Treatment plants, in various stages of planning and design, will clean up ground water contamination in these valleys.
- Santa Monica Bay Restoration Project conducted a epidemiology study which linked illness in swimmers to contaminated storm drain runoff in Santa Monica Bay. As a result, local agencies have committed to carrying out an "Action Agenda" to better protect and inform the public regarding the potential health risks to swimmers.
- Completed comprehensive water quality assessments in the Calleguas Creek and Ventura River watersheds that enabled the RWQCB to revise requirements for all major permits and to implement a cost-effective monitoring program.



### **Central Valley Region (Region 5)**

The Central Valley Region encompasses 60,000 square miles of the State, or about 40 percent of its total area. The Sacramento and San Joaquin Rivers, along with their tributaries, drain the major part of this large area into the Delta prior to discharge to San Francisco Bay.

The Delta is the focal point of the State's two largest water conveyance projects, the State Water Project, and the Federal Central Valley Project. The southern third of the San Joaquin Valley contains the Tulare Lake Basin, a closed hydrographic unit except during extremely wet years.

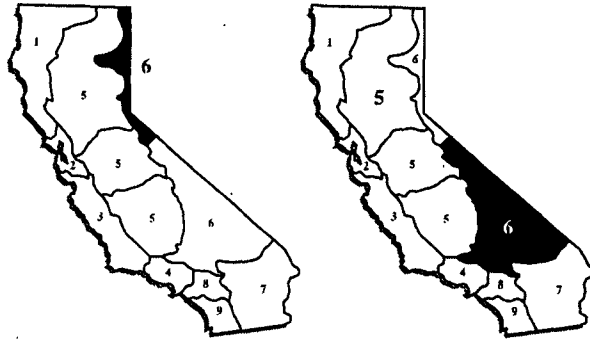
RWQCB staff are headquartered in Sacramento with branch offices in Redding and Fresno.

### **Challenges**

- Regulate agricultural drainage in the San Joaquin Valley, which is high in selenium and trace elements to protect water resources, while maintaining a viable agricultural industry.
- Mitigate or reduce the accumulation of salts and trace elements in the San Joaquin River and the Tulare Lake Basin.
- Mitigate the effects of abandoned mine discharges of acids and heavy metals which impact the Sacramento River system and the Delta.
- Restore the water quality at McClellan, Mather and Castle Air Force Bases to facilitate the return of these properties to productive use.
- Identify and control sources of toxicity in surface waters.
- Control nitrate levels in ground water that occur in excess of water quality standards in almost half the counties in the region.
- Control storm water runoff in urban and rural areas.
- Develop a policy for water quality protection in constructed agricultural drains.

***Accomplishments***

- Adopted enforcement actions which collected approximately \$570,000 in water pollution violations.
- Updated the Basin Plan with an amendment regarding the control of selenium discharges from the Grasslands Watershed to the San Joaquin River.
- Developed an agreement with the City of Lindsay and private parties to limit liability for salt contamination (at a former olive processing facility) and to restore the property to productive use while protecting water quality.
- Initiated watershed activities involving over 200 stakeholders for the Sacramento River and for Cache Creek.
- Working in cooperation with approximately 30 local agencies, closed over 1,100 underground tank sites.



### **Lahontan Region (Region 6)**

The Lahontan Region is named for a prehistoric lake which once covered much of the Great Basin. The region occupies about 20 percent of California from the Oregon border south along the eastern Sierra Nevada crest through the northern Mojave Desert. Within this area are hundreds of lakes, streams, and wetlands, including nationally significant waters such as Lake Tahoe and Mono Lake. Tourism is the most important "industry" in the region, which also includes Death Valley National Park, the Mammoth Lakes area and segments of the Pacific Crest and John Muir Trails. Other important components of the region's economy are agriculture (mostly livestock grazing) and several military bases. The Lahontan RWQCB maintains offices at South Lake Tahoe (its headquarters) and Victorville.

### **Challenges**

- Review quality/quantity relationships in watersheds such as the Truckee River, where interstate negotiations will determine flows to protect threatened/endangered fish in Pyramid Lake; and the Mojave River Watershed and Antelope Valley ground water basin, where there are plans to supplement local ground water supplies with imported water which may be of lower quality than native water.
- Monitor water quality concerns including blooms of aquatic weeds in Lake Tahoe and potential watershed damage related to the widespread death of forest trees.
- Further streamline storm water discharge permitting in the Lake Tahoe Basin.
- Remove unnecessary obstacles to water reclamation.



### ***Accomplishments***

- Finalized the Region's Basin Plan and amendments.
- Worked with stakeholders to implement the Watershed Management Initiative in the Lower Truckee River, Upper Truckee River/Trout Creek, Carson River, Upper Owens River and Mojave River Watersheds.
- Sponsored a study of Lake Tahoe which revealed that specific types of equipment and dredging practices can minimize the impacts to water quality.
- Began development of Total Maximum Daily Loads for sediment in the Lower Truckee River Watershed.
- Entered into a Memorandum of Understanding with Mono County, California Department of Fish and Game, U.S. Bureau of Land Management, U.S. Forest Service, and Los Angeles Department of Water and Power to collaborate on activities that affect the people and economy of Mono County.



### **Colorado River Basin (Region 7)**

The Colorado River Basin Region covers the most arid area of California. Despite its dry climate, the Region contains two large water bodies, the Colorado River and the Salton Sea. The Colorado River, a major source of water for California, irrigates more than 700,000 acres of farmland in the Imperial, Coachella, Bard, and Palo Verde Valleys.

Farm runoff from the Imperial Valley is the main source of fresh water for the Salton Sea. Since the Sea is in a closed basin below sea level, evaporation causes its salinity to increase. Its current salinity is 25 percent greater than ocean water which threatens the Sea's fish and wildlife resources. The farm runoff also contains silt, pesticides, and fertilizers which imperil the aquatic life, wildlife, and recreational uses.

Many areas in the region are underlain by ground water aquifers that provide the only local source of water. The most important aquifer is in the Coachella Valley featuring a large tourist industry including Palm Springs and over 90 golf courses.

### **Challenges**

- Reduce the pollution in the New River originating from Mexicali in cooperation with the United States and Mexican governments.
- Reduce the increasing salinity of the Salton Sea and continue to assist the Salton Sea Authority in their efforts to develop a salinity control project.
- Control agricultural discharges, comprising the largest source of surface water pollution in the region, and assist the Imperial Irrigation District to implement their Drain Water Quality Improvement Program.
- Protect ground water threatened by perchloroethylene (PCE) and nitrates.

### Accomplishments

- Adopted waste discharge requirements for the proposed six hundred million ton Mesquite Landfill.
- Prepared the first watershed management plan for the region describing proposed actions in priority watersheds.
- Adopted a general National Pollutant Discharge Elimination System Permit for confined animal facilities and adopted municipal storm water permits for Riverside County and the California Department of Transportation.
- Adopted the 1996 list of impaired waters.



### **Santa Ana Region (Region 8)**

The Santa Ana Region continues to be one of the most rapidly growing areas of the State. While the region is geographically the smallest (nearly 3,000 square miles), it boasts one of the largest populations (almost five million people). Extensive ground water basins underlie much of the region, but local recharge provides only a fraction of the area's water needs, which are primarily met by imported water. The Santa Ana River, the region's main surface water body, transports more than 125 million gallons per day of reclaimed water from Riverside and San Bernardino Counties for recharge into the Orange County Ground water Basin. This satisfies approximately 40 percent of the county's water demand. This semi-arid region is known for its temperate climate and relatively low rainfall—about 15 inches per year. The RWQCB's office is located in Riverside.

### **Challenges**

- Reduce salts and nutrients in manure and wash water from dairy operations overlying the Chino Groundwater Basin that have severely degraded ground water quality and threaten downstream water quality.
- Manage nonpoint sources of nutrients, silt, bacteria, metals, PCBs, and the banned pesticide DDT that pose serious threats to Newport Bay.
- Control contaminated ground water, which underlies many areas of the region, resulting from historic discharges of chlorinated solvents.
- Manage nonpoint sources of pathogens that continue to affect the quality of the Santa Ana River, thus rendering the river unsuitable for swimming.

***Accomplishments***

- Implemented the Watershed Management Initiative to develop comprehensive watershed management plans for the region's two highest priority watersheds, the Newport Bay Watershed and the Chino Basin Watershed Management Area.
- Directed those wastewater treatment plants that discharge into the Santa Ana River to comply with pollution treatment levels to protect all beneficial uses.
- Participated in the development of a desalination project for the lower Chino ground water basin to intercept and desalt poor quality ground water and thus protect downstream water supplies.
- Coordinated major stakeholders in the watershed to review the total dissolved solids and nitrogen water quality objectives of the Santa Ana Basin, to develop a regulatory strategy to protect water quality, and to optimize water resources development.



### **San Diego Region (Region 9)**

The San Diego Region stretches along 85 miles of scenic coastline from Laguna Beach to the Mexican border and extends 50 miles inland to the crest of the coastal mountain range. In a mild coastal climate, the region's growing population enjoys many water related activities; however, little rain falls within the semiarid region. Approximately 90 percent of the region's water supply is imported from Northern California and the Colorado River.

#### ***Challenges***

- Eliminate raw sewage discharges from Mexico which contaminate San Diego County beaches and waterways.
- Eliminate San Diego Region beach closures due to sewage spills and urban runoff.
- Reclaim and reuse water to the maximum extent feasible with appropriate safeguards to protect the public health and ensure that water quality is protected.
- Reduce pollutants in urban runoff through public education and the implementation of the municipal, industrial and construction storm water programs.
- Integrate existing RWQCB regulatory programs (i.e., water quality monitoring, assessment, planning, standard setting, nonpoint source management, ground water protection, and permitting) to address water quality issues on a watershed basis.

#### ***Accomplishments***

- Key player in a multi-agency effort to construct and permit an international sewage treatment facility and ocean outfall to receive wastewater from the City of Tijuana, Mexico. Facility will greatly reduce the chronic contamination of United States and Mexican waters resulting from sewage discharges from Tijuana.

- Issued orders initiating a multi-year contaminated sediment cleanup project in the Commercial Basin portion of San Diego Bay by several boatyards. Initiated a cooperative effort with several shipyards to achieve voluntary cleanup of contaminated sediment in San Diego Bay.
- Settled longstanding enforcement issues with the City of San Diego resulting in the City making penalty cash payments and performing environmental credit projects totaling \$1.35 million over the next five years.
- Adopted waste discharge requirements establishing uniform guidelines for the submittal of electronic records of sewage spills by all sewage collection agencies in the San Diego Region.
- Completed a watershed management approach document targeting three watersheds for initial work: Aliso Creek, San Diego Bay, and Santa Margarita River Watersheds.
- Resolved the majority of severe erosion problems at construction sites in the Santa Margarita River Watershed through a comprehensive site inspection program and follow-up enforcement actions.

### **III. SURFACE WATER ASSESSMENT**

#### **A. Water Pollution Control Programs**

Much of the following information on water quality programs, plans, and policies is taken from the SWRCB's and RWQCBs' Biennial Report, 1995-1996.

##### **1. Programs to Assess Water Quality**

###### Nonpoint Source Pollution Management Program

The SWRCB is implementing a plan to address Nonpoint Source (NPS) problems statewide. Following a review of NPS problems by ten technical advisory committees, the SWRCB adopted in September 1995 its document titled "Initiatives in Nonpoint Source Management".

This document was an important component of the State's submittal under the Federal Coastal Zone Act Reauthorization Amendments. The Act requires states to identify land uses which individually or cumulatively may cause or contribute significantly to a degradation of coastal waters, to identify critical geographic areas adjacent to coastal waters, and to implement additional measures where necessary to achieve and maintain water quality standards.

Simultaneously, the SWRCB continued to award Federal Clean Water Act Nonpoint Source Grants. Beginning with the 1996 grants, the process involved targeting and allocating grant funds to waters and projects in each RWQCB that most effectively addressed regional priorities. This process is included under the Watershed Management Initiative which is implemented according to the SWRCB's Strategic Plan.

###### Toxic Substances Monitoring Program

The Toxic Substances Monitoring Program (TSMP) was initiated in 1976 by the SWRCB. The TSMP provides a uniform statewide approach to the detection and evaluation of the occurrence of toxic substances in fresh, estuarine, and marine waters of the State through the analysis of fish and other aquatic life. The TSMP primarily targets water bodies with known or suspected impaired water quality and is not intended to give an overall water quality assessment.



Sampling stations are selected primarily by the nine RWQCBs. Data are used by the SWRCB, RWQCBs, and other agencies to identify waters impacted by toxic pollutants.

#### State Mussel Watch Program

The California State Mussel Watch Program (SMWP), initiated in 1977 by the SWRCB, provides a uniform statewide approach to detection and evaluation of the occurrence of toxic substances in the waters of California's bays, harbors, and estuaries. This is accomplished through the analysis of transplanted and resident mussels and clams. The SMWP primarily targets areas with known or suspected impaired water quality and is not intended to give an overall water quality assessment. Information collected in the SMWP is used by the SWRCB, RWQCBs, and other agencies to identify waters impacted by toxic pollutants.

#### Toxicity Testing Program

The Toxicity Testing Program (TTP) is intended to assess water quality in surface waters of the State using reliable U.S. EPA standardized toxicity testing procedures, modified U.S. EPA toxicity identification evaluation methods, and supporting chemical analyses.

Toxicity tests can directly determine the integrative and cumulative effects of chemicals on aquatic organisms and provide a measure of the bioavailability (i.e., the proportion of the chemically measured concentration of a chemical which is toxic) in water samples.

For the past ten years, the TTP has been effective in providing information that can identify waterways where toxicity water quality standards (objectives) are not being met and whether these surface waters can support biological communities in aquatic ecosystems. The intent of the TTP is to identify high risk areas and to identify the spatial and temporal extent of water quality problems, as well as the geographic and land/water use sources of the causative chemical(s).

### Bay Protection and Toxic Cleanup Program

The SWRCB's Bay Protection and Toxic Cleanup Program (BPTCP) identifies toxic hot spots in the enclosed bays and estuaries of California. As part of the legislative mandates of this program, sediment samples were analyzed statewide from enclosed bays and estuaries (over 1,000 stations) for chemistry, toxicity, and benthic community effects. Highest priority sites with observed toxicity in the screening phase were retested for toxic effects in the confirmation phase. Benthic community and chemical measurements were made during the confirmation phase. Using the effects-based measurements of impacts, thirty-seven sites throughout the State's enclosed bays and estuaries have been identified as Toxic Hot Spots. Regional Toxic Hot Spot Cleanup Plans have been developed for seventeen high priority sites.

### Coastal Monitoring Inventory and Plan

The SWRCB is implementing the water quality relevant portions of the Governor's Executive Order W-162-97. Three contractors—Southern California Coastal Water Research Project, San Francisco Estuary Institute, and California Department of Fish and Game—are assisting SWRCB in completing an inventory of coastal monitoring programs and in developing a comprehensive program for monitoring water quality and reducing water pollution in the coastal zone. The monitoring inventory data will be accessible through the Resources Agency's California Environmental Resources Evaluation System (CERES). These three functions will be accomplished by October 1, 1998 according to the Executive Order deadline.

### Volunteer Monitoring Program

"Volunteer monitoring" is the monitoring of aquatic resources, aquatic habitat, and water quality by members of the community. Across California, volunteers are evaluating the health of streams, lakes, and ocean waters. Monitoring takes numerous forms based on the desires of different communities. Volunteers may measure flow, dissolved oxygen, nutrients, or bacteria. They sample aquatic insects, identify birds and amphibians, and watch for potential illegal spills and discharges or chronic problems such as severe erosion. Community members respond to the unique nature of the aquatic resources near their homes and design monitoring programs accordingly.

Information collected by community members can be used at the local, regional, and State level. It has been summarized and presented at city council meetings, assessed as part of watershed management plans, posted electronically, and published in local newspapers. Information gleaned from monitoring can help communities evaluate their management goals and the effectiveness of their efforts at restoring habitat, reducing pollutants, and protecting their waterways. Local planning offices, storm water agencies, and the RWQCBs have used volunteer-collected data to identify riparian restoration sites, catch illegal dischargers, and identify pollution problems. Monitoring organizations that collect data in compliance with appropriate quality control measures can provide their data to the RWQCBs for use in 305(b) Reports.

#### Underground Storage Tank Program

In June 1994, the SWRCB contracted with Lawrence Livermore National Laboratory (LLNL) to study the cleanup of leaking underground fuel tanks in California. The team of university scientists analyzed data from over 1,800 tank sites. The resulting 1995 report indicated very limited impacts of leaking underground tanks on the State's water resources, using benzene as an indicator of the constituents of concern. Consequently, the SWRCB's Executive Director advised the RWQCBs to consider this study in evaluating remediation options for low-risk leaking underground fuel tank sites. In the spring of 1996, the SWRCB held two public meetings to obtain comments on the LLNL report and possible amendments to the SWRCB's current underground storage tank procedures. A report on the policy was also submitted in May 1996 to the SWRCB by the Senate Bill 1764 Committee, a group of university professors requested by legislation to examine the SWRCB's tank policy. A tank policy was drafted and distributed to the RWQCBs for comment as a first step in the process to develop a statewide policy.

## **2. Programs to Restore Water Quality**

### **a. Statewide General Permits**

#### Storm Water

Through the SWRCB's Storm Water Program, two statewide general permits have been adopted addressing storm water discharges associated with industrial activities. Dischargers are required to eliminate most nonstorm water discharges, develop a storm water pollution prevention plan to identify and implement control measures to minimize pollutants in storm water runoff, and monitor their discharges. The SWRCB held a public hearing in November 1996 to receive comments on a draft permit released 60 days before. A general storm water permit was reissued in April 1997.

#### Other General Permits

In addition to the storm water general permits, the nine RWQCBs have adopted close to 50 general permits. A model waiver for composting has been developed. Under consideration is a model general permit for reuse of biomass ash and a general permit for water suppliers and utility companies.

### **b. Cleanup Funding Programs**

#### Underground Tanks Cleanup Fund

To address the problems and expense of cleaning up leaking underground fuel tanks, the SWRCB administers the Underground Storage Tank Cleanup Fund (implemented in 1991) which pays for corrective action and third party liability costs up to \$1 million per occurrence. As of June 1996, the fund had received 11,743 applications, of which 9,515 have been approved. There were 3,455 letters of commitment issued for over \$354 million. Over \$271 million was paid out on 6,740 reimbursement requests. Since Fiscal Year 1992-93, the Fund has committed 100 percent of its annual appropriation each year to reimburse responsible parties for their cleanup.

### **c. Plans and Policies**

#### Basin Plans

In 1996, the SWRCB and RWQCBs completed a four-year, multi-million dollar effort to update all RWQCB Water Quality Control Plans (Basin Plans). This is the first time since 1975 that all RWQCB Basin Plans have been completely updated. These plans are the "blueprints" for implementing water protection in each region. They draw upon best science, pollution prevention provisions, and full partnership efforts with regional stakeholders.

#### Containment Zone Policy

An amendment to the SWRCB's Resolution 92-49, termed the "Containment Zone Policy" was adopted by the SWRCB in October 1996.

A containment zone is a portion of a ground water unit in which the RWQCB determines that attainment of water quality objectives is technologically or economically unreasonable and where the RWQCB believes pollutants can be contained. Monitoring is required to verify containment, and mitigation is required for significant environmental impacts.

In the two year rule-making process, two formal hearings and a workshop were held. Over 1,500 comments were received and analyzed.

In an effort to ensure statewide consistency in applying and implementing the Policy and to solicit recommendations for possible revisions to the Policy, the SWRCB incorporated into the amendment a provision for a Containment Zone Review Committee to (1) review implementation of the Policy; (2) review incorporating risk assessment into the Policy; and (3) provide recommendations to the SWRCB on any further adjustments to the Policy.

### Inland Surface Waters Plan/Enclosed Bays and Estuaries Plan

The SWRCB is developing its Inland Surface Water Plan (ISWP) and Enclosed Bays and Estuaries Plan (EBEP) in two phases. Ultimately, these two statewide water quality control plans will set water quality objectives for toxic pollutants and establish an implementation program.

Work on the ISWP/EBEP began in 1995 with eight task forces, representing eleven interest groups, meeting to discuss key issues. Task force recommendations were submitted to the SWRCB in November 1995 with additional public comments received throughout 1996.

In late 1996, the SWRCB and U.S. EPA agreed to a unique cooperative arrangement to better utilize State resources. The current Phase I is being coordinated with U.S. EPA actions to promulgate numeric criteria for the priority pollutants under the California Toxics Rule (CTR). Phase I will see a policy for implementing the Federal CTR criteria. Phase II will consist of developing State water quality objectives for the priority pollutants (and possibly other toxic pollutants) and merging them with the implementation policy provisions to create the ISWP and EBEP.

### Statewide Water Quality Enforcement Policy

In April 1996, the SWRCB adopted a Statewide Water Quality Enforcement Policy to ensure consistency and to assist the RWQCBs and dischargers in protecting water quality.

### California Ocean Plan

This statewide plan sets physical, chemical, biological, and bacteriological water quality standards for protecting the State's coastal waters. The SWRCB is currently examining several high priority issues raised by the public during the most recent California Ocean Plan Triennial Review.

As individual issues are resolved, staff plans to present them to the SWRCB on an annual basis to determine if the Ocean Plan should be

amended. In March 1997, the SWRCB adopted the first phase of amendments to the Ocean Plan. These amendments became effective in July 1997 after approval of the State's Office of Administrative Law. A second phase of amendments will be proposed at public hearings in November 1998.

A new triennial review will be initiated at public hearings scheduled in September 1998.

#### California Pesticide Management Plan

The SWRCB and Department of Pesticide Regulation have developed the California Pesticide Management Plan for Water Quality to coordinate staff activities to protect surface and ground water from pesticides. It identifies each agency's role in water quality protection and pesticide regulation and promotes a sharing of information relating to the study of pesticides and regulatory efforts.

#### Watershed Management Initiative

The SWRCB and RWQCBs, as part of the Strategic Plan, are implementing a Watershed Management Initiative (WMI) to better coordinate and focus limited public and private resources to address both point and nonpoint source water quality problems especially in high priority targeted watersheds.

Watersheds are geographical areas in which water flows to a common outlet, e.g., a stream, lake, or other body of water. Each point in a drainage basin has its own tributary "watershed" ranging in size from the area upstream of the Golden Gate to the smallest ravine; therefore, California can be divided into thousands of watersheds. Watersheds form the basis for the boundaries of the nine RWQCBs.

Each RWQCB will have a watershed strategy described in its WMI Chapter. These chapters are long term workplans covering activities for the next five to seven years. These strategies rely on close coordination with other State, federal and local agencies in using limited fiscal and technical resources. This ensures that local community groups will

receive the assistance they need to effectively manage their local sources of pollution. Implementation of the WMI began in July 1997.

## **B. Plan for Achieving Comprehensive Assessments**

The mission of the SWRCB is to preserve and enhance the quality of California's water resources and to ensure their proper allocation and efficient use for the benefit of present and future generations. In order to evaluate progress toward this mission, the SWRCB must have access to information on the health of the stream systems and the beneficial uses they support. Protection and restoration of environmental resources requires a good monitoring program to provide feedback needed to ensure that the programs embarked upon are effective and that progress is being made to reach the goals. Environmental monitoring can be expensive. The monitoring program needs to be directed at answering specific questions to keep the program focused and the costs affordable.

The SWRCB with the RWQCBs have begun a reevaluation of the State's water quality monitoring programs. It is being done with a focus towards watershed evaluations and in cooperation and coordination with all local, State, and national agencies and groups. Past efforts have been organized to address specific protection or restoration program needs. This has led to a fragmentation of monitoring efforts resulting in duplication in some monitoring efforts, gaps in needed information, and lack of integrated analysis. A watershed approach will allow different groups to pool their resources in more effective ways to answer the key water quality and beneficial use protection questions.

However, even though this evaluation has just begun, a high priority area of critical monitoring information needs has been identified that requires immediate attention. Every two years the SWRCB develops this 305(b) Report on the level of protection being achieved for the various water bodies in the State. This report lists the water bodies where the beneficial uses are impaired due to problems with water quality. A process to correct the problems in these water bodies is needed to achieve the State's goals of protecting beneficial uses in these water bodies. Most of these problems are due to nonpoint sources of pollutants that are hard to identify and correct. However, impairments are also due to water diversions. Some of the water body impairments are affecting anadromous fish species in coastal watersheds and in the Central Valley that have recently been listed as threatened or endangered.



The resources needed to identify the specific sources of the water quality problems and evaluate cost effective means to correct the problems can be extensive. Current funding is not adequate to address these issues in a reasonable time frame. Under the Clean Water Act, citizen lawsuits have been filed to compel the U.S. EPA and the SWRCB to perform the needed evaluations to correct these problems. Data on the sources of pollutant loads and best means to correct these problems need to be collected quickly to avoid additional suits and to maintain the focus of the SWRCB's other programs consistent with that identified by the administration and the Legislature. Not gathering this information could lead to control of program priorities by the courts.

### **C. Section 303(d) of the Clean Water Act**

Section 303(d) of the Federal Clean Water Act (CWA) requires states to identify waters that do not meet applicable water quality standards with technology-based controls alone. Applicable standards include the designated beneficial use and the adopted water quality objective. States are also required to establish a priority ranking of these waters for purposes of developing Total Maximum Daily Loads (TMDL). Subsequently, each point source and nonpoint source discharging pollutants to the listed water body require a Waste Load Allocation and Load Allocation, respectively, assigned to it. States are then required to submit to the U.S. EPA the list of waters and TMDL priorities for review and approval.

#### **1. Development of the 1998 Section 303(d) List and TMDL Priority Schedule**

SWRCB staff prepared guidance for the 1998 water quality assessment update outlining the procedures for each of the nine RWQCBs to conduct its review. This guidance placed emphasis on the assessment of California water bodies for possible Section 303(d) listing. The assessment included reexamining the water bodies listed under CWA Section 303(d) in 1996, reviewing new monitoring information, soliciting information from other State and federal agencies, and inviting the public to participate.

The guidance also included the State's "1998 Clean Water Act (CWA) Section 303(d) Listing Guidelines for California", dated August 11, 1997.

These guidelines, developed by a task force of U.S. EPA, RWQCB, and SWRCB staff, were used by RWQCB staff as a basis for listing and delisting water bodies, prioritizing and scheduling TMDLs, and public noticing procedures.

The SWRCB received several petitions and comment letters on the RWQCBs' adoption of their 303(d) lists. Given the significant public interest, the SWRCB held a public workshop to receive comments on the RWQCBs' lists. At a subsequent SWRCB Board Meeting, the statewide Section 303(d) list was modified and then approved by the SWRCB for submittal to U.S. EPA for approval.

## **2. 1998 California 303(d) List and TMDL Priority Schedule**

The 1998 California Section 303(d) List and TMDL Priority Schedule (including pollutants or stressors, probable sources, the TMDL priorities, and schedules of completion) is presented in Table 3. The statewide 1998 California 303(d) List and TMDL Priority Schedule includes all nine RWQCBs' final Section 303(d) lists and SWRCB modifications.

The 1998 California Section 303(d) List and TMDL Priority Schedule identified 509 impaired surface waters with 1,474 pollutants or stressors slated for TMDLs within the next 13 years. Four hundred seventy-three of these pollutants or stressors were given highest priority for the development of TMDLs. It should be noted that in addition to the highest priority water bodies, actions are underway for many of the remaining Section 303(d) waters.

The statewide 1998 California Section 303(d) List and TMDL Priority Schedule was prepared using data stored in the SWRCB's Waterbody System (WBS) database. The WBS database is a catalog of the State's major water bodies that identifies the general condition of beneficial use support of each water body. The database also includes more specific water quality assessment information on water bodies such as water body size, affected beneficial uses, and specific pollutants and sources of impairment. All this information in the database was provided by the RWQCBs.

**TABLE 3**

**1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE**

# 1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
1	E	EEL RIVER DELTA	111.110	Sedimentation/Siltation		Low	6350	Acres	0204	1206
					Range Land Silviculture Nonpoint Source					
				Temperature		Low	6350	Acres	0204	1206
					Nonpoint Source					
1	E	ESTERO AMERICANO	115.300	Nutrients		Medium	692	Acres	0497	0206
					Water Quality Attainment strategy is attempting to increase voluntary measures for attainment of standards and objectives, as was done in the Estero de San Antonio / Stemple Creek TMDL Water Quality Attainment Strategy, adopted by the North Coast Regional Water Quality Control Board at the December 11, 1997 meeting.					
					Pasture Land Manure Lagoons					
				Sedimentation/Siltation		Medium	692	Acres	0497	0206
					Water Quality Attainment strategy is attempting to increase voluntary measures for attainment of standards and objectives, as was done in the Estero de San Antonio / Stemple Creek TMDL Water Quality Attainment Strategy, adopted by the North Coast Regional Water Quality Control Board at the December 11, 1997 meeting.					
					Riparian Grazing Hydromodification Removal of Riparian Vegetation Streambank Modification/Destabilization Erosion/Siltation Nonpoint Source					
1	E	ESTERO DE SAN ANTONIO	115.400	Nutrients		Low	319	Acres	0496	0498
					This water body/pollutant was relisted by USEPA.					
					Pasture Land Manure Lagoons					
1	E	NAVARRO RIVER DELTA	113.500	Sedimentation/Siltation		Medium	20	Acres	0298	1200
					Erosion/Siltation					
1	L	LAKE PILLSBURY	111.630	Mercury		Low	2280	Acres	1209	1211
					Natural Sources					
1	R	ALBION RIVER	113.400	Sedimentation/Siltation		Medium	14	Miles	0299	1201
					USEPA is preparing TMDL for Albion River.					
					Silviculture Nonpoint Source					

\* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

# 1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
1	R	AMERICANO CREEK	115.300	Nutrients (See Estero Americano)	Pasture Land Riparian Grazing Upland Grazing Animal Operations Manure Lagoons Dairies	Medium	7	Miles	0497	0206
1	R	BIG RIVER	113.300	Sedimentation/Siltation	Silviculture Nonpoint Source	Medium	40	Miles	0299	1201
1	R	EEL RIVER, MIDDLE FORK	111.700	Sedimentation/Siltation USEPA will develop a TMDL for Eel River, Middle Fork.	Erosion/Siltation	Low	64	Miles	0201	1203
				Temperature USEPA will develop a TMDL for Eel River, Middle Fork.	Nonpoint Source	Low	64	Miles	0201	1203
1	R	EEL RIVER, MIDDLE MAIN FORK	111.70	Sedimentation/Siltation USEPA will develop a TMDL for Eel River, Middle Main Fork.	Range Land Silviculture Nonpoint Source	Low	1075.38	Miles	0203	1205
				Temperature USEPA will develop a TMDL for Eel River, Middle Main Fork.	Nonpoint Source	Low	1075.38	Miles	0203	1205
1	R	EEL RIVER, NORTH FORK	111.500	Sedimentation/Siltation USEPA will develop TMDL for Eel River, North Fork	Silviculture Logging Road Construction/Maintenance Erosion/Siltation Nonpoint Source	Low	41	Miles	0200	1202
				Temperature USEPA will develop TMDL for Eel River, North Fork.	Nonpoint Source	Low	41	Miles	0200	1202

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# 1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
1	R	EEL RIVER, SOUTH FORK	111.300	Sedimentation/Siltation		Low	85	Miles	0297	1299
				USEPA is developing TMDL for Eel River, South Fork. Sediment and temperature TMDLs will be developed for: (1) the area tributary to and including the South Fork of the Eel River above Garberville and (2) the area tributary to and including the South For of the Eel River below Garberville.						
				Range Land						
				Silviculture						
				Logging Road Construction/Maintenance						
				Resource Extraction						
				Hydromodification						
				Flow Regulation/Modification						
				Removal of Riparian Vegetation						
				Erosion/Siltation						
				Nonpoint Source						
				Temperature		Low	85	Miles	0297	1299
				USEPA is developing TMDL for Eel River, South Fork.						
				Hydromodification						
				Flow Regulation/Modification						
				Removal of Riparian Vegetation						
				Erosion/Siltation						
				Nonpoint Source						
1	R	EEL RIVER, UPPER MAIN FORK	111.60	Sedimentation/Siltation		Low	1154.24	Miles	0202	1204
				USEPA will develop a TMDL for Eel River, Upper Main Fork.						
				Range Land						
				Silviculture						
				Nonpoint Source						
				Temperature		Low	1154.24	Miles	0202	1204
				USEPA will develop a TMDL for Eel River, Upper Main Fork.						
				Nonpoint Source						
1	R	ELK RIVER	110.000	Sedimentation/Siltation		Medium	87	Miles	0207	2009
				Sedimentation, threat of sedimentation, impaired irrigation water quality, impaired domestic supply water quality, impaired spawning habitat, increased rate and depth of flooding due to sediment, property damage. Regional Water Board and California Department of Forestry staff are involved in ongoing efforts to attain adherence to Forest Practice Rules. It is possible that compliance will bring attainment prior to TMDL development.						
				Silviculture						
				Harvesting, Restoration, Residue Management						
				Logging Road Construction/Maintenance						
				Removal of Riparian Vegetation						
				Streambank Modification/Destabilization						
				Erosion/Siltation						
				Nonpoint Source						

\* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

# 1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
1	R	FRESHWATER CREEK	110.000	<b>Sedimentation/Siltation</b>		Medium	72.67	Miles	0208	1210
				Sedimentation, threat of sedimentation, impaired irrigation water quality, impaired domestic supply water quality, impaired spawning habitat, increased rate and depth of flooding due to sediment, property damage. Regional Water Board and California Department of Forestry staff are involved in ongoing efforts to attain adherence to Forest Practice Rules. It is possible that compliance will bring attainment prior to TMDL development.						
				Silviculture						
				Harvesting, Restoration, Residue Management						
				Logging Road Construction/Maintenance						
				Erosion/Siltation						
				Nonpoint Source						
1	R	GARCIA RIVER	113.700	<b>Sedimentation/Siltation</b>		High	39	Miles	0997	1297
				The Regional Water Board is involved in extended public hearings to consider the adoption of a TMDL for sediment control on the Garcia River. In January, 1998, USEPA issued public notice for adoption and promulgation of a TMDL for sediment on the Garcia River.						
				Riparian Grazing						
				Silviculture						
				Harvesting, Restoration, Residue Management						
				Logging Road Construction/Maintenance						
				Removal of Riparian Vegetation						
				Streambank Modification/Destabilization						
				Channel Erosion						
				Erosion/Siltation						
				Nonpoint Source						
				<b>Temperature</b>		High	39	Miles	0298	2000
				Elevated temperatures impacting coldwater fisheries in these reaches and sub-areas: Planning Units 113.70010 (Pardaloe Creek), 113.70011, 12, 13, 14, 20, 21, and the entire mainstem Garcia River from Pardaloe Creek to the estuary, which includes that portion of 113.70022, 23, 24, 25, and 26. February 1998 - The Regional Water Board is working to adopt a TMDL for sediment on the Garcia River. It is possible that voluntary compliance with measures in this TMDL will improve conditions related to temperature prior to development of a TMDL for temperature.						
				Habitat Modification						
				Removal of Riparian Vegetation						
				Streambank Modification/Destabilization						
				Nonpoint Source						

\* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

# 1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
1	R	GUALALA RIVER	113.800	Sedimentation/Siltation	Specialty Crop Production Silviculture Harvesting, Restoration, Residue Management Logging Road Construction/Maintenance Road Construction Land Development Disturbed Sites (Land Develop.) Erosion/Siltation Nonpoint Source	Medium	35	Miles	0499	1201
1	R	KLAMATH RIVER	105.000	Nutrients	<i>Nutrient TMDLs will be developed for the area tributary to and including: Clear Lake Reservoir Area Lost River/Tule Lake to Oregon border Oregon border to iron Gate dam Iron Gate Dam to Scott River Scott River to Trinity River Trinity River to the Ocean</i> Municipal Point Sources Irrigated Crop Production Agricultural Return Flows Nonpoint Source	Medium	190	Miles	0402	0404
				Org. enrichment/Low D.O.	<i>Dissolved oxygen levels do not meet Basin Plan Objective. Fisheries habitat is impaired due to low dissolved oxygen levels. Dissolved Oxygen TMDL will be developed for the mainstem of the Klamath River.</i> Municipal Point Sources Agricultural Return Flows Flow Regulation/Modification	Medium	180	Miles	0202	1204
				Temperature	<i>Temperature TMDLs will be developed for the area tributary to and including: Clear Lake Reservoir Area Lost River/Tule Lake to Oregon border Oregon border to iron Gate dam Iron Gate Dam to Scott River Scott River to Trinity River Trinity River to the Ocean</i> Dam Construction/Operation Flow Regulation/Modification Water Diversions Habitat Modification Nonpoint Source	Medium	190	Miles	0402	0404

\* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.



# 1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
1	R	MAD RIVER	109.000	Sedimentation/Siltation		Low	90	Miles	0205	0207
				USEPA will develop TMDL for the Mad River. Sediment TMDLs will be developed for the area tributary to and including: (1) the Mad River (North Fork), (2) the Mad River(Upper), and (3) the Mad River (Middle).						
				Silviculture						
				Resource Extraction						
				Nonpoint Source						
				Turbidity		Low	90	Miles	0205	0207
				Turbidity TMDLs will be developed for the area tributary to and including: (1) the Mad River (North Fork), (2) the Mad River(Upper), and (3) the Mad River (Middle).						
				Silviculture						
				Resource Extraction						
				Nonpoint Source						
1	R	MATTOLE RIVER	112.300	Sedimentation/Siltation		Medium	56	Miles	0200	1202
				Specialty Crop Production						
				Range Land						
				Riparian Grazing						
				Silviculture						
				Hydromodification						
				Habitat Modification						
				Removal of Riparian Vegetation						
				Streambank Modification/Destabilization						
				Erosion/Siltation						
				Nonpoint Source						
				Temperature		Medium	56	Miles	0200	1202
				Silviculture						
				Habitat Modification						
				Removal of Riparian Vegetation						
				Nonpoint Source						

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# 1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
1	R	NAVARRO RIVER	113.500	Sedimentation/Siltation		Medium	25	Miles	0298	1200
				Sediment TMDLs will be developed for: (1) the area tributary to and including the Navarro River above Philo and (2) the area tributary to and including the Navarro River below Philo.						
				Agriculture						
				Nonirrigated Crop Production						
				Irrigated Crop Production						
				Specialty Crop Production						
				Range Land						
				Riparian Grazing						
				Upland Grazing						
				Agriculture-grazing						
				Silviculture						
				Harvesting, Restoration, Residue Management						
				Logging Road Construction/Maintenance						
				Silvicultural Point Sources						
				Construction/Land Development						
				Highway/Road/Bridge Construction						
				Road						
				Construction						
				Land Development						
				Disturbed Sites (Land Develop.)						
				Resource Extraction						
				Flow Regulation/Modification						
				Water Diversions						
				Habitat Modification						
				Removal of Riparian Vegetation						
				Streambank Modification/Destabilization						
				Drainage/Filling Of Wetlands						
				Channel Erosion						
				Erosion/Siltation						
				Nonpoint Source						

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# 1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				Temperature		Medium	25	Miles	0298	1200
				Temperature TMDLs will be developed for: (1) the area tributary to and including the Navarro River above Philo and (2) the area tributary to and including the Navarro River below Philo.						
				Agriculture						
				Agricultural Return Flows						
				Resource Extraction						
				Flow Regulation/Modification						
				Water Diversions						
				Agricultural Water Diversion						
				Habitat Modification						
				Removal of Riparian Vegetation						
				Streambank Modification/Destabilization						
				Drainage/Filling Of Wetlands						
				Nonpoint Source						
1	R	NOYO RIVER	113.200	Sedimentation/Siltation		Medium	35	Miles	0698	1299
				Silviculture						
				Nonpoint Source						
1	R	REDWOOD CREEK	107.000	Sedimentation/Siltation		Low	63	Miles	0497	1298
				Sediment TMDLs are being developed for: (1) the area tributary to and including the mainstem upstream of the Redwood National Park boundary and (2) for the area tributary to and including the mainstem within the Park boundary.						
				Range Land						
				Silviculture						
				Nonpoint Source						

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# 1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
1	R	RUSSIAN RIVER	114.100	<b>Sedimentation/Siltation</b> <i>[Entire watershed, mainly tributaries.]</i> <i>Sedimentation, threat of sedimentation, siltation, turbidity, bank erosion impaired spawning and rearing habitat, increased rate and depth of flooding due to sediment, property damage, in Russian River and tributaries.</i> <i>Aggradation in the main stem Russian River. Sonoma County Water Agency has begun a comprehensive Endangered Species Act habitat assessment. This project should arrive at assessment and control measures equivalent to TMDL allocation and attainment strategies.</i>		Medium	105	Miles	0209	1211
				Specialty Crop Production						
				Riparian Grazing						
				Upland Grazing						
				Agriculture-storm runoff						
				Silviculture						
				Harvesting, Restoration, Residue Management						
				Logging Road Construction/Maintenance						
				Construction/Land Development						
				Highway/Road/Bridge Construction						
				Road						
				Construction						
				Land Development						
				Disturbed Sites (Land Develop.)						
				Other Urban Runoff						
				Hydromodification						
				Channelization						
				Flow Regulation/Modification						
				Habitat Modification						
				Removal of Riparian Vegetation						
				Streambank Modification/Destabilization						
				Drainage/Filling Of Wetlands						
				Channel Erosion						
				Erosion/Siltation						
				Nonpoint Source						
1	R	SCOTT RIVER	105.400	<b>Sedimentation/Siltation</b>		Low	68	Miles	0203	0405
				Irrigated Crop Production						
				Pasture Land						
				Silviculture						
				Resource Extraction						
				Mine Tailings						
				Nonpoint Source						

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# 1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
1	R	SHASTA RIVER	105.500	Temperature	Irrigated Crop Production	Low	68	Miles	0203	0405
				Pasture Land						
				Agricultural Return Flows						
				Silviculture						
				Water Diversions						
				Habitat Modification						
				Removal of Riparian Vegetation						
				Streambank Modification/Destabilization						
				Drainage/Filling Of Wetlands						
				Nonpoint Source						
1	R	STEMPLE CREEK	115.400	Org. enrichment/Low D.O.	Riparian Grazing	Low	52	Miles	0203	0905
				Agricultural Return Flows						
				Flow Regulation/Modification						
				Temperature	Agriculture-irrigation tailwater	Low	52	Miles	0203	0905
				Water Diversions						
				Agricultural Water Diversion						
				Habitat Modification						
				Removal of Riparian Vegetation						
				Drainage/Filling Of Wetlands						
				Nonpoint Source						
1	R	TEN MILE RIVER	113.130	Nutrients	Pasture Land	Low	17	Miles	0496	0498
				Manure Lagoons						
				Nonpoint Source						
				This water body/pollutant was relisted by USEPA.						
				Sedimentation/Siltation		Low	10	Miles	0298	1200
				USEPA is developing TMDL for Ten Mile River.						
				Silviculture						
				Nonpoint Source						

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# 1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
1	R	TOMKI CREEK	111.620	Sedimentation/Siltation		Medium	18	Miles	0202	1204
				USEPA will develop TMDL's for Eel River Watershed in the Tomki Creek vicinity. Tomki Creek, tributary to the Eel River, has been listed under Clean Water Act Section 303(d) due to the effects of sedimentation. Restoration effort has targeted the riparian area. Tomki Creek is under consideration for removal from the 303(d) list.						
				Range Land						
				Silviculture						
				Erosion/Siltation						
				Nonpoint Source						
1	R	TRINITY RIVER	106.000	Sedimentation/Siltation		Medium	170	Miles	0199	1201
				USEPA will develop TMDL for Trinity River. Sediment TMDLs will be developed for the area tributary to and including: (1) the Trinity River (Upper), (2) the Trinity River (Middle), and (3) the Trinity River (Lower).						
				Range Land						
				Silviculture						
				Resource Extraction						
				Mine Tailings						
				Nonpoint Source						
1	R	TRINITY RIVER, SOUTH FORK	106.200	Sedimentation/Siltation		Low	80	Miles	0397	1298
				USEPA will be developing TMDL for South Fork Trinity River. Sediment TMDLs will be developed for: (1) areas tributary to and including Hayfork/Corral Creeks and (2) areas tributary to and including the South Fork of the Trinity River except Hayfork/Corral Creeks						
				Riparian Grazing						
				Silviculture						
				Nonpoint Source						
				Temperature		Low	80	Miles	0206	1208
				Elevated temperatures impact coldwater fisheries. USEPA will be developing TMDL for South Fork Trinity River.						
				Riparian Grazing						
				Water Diversions						
				Habitat Modification						
				Removal of Riparian Vegetation						
				Streambank Modification/Destabilization						
1	R	VAN DUZEN RIVER	111.200	Sedimentation/Siltation		Low	63	Miles	0297	1299
				USEPA is developing TMDL for Van Duzen River. Sediment TMDLs will be developed for: (1) areas tributary to and including Yager Creek, (2) areas tributary to and including the Van Duzen River above Bridgeville, and (3) areas tributary to and including the Van Duzen River below Bridgeville.						
				Range Land						
				Silviculture						
				Erosion/Siltation						
				Nonpoint Source						

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# 1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
2	B	CARQUINEZ STRAIT	207.100							
				Chlordane		Low	6560	Acres		
				<i>This listing was made by USEPA.</i>						
				Nonpoint Source						
				Copper		Medium	6560	Acres	2003	2008
				<i>Exceedance of California Toxic Rules dissolved criteria and National Toxic Rules total criteria; elevated water and sediment tissue levels.</i>						
				Municipal Point Sources						
				Urban Runoff/Storm Sewers						
				Other						
				Atmospheric Deposition						
				DDT		Low	6560	Acres		
				<i>This listing was made by USEPA.</i>						
				Nonpoint Source						
				Diazinon		Medium	6560	Acres	2000	2005
				<i>Diazinon levels cause water column toxicity. Two patterns: pulses through riverine systems linked to agricultural application in late winter and pulse from residential land use areas linked to homeowner pesticide use in late spring, early summer. Chlorpyrifos may also be the cause of toxicity; more data needed, however.</i>						
				Nonpoint Source						
				Dieldrin		Low	6560	Acres		
				<i>This listing was made by USEPA.</i>						
				Nonpoint Source						
				Dioxin compounds*		High	6560	Acres		
				<i>* The specific compounds are: 2,3,7,8-TCDD, 1,2,3,7,8-PeCDD, 1,2,3,4,7,8-HxCDD, 1,2,3,6,7,8-HxCDD, 1,2,3,7,8,9-HxCDD, 1,2,3,4,6,7,8-HpCDD, and OCDD.</i>						
				<i>This listing was made by USEPA.</i>						
				Atmospheric Deposition						
				Exotic Species		High	6560	Acres	1998	2003
				<i>Disrupt natural benthos; change pollutant availability in food chain; disrupt food availability to native species.</i>						
				Ballast Water						
				Furan compounds*		High	6560	Acres		
				<i>* The specific compounds are: 2,3,7,8-TCDF, 1,2,3,7,8-PeCDF, 2,3,4,7,8-PeCDF, 1,2,3,4,7,8-HxCDF, 1,2,3,6,7,8-HxCDF, 1,2,3,7,8,9-HxCDF, 2,3,4,6,7,8-HxCDF, 1,2,3,4,6,7,8-HpCDF, 1,2,3,4,7,8,9-HpCDF, and OCDF.</i>						
				<i>This listing was made by USEPA.</i>						
				Atmospheric Deposition						

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# 1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				<b>Mercury</b>		High	6560	Acres	1998	2003
				<i>Current data indicate fish consumption and wildlife consumption impacted uses. Major source is historic: gold mining sediments and local mercury mining; most significant ongoing source is erosion and drainage from abandoned mines; moderate to low level inputs from point sources.</i>						
				Industrial Point Sources						
				Municipal Point Sources						
				Resource Extraction						
				Atmospheric Deposition						
				Natural Sources						
				Nonpoint Source						
				<b>Nickel</b>		Low	6560	Acres	2006	2010
				<i>Exceedance of California Toxic Rules dissolved criteria and National Toxic Rules total criteria; elevated water and sediment tissue levels.</i>						
				Municipal Point Sources						
				Urban Runoff/Storm Sewers						
				Other						
				<b>PCBs</b>		Medium	6560	Acres	2003	2008
				<i>This listing covers non dioxin-like PCBs.</i>						
				<i>Interim health advisory for fish; uncertainty regarding water column concentration data.</i>						
				Unknown Nonpoint Source						
				<b>PCBs (dioxin-like)*</b>		High	6560	Acres		
				<i>* The specific dioxin-like PCBs are 3,4,4',5-TCB (81), 3,3',3,3'-TCB (77), 3,3',4,4',5-PeCB (126), 3,3',4,4',4,4'-HxCB (169), 2,3,3',4,4'-PeCB (105), 2,3,4,4',5-PeCB (114), 2,3',4,4',5-PeCB (118), 2',3,4,4',5-PeCB (123), 2,3,3',4,4',5-HxCB (156), 2,3,3',4,4',5-HxCB (157), 2,3',4,4',5,5'-HxCB (167), 2,3,3',4,4',5,5'-HpCB (189).</i>						
				<i>This listing was made by USEPA.</i>						
				Unknown Nonpoint Source						
				<b>Selenium</b>		Low	6560	Acres	2006	2010
				<i>Affected use is one branch of the food chain; most sensitive indicator is hatchability in nesting diving birds, significant contributions from oil refineries (control program in place) and agriculture (carried downstream by rivers); exotic species may have made food chain more susceptible to accumulation of selenium; health consumption advisory in effect for scaup and scoter (diving ducks); low TMDL priority because Individual Control Strategy in place.</i>						
				Industrial Point Sources						
				Agriculture						
2	B	RICHARDSON BAY	203.130	<b>Chlordane</b>		Low	2560	Acres		
				<i>This listing was made by USEPA.</i>						
				Nonpoint Source						
				<b>DDT</b>		Low	2560	Acres		
				<i>This listing was made by USEPA.</i>						
				Nonpoint Source						
				<b>Dieldrin</b>		Low	2560	Acres		
				<i>This listing was made by USEPA.</i>						
				Nonpoint Source						

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# 1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				Dioxin compounds*		High	2560	Acres		
				* The specific compounds are: 2,3,7,8-TCDD, 1,2,3,7,8-PeCDD, 1,2,3,4,7,8-HxCDD, 1,2,3,6,7,8-HxCDD, 1,2,3,7,8,9-HxCDD, 1,2,3,4,6,7,8-HpCDD, and OCDD.						
				This listing was made by USEPA.						
					Atmospheric Deposition					
				Exotic Species		High	2560	Acres	1998	2003
				Disrupt natural benthos; change pollutant availability in food chain; endanger food availability to native species.						
					Ballast Water					
				Furan compounds*		High	2560	Acres		
				* The specific compounds are: 2,3,7,8-TCDF, 1,2,3,7,8-PeCDF, 2,3,4,7,8-PeCDF, 1,2,3,4,7,8-HxCDF, 1,2,3,6,7,8-HxCDF, 1,2,3,7,8,9-HxCDF, 2,3,4,6,7,8-HxCDF, 1,2,3,4,6,7,8-HpCDF, 1,2,3,4,7,8,9-HpCDF, and OCDF.						
				This listing was made by USEPA.						
					Atmospheric Deposition					
				High Coliform Count		Medium	200	Acres	2003	2008
				Affected area, Waldo Point Harbor, is less than 10% of embayment; source has been positively identified as substandard sewage systems in some houseboat areas; extensive local control program in place with significant water quality improvements.						
					Urban Runoff/Storm Sewers					
					Septage Disposal					
					Boat Discharges/Vessel Wastes					
				Mercury		High	2560	Acres	1998	2003
				Current data indicate fish consumption and wildlife consumption impacted uses: health consumption advisory in effect for multiple fish species including striped bass and shark. Major source is historic: gold mining sediments and local mercury mining; most significant ongoing source is erosion and drainage from abandoned mines; moderate to low level inputs from point sources.						
					Municipal Point Sources					
					Resource Extraction					
					Atmospheric Deposition					
					Natural Sources					
					Nonpoint Source					
				PCBs		Medium	2560	Acres	2003	2008
				This listing covers non dioxin-like PCBs.						
				Interim health advisory for fish; uncertainty regarding water column concentration data.						
					Unknown Nonpoint Source					
				PCBs (dioxin-like)*		High	2560	Acres		
				* The specific dioxin-like PCBs are 3,4,4',5'-TCB (81), 3,3',3,3'-TCB (77), 3,3',4,4',5'-PeCB (126), 3,3',4,4',4,4'-HxCB (169), 2,3,3',4,4'-PeCB (105), 2,3,4,4',5'-PeCB (114), 2,3',4,4',5'-PeCB (118), 2',3,4,4',5'-PeCB (123), 2,3,3',4,4',5'-HxCB (156), 2,3,3',4,4',5'-HxCB (157), 2,3',4,4',5,5'-HxCB (167), 2,3,3',4,4',5,5'-HpCB (189).						
				This listing was made by USEPA.						
					Unknown Nonpoint Source					

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# 1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
2	B	SAN FRANCISCO BAY, CENTRAL	203.120	Chlordane		Low	67700	Acres		
				This listing was made by USEPA.						
				Nonpoint Source						
				Copper		Medium	67700	Acres	2003	2008
				Exceedance of California Toxic Rules dissolved criteria and National Toxic Rules total criteria; elevated water and sediment tissue levels.						
				Municipal Point Sources						
				Urban Runoff/Storm Sewers						
				Other						
				Atmospheric Deposition						
				DDT		Low	67700	Acres		
				This listing was made by USEPA.						
				Nonpoint Source						
				Diazinon		Medium	67700	Acres	2000	2005
				Diazinon levels cause water column toxicity. Two patterns: pulses through riverine systems linked to agricultural application in late winter and pulse from residential land use areas linked to homeowner pesticide use in late spring, early summer. Chlorpyrifos may also be the cause of toxicity; more data needed, however.						
				Nonpoint Source						
				Dieldrin		Low	67700	Acres		
				This listing was made by USEPA.						
				Nonpoint Source						
				Dioxin compounds*		High	67700	Acres		
				* The specific compounds are: 2,3,7,8-TCDD, 1,2,3,7,8-PeCDD, 1,2,3,4,7,8-HxCDD, 1,2,3,6,7,8-HxCDD, 1,2,3,7,8,9-HxCDD, 1,2,3,4,6,7,8-HpCDD, and OCDD.						
				This listing was made by USEPA.						
				Atmospheric Deposition						
				Exotic Species		High	67700	Acres	1998	2003
				Disrupt natural benthos; change pollutant availability in food chain; endanger food availability to native species.						
				Ballast Water						
				Furan compounds*		High	67700	Acres		
				* The specific compounds are: 2,3,7,8-TCDF, 1,2,3,7,8-PeCDF, 2,3,4,7,8-PeCDF, 1,2,3,4,7,8-HxCDF, 1,2,3,6,7,8-HxCDF, 1,2,3,7,8,9-HxCDF, 2,3,4,6,7,8-HxCDF, 1,2,3,4,6,7,8-HpCDF, 1,2,3,4,7,8,9-HpCDF, and OCDF.						
				This listing was made by USEPA.						
				Atmospheric Deposition						

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REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
2	B	SAN FRANCISCO BAY, LOWER	204.100	Mercury		High	67700	Acres	1998	2003
				Current data indicate fish consumption and wildlife consumption impacted uses: health consumption advisory in effect for multiple fish species including striped bass and shark. Major source is historic: gold mining sediments and local mercury mining; most significant ongoing source is erosion and drainage from abandoned mines; moderate to low level inputs from point sources.						
				Industrial Point Sources						
				Municipal Point Sources						
				Resource Extraction						
				Atmospheric Deposition						
				Natural Sources						
				Nonpoint Source						
				PCBs		Medium	67700	Acres	2003	2008
				This listing covers non dioxin-like PCBs. Interim health advisory for fish; uncertainty regarding water column concentration data.						
2	B	SAN FRANCISCO BAY, LOWER	204.100	Unknown Nonpoint Source						
				PCBs (dioxin-like)*		High	67700	Acres		
				* The specific dioxin-like PCBs are 3,4,4',5-TCB (81), 3,3',3,3'-TCB (77), 3,3',4,4',5-PeCB (126), 3,3',4,4',4,4'-HxCB (169), 2,3,3',4,4'-PeCB (105), 2,3,4,4',5-PeCB (114), 2,3',4,4',5-PeCB (118), 2',3,4,4',5-PeCB (123), 2,3,3',4,4',5-HxCB (156), 2,3,3',4,4',5'-HxCB (157), 2,3',4,4',5,5'-HxCB (167), 2,3,3',4,4',5,5'-HpCB (189)						
				This listing was made by USEPA.						
				Unknown Nonpoint Source						
				Selenium		Low	67700	Acres	2006	2010
				Affected use is one branch of the food chain; most sensitive indicator is hatchability in nesting diving birds, significant contributions from oil refineries (control program in place) and agriculture (carried downstream by rivers); exotic species may have made food chain more susceptible to accumulation of selenium; health consumption advisory in effect for scaup and scoter (diving ducks); low TMDL priority because Individual Control Strategy in place.						
				Industrial Point Sources						
				Agriculture						
				Natural Sources						
2	B	SAN FRANCISCO BAY, LOWER	204.100	Exotic Species						
				Chlordane		Low	79900	Acres		
				This listing was made by USEPA.						
				Nonpoint Source						
				Copper		Medium	79900	Acres	2003	2008
				Exceedance of California Toxic Rules dissolved criteria and National Toxic Rules total criteria; elevated water and sediment tissue levels.						
				Municipal Point Sources						
				Urban Runoff/Storm Sewers						
				Other						
				Atmospheric Deposition						
2	B	SAN FRANCISCO BAY, LOWER	204.100	DDT		Low	79900	Acres		
				This listing was made by USEPA.						
2	B	SAN FRANCISCO BAY, LOWER	204.100	Nonpoint Source						

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Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				<b>Diazinon</b>		Medium	79900	Acres	2000	2005
				<i>Diazinon levels cause water column toxicity. Two patterns: pulses through riverine systems linked to agricultural application in late winter and pulse from residential land use areas linked to homeowner pesticide use in late spring, early summer. Chlorpyrifos may also be the cause of toxicity; more data needed, however.</i>						
				Nonpoint Source						
				<b>Dieldrin</b>		Low	79900	Acres		
				<i>This listing was made by USEPA.</i>						
				Nonpoint Source						
				<b>Dioxin compounds*</b>		High	79900	Acres		
				<i>* The specific compounds are: 2,3,7,8-TCDD, 1,2,3,7,8-PeCDD, 1,2,3,4,7,8-HxCDD, 1,2,3,6,7,8-HxCDD, 1,2,3,7,8,9-HxCDD, 1,2,3,4,6,7,8-HpCDD, and OCDD.</i>						
				<i>This listing was made by USEPA.</i>						
				Atmospheric Deposition						
				<b>Exotic Species</b>		High	79900	Acres	1998	2003
				<i>Disrupt natural benthos; change pollutant availability in food chain; endanger food availability to native species.</i>						
				Ballast Water						
				<b>Furan compounds*</b>		High	79900	Acres		
				<i>* The specific compounds are: 2,3,7,8-TCDF, 1,2,3,7,8-PeCDF, 2,3,4,7,8-PeCDF, 1,2,3,4,7,8-HxCDF, 1,2,3,6,7,8-HxCDF, 1,2,3,7,8,9-HxCDF, 2,3,4,6,7,8-HxCDF, 1,2,3,4,6,7,8-HpCDF, 1,2,3,4,7,8,9-HpCDF, and OCDF.</i>						
				<i>This listing was made by USEPA.</i>						
				Atmospheric Deposition						
				<b>Mercury</b>		High	79900	Acres	1998	2003
				<i>Current data indicate fish consumption and wildlife consumption impacted uses: health consumption advisory in effect for multiple fish species including striped bass and shark. Major source is historic: gold mining sediments and local mercury mining; most significant ongoing source is erosion and drainage from abandoned mines; moderate to low level inputs from point sources; water objective exceedances. Elevated sediment levels, elevated tissue levels.</i>						
				Industrial Point Sources						
				Municipal Point Sources						
				Resource Extraction						
				Atmospheric Deposition						
				Natural Sources						
				Nonpoint Source						
				<b>Nickel</b>		Medium	79900	Acres	2003	2008
				<i>Exceedance of California Toxic Rules dissolved criteria and National Toxic Rules total criteria; elevated water and sediment tissue levels of nickel.</i>						
				Municipal Point Sources						
				Urban Runoff/Storm Sewers						
				Other						
				Atmospheric Deposition						
				<b>PCBs</b>		Medium	79900	Acres	2003	2008
				<i>This listing covers non dioxin-like PCBs.</i>						
				<i>Interim health advisory for fish: uncertainty regarding water column concentration data.</i>						
				Unknown Nonpoint Source						

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# 1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				PCBs (dioxin-like)*		High	79900	Acres		
				* The specific dioxin-like PCBs are 3,4,4',5-TCB (81), 3,3',3,3'-TCB (77), 3,3',4,4',5-PeCB (126), 3,3',4,4',4,4'-HxCB (169), 2,3,3',4,4'-PeCB (105), 2,3,4,4',5-PeCB (114), 2,3',4,4',5-PeCB (118), 2',3,4,4',5-PeCB (123), 2,3,3',4,4',5-HxCB (156), 2,3,3',4,4',5'-HxCB (157), 2,3',4,4',5,5'-HxCB (167), 2,3,3',4,4',5,5'-HpCB (189).						
				This listing was made by USEPA.						
				Unknown Nonpoint Source						
2	B	SAN FRANCISCO BAY, SOUTH	205.100	Chlordane		Low	24500	Acres		
				This listing was made by USEPA.						
				Nonpoint Source						
				Copper		High	24500	Acres	1998	2003
				Exceedance of California Toxic Rules dissolved criteria and National Toxic Rules total criteria; elevated water and sediment tissue levels.						
				Municipal Point Sources						
				Urban Runoff/Storm Sewers						
				Other						
				Atmospheric Deposition						
				DDT		Low	24500	Acres		
				This listing was made by USEPA.						
				Nonpoint Source						
				Diazinon		Medium	24500	Acres	2000	2005
				Diazinon levels cause water column toxicity. Two patterns: pulses through riverine systems linked to agricultural application in late winter and pulse from residential land use areas linked to homeowner pesticide use in late spring, early summer. Chlorpyrifos may also be the cause of toxicity; more data needed, however.						
				Nonpoint Source						
				Dieldrin		Low	24500	Acres		
				This listing was made by USEPA.						
				Nonpoint Source						
				Dioxin compounds*		High	24500	Acres		
				* The specific compounds are: 2,3,7,8-TCDD, 1,2,3,7,8-PeCDD, 1,2,3,4,7,8-HxCDD, 1,2,3,6,7,8-HxCDD, 1,2,3,7,8,9-HxCDD, 1,2,3,4,6,7,8-HpCDD, and OCDD.						
				This listing was made by USEPA.						
				Atmospheric Deposition						
				Exotic Species		High	24500	Acres	1998	2003
				Disrupt natural benthos; change pollutant availability in food chain; endanger food availability to native species.						
				Ballast Water						
				Furan compounds*		High	24500	Acres		
				* The specific compounds are: 2,3,7,8-TCDF, 1,2,3,7,8-PeCDF, 2,3,4,7,8-PeCDF, 1,2,3,4,7,8-HxCDF, 1,2,3,6,7,8-HxCDF, 1,2,3,7,8,9-HxCDF, 2',3,4,6,7,8-HxCDF, 1,2,3,4,6,7,8-HpCDF, 1,2,3,4,7,8,9-HpCDF, and OCDF.						
				This listing was made by USEPA.						
				Atmospheric Deposition						

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# 1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
2	B	SAN PABLO BAY	206.100	Mercury		High	24500	Acres	1998	2003
				Current data indicate fish consumption and wildlife consumption impacted uses: health consumption advisory in effect for multiple fish species including striped bass and shark. Major source is historic: gold mining sediments and local mercury mining; most significant ongoing source is erosion and drainage from abandoned mines; moderate to low level inputs from point sources; water objective exceedances. Elevated sediment levels, elevated tissue levels.						
				Industrial Point Sources						
				Municipal Point Sources						
				Resource Extraction						
				Atmospheric Deposition						
				Natural Sources						
				Nonpoint Source						
				Nickel		High	24500	Acres	1998	2003
				Exceedance of California Toxic Rules dissolved criteria and National Toxic Rules total criteria; elevated water and sediment tissue levels.						
				Municipal Point Sources						
				Urban Runoff/Storm Sewers						
				Other						
				PCBs		Medium	24500	Acres	2003	2008
				This listing covers non dioxin-like PCBs.						
				Interim health advisory for fish; uncertainty regarding water column concentration data.						
				Unknown Nonpoint Source						
				PCBs (dioxin-like)*		High	24500	Acres		
				* The specific dioxin-like PCBs are 3,4,4',5-TCB (81), 3,3',3,3'-TCB (77), 3,3',4,4',5-PeCB (126), 3,3',4,4',4'-HxCB (169), 2,3,3',4,4'-PeCB (105), 2,3,4,4',5-PeCB (114), 2,3',4,4',5-PeCB (118), 2',3,4,4',5-PeCB (123), 2,3,3',4,4',5-HxCB (156), 2,3,3',4,4',5-HxCB (157), 2,3',4,4',5,5'-HxCB (167), 2,3,3',4,4',5,5'-HpCB (189).						
				This listing was made by USEPA.						
				Unknown Nonpoint Source						
				Selenium		Low	24500	Acres	2006	2010
				A formal health advisory has been issued by OEHA for benthic-feeding ducks in South San Francisco Bay.						
				This health advisory clearly establishes that water contact recreation beneficial use (REC-1) is not fully supported and standards are not fully met.						
				Agriculture						
				Domestic Use of Ground Water						
				Chlordane		Low	71300	Acres		
				This listing was made by USEPA.						
				Nonpoint Source						
				Copper		Medium	71300	Acres	2003	2008
				Exceedance of California Toxic Rules dissolved criteria and National Toxic Rules total criteria; elevated water and sediment tissue levels.						
				Municipal Point Sources						
				Urban Runoff/Storm Sewers						
				Atmospheric Deposition						
				Other						

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# 1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				DDT		Low	71300	Acres		
				<i>This listing was made by USEPA.</i>						
				Nonpoint Source						
				Diazinon		Medium	71300	Acres	2000	2005
				<i>Diazinon levels cause water column toxicity. Two patterns: pulses through riverine systems linked to agricultural application in late winter and pulse from residential land use areas linked to homeowner pesticide use in late spring, early summer. Chlorpyrifos may also be the cause of toxicity; more data needed, however.</i>						
				Nonpoint Source						
				Dieldrin		Low	71300	Acres		
				<i>This listing was made by USEPA.</i>						
				Nonpoint Source						
				Dioxin compounds*		High	71300	Acres		
				* The specific compounds are: 2,3,7,8-TCDD, 1,2,3,7,8-PeCDD, 1,2,3,4,7,8-HxCDD, 1,2,3,6,7,8-HxCDD, 1,2,3,7,8,9-HxCDD, 1,2,3,4,6,7,8-HpCDD, and OCDD.						
				<i>This listing was made by USEPA.</i>						
				Atmospheric Deposition						
				Exotic Species		High	71300	Acres	1998	2003
				<i>Disrupt natural benthos; change pollutant availability in food chain; disrupt food availability to native species.</i>						
				Ballast Water						
				Furan compounds*		High	71300	Acres		
				* The specific compounds are: 2,3,7,8-TCDF, 1,2,3,7,8-PeCDF, 2,3,4,7,8-PeCDF, 1,2,3,4,7,8-HxCDF, 1,2,3,6,7,8-HxCDF, 1,2,3,7,8,9-HxCDF, 2,3,4,6,7,8-HxCDF, 1,2,3,4,6,7,8-HpCDF, 1,2,3,4,7,8,9-HpCDF, and OCDF.						
				<i>This listing was made by USEPA.</i>						
				Atmospheric Deposition						
				Mercury		High	71300	Acres	1998	2003
				<i>Current data indicate fish consumption and wildlife consumption impacted uses: health consumption advisory in effect for multiple fish species including striped bass and shark. Major source is historic: gold mining sediments and local mercury mining; most significant ongoing source is erosion and drainage from abandoned mines; moderate to low level inputs from point sources.</i>						
				Municipal Point Sources						
				Resource Extraction						
				Atmospheric Deposition						
				Natural Sources						
				Nonpoint Source						
				Nickel		Low	71300	Acres	2006	2010
				<i>Exceedance of California Toxic Rules dissolved criteria and National Toxic Rules total criteria; elevated water and sediment tissue levels.</i>						
				Municipal Point Sources						
				Urban Runoff/Storm Sewers						
				Other						
				PCBs		Medium	71300	Acres	2003	2008
				<i>This listing covers non dioxin-like PCBs.</i>						
				<i>Interim health advisory for fish; uncertainty regarding water column concentration data.</i>						
				Unknown Nonpoint Source						

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# 1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				PCBs (dioxin-like)*		High	71300	Acres		
				* The specific dioxin-like PCBs are 3,4,4',5-TCB (81), 3,3',3,3'-TCB (77), 3,3',4,4',5-PeCB (126), 3,3',4,4',4,4'-HxCB (169), 2,3,3',4,4'-PeCB (105), 2,3,4,4',5-PeCB (114), 2,3',4,4',5-PeCB (118), 2',3,4,4',5-PeCB (123), 2,3,3',4,4',5-HxCB (156), 2,3,3',4,4',5'-HxCB (157), 2,3',4,4',5,5'-HxCB (167), 2,3,3',4,4',5,5'-HpCB (189).						
				This listing was made by USEPA.						
				Unknown Nonpoint Source						
				Selenium		Low	71300	Acres	2006	2010
				Affected use is one branch of the food chain; most sensitive indicator is hatchability in nesting diving birds, significant contributions from oil refineries (control program in place) and agriculture (carried downstream by rivers); exotic species may have made food chain more susceptible to accumulation of selenium; health consumption advisory in effect for scaup and scoter (diving ducks); low TMDL priority because Individual Control Strategy in place.						
				Industrial Point Sources						
				Agriculture						
				Natural Sources						
				Exotic Species						
2	B	SUISUN BAY	207.100	Chlordane		Low	25000	Acres		
				This listing was made by USEPA.						
				Nonpoint Source						
				Copper		Medium	25000	Acres	2003	2008
				Exceedance of California Toxic Rules dissolved criteria and National Toxic Rules total criteria; elevated water and sediment tissue levels.						
				Municipal Point Sources						
				Urban Runoff/Storm Sewers						
				Other						
				Atmospheric Deposition						
				DDT		Low	25000	Acres		
				This listing was made by USEPA.						
				Nonpoint Source						
				Diazinon		Medium	25000	Acres	2000	2005
				Diazinon levels cause water column toxicity. Two patterns: pulses through riverine systems linked to agricultural application in late winter and pulse from residential land use areas linked to homeowner pesticide use in late spring, early summer. Chlorpyrifos may also be the cause of toxicity; more data needed, however.						
				Nonpoint Source						
				Dieldrin		Low	25000	Acres		
				This listing was made by USEPA.						
				Nonpoint Source						
				Dioxin compounds*		High	25000	Acres		
				* The specific compounds are: 2,3,7,8-TCDD, 1,2,3,7,8-PeCDD, 1,2,3,4,7,8-HxCDD, 1,2,3,6,7,8-HxCDD, 1,2,3,7,8,9-HxCDD, 1,2,3,4,6,7,8-HpCDD, and OCDD.						
				This listing was made by USEPA.						
				Atmospheric Deposition						

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# 1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				<b>Exotic Species</b>		High	25000	Acres	1998	2003
				<i>Disrupt natural benthos; change pollutant availability in food chain; disrupt food availability to native species.</i>						
				<b>Ballast Water</b>						
				<b>Furan compounds*</b>		High	25000	Acres		
				<i>* The specific compounds are: 2,3,7,8-TCDF, 1,2,3,7,8-PcCDF, 2,3,4,7,8-PeCDF, 1,2,3,4,7,8-HxCDF, 1,2,3,6,7,8-HxCDF, 1,2,3,7,8,9-HxCDF, 2',3,4,6,7,8-HxCDF, 1,2,3,4,6,7,8-HpCDF, 1,2,3,4,7,8,9-HpCDF, and OCDF.</i>						
				<i>This listing was made by USEPA.</i>						
				<b>Atmospheric Deposition</b>						
				<b>Mercury</b>		High	25000	Acres	1998	2003
				<i>Current data indicate fish consumption and wildlife consumption impacted uses. Major source is historic: gold mining sediments and local mercury mining; most significant ongoing source is erosion and drainage from abandoned mines; moderate to low level inputs from point sources.</i>						
				<b>Industrial Point Sources</b>						
				<b>Resource Extraction</b>						
				<b>Atmospheric Deposition</b>						
				<b>Natural Sources</b>						
				<b>Nonpoint Source</b>						
				<b>Nickel</b>		Low	25000	Acres	2006	2010
				<i>Exceedance of California Toxic Rules dissolved criteria and National Toxic Rules total criteria; elevated water and sediment tissue levels.</i>						
				<b>Municipal Point Sources</b>						
				<b>Urban Runoff/Storm Sewers</b>						
				<b>Other</b>						
				<b>PCBs</b>		Medium	25000	Acres	2003	2008
				<i>This listing covers non dioxin-like PCBs.</i>						
				<i>Interim health advisory for fish; uncertainty regarding water column concentration data.</i>						
				<b>Unknown Nonpoint Source</b>						
				<b>PCBs (dioxin-like)*</b>		High	25000	Acres		
				<i>* The specific dioxin-like PCBs are 3,4,4',5-TCB (81), 3,3',3,3'-TCB (77), 3,3',4,4',5-PeCB (126), 3,3',4,4',4,4'-HxCB (169), 2,3,3',4,4'-PeCB (105), 2,3,4,4',5-PeCB (114), 2,3',4,4',5-PeCB (118), 2',3,4,4',5-PeCB (123), 2,3,3',4,4',5-HxCB (156), 2,3,3',4,4',5'-HxCB (157), 2,3',4,4',5,5'-HxCB (167), 2,3,3',4,4',5,5'-HpCB (189).</i>						
				<i>This listing was made by USEPA.</i>						
				<b>Unknown Nonpoint Source</b>						
				<b>Selenium</b>		Low	25000	Acres	2006	2010
				<i>Affected use is one branch of the food chain; most sensitive indicator is hatchability in nesting diving birds, significant contributions from oil refineries (control program in place) and agriculture (carried downstream by rivers); exotic species may have made food chain more susceptible to accumulation of selenium; health consumption advisory in effect for scaup and scoter (diving ducks); low TMDL priority because Individual Control Strategy in place.</i>						
				<b>Industrial Point Sources</b>						
				<b>Natural Sources</b>						
				<b>Exotic Species</b>						

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Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
2	B	TOMALES BAY	201.110	Metals		Medium	7820	Acres	2002	2007
				TMDL will be developed as part of evolving watershed management effort. Tributary streams, Lagunitas Creek and Walker Creek, must be managed first. Additional monitoring and assessment needed.						
				Mine Tailings						
				Nutrients		Medium	7820	Acres	2002	2007
				TMDL will be developed as part of evolving watershed management effort. Tributary streams, Lagunitas Creek and Walker Creek, must be managed first. Additional monitoring and assessment needed.						
				Agriculture						
				Pathogens		Medium	7820	Acres	2002	2007
				TMDL will be developed as part of evolving watershed management effort. Tributary streams, Lagunitas Creek and Walker Creek, must be managed first. Additional monitoring and assessment needed.						
				Animal Operations						
				Septage Disposal						
				Sedimentation/Siltation		Medium	7820	Acres	2002	2007
				TMDL will be developed as part of evolving watershed management effort. Tributary streams, Lagunitas Creek and Walker Creek, must be managed first. Additional monitoring and assessment needed.						
				Agriculture						
				Upstream Impoundment						
2	E	SACRAMENTO SAN JOAQUIN DELTA	207.100	Chlordane		Low	15000	Acres		
				This listing was made by USEPA.						
				Nonpoint Source						
				Copper		Medium	15000	Acres	2003	2008
				Exceedance of California Toxic Rules dissolved criteria and National Toxic Rules total criteria; elevated water and sediment tissue levels.						
				Municipal Point Sources						
				Urban Runoff/Storm Sewers						
				Other						
				Atmospheric Deposition						
				DDT		Low	15000	Acres		
				This listing was made by USEPA.						
				Nonpoint Source						
				Diazinon		Medium	15000	Acres	2000	2005
				Diazinon levels cause water column toxicity. Two patterns: pulses through riverine systems linked to agricultural application in late winter and pulse from residential land use areas linked to homeowner pesticide use in late spring, early summer. Chlorpyrifos may also be the cause of toxicity; more data needed, however.						
				Nonpoint Source						
				Dieldrin		Low	15000	Acres		
				This listing was made by USEPA.						
				Nonpoint Source						

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REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				Dioxin compounds*		High	15000	Acres		
				* The specific compounds are: 2,3,7,8-TCDD, 1,2,3,7,8-PeCDD, 1,2,3,4,7,8-HxCDD, 1,2,3,6,7,8-HxCDD, 1,2,3,7,8,9-HxCDD, 1,2,3,4,6,7,8-HpCDD, and OCDD.						
				This listing was made by USEPA.						
				Atmospheric Deposition						
				Exotic Species		High	15000	Acres	1998	2003
				Disrupt natural benthos; change pollutant availability in food chain; endanger food availability to native species.						
				Ballast Water						
				Furan compounds*		High	15000	Acres		
				* The specific compounds are: 2,3,7,8-TCDF, 1,2,3,7,8-PcCDF, 2,3,4,7,8-PeCDF, 1,2,3,4,7,8-HxCDF, 1,2,3,6,7,8-HxCDF, 1,2,3,7,8,9-HxCDF, 2,3,4,6,7,8-HxCDF, 1,2,3,4,6,7,8-HpCDF, 1,2,3,4,7,8,9-HpCDF, and OCDF.						
				This listing was made by USEPA.						
				Atmospheric Deposition						
				Mercury		High	15000	Acres	1998	2003
				Current data indicate fish consumption and wildlife consumption impacted uses. Major source is historic: gold mining sediments and local mercury mining; most significant ongoing source is erosion and drainage from abandoned mines; moderate to low level inputs from point sources.						
				Industrial Point Sources						
				Municipal Point Sources						
				Resource Extraction						
				Atmospheric Deposition						
				Nonpoint Source						
				Nickel		Low	15000	Acres	2006	2010
				Exceedance of California Toxic Rules dissolved criteria and National Toxic Rules total criteria; elevated water and sediment tissue levels.						
				Municipal Point Sources						
				Urban Runoff/Storm Sewers						
				Other						
				PCBs		Medium	15000	Acres	2003	2008
				This listing covers non dioxin-like PCBs.						
				Interim health advisory for fish; uncertainty regarding water column concentration data.						
				Unknown Nonpoint Source						
				PCBs (dioxin-like)*		High	15000	Acres		
				* The specific dioxin-like PCBs are 3,4,4',5-TCB (81), 3,3',3,3'-TCB (77), 3,3',4,4',5-PeCB (126), 3,3',4,4',4,4'-HxCB (169), 2,3,3',4,4'-PeCB (105), 2,3,4,4',5-PeCB (114), 2,3',4,4',5-PeCB (118), 2',3,4,4',5-PeCB (123), 2,3,3',4,4',5-HxCB (156), 2,3,3',4,4',5'-HxCB (157), 2,3',4,4',5,5'-HxCB (167), 2,3,3',4,4',5,5'-HpCB (189).						
				This listing was made by USEPA.						
				Unknown Nonpoint Source						

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REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				Selenium		Low	15000	Acres	2006	2010
				Affected use is one branch of the food chain; most sensitive indicator is hatchability in nesting diving birds, significant contributions from oil refineries (control program in place) and agriculture (carried downstream by rivers); exotic species may have made food chain more susceptible to accumulation of selenium; health consumption advisory in effect for scaup and scoter (diving ducks); low TMDL priority because Individual Control Strategy in place.						
					Industrial Point Sources					
					Agriculture					
					Natural Sources					
					Exotic Species					
2	L	CALERO RESERVOIR	205.400	Mercury		High	350	Acres	1998	2003
				TMDL will be developed as part of the Santa Clara Basin Watershed Management Initiative. Additional monitoring and assessment is needed.						
					Surface Mining					
					Mine Tailings					
2	L	GUADALUPE RESERVOIR	205.400	Mercury		High	80	Acres	1998	2003
				TMDL will be developed as part of the Santa Clara Basin Watershed Management Initiative. Additional monitoring and assessment is needed.						
					Surface Mining					
					Mine Tailings					
2	L	LAKE HERMAN	207.210	Mercury		Low	110	Acres	2005	2010
				Additional monitoring and assessment needed. Problem due to historical mining.						
					Surface Mining					
2	L	MERRITT LAKE	204.200	Floating Material		Low	160	Acres		
				This listing was made by USEPA.						
					Nonpoint Source					
				Org. enrichment/Low D.O.		Low	160	Acres		
				This listing was made by USEPA.						
					Nonpoint Source					
2	R	ALAMEDA CREEK	204.300	Diazinon		Low	50.77	Miles		
				This listing was made by USEPA.						
					Urban Runoff/Storm Sewers					
2	R	ALAMITOS CREEK	205.400	Mercury		High	21	Miles	1998	2003
				TMDL will be developed as part of the Santa Clara Basin Watershed Management Initiative. Additional monitoring and assessment is needed.						
					Mine Tailings					

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# 1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

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REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
2	R	ARROYO CORTE MADERA DEL PRESIDIO	203.200	Diazinon <i>This listing was made by USEPA.</i>	Urban Runoff/Storm Sewers	Low	3.2	Miles		
2	R	ARROYO DE LA LAGUNA	204.300	Diazinon <i>This listing was made by USEPA.</i>	Urban Runoff/Storm Sewers	Low	7.4	Miles		
2	R	ARROYO DEL VALLE	204.300	Diazinon <i>This listing was made by USEPA.</i>	Urban Runoff/Storm Sewers	Low	48.7	Miles		
2	R	ARROYO HONDO	204.300	Diazinon <i>This listing was made by USEPA.</i>	Urban Runoff/Storm Sewers	Low	9.23	Miles		
2	R	BUTANO CREEK	202.400	Sedimentation/Siltation <i>Impairment to steelhead habitat.</i>	Nonpoint Source	Medium	1	Miles	2000	2005
2	R	CALABAZAS CREEK	206.401	Diazinon <i>This listing was made by USEPA.</i>	Urban Runoff/Storm Sewers	Low	4.7	Miles		
2	R	CORTE MADERA CREEK	203.200	Diazinon <i>This listing was made by USEPA.</i>	Urban Runoff/Storm Sewers	Low	4.12	Miles		
2	R	COYOTE CREEK (MARIN CO)	203.200	Diazinon <i>This listing was made by USEPA.</i>	Urban Runoff/Storm Sewers	Low	2.62	Miles		
2	R	COYOTE CREEK (SANTA CLARA CO.)	205.300	Diazinon <i>This listing was made by USEPA.</i>	Urban Runoff/Storm Sewers	Low	68.63	Miles		
2	R	GALLINAS CREEK	206.200	Diazinon <i>This listing was made by USEPA.</i>	Urban Runoff/Storm Sewers	Low	2.4	Miles		

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2	R	GUADALUPE CREEK	205.400	Mercury TMDL will be developed as part of the Santa Clara Basin Watershed Management Initiative. Additional monitoring and assessment is needed.		High	6	Miles	1998	2003
				Mine Tailings						
2	R	GUADALUPE RIVER	205.400	Diazinon This listing was made by USEPA.		Low	18.21	Miles		
				Urban Runoff/Storm Sewers						
				Mercury TMDL will be developed as part of the Santa Clara Basin Watershed Management Initiative. Additional monitoring and assessment is needed.		High	30	Miles	1998	2003
				Mine Tailings						
2	R	LAGUNITAS CREEK	201.130	Nutrients Tributary to Tomales Bay. TMDLs will be developed as part of evolving watershed management effort. Additional monitoring and assessment needed.		Medium	22	Miles	2002	2007
				Agriculture						
				Urban Runoff/Storm Sewers						
				Pathogens Tributary to Tomales Bay. TMDLs will be developed as part of evolving watershed management effort. Additional monitoring and assessment needed.		Medium	22	Miles	2002	2007
				Agriculture						
				Urban Runoff/Storm Sewers						
				Sedimentation/Siltation Tributary to Tomales Bay. TMDLs will be developed as part of evolving watershed management effort. Additional monitoring and assessment needed.		Medium	22	Miles	2002	2007
				Agriculture						
				Urban Runoff/Storm Sewers						
2	R	LAUREL CREEK	207.230	Diazinon This listing was made by USEPA.		Low	3.02	Miles		
				Urban Runoff/Storm Sewers						
2	R	LEDGEWOOD CREEK	207.230	Diazinon This listing was made by USEPA.		Low	12.44	Miles		
				Urban Runoff/Storm Sewers						
2	R	LOS GATOS CREEK (REG 2)	205.400	Diazinon This listing was made by USEPA.		Low	25.72	Miles		
				Urban Runoff/Storm Sewers						

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REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
2	R	MATADERO CREEK	205.500	Diazinon <i>This listing was made by USEPA.</i>	Urban Runoff/Storm Sewers	Low	7.34	Miles		
2	R	MILLER CREEK	206.200	Diazinon <i>This listing was made by USEPA.</i>	Urban Runoff/Storm Sewers	Low	9.03	Miles		
2	R	MT. DIABLO CREEK	207.310	Diazinon <i>This listing was made by USEPA.</i>	Urban Runoff/Storm Sewers	Low	12.63	Miles		
2	R	NAPA RIVER	206.500	Nutrients <i>TMDL will be developed as part of ongoing watershed management effort. Additional monitoring and assessment needed.</i>	Agriculture	Medium	55	Miles	2000	2005
				Pathogens <i>TMDL will be developed as part of ongoing watershed management effort. Additional monitoring and assessment needed.</i>	Agriculture Urban Runoff/Storm Sewers	Medium	55	Miles	2000	2005
				Sedimentation/Siltation <i>TMDL will be developed as part of ongoing watershed management effort. Additional monitoring and assessment needed.</i>	Agriculture Construction/Land Development Urban Runoff/Storm Sewers	High	55	Miles	1998	2003
2	R	NOVATO CREEK	206.200	Diazinon <i>This listing was made by USEPA.</i>	Urban Runoff/Storm Sewers	Low	18.74	Miles		
2	R	PERMANENTE CREEK	205.500	Diazinon <i>This listing was made by USEPA.</i>	Urban Runoff/Storm Sewers	Low	13.1	Miles		
2	R	PESCADERO CREEK (REG 2)	202.400	Sedimentation/Siltation <i>Impairment to steelhead habitat.</i>	Nonpoint Source	Medium	21	Miles	2000	2005

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REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
2	R	PETALUMA RIVER	206.300	Nutrients <i>TMDL will be developed as part of ongoing watershed management effort. Additional monitoring and assessment needed.</i>	Agriculture Construction/Land Development Urban Runoff/Storm Sewers	Medium	25	Miles	2000	2005
				Pathogens <i>TMDL will be developed as part of ongoing watershed management effort. Additional monitoring and assessment needed.</i>	Agriculture Construction/Land Development Urban Runoff/Storm Sewers	Medium	25	Miles	2000	2005
				Sedimentation/Siltation <i>TMDL will be developed as part of ongoing watershed management effort. Additional monitoring and assessment needed.</i>	Agriculture Construction/Land Development Urban Runoff/Storm Sewers	Medium	25	Miles	2000	2005
2	R	PINE CREEK	207.310	Diazinon <i>This listing was made by USEPA.</i>	Urban Runoff/Storm Sewers	Low	12.56	Miles		
2	R	PINOLE CREEK	206.600	Diazinon <i>This listing was made by USEPA.</i>	Urban Runoff/Storm Sewers	Low	9.17	Miles		
2	R	RODEO CREEK	201.300	Diazinon <i>This listing was made by USEPA.</i>	Urban Runoff/Storm Sewers	Low	7.96	Miles		
2	R	SAN ANTONIO CREEK (REG 2)	206.300	Diazinon <i>This listing was made by USEPA.</i>	Urban Runoff/Storm Sewers	Low	17.77	Miles		
2	R	SAN FELIPE CREEK	205.300	Diazinon <i>This listing was made by USEPA.</i>	Urban Runoff/Storm Sewers	Low	15.47	Miles		
2	R	SAN FRANCISQUITO CREEK	205.500	Diazinon <i>This listing was made by USEPA.</i>	Urban Runoff/Storm Sewers	Low	12.05	Miles		

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REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				Sedimentation/Siltation Impairment to steelhead habitat. Nonpoint Source		Medium	18	Miles	2000	2005
2	R	SAN GREGORIO CREEK	202.300	Sedimentation/Siltation Impairment to steelhead habitat. Nonpoint Source		Medium	16	Miles	2000	2005
2	R	SAN LEANDRO CREEK	204.200	Diazinon This listing was made by USEPA. Urban Runoff/Storm Sewers		Low	14.77	Miles		
2	R	SAN LORENZO CREEK (R2)	204.200	Diazinon This listing was made by USEPA. Urban Runoff/Storm Sewers		Low	11.7	Miles		
2	R	SAN MATEO CREEK	204.400	Diazinon This listing was made by USEPA. Urban Runoff/Storm Sewers		Low	11.05	Miles		
2	R	SAN PABLO CREEK	206.600	Diazinon This listing was made by USEPA. Urban Runoff/Storm Sewers		Low	16.14	Miles		
2	R	SAN RAFAEL CREEK	203.200	Diazinon This listing was made by USEPA. Urban Runoff/Storm Sewers		Low	2.8	Miles		
2	R	SARATOGA CREEK	205.500	Diazinon This listing was made by USEPA. Urban Runoff/Storm Sewers		Low	17.86	Miles		
2	R	SONOMA CREEK	206.400	Nutrients TMDL will be developed as part of ongoing watershed management effort. Additional monitoring and assessment needed. Agriculture Construction/Land Development Urban Runoff/Storm Sewers		Medium	23	Miles	2000	2005

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REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				Pathogens		Medium	23	Miles	2000	2005
				TMDL will be developed as part of ongoing watershed management effort. Additional monitoring and assessment needed.						
					Agriculture					
					Construction/Land Development					
					Urban Runoff/Storm Sewers					
				Sedimentation/Siltation		Medium	23	Miles	2000	2005
				TMDL will be developed as part of ongoing watershed management effort. Additional monitoring and assessment needed.						
					Agriculture					
					Construction/Land Development					
					Urban Runoff/Storm Sewers					
2	R	STEVENS CREEK	205.500	Diazinon		Low	22.26	Miles		
				This listing was made by USEPA.						
					Urban Runoff/Storm Sewers					
2	R	SUISUN SLOUGH	207.23	Diazinon		Low	10	Miles		
				This listing was made by USEPA.						
					Urban Runoff/Storm Sewers					
2	R	WALKER CREEK	201.120	Metals		Medium	25	Miles	2002	2007
				Tributary to Tomales Bay. TMDLs will be developed as part of evolving watershed management effort. Additional monitoring and assessment needed.						
					Surface Mining					
					Mine Tailings					
				Nutrients		Medium	25	Miles	2002	2007
				Tributary to Tomales Bay. TMDLs will be developed as part of evolving watershed management effort. Additional monitoring and assessment needed.						
					Agriculture					
				Sedimentation/Siltation		Medium	25	Miles	2002	2007
				Tributary to Tomales Bay. TMDLs will be developed as part of evolving watershed management effort. Additional monitoring and assessment needed.						
					Agriculture					
2	R	WALNUT CREEK	207.320	Diazinon		Low	9.03	Miles		
				This listing was made by USEPA.						
					Urban Runoff/Storm Sewers					
2	R	WILDCAT CREEK	206.600	Diazinon		Low	12.07	Miles		
				This listing was made by USEPA.						
					Urban Runoff/Storm Sewers					

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REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
2	T	SUISUN MARSH WETLANDS	207.230	Metals		Medium	57000	Acres	2003	2008
				Additional monitoring and assessment needed.						
				Agriculture						
				Urban Runoff/Storm Sewers						
				Flow Regulation/Modification						
				Nutrients		Medium	57000	Acres	2003	2008
				Additional monitoring and assessment needed.						
				Agriculture						
				Urban Runoff/Storm Sewers						
				Flow Regulation/Modification						
				Org. enrichment/Low D.O.		Medium	57000	Acres	2003	2008
				Additional monitoring and assessment needed.						
				Agriculture						
				Urban Runoff/Storm Sewers						
				Flow Regulation/Modification						
				Salinity		Medium	57000	Acres	2003	2008
				Additional monitoring and assessment needed.						
				Agriculture						
				Urban Runoff/Storm Sewers						
				Flow Regulation/Modification						
3	B	MONTEREY HARBOR	309.500	Metals		Medium	74	Acres	0198	0403
				Railroad Slag Pile						
				Unknown Toxicity		Low	74	Acres	0198	0411
				Source Unknown						
3	B	MORRO BAY	310.220	Metals		High	100	Acres	0696	0400
				Surface Mining						
				Nonpoint Source						
				Boat Discharges/Vessel Wastes						
				Pathogens		High	50	Acres	0696	0400
				Upland Grazing						
				Urban Runoff/Storm Sewers						
				Septage Disposal						
				Natural Sources						
				Nonpoint Source						
				Sedimentation/Siltation		High	100	Acres	0696	0699
				Agriculture						
				Irrigated Crop Production						
				Construction/Land Development						
				Resource Extraction						
				Channelization						
				Channel Erosion						

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REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
3	B	MOSS LANDING HARBOR	306.000	Pathogens	Agriculture Nonpoint Source Boat Discharges/Vessel Wastes	Low	40	Acres	0405	0409
				Pesticides	Agriculture Irrigated Crop Production Specialty Crop Production	Low	160	Acres	0405	0409
				Sedimentation/Siltation	Agriculture Irrigated Crop Production Agriculture-storm runoff Hydromodification Dredging (Hydromod.) Channel Erosion Erosion/Siltation Nonpoint Source	Low	160	Acres	0405	0409
3	C	MONTEREY BAY SOUTH	309.500	Metals	Surface Mining	Low	10	Miles	0198	0411
				Pesticides	Agriculture	Low	10	Miles	0198	0411
3	C	PACIFIC OCEAN AT POINT RINCON	315.340	Pathogens	Urban Runoff/Storm Sewers Nonpoint Source	Medium	5	Miles	0406	0411
3	E	CARPINTERIA MARSH (EL ESTERO MARSH)	315.340	Nutrients	Agriculture	Low	80	Acres	0406	0411
				Org. enrichment/Low D.O.	Agriculture	Low	80	Acres	0406	0411
				Priority Organics	Urban Runoff/Storm Sewers	Low	80	Acres	0406	0411
				Sedimentation/Siltation	Agriculture Construction/Land Development Storm sewers	Low	80	Acres	0406	0411
3	E	ELKHORN SLOUGH	306.000	Pathogens	Natural Sources Nonpoint Source	Low	500	Acres	0405	0409

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3	E	GOLETA SLOUGH/ESTUARY	315.310	Pesticides	Industrial discharge from PG&E may transfer pollutants from Old Salinas river and Moss Landing Harbor to the slough.	Low	500	Acres	0405	0409
				Sedimentation/Siltation	Agriculture	Low	50	Acres	0405	0409
					Irrigated Crop Production					
					Agriculture-storm runoff					
					Agricultural Return Flows					
					Contaminated Sediments					
					Erosion/Siltation					
					Nonpoint Source					
				Metals	Agriculture	Low	200	Acres	0406	0411
					Irrigated Crop Production					
					Agriculture-storm runoff					
					Channel Erosion					
					Nonpoint Source					
3	E	OLD SALINAS RIVER ESTUARY	309.100	Pathogens	Urban Runoff/Storm Sewers	Low	200	Acres	0406	0411
				Priority Organics	Nonpoint Source	Low	200	Acres	0406	0411
				Sedimentation/Siltation	Construction/Land Development	Low	200	Acres	0406	0411
				Nutrients	Agriculture	Medium	50	Acres	0198	0403
					Irrigated Crop Production					
					Agricultural Return Flows					
					Nonpoint Source					
				Pesticides	Agriculture	Medium	50	Acres	0198	0403
					Irrigated Crop Production					
					Agriculture-storm runoff					
					Agriculture-irrigation tailwater					
					Agricultural Return Flows					
3	E	SALINAS RIVER LAGOON (NORTH)	309.100	Nutrients	Nonpoint Source	Medium	75	Acres	0198	0403
				Pesticides	Agriculture	Medium	75	Acres	0198	0403

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				Sedimentation/Siltation		Medium	75	Acres	0198	0401
				Nonpoint Source						
3	E	SAN LORENZO RIVER ESTUARY	304.120	Pathogens	Urban Runoff/Storm Sewers Natural Sources	Medium	20	Acres	0499	0401
				Sedimentation/Siltation		High	20	Acres	0198	0400
				Hydromodification						
3	E	WATSONVILLE SLOUGH	305.100	Metals	Agriculture Urban Runoff/Storm Sewers	Medium	300	Acres	0199	0403
				Oil and grease	Urban Runoff/Storm Sewers Nonpoint Source	Medium	300	Acres	0199	0403
				Pathogens	Urban Runoff/Storm Sewers Source Unknown Nonpoint Source	Medium	300	Acres	0199	0403
				Pesticides	Agriculture Irrigated Crop Production Agriculture-storm runoff Agricultural Return Flows Nonpoint Source	Medium	300	Acres	0199	0403
				Sedimentation/Siltation	Agriculture Irrigated Crop Production Agriculture-storm runoff Nonpoint Source	Medium	300	Acres	0198	0401
3	L	HERNANDEZ RESERVOIR	305.500	Mercury	Subsurface Mining	Medium	619	Acres	0198	0403
3	L	NACIMIENTO RESERVOIR	309.820	Metals	Subsurface Mining Natural Sources	High	5370	Acres	0997	0400
3	R	APTOS CREEK	304.130	Pathogens	Urban Runoff/Storm Sewers	Low	4	Miles	0405	0411

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				Sedimentation/Siltation		Medium	4	Miles	0101	0401
					Disturbed Sites (Land Develop.) Channel Erosion					
3	R	ARROYO BURRO CREEK	315.320	Pathogens	Urban Runoff/Storm Sewers Nonpoint Source	Medium	6	Miles	0406	0411
3	R	BLANCO DRAIN	309.100	Pesticides	Agriculture Irrigated Crop Production Agriculture-storm runoff Agriculture-irrigation tailwater Agricultural Return Flows Nonpoint Source	Medium	8	Miles	0198	0405
3	R	CARBONERA CREEK	304.120	Nutrients	Nonpoint Source	High	10	Miles	0493	0400
				Pathogens	Urban Runoff/Storm Sewers Nonpoint Source	Medium	10	Miles	0499	0401
				Sedimentation/Siltation	Construction/Land Development Nonpoint Source	High	10	Miles	0198	0400
3	R	CARPINTERIA CREEK	315.340	Pathogens	Agriculture Septage Disposal Nonpoint Source	Low	6	Miles	0406	0411
3	R	CHORRO CREEK	310.220	Metals	Resource Extraction Mine Tailings	High	11	Miles	0696	0400
				Nutrients	Municipal Point Sources Agriculture Irrigated Crop Production Agriculture-storm runoff	High	11	Miles	0696	0400

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				Sedimentation/Siltation		High	11	Miles	0696	0699
					Agriculture					
					Irrigated Crop Production					
					Range Land					
					Upland Grazing					
					Agriculture-storm runoff					
					Construction/Land Development					
					Road					
					Construction					
					Resource Extraction					
					Hydromodification					
					Channelization					
					Streambank Modification/Destabilization					
					Channel Erosion					
					Natural Sources					
					Golf course activities					
					Erosion/Siltation					
					Nonpoint Source					
3	R	CLEAR CREEK (R3)	304.120							
				Mercury		Medium	2	Miles	0198	0403
					Resource Extraction					
3	R	LAS TABLAS CREEK	309.810							
				Metals		High	13	Miles	0997	0400
					Surface Mining					
3	R	LAS TABLAS CREEK, NORTH FORK	309.810							
				Metals		High	5	Miles	0997	0400
					Surface Mining					
3	R	LAS TABLAS CREEK, SOUTH FORK	309.810							
				Metals		High	4	Miles	0997	0400
					Surface Mining					

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3	R	LLAGAS CREEK	305.300	Nutrients	Municipal Point Sources Agriculture Irrigated Crop Production Pasture Land Agriculture-storm runoff Agriculture-irrigation tailwater Agricultural Return Flows Urban Runoff/Storm Sewers Habitat Modification Nonpoint Source Point Source	High	22	Miles	0198	0401
				Sedimentation/Siltation	Agriculture Hydromodification Habitat Modification	Medium	22	Miles	0198	0401
3	R	LOMPICO CREEK	304.120	Nutrients	Septage Disposal	High	5	Miles	0493	0400
				Pathogens	Septage Disposal Natural Sources Nonpoint Source	Medium	5	Miles	0499	0401
				Sedimentation/Siltation	Construction/Land Development Natural Sources	High	5	Miles	0198	0400
3	R	LOS OSOS CREEK	310.220	Nutrients	Agriculture Irrigated Crop Production Agriculture-storm runoff Agricultural Return Flows	High	10	Miles	0696	0400
				Priority Organics	Urban Runoff/Storm Sewers	High	10	Miles	0696	0400

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				Sedimentation/Siltation		High	10	Miles	0696	0699
					Agriculture					
					Irrigated Crop Production					
					Range Land					
					Upland Grazing					
					Agriculture-storm runoff					
					Hydromodification					
					Channelization					
					Dredging (Hydromod.)					
					Habitat Modification					
					Removal of Riparian Vegetation					
					Streambank Modification/Destabilization					
					Channel Erosion					
					Natural Sources					
					Erosion/Siltation					
					Nonpoint Source					
3	R	MISSION CREEK	315.320	Pathogens		Low	9	Miles	0406	0411
					Urban Runoff/Storm Sewers					
					Septage Disposal					
				Unknown Toxicity		Low	9	Miles	0406	0411
					Urban Runoff/Storm Sewers					
3	R	PAJARO RIVER	305.000	Nutrients		High	49	Miles	0198	0401
					Agriculture					
					Irrigated Crop Production					
					Agriculture-storm runoff					
					Agriculture-subsurface drainage					
					Agriculture-irrigation tailwater					
					Agricultural Return Flows					
					Urban Runoff/Storm Sewers					
					Wastewater - land disposal					
					Channelization					
					Removal of Riparian Vegetation					
					Nonpoint Source					

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# 1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				Sedimentation/Siltation		Medium	49	Miles	0198	0401
					Agriculture					
					Irrigated Crop Production					
					Range Land					
					Agriculture-storm runoff					
					Resource Extraction					
					Surface Mining					
					Hydromodification					
					Channelization					
					Habitat Modification					
					Removal of Riparian Vegetation					
					Streambank Modification/Destabilization					
					Channel Erosion					
3	R	RIDER GULCH CREEK	305.100	Sedimentation/Siltation		Medium	2	Miles	0198	0401
					Agriculture					
					Silviculture					
					Construction/Land Development					
3	R	SALINAS RECLAMATION CANAL	309.200	Pesticides		Medium	20	Miles	0198	0405
					Minor Industrial Point Source					
					Agriculture					
					Irrigated Crop Production					
					Agriculture-storm runoff					
					Agriculture-irrigation tailwater					
					Agricultural Return Flows					
					Nonpoint Source					
				Priority Organics		Medium	20	Miles	0198	0405
					Minor Industrial Point Source					
					Agriculture					
					Irrigated Crop Production					
					Agriculture-storm runoff					
					Agriculture-irrigation tailwater					
					Agricultural Return Flows					
					Urban Runoff/Storm Sewers					
					Source Unknown					
					Nonpoint Source					
3	R	SALINAS RIVER	309.100	Nutrients		Medium	50	Miles	0198	0403
					Agriculture					

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# 1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

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REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
3	R	SAN ANTONIO CREEK (SANTA BARBARA COUNTY)	315.310	Pesticides	Agriculture	Medium	50	Miles	0198	0403
				Irrigated Crop Production						
				Agriculture-storm runoff						
				Agriculture-irrigation tailwater						
				Agricultural Return Flows						
				Nonpoint Source						
				Salinity/TDS/Chlorides	Agriculture	Medium	50	Miles	0198	0403
				Sedimentation/Siltation	Agriculture	Medium	90	Miles	0198	0401
				Irrigated Crop Production						
				Range Land						
				Agriculture-storm runoff						
				Road						
				Construction						
				Land Development						
				Channel Erosion						
				Nonpoint Source						
3	R	SAN BENITO RIVER	305.500	Sedimentation/Siltation	Agriculture	Low	6	Miles	0406	0411
				Nonpoint Source						
3	R	SAN LORENZO RIVER	304.120	Sedimentation/Siltation	Agriculture	Medium	86	Miles	0198	0401
				Resource Extraction						
				Nonpoint Source						
				Nutrients	Septage Disposal	High	25	Miles	0493	0400
				Nonpoint Source						
				Pathogens	Urban Runoff/Storm Sewers	High	25	Miles	1999	2001
				Septage Disposal						
				Sedimentation/Siltation	Silviculture	High	25	Miles	1298	0400
				Construction/Land Development						
				Land Development						
				Urban Runoff/Storm Sewers						

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# 1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
3	R	SAN LUIS OBISPO CRK.(BELOW W.MARSH ST.)	310.240	Nutrients	Municipal Point Sources Agriculture Irrigated Crop Production Agriculture-storm runoff	High	9	Miles	0493	0400
				Pathogens	Urban Runoff/Storm Sewers	High	9	Miles	0493	0400
				Priority Organics	Industrial Point Sources	Medium	9	Miles	0498	0401
3	R	SANTA YNEZ RIVER	314.000	Nutrients	Nonpoint Source	Low	70	Miles	0403	0407
				Salinity/TDS/Chlorides	Agriculture	Low	70	Miles	0403	0407
				Sedimentation/Siltation	Agriculture Urban Runoff/Storm Sewers Resource Extraction	Low	70	Miles	0403	0407
3	R	SHINGLE MILL CREEK	304.120	Nutrients	Septage Disposal	High	2	Miles	0198	0401
				Sedimentation/Siltation	Construction/Land Development Nonpoint Source	High	2	Miles	0198	0401
3	R	VALENCIA CREEK	304.130	Pathogens	Agriculture Septage Disposal	Low	7	Miles	0406	0411
				Sedimentation/Siltation	Agriculture Construction/Land Development	Medium	7	Miles	0401	0405
3	R	WADDELL CREEK, EAST BRANCH	304.110	Nutrients	Municipal Point Sources	Medium	3	Miles	0401	0405
3	W	ESPINOSA SLOUGH	309.100	Nutrients	Agriculture Storm sewers	Medium	320	Acres	0198	0403
				Pesticides	Agriculture Urban Runoff/Storm Sewers	Medium	320	Acres	0198	0403

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# 1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

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REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				Priority Organics		Medium	320	Acres	0198	0403
					Nonpoint Source					
3	W	MORO COJO SLOUGH	309.100	Pesticides	Agriculture Irrigated Crop Production Agriculture-storm runoff Agricultural Return Flows Nonpoint Source	Low	345	Acres	0198	0411
				Sedimentation/Siltation	Agriculture Irrigated Crop Production Agriculture-storm runoff Construction/Land Development Nonpoint Source	Low	345	Acres	0198	0411
3	W	SALINAS RIVER REFUGE LAGOON (SOUTH)	309.100	Nutrients	Agriculture	Medium	163	Acres	0198	0401
				Pesticides	Agriculture	Medium	163	Acres	0198	0403
				Salinity/TDS/Chlorides	Agriculture	Medium	163	Acres	0198	0403
3	W	SCHWAN LAKE	304.120	Nutrients	Nonpoint Source	Low	32	Acres	0406	0411
				Pathogens	Urban Runoff/Storm Sewers Natural Sources	Low	32	Acres	0406	0411
3	W	SOQUEL LAGOON	304.130	Nutrients	Septage Disposal Nonpoint Source	Low	2	Acres	0403	0407
				Pathogens	Urban Runoff/Storm Sewers Natural Sources Nonpoint Source	Low	2	Acres	0403	0407
				Sedimentation/Siltation	Construction/Land Development	Medium	2	Acres	0401	0405

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REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
3	W	TEMLADERO SLOUGH	309.100	Nutrients	Agriculture Irrigated Crop Production Agriculture-storm runoff Agricultural Return Flows Nonpoint Source	Medium	150	Acres	0198	0403
				Pesticides	Agriculture Irrigated Crop Production Agriculture-storm runoff Agricultural Return Flows Nonpoint Source	Medium	150	Acres	0198	0403
4	B	CHANNEL ISLANDS HARBOR	403.11	Lead	Elevated levels of lead in sediment. Nonpoint Source	Low	220	Acres		
				Zinc	Elevated levels of zinc in sediment. Nonpoint Source	Low	220	Acres		
4	B	LA FISH HARBOR	405.12	DDT	Nonpoint/Point Source	High	50	Acres		
				PAHs	Nonpoint/Point Source	High	50	Acres		
				PCBs	Nonpoint/Point Source	High	50	Acres		
				Tributyltin	Nonpoint/Point Source	Low	0	Acres		
4	B	LA HARBOR CONSOLIDATED SLIP	405.12	Benthic Comm. Effects	Nonpoint Source	High	37.13	Acres		
				Chlordane	Elevated levels of chlordane in tissue and sediment. Nonpoint Source	Medium	37.13	Acres		
				Chromium	Elevated levels of chromium in sediment. Nonpoint Source	Medium	37.13	Acres		
				DDT	Elevated levels of DDT in tissue and sediment. Fish Consumption Advisory for DDT. Nonpoint Source	High	37.13	Acres		
				Lead	Elevated levels of lead in sediment. Nonpoint Source	Low	37.13	Acres		

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# 1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

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REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				PAHs		High	37.13	Acres		
				<i>Elevated levels of PAHs in sediment.</i>						
					Nonpoint Source					
				PCBs		High	37.13	Acres		
				<i>Elevated levels of PCBs in tissue and sediment. Fish Consumption Advisory for PCBs.</i>						
					Nonpoint Source					
				Sediment Toxicity		High	37.13	Acres		
					Nonpoint Source					
				Tributyltin		Low	37.13	Acres		
				<i>Elevated levels of tributyltin in tissue.</i>						
					Nonpoint Source					
				Zinc		Medium	37.13	Acres		
				<i>Elevated levels of zinc in tissue and sediment.</i>						
					Nonpoint Source					
4	B	LA HARBOR INNER BREAKWATER	405.12	DDT		High	1.5	Miles		
					Nonpoint/Point Source					
				PAHs		High	1.5	Miles		
					Nonpoint/Point Source					
				PCBs		High	1.5	Miles		
					Nonpoint/Point Source					
				Tributyltin		Low	1.5	Miles		
					Nonpoint/Point Source					
4	B	LA HARBOR MAIN CHANNEL	405.12	Beach Closures		Low	3785	Acres		
					Nonpoint/Point Source					
				Copper		Low	3785	Acres		
				<i>Elevated levels of copper in tissue and sediment.</i>						
					Nonpoint/Point Source					
				DDT		High	3785	Acres		
				<i>Elevated levels of DDT in tissue and sediment. Fish Consumption Advisory for DDT.</i>						
					Nonpoint/Point Source					
				PAHs		High	3785	Acres		
				<i>Elevated levels of PAHs in tissue and sediment.</i>						
					Nonpoint/Point Source					
				PCBs		High	3785	Acres		
				<i>Elevated levels of PCBs in tissue and sediment. Fish Consumption Advisory for PCBs.</i>						
					Nonpoint/Point Source					
				Sediment Toxicity		Low	3785	Acres		
					Nonpoint/Point Source					
				Tributyltin		Low	3785	Acres		
				<i>Elevated levels of tributyltin in sediment.</i>						
					Nonpoint/Point Source					

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# 1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

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REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				Zinc		Low	3785	Acres		
				<i>Elevated levels of zinc in tissue and sediment.</i>						
				Nonpoint/Point Source						
4	B	LA HARBOR SOUTHWEST SLIP	405.12	DDT		High	30	Acres		
				<i>Fish Consumption Advisory for DDT.</i>						
				Nonpoint Source						
				PCBs		High	30	Acres		
				<i>Fish Consumption Advisory for PCBs.</i>						
				Nonpoint Source						
				Sediment Toxicity		Medium	30	Acres		
				Nonpoint Source						
4	B	LONG BEACH HARBOR MAIN CHANNEL, SE,W BASIN, PIER J, BREAKWTR	405.12	Benthic Comm. Effects		Medium	3594	Acres		
				Nonpoint Source						
				DDT		High	3594	Acres		
				<i>Elevated levels of DDT in tissue. Fish Consumption Advisory for DDT.</i>						
				Nonpoint Source						
				PAHs		High	3594	Acres		
				<i>Elevated levels of PAHs in sediment.</i>						
				Nonpoint Source						
				PCBs		High	3594	Acres		
				<i>Elevated levels of PCBs in tissue. Fish Consumption Advisory for PCBs.</i>						
				Nonpoint Source						
				Sediment Toxicity		Medium	3594	Acres		
				Nonpoint Source						
4	B	MARINA DEL REY HARBOR-BACK BASINS	405.13	Benthic Comm. Effects		Low	413	Acres		
				Nonpoint Source						
				Chlordane		High	413	Acres		
				<i>Elevated levels of chlordane in tissue and sediment.</i>						
				Nonpoint Source						
				Copper		Medium	413	Acres		
				<i>Elevated levels of copper in tissue and sediment.</i>						
				Nonpoint Source						
				DDT		High	413	Acres		
				<i>Elevated levels of DDT in tissue and sediment. Shellfish Harvesting Advisory for DDT.</i>						
				Nonpoint Source						
				Dieldrin		Low	413	Acres		
				<i>Elevated levels of dieldrin in tissue.</i>						
				Nonpoint Source						

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# 1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

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REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
4	B	PORT HUENEME HARBOR (BACK BASINS)	403.11	Fish Consumption Adviso		High	413	Acres		
					Nonpoint Source					
				High Coliform Count		High	413	Acres		
					Nonpoint Source					
				Lead		Low	413	Acres		
				Elevated levels of lead in tissue and sediment.						
					Nonpoint Source					
				PCBs		High	413	Acres		
				Elevated levels of PCBs in tissue. Shellfish Harvesting Advisory for PCBs.						
					Nonpoint Source					
				Sediment Toxicity		Medium	413	Acres		
					Nonpoint Source					
				Tributyltin		Low	413	Acres		
				Elevated levels of tributyltin in tissue.						
4	B	SAN PEDRO BAY NEARS/OFF SHORE ZONES- CABRILLO PIER AREA	405.12		Nonpoint Source					
				Zinc		Medium	413	Acres		
				Elevated levels of zinc in tissue and sediment.						
					Nonpoint Source					
				DDT		High	50	Acres		
				Elevated levels of DDT in tissue.						
					Nonpoint Source					
				PAHs		High	59	Acres		
				Elevated levels of PAHs in sediment.						
					Nonpoint Source					
				PCBs		High	50	Acres		
				Elevated levels of PCBs in tissue.						
					Nonpoint Source					
				Tributyltin		Low	50	Acres		
				Elevated levels of tributyltin in tissue.						
4	B	SAN PEDRO BAY NEARS/OFF SHORE ZONES- CABRILLO PIER AREA	405.12		Nonpoint Source					
				Zinc		Low	50	Acres		
				Elevated levels of zinc in tissue.						
					Nonpoint Source					
				Chromium		Low	10700	Acres		
				Elevated levels of chromium in sediment.						
4	B	SAN PEDRO BAY NEARS/OFF SHORE ZONES- CABRILLO PIER AREA	405.12		Nonpoint/Point Source					
				Copper		Low	10700	Acres		
				Elevated levels of copper in sediment.						
4	B	SAN PEDRO BAY NEARS/OFF SHORE ZONES- CABRILLO PIER AREA	405.12		Nonpoint/Point Source					
					Nonpoint/Point Source					

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REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				DDT		High	10700	Acres		
				<i>Elevated levels of DDT in tissue and sediment. Fish Consumption Advisory for DDT.</i>						
				Nonpoint/Point Source						
				PAHs		High	10700	Acres		
				<i>Elevated levels of PAHs in sediment.</i>						
				Nonpoint/Point Source						
				PCBs		High	10700	Acres		
				<i>Fish Consumption Advisory for PCBs.</i>						
				Nonpoint/Point Source						
				Sediment Toxicity		Medium	10700	Acres		
				Nonpoint/Point Source						
				Zinc		Low	10700	Acres		
				<i>Elevated levels of zinc in sediment.</i>						
				Nonpoint/Point Source						
4	B	SANTA MONICA BAY OFFSHORE AND NEARSHORE	413.00							
				Cadmium		Low	16640	Acres		
				<i>Elevated levels of cadmium in sediment.</i>						
				Nonpoint/Point Source						
				Chlordane		Low	16640	Acres		
				<i>Elevated levels of chlordane in sediment.</i>						
				Nonpoint/Point Source						
				Copper		Low	16640	Acres		
				<i>Elevated levels of copper in sediment.</i>						
				Nonpoint/Point Source						
				DDT		High	16640	Acres		
				<i>Elevated levels of DDT in tissue and sediment.</i>						
				Nonpoint/Point Source						
				Debris		Low	16640	Acres		
				Nonpoint/Point Source						
				Fish Consumption Adviso		High	16640	Acres		
				Nonpoint/Point Source						
				Lead		Low	16640	Acres		
				<i>Elevated levels of lead in tissue and sediment.</i>						
				Nonpoint/Point Source						
				Mercury		Medium	16640	Acres		
				<i>Elevated levels of mercury in sediment.</i>						
				Nonpoint/Point Source						
				Nickel		Low	16640	Acres		
				<i>Elevated levels of nickel in sediment.</i>						
				Nonpoint/Point Source						
				PAHs		High	16640	Acres		
				<i>Elevated levels of PAHs in sediment.</i>						
				Nonpoint/Point Source						

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REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				PCBs		High	16640	Acres		
				<i>Elevated levels of PCBs in tissue and sediment.</i>						
					Nonpoint/Point Source					
				Sediment Toxicity		Medium	16640	Acres		
					Nonpoint/Point Source					
				Silver		Low	16640	Acres		
				<i>Elevated levels of silver in tissue.</i>						
					Nonpoint/Point Source					
				Zinc		Low	16640	Acres		
				<i>Elevated levels of zinc in sediment.</i>						
					Nonpoint/Point Source					
4	B	VENTURA HARBOR: VENTURA KEYES	403.11							
				High Coliform Count		High	40	Acres		
					Nonpoint Source					
4	C	ABALONE COVE BEACH	405.11							
				Beach Closures		Medium	0.94	Miles		
					Nonpoint Source					
				DDT		High	0.94	Miles		
				<i>Elevated levels of DDT in sediment.</i>						
					Nonpoint Source					
				PCBs		High	0.94	Miles		
				<i>Fish Consumption Advisory for PCBs.</i>						
					Nonpoint Source					
4	C	AMARILLO BEACH	404.21							
				DDT		High	0.3	Miles		
				<i>Fish Consumption Advisory for DDT.</i>						
					Nonpoint Source					
				PCBs		High	0.3	Miles		
				<i>Fish Consumption Advisory for PCBs.</i>						
					Nonpoint Source					
4	C	BIG ROCK BEACH	404.16							
				Beach Closures		Medium	1.09	Miles		
					Nonpoint Source					
				DDT		High	1.09	Miles		
				<i>Fish Consumption Advisory for DDT.</i>						
					Nonpoint Source					
				High Coliform Count		High	1.09	Miles		
					Nonpoint Source					
				PCBs		High	1.09	Miles		
				<i>Fish Consumption Advisory for PCBs.</i>						
					Nonpoint Source					

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REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
4	C	BLUFF COVE BEACH	405.11	Beach Closures	Nonpoint Source	Medium	0.61	Miles		
				DDT	Fish Consumption Advisory for DDT.	High	0.61	Miles		
				PCBs	Fish Consumption Advisory for PCBs.	High	0.61	Miles		
4	C	CABRILLO BEACH (INNER) LA HARBOR AREA	405.12	Beach Closures (Coliform)	Nonpoint Source	Low	0.79	Miles		
				DDT	Fish Consumption Advisory for DDT.	High	0.79	Miles		
				PCBs	Fish Consumption Advisory for PCBs.	High	0.79	Miles		
4	C	CABRILLO BEACH OUTER	405.12	Beach Closures	Nonpoint Source	Medium	0.51	Miles		
				DDT	Fish Consumption Advisory for DDT.	High	0.51	Miles		
				High Coliform Count	Nonpoint Source	High	0.51	Miles		
				PCBs	Fish Consumption Advisory for PCBs.	High	0.51	Miles		
4	C	CARBON BEACH	404.16	Beach Closures	Nonpoint Source	Medium	1.48	Miles		
				DDT	Fish Consumption Advisory for DDT.	High	1.48	Miles		
				PCBs	Fish Consumption Advisory for PCBs.	High	1.48	Miles		
4	C	CASTLEROCK BEACH	405.13	Beach Closures	Nonpoint Source	Medium	0.81	Miles		

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REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				DDT		High	0.81	Miles		
				Fish Consumption Advisory for DDT.						
				Nonpoint Source						
				PCBs		High	0.81	Miles		
				Fish Consumption Advisory for PCBs.						
				Nonpoint Source						
4	C	DAN BLOCKER MEMORIAL (CORAL) BEACH	404.31							
				High Coliform Count		High	1.04	Miles		
				Nonpoint Source						
4	C	DOCKWEILER BEACH	405.12							
				Beach Closures		Medium	5.4	Miles		
				Nonpoint Source						
				High Coliform Count		High	5.4	Miles		
				Nonpoint Source						
4	C	ESCONDIDO BEACH	404.34							
				Beach Closures		Medium	2.05	Miles		
				Nonpoint Source						
				DDT		High	2.05	Miles		
				Fish Consumption Advisory for DDT.						
				Nonpoint Source						
				PCBs		High	2.05	Miles		
				Fish Consumption Advisory for PCBs.						
				Nonpoint Source						
4	C	FLAT ROCK POINT BEACH AREA	405.11							
				Beach Closures		Medium	0.3	Miles		
				Nonpoint Source						
				DDT		High	0.3	Miles		
				Fish Consumption Advisory for DDT.						
				Nonpoint Source						
				PCBs		High	0.3	Miles		
				Fish Consumption Advisory for PCBs.						
				Nonpoint Source						
4	C	HERMOSA BEACH	405.12							
				Beach Closures		Medium	1.88	Miles		
				Nonpoint Source						
4	C	INSPIRATION POINT BEACH	405.11							
				Beach Closures		Medium	0.3	Miles		
				Nonpoint Source						
				DDT		High	0.3	Miles		
				Fish Consumption Advisory for DDT.						
				Nonpoint Source						

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REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
4	C	LA COSTA BEACH	404.16	PCBs		High	0.3	Miles		
				Fish Consumption Advisory for PCBs.						
					Nonpoint Source					
				Beach Closures		Medium	0.74	Miles		
					Nonpoint Source					
				DDT		High	0.74	Miles		
		LAS FLORES BEACH	404.15	Fish Consumption Advisory for DDT.						
					Nonpoint Source					
				PCBs		High	0.74	Miles		
				Fish Consumption Advisory for PCBs.						
					Nonpoint Source					
				DDT		High	0.76	Miles		
4	C	LAS TUNAS BEACH	404.12	Fish Consumption Advisory for DDT.						
					Nonpoint Source					
				High Coliform Count		High	0.76	Miles		
					Nonpoint Source					
				PCBs		High	0.76	Miles		
				Fish Consumption Advisory for PCBs.						
		LEO CARILLO BEACH (SOUTH OF COUNTY LINE)	404.44		Nonpoint Source					
				Beach Closures		Medium	1.15	Miles		
					Nonpoint Source					
				High Coliform Count		High	1.15	Miles		
					Nonpoint Source					
				DDT		High	0.45	Miles		
4	C	LONG POINT BEACH	405.11	Fish Consumption Advisory for DDT.						
					Nonpoint Source					
				High Coliform Count		High	0.45	Miles		
					Nonpoint Source					

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REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				PCBs		High	0.45	Miles		
				Fish Consumption Advisory for PCBs.						
				Nonpoint Source						
4	C	LUNADA BAY BEACH	405.11							
				Beach Closures		Medium	0.35	Miles		
				Nonpoint Source						
4	C	MALAGA COVE BEACH	405.11							
				Beach Closures		Medium	1.13	Miles		
				Nonpoint Source						
				DDT		High	1.13	Miles		
				Fish Consumption Advisory for DDT.						
				Nonpoint Source						
				PCBs		High	1.13	Miles		
				Fish Consumption Advisory for PCBs.						
				Nonpoint Source						
4	C	MALIBU BEACH	404.21							
				Beach Closures		Medium	0.53	Miles		
				Nonpoint Source						
				DDT		High	0.53	Miles		
				Fish Consumption Advisory for DDT.						
				Nonpoint Source						
4	C	MALIBU LAGOON BEACH (SURFRIDER)	404.21							
				Beach Closures		Medium	0.66	Miles		
				Nonpoint Source						
				DDT		High	0.66	Miles		
				Fish Consumption Advisory for DDT.						
				Nonpoint Source						
				High Coliform Count		High	0.66	Miles		
				Nonpoint Source						
				PCBs		High	0.66	Miles		
				Fish Consumption Advisory for PCBs.						
				Nonpoint Source						
4	C	MANDALAY BEACH	403.11							
				Beach Closures		Low	1.55	Miles		
				Nonpoint Source						
4	C	MANHATTAN BEACH	405.12							
				Beach Closures		Medium	2.08	Miles		
				Nonpoint Source						
4	C	MARINA DEL REY HARBOR BEACH	405.13							
				Beach Closures		Medium	0.65	Miles		
				Nonpoint Source						

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REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				High Coliform Count		High	0.65	Miles		
					Nonpoint Source					
4	C	MCGRATH BEACH	403.11							
				Beach Closures		Low	1.35	Miles		
					Nonpoint Source					
				High Coliform Count		Medium	1.35	Miles		
					Nonpoint Source					
4	C	NICHOLAS CANYON BEACH	404.43							
				Beach Closures		Medium	1.94	Miles		
					Nonpoint Source					
				DDT		High	1.94	Miles		
				<i>Fish Consumption Advisory for DDT.</i>						
					Nonpoint Source					
				PCBs		High	1.94	Miles		
				<i>Fish Consumption Advisory for PCBs.</i>						
					Nonpoint Source					
4	C	PALO VERDE SHORELINE PARK BEACH	413.057							
				Pathogens		Low	0.12	Miles		
					Source Unknown					
				Pesticides		Low	0.12	Miles		
					Source Unknown					
4	C	PARADISE COVE BEACH	404.35							
				Beach Closures		Medium	1.33	Miles		
					Nonpoint Source					
				DDT		High	1.33	Miles		
				<i>Fish Consumption Advisory for DDT.</i>						
					Nonpoint Source					
				High Coliform Count		High	1.33	Miles		
					Nonpoint Source					
				PCBs		High	1.33	Miles		
				<i>Fish Consumption Advisory for PCBs.</i>						
					Nonpoint Source					
4	C	POINT DUME BEACH	404.36							
				Beach Closures		Medium	0.95	Miles		
					Nonpoint Source					
				DDT		High	0.95	Miles		
				<i>Fish Consumption Advisory for DDT.</i>						
					Nonpoint Source					
				PCBs		High	0.95	Miles		
				<i>Fish Consumption Advisory for PCBs.</i>						
					Nonpoint Source					

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REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
4	C	POINT FERMIN PARK BEACH	405.11	Beach Closures		Medium	1.5	Miles		
				DDT	Nonpoint Source	High	1.5	Miles		
				<i>Fish Consumption Advisory for DDT.</i>						
				PCBs	Nonpoint Source	High	1.5	Miles		
				<i>Fish Consumption Advisory for PCBs.</i>						
4	C	POINT VICENTE BEACH	405.11	Beach Closures		Medium	2.13	Miles		
				DDT	Nonpoint Source	High	2.2	Miles		
				<i>Fish Consumption Advisory for DDT.</i>						
				PCBs	Nonpoint Source	High	2.2	Miles		
				<i>Fish Consumption Advisory for PCBs.</i>						
4	C	PORTUGUESE BEND BEACH	405.11	Beach Closures		Medium	2.2	Miles		
				DDT	Nonpoint Source	High	2.2	Miles		
				<i>Fish Consumption Advisory for DDT.</i>						
				PCBs	Nonpoint Source	High	2.2	Miles		
				<i>Fish Consumption Advisory for PCBs.</i>						
4	C	PUERCO BEACH	404.31	Beach Closures		Medium	1.68	Miles		
				DDT	Nonpoint Source	High	1.68	Miles		
				<i>Fish Consumption Advisory for DDT.</i>						
				PCBs	Nonpoint Source	High	1.68	Miles		
				<i>Fish Consumption Advisory for PCBs.</i>						
4	C	REDONDO BEACH	405.12	Beach Closures		Medium	1.37	Miles		
				DDT	Nonpoint Source	High	1.37	Miles		
				<i>Fish Consumption Advisory for DDT.</i>						
				High Coliform Count	Nonpoint Source	High	1.37	Miles		
				PCBs	Nonpoint Source	High	1.37	Miles		
				<i>Fish Consumption Advisory for PCBs.</i>						

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REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
4	C	RESORT POINT BEACH	405.11	Beach Closures	Nonpoint Source	Medium	0.49	Miles		
4	C	ROBERT H MEYER MEMORIAL BEACH	404.42	Beach Closures	Nonpoint Source	Medium	1.23	Miles		
				DDT		High	1.23	Miles		
				Fish Consumption Advisory for DDT.	Nonpoint Source					
				PCBs		High	1.23	Miles		
				Fish Consumption Advisory for PCBs.	Nonpoint Source					
4	C	ROCKY POINT BEACH	405.11	Beach Closures	Nonpoint Source	Medium	0.52	Miles		
4	C	ROYAL PALMS BEACH	405.11	Beach Closures	Nonpoint Source	Medium	1.06	Miles		
				DDT		High	1.06	Miles		
				Fish Consumption Advisory for DDT.	Nonpoint Source					
				PCBs		High	1.06	Miles		
				Fish Consumption Advisory for PCBs.	Nonpoint Source					
4	C	SANTA CLARA RIVER ESTUARY BEACH/SURFERS KNOLL	403.11	High Coliform Count	Nonpoint Source	Low	0.56	Miles		
4	C	SANTA MONICA BEACH	405.13	Beach Closures	Nonpoint Source	Medium	2.95	Miles		
				High Coliform Count	Nonpoint Source	High	2.95	Miles		
4	C	SEA LEVEL BEACH	404.41	Beach Closures	Nonpoint Source	Medium	0.67	Miles		
				DDT		High	0.67	Miles		
				Fish Consumption Advisory for DDT.	Nonpoint Source					
				PCBs		High	0.67	Miles		
				Fish Consumption Advisory for PCBs.	Nonpoint Source					

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REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
4	C	TOPANGA BEACH	404.11	Beach Closures	Nonpoint Source	Medium	1.01	Miles		
				DDT	Fish Consumption Advisory for DDT.	High	1.01	Miles		
				High Coliform Count	Nonpoint Source	High	1.01	Miles		
				PCBs	Fish Consumption Advisory for PCBs.	High	1.01	Miles		
4	C	TORRANCE BEACH	405.12	Beach Closures	Nonpoint Source	Medium	0.58	Miles		
				High Coliform Count	Nonpoint Source	High	0.58	Miles		
4	C	TRANCAS BEACH (BROAD BEACH)	404.37	Beach Closures	Nonpoint Source	Medium	2.02	Miles		
				DDT	Fish Consumption Advisory for DDT.	High	2.02	Miles		
				High Coliform Count	Nonpoint Source	High	2.02	Miles		
				PCBs	Fish Consumption Advisory for PCBs.	High	2.02	Miles		
4	C	VENICE BEACH	405.13	Beach Closures	Nonpoint Source	Medium	1.5	Miles		
				High Coliform Count	Nonpoint Source	High	1.5	Miles		
4	C	WHITES POINT BEACH	405.11	Beach Closures	Nonpoint Source	Medium	0.7	Miles		
				DDT	Fish Consumption Advisory for DDT.	High	0.7	Miles		
				PCBs	Fish Consumption Advisory for PCBs.	High	0.7	Miles		

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REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
4	C	WILL ROGERS BEACH	405.13	Beach Closures		Medium	2.2	Miles		
				High Coliform Count	Nonpoint Source	High	2.2	Miles		
4	C	ZUMA (WESTWARD BEACH)	404.36	Beach Closures		Medium	1.65	Miles		
				DDT	Nonpoint Source	High	1.65	Miles		
				Fish Consumption Advisory for DDT.						
				PCBs	Nonpoint Source	High	1.65	Miles		
				Fish Consumption Advisory for PCBs.						
4	E	MALIBU LAGOON	404.21	Benthic Comm. Effects		Medium	32.5	Acres		
				Enteric Viruses	Nonpoint/Point Source	High	32.5	Acres		
				Eutrophic	Nonpoint/Point Source	Medium	32.5	Acres	0193	1202
				High Coliform Count	Nonpoint/Point Source	High	32.5	Acres		
				Shellfish Harvesting Adv.	Nonpoint/Point Source	Medium	32.5	Acres		
				Swimming Restrictions	Nonpoint/Point Source	High	32.5	Acres		
4	E	MUGU LAGOON	403.11	Chlordane		High	2000	Acres	1298	
				Elevated levels of chlordane in tissue.						
				Copper	Nonpoint Source	Medium	2000	Acres		
				Dacthal	Nonpoint/Point Source	High	2000	Acres	1298	
				Elevated levels of dacthal in tissue.						
				DDT	Nonpoint Source	High	2000	Acres	1298	
				Elevated levels of DDT in tissue and sediment. Effects on bird reproductivity from DDT.						
				Endosulfan	Nonpoint Source	High	2000	Acres	1298	
				Elevated levels of endosulfan in tissue.						
				Mercury	Nonpoint/Point Source	High	2000	Acres		

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REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				Nickel	Nonpoint/Point Source	Medium	2000	Acres		
				Nitrogen	Nonpoint/Point Source	Low	2000	Acres	1298	
				PCBs	Nonpoint/Point Source	High	2000	Acres		
				<i>Elevated levels of PCBs in tissue.</i>						
				Sediment Toxicity	Nonpoint/Point Source	High	2000	Acres		
				Sedimentation/Siltation	Nonpoint/Point Source	High	2000	Acres		
				Zinc	Nonpoint/Point Source	Medium	2000	Acres		
				<i>Elevated levels of PCBs in tissue.</i>						
4	L	CRYSTAL LAKE	405.43	Org. enrichment/Low D.O.	Nonpoint Source	Low	5.8	Acres		
4	L	ECHO PARK LAKE	405.15	Algae	Nonpoint Source	Low	23	Acres		
				Ammonia	Nonpoint Source	Low	23	Acres	0194	1299
				Copper	Nonpoint Source	Low	23	Acres		
				Eutrophic	Nonpoint Source	Low	23	Acres		
				Lead	Nonpoint Source	Low	23	Acres		
				Odors	Nonpoint Source	Low	23	Acres		
				PCBs	Nonpoint Source	Medium	23	Acres		
				<i>Elevated levels of PCBs in tissue.</i>						
				pH	Nonpoint Source	Medium	23	Acres		
				Trash	Nonpoint Source	High	23	Acres		
4	L	EL DORADO LAKES	405.15	Algae	Nonpoint Source	Low	220	Acres		
				Ammonia	Nonpoint Source	Low	220	Acres	0194	1299
				Copper	Nonpoint Source	Low	220	Acres		

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REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
4	L	ELIZABETH LAKE	403.51	Eutrophic	Nonpoint Source	Low	220	Acres		
				Lead	Nonpoint Source	Low	220	Acres		
				Mercury	Nonpoint Source	Medium	220	Acres		
				Elevated levels of mercury in tissue.						
				pH	Nonpoint Source	Medium	220	Acres		
					Nonpoint Source					
				Eutrophic	Nonpoint Source	Low	194	Acres		
				Org. enrichment/Low D.O.	Nonpoint Source	Medium	194	Acres		
				pH	Nonpoint Source	Medium	194	Acres		
				Trash	Nonpoint Source	Low	194	Acres		
4	L	LAKE CALABASAS	405.21		Nonpoint Source					
				Ammonia	Nonpoint Source	Low	28	Acres		
				Copper	Nonpoint Source	Medium	28	Acres		
				Elevated levels of copper in tissue.						
				DDT	Nonpoint Source	High	28	Acres		
				Elevated levels of DDT in tissue.						
				Eutrophic	Nonpoint Source	Medium	28	Acres		
				Odors	Nonpoint Source	Low	28	Acres		
				Org. enrichment/Low D.O.	Nonpoint Source	Medium	28	Acres		
				pH	Nonpoint Source	Medium	28	Acres		
				Zinc	Nonpoint Source	Low	28	Acres		
				Elevated levels of zinc in tissue.						
					Nonpoint Source					
4	L	LAKE HUGHES	403.51	Algae	Nonpoint Source	Low	34	Acres		
				Eutrophic	Nonpoint Source	Medium	34	Acres		

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REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				Fish Kills		Medium	34	Acres		
					Nonpoint Source					
				Odors		Low	34	Acres		
					Nonpoint Source					
				Trash		Low	34	Acres		
					Nonpoint Source					
4	L	LAKE LINDERO	404.23							
				Algae		Medium	13.56	Acres		
					Nonpoint Source					
				Chloride		Low	13.56	Acres		
					Nonpoint Source					
				Eutrophic		Medium	13.56	Acres	0193	1202
					Nonpoint Source					
				Odors		Low	13.56	Acres		
					Nonpoint Source					
				Selenium		Low	13.56	Acres		
				<i>Elevated levels of selenium in tissue.</i>						
					Nonpoint Source					
				Specific conductivity		Low	13.56	Acres		
					Nonpoint Source					
				Trash		Low	13.56	Acres		
					Nonpoint Source					
4	L	LAKE SHERWOOD	404.26							
				Algae		Medium	213	Acres		
					Nonpoint Source					
				Ammonia		Low	213	Acres		
					Nonpoint Source					
				Eutrophic		Medium	213	Acres	0193	1202
					Nonpoint Source					
				Mercury		Medium	213	Acres		
				<i>Elevated levels of mercury in tissue.</i>						
					Nonpoint Source					
				Org. enrichment/Low D.O.		Medium	213	Acres		
					Nonpoint Source					
4	L	LEGG LAKE	405.41							
				Ammonia		Low	70	Acres		
					Nonpoint Source					
				Copper		Low	70	Acres		
					Nonpoint Source					
				Lead		Low	70	Acres		
					Nonpoint Source					
				Odors		Low	70	Acres		
					Nonpoint Source					

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4	L	LINCOLN PARK LAKE	405.15	pH		Medium	70	Acres		
				Trash	Nonpoint Source	High	70	Acres		
					Nonpoint Source					
				Ammonia		Low	7	Acres	0194	1299
					Nonpoint Source					
				Eutrophic		Medium	7	Acres		
					Nonpoint Source					
				Lead		Low	7	Acres		
					Nonpoint Source					
				Odors		Low	7	Acres		
					Nonpoint Source					
				Org. enrichment/Low D.O.		Medium	7	Acres		
					Nonpoint Source					
				Trash		High	7	Acres		
					Nonpoint Source					
4	L	MACHADO LAKE (HARBOR PARK LAKE)	405.12							
				Algae		Low	45.2	Acres		
					Nonpoint Source					
				Ammonia		Low	45.2	Acres		
					Nonpoint Source					
				ChemA		High	45.2	Acres		
				Elevated levels of chemA pesticides in tissue.						
					Nonpoint Source					
				Chlordane		High	45.2	Acres		
				Elevated levels of chlordane in tissue. Fish Consumption Advisory for chlordane.						
					Nonpoint Source					
				DDT		High	45.2	Acres		
				Elevated levels of DDT in tissue. Fish Consumption Advisory for DDT.						
					Nonpoint Source					
				Dieldrin		High	45.2	Acres		
				Elevated levels of dieldrin in tissue.						
					Nonpoint Source					
				Eutrophic		Low	45.2	Acres		
					Nonpoint Source					
				Odors		Low	45.2	Acres		
					Nonpoint Source					
				PCBs		High	45.2	Acres		
				Elevated levels of PCBs in tissue.						
					Nonpoint Source					
				Trash		Low	45.2	Acres		
					Nonpoint Source					

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REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
4	L	MALIBOU LAKE	404.24	Algae	Nonpoint Source	Medium	69	Acres		
				Chlordane	Nonpoint/Point Source	Low	69	Acres		
				<i>Elevated levels of chlordane in tissue.</i>						
				Copper	Nonpoint Source	Medium	69	Acres		
				<i>Elevated levels of copper in tissue.</i>						
				Eutrophic	Nonpoint Source	Medium	69	Acres	0193	1202
				Org. enrichment/Low D.O.	Nonpoint Source	Medium	69	Acres		
				PCBs	Nonpoint Source	Low	69	Acres		
				<i>Elevated levels of PCBs in tissue.</i>						
4	L	MATILJA RESERVOIR	402.20	Fish barriers	Dam Construction/Operation	Low	198	Acres		
4	L	MCGRATH LAKE (ESTUARY)	403.11	Chlordane	Nonpoint Source	High	1.35	Acres		
				<i>Elevated levels of chlordane in sediment.</i>						
				DDT	Nonpoint Source	High	1.35	Acres		
				<i>Elevated levels of DDT in sediment.</i>						
				Pesticides	Nonpoint Source	High	1.35	Acres		
				<i>Elevated levels of pesticides (total) in sediment.</i>						
				Sediment Toxicity	Nonpoint Source	Medium	1.35	Acres		
4	L	MUNZ LAKE	403.51	Eutrophic	Nonpoint Source	Low	15	Acres		
				Trash	Nonpoint Source	Low	15	Acres		
4	L	PECK ROAD PARK LAKE	405.41	Chlordane	Nonpoint Source	Medium	166	Acres		
				<i>Elevated levels of chlordane in tissue.</i>						
				DDT	Nonpoint Source	Medium	166	Acres		
				<i>Elevated levels of DDT in tissue.</i>						

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REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
4	L	PUDDINGSTONE RESERVOIR	405.52	Lead	Nonpoint Source	Low	166	Acres		
				Odors		Low	166	Acres		
				Org. enrichment/Low D.O.	Nonpoint Source	Medium	166	Acres		
				Trash		High	166	Acres		
					Nonpoint Source					
				Chlordane	Nonpoint Source	Medium	382	Acres		
				Elevated levels of chlordane in tissue.						
				DDT	Nonpoint Source	Medium	382	Acres		
				Elevated levels of DDT in tissue.						
				Mercury	Nonpoint Source	Medium	382	Acres		
4	L	SANTA FE DAM PARK LAKE	405.41	Elevated levels of mercury in tissue.						
				Org. enrichment/Low D.O.	Nonpoint Source	Medium	382	Acres		
				PCBs	Nonpoint Source	Medium	382	Acres		
				Elevated levels of PCBs in tissue.						
					Nonpoint Source					
				Copper	Nonpoint Source	Low	70	Acres		
				Lead		Low	70	Acres		
				pH	Nonpoint Source	Low	70	Acres		
4	L	WESTLAKE LAKE	404.25		Nonpoint Source					
				Algae	Nonpoint Source	Medium	186	Acres		
				Ammonia		Low	186	Acres		
					Nonpoint Source					
				Chlordane	Nonpoint Source	Low	186	Acres		
				Elevated levels of chlordane in tissue.						
				Copper	Nonpoint Source	Medium	186	Acres		
				Elevated levels of copper in tissue.						
					Nonpoint Source					
				Eutrophic	Nonpoint Source	Medium	186	Acres	0193	1202

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REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				Lead		Low	186	Acres		
					Nonpoint Source					
				Org. enrichment/Low D.O.		Medium	186	Acres		
					Nonpoint Source					
4	R	ALISO CANYON WASH	405.21	Selenium		Low	10.13	Miles		
					Nonpoint Source					
4	R	ARROYO LAS POSAS REACH 1 (LEWIS SOMIS RD TO FOX BARRANCA)	403.12	Ammonia		High	1.99	Miles	1298	
					Nonpoint/Point Source					
				Chloride		Medium	1.99	Miles	0197	1200
					Nonpoint/Point Source					
				DDT		High	1.99	Miles	1298	
				Elevated levels of DDT in sediment.						
					Nonpoint Source					
				Nitrate and Nitrite		Medium	1.99	Miles	1298	
					Nonpoint/Point Source					
				Sulfates		Medium	1.99	Miles		
					Nonpoint/Point Source					
				Total Dissolved Solids		Medium	1.99	Miles	1298	
					Nonpoint/Point Source					
4	R	ARROYO LAS POSAS REACH 2 (FOX BARRANCA TO MOORPARK FWY (23))	403.62	Ammonia		High	9.62	Miles	1298	
					Nonpoint/Point Source					
				Chloride		Medium	9.62	Miles	0197	1200
					Nonpoint/Point Source					
				DDT		High	9.62	Miles	1298	
				Elevated levels of DDT in sediment.						
					Nonpoint Source					
				Nitrate and Nitrite		Medium	9.62	Miles	1298	
					Nonpoint/Point Source					
				Sulfates		Medium	9.62	Miles		
					Nonpoint/Point Source					
				Total Dissolved Solids		Medium	9.62	Miles		
					Nonpoint/Point Source					
4	R	ARROYO SECO REACH 1 (LA RIVER TO WEST HOLLY AVE)	405.15	Algae		Low	7.02	Miles		
					Nonpoint Source					

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REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				Sulfates		Medium	11.12	Miles		
					Nonpoint Source					
				Total Dissolved Solids		Medium	11.12	Miles		
					Nonpoint Source					
4	R	ASHLAND AVENUE DRAIN	405.13	High Coliform Count		High	0.57	Miles		
					Nonpoint Source					
				Org. enrichment/Low D.O.		Low	0.57	Miles		
					Nonpoint Source					
				Toxicity		Low	0.57	Miles		
					Nonpoint Source					
4	R	BALLONA CREEK	405.13	Arsenic		Medium	4.3	Miles		
				<i>Elevated levels of arsenic in tissue.</i>						
					Nonpoint/Point Source					
				Cadmium		Medium	4.3	Miles		
				<i>Elevated levels of cadmium in sediment.</i>						
					Nonpoint/Point Source					
				Chema		High	4.3	Miles		
				<i>Elevated levels of chema pesticides in tissue.</i>						
					Nonpoint/Point Source					
				Chlordane		High	4.3	Miles		
				<i>Elevated levels of chlordane in tissue.</i>						
					Nonpoint/Point Source					
				Copper		Medium	4.3	Miles		
				<i>Elevated levels of copper in tissue and sediment.</i>						
					Nonpoint/Point Source					
				DDT		High	4.3	Miles		
				<i>Elevated levels of DDT in tissue.</i>						
					Nonpoint/Point Source					
				Dieldrin		High	4.3	Miles		
				<i>Elevated levels of dieldrin in tissue.</i>						
					Nonpoint/Point Source					
				Enteric Viruses		High	4.3	Miles		
					Nonpoint/Point Source					
				High Coliform Count		High	4.3	Miles		
					Nonpoint/Point Source					
				Lead		Low	4.3	Miles		
				<i>Elevated levels of lead in tissue and sediment.</i>						
					Nonpoint/Point Source					
				PCBs		High	4.3	Miles		
				<i>Elevated levels of PCBs in tissue.</i>						
					Nonpoint/Point Source					

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REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				Sediment Toxicity		Medium	4.3	Miles		
					Nonpoint/Point Source					
				Silver		Low	4.3	Miles		
				<i>Elevated levels of silver in tissue and sediment.</i>						
					Nonpoint/Point Source					
				Toxicity		Medium	4.3	Miles		
					Nonpoint/Point Source					
				Trash		High	4.3	Miles		
					Nonpoint/Point Source					
				Tributyltin		Low	4.3	Miles		
				<i>Elevated levels of tributyltin in sediment.</i>						
					Nonpoint/Point Source					
4	R	BALLONA CREEK ESTUARY	405.13							
				Arochlor		High	2.5	Miles		
				<i>Elevated levels of arochlor in sediment.</i>						
					Nonpoint/Point Source					
				Chlordane		High	2.5	Miles		
				<i>Elevated levels of chlordane in tissue and sediment.</i>						
					Nonpoint/Point Source					
				DDT		High	2.5	Miles		
				<i>Elevated levels of DDT in sediment.</i>						
					Nonpoint/Point Source					
				High Coliform Count		High	2.5	Miles		
					Nonpoint/Point Source					
				Lead		Low	2.5	Miles		
				<i>Elevated levels of lead in sediment.</i>						
					Nonpoint/Point Source					
				PAHs		High	2.5	Miles		
				<i>Elevated levels of PAHs in sediment.</i>						
					Nonpoint/Point Source					
				PCBs		High	2.5	Miles		
				<i>Elevated levels of PCBs in tissue and sediment.</i>						
					Nonpoint/Point Source					
				Sediment Toxicity		Medium	2.5	Miles		
					Nonpoint/Point Source					
				Shellfish Harvesting Adv.		Medium	2.5	Miles		
					Nonpoint/Point Source					
				Zinc		Low	2.5	Miles		
				<i>Elevated levels of zinc in sediment.</i>						
					Nonpoint/Point Source					
4	R	BEARDSLEY CHANNEL (ABOVE CENTRAL AVENUE)	403.61							
				Algae		Low	6.16	Miles	1298	
					Nonpoint Source					

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REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				Chema		High	6.16	Miles	1298	
				Elevated levels of chema pesticides in tissue.						
					Nonpoint Source					
				Chlordane		High	6.16	Miles	1298	
				Elevated levels of chlordane in tissue and sediment.						
					Nonpoint Source					
				Chlorpyrifos		High	6.16	Miles	1298	
				Elevated levels of chlorpyrifos in tissue.						
					Nonpoint Source					
				Dacthal		High	6.16	Miles	1298	
				Elevated levels of dacthal in sediment.						
					Nonpoint Source					
				DDT		High	6.16	Miles	1298	
				Elevated levels of DDT in tissue and sediment.						
					Nonpoint Source					
				Dieldrin		High	6.16	Miles	1298	
				Elevated levels of dieldrin in tissue.						
					Nonpoint Source					
				Endosulfan		High	6.16	Miles	1298	
				Elevated levels of endosulfan in tissue and sediment.						
					Nonpoint Source					
				Nitrogen		Medium	6.16	Miles	1298	
					Nonpoint Source					
				PCBs		High	6.16	Miles		
				Elevated levels of PCBs in tissue.						
					Nonpoint Source					
				Toxaphene		High	6.16	Miles	1298	
				Elevated levels of toxaphene in tissue and sediment.						
					Nonpoint Source					
				Toxicity		High	6.16	Miles		
					Nonpoint Source					
				Trash		Low	6.16	Miles		
					Nonpoint Source					
4	R	BELL CREEK	405.21	High Coliform Count		Low	9.81	Miles		
					Nonpoint/Point Source					
4	R	BROWN BARRANCA / LONG CANYON	403.11	Nitrate and Nitrite		Medium	3.79	Miles		
					Nonpoint Source					
4	R	BURBANK WESTERN CHANNEL	405.21	Algae		Low	6.35	Miles		
					Nonpoint/Point Source					

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REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				Ammonia		High	6.35	Miles	0194	1299
					Nonpoint/Point Source					
				Cadmium		Low	6.35	Miles		
					Nonpoint/Point Source					
				Odors		Low	6.35	Miles		
					Nonpoint/Point Source					
				Scum/Foam-unnatural		Low	6.35	Miles		
					Nonpoint/Point Source					
				Trash		High	6.35	Miles		
					Nonpoint/Point Source					
4	R	CALLEGUAS CREEK REACH 1 (ESTUARY TO 0.5MI S OF BROOME RD)	403.11							
				Ammonia		High	2.2	Miles	1298	
					Nonpoint/Point Source					
				ChemA		High	2.2	Miles	1298	
				<i>Elevated levels of chemA in tissue.</i>						
					Nonpoint Source					
				Chlordane		High	2.2	Miles	1298	
				<i>Elevated levels of chlordane in tissue.</i>						
					Nonpoint Source					
				DDT		High	2.2	Miles	1298	
				<i>Elevated levels of DDT in tissue and sediment.</i>						
					Nonpoint Source					
				Endosulfan		High	2.2	Miles	1298	
				<i>Elevated levels of endosulfan in tissue.</i>						
					Nonpoint Source					
				Nitrogen		Medium	2.2	Miles	1298	
					Nonpoint/Point Source					
				PCBs		High	2.2	Miles		
				<i>Elevated levels of PCBs in tissue.</i>						
					Nonpoint/Point Source					
				Sediment Toxicity		Medium	2.2	Miles		
					Nonpoint/Point Source					
				Toxaphene		High	2.2	Miles	1298	
				<i>Elevated levels of toxaphene in tissue and sediment.</i>						
					Nonpoint Source					
				Toxicity		High	2.2	Miles		
					Nonpoint/Point Source					
4	R	CALLEGUAS CREEK REACH 2 (0.5 MI S OF BROOME RD TO POTRERO RD)	403.12							
				Ammonia		High	2.3	Miles	1298	
					Nonpoint/Point Source					

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REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				ChemA		High	2.3	Miles	1298	
				<i>Elevated levels of chemA pesticides in tissue.</i>						
					Nonpoint Source					
				Chlordane		High	2.3	Miles	1298	
				<i>Elevated level of chlordane in tissue.</i>						
					Nonpoint Source					
				Dacthal		High	2.3	Miles	1298	
				<i>Elevated level of dacthal in tissue.</i>						
					Nonpoint Source					
				DDT		High	2.3	Miles	1298	
				<i>Elevated level of DDT in tissue and sediment.</i>						
					Nonpoint Source					
				Endosulfan		High	2.3	Miles	1298	
				<i>Elevated level of endosulfan in tissue.</i>						
					Nonpoint Source					
				Nitrogen		Medium	2.3	Miles	1298	
					Nonpoint/Point Source					
				PCBs		High	2.3	Miles		
				<i>Elevated level of PCBs in tissue.</i>						
					Nonpoint/Point Source					
				Sediment Toxicity		Medium	2.3	Miles		
					Nonpoint/Point Source					
				Toxaphene		High	2.3	Miles	1298	
				<i>Elevated level of toxaphene in tissue and sediment.</i>						
					Nonpoint Source					
				Toxicity		High	2.3	Miles		
					Nonpoint/Point Source					
4	R	CALLEGUAS CREEK REACH 3 (POTRERO TO SOMIS RD)	403.12	Chloride		Medium	7.7	Miles	0197	1200
					Nonpoint/Point Source					
				Nitrate and Nitrite		Medium	7.7	Miles	1298	
					Nonpoint/Point Source					
				Total Dissolved Solids		Medium	7.7	Miles		
					Nonpoint/Point Source					
4	R	COMPTON CREEK	405.15	Copper		Low	8.52	Miles		
					Nonpoint/Point Source					
				High Coliform Count		Medium	8.52	Miles		
					Nonpoint/Point Source					
				Lead		Low	8.52	Miles		
					Nonpoint/Point Source					
				pH		Medium	8.52	Miles		
					Nonpoint/Point Source					

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REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
4	R	CONEJO CREEK / ARROYO CONEJO NORTH FORK	403.64	Ammonia	Nonpoint/Point Source	High	6.51	Miles	1298	
				Chlordane	Nonpoint Source	Medium	6.51	Miles	1298	
				<i>Elevated levels of chlordane in tissue.</i>						
				DDT	Nonpoint Source	Medium	6.51	Miles	1298	
				<i>Elevated levels of DDT in tissue.</i>						
				Sulfates	Nonpoint/Point Source	Medium	6.51	Miles		
				Total Dissolved Solids	Nonpoint/Point Source	Medium	6.51	Miles		
4	R	CONEJO CREEK REACH 1 (CONFL CALL TO SANTA ROSA RD)	403.12	Algae	Nonpoint/Point Source	Low	5.8	Miles	1298	
				Ammonia	Nonpoint/Point Source	High	5.8	Miles	1298	
				Cadmium	Nonpoint/Point Source	Medium	5.8	Miles		
				<i>Elevated levels of cadmium in tissue.</i>						
				ChemA	Nonpoint Source	High	5.8	Miles	1298	
				<i>Elevated levels of chemA pesticides in tissue.</i>						
				Chromium	Nonpoint/Point Source	Medium	5.8	Miles		
				<i>Elevated levels of chromium in tissue.</i>						
				Dacthal	Nonpoint Source	High	5.8	Miles	1298	
				<i>Elevated levels of dacthal in tissue.</i>						
				DDT	Nonpoint Source	High	5.8	Miles	1298	
				<i>Elevated levels of DDT in tissue.</i>						
				Endosulfan	Nonpoint Source	High	5.8	Miles	1298	
				<i>Elevated levels of endosulfan in tissue.</i>						
				Nickel	Nonpoint/Point Source	Medium	5.8	Miles		
				<i>Elevated levels of nickel in tissue.</i>						
				Org. enrichment/Low D.O.	Nonpoint/Point Source	Medium	5.8	Miles		

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REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				Silver		Medium	5.8	Miles		
				Elevated levels of silver in tissue.						
					Nonpoint/Point Source					
				Sulfates		Medium	5.8	Miles		
					Nonpoint/Point Source					
				Total Dissolved Solids		Medium	5.8	Miles		
					Nonpoint/Point Source					
				Toxaphene		High	5.8	Miles	1298	
				Elevated levels of toxaphene in tissue and sediment.						
					Nonpoint Source					
				Toxicity		High	5.8	Miles		
					Nonpoint/Point Source					
4	R	CONEJO CREEK REACH 2 (SANTA ROSA RD TO THO. OAKS CITY LIMIT)	403.63							
				Algae		Low	2.67	Miles	1298	
					Nonpoint/Point Source					
				Ammonia		High	2.67	Miles	1298	
					Nonpoint/Point Source					
				Cadmium		Medium	2.67	Miles		
				Elevated levels of cadmium in tissue.						
					Nonpoint/Point Source					
				ChemA		High	2.67	Miles	1298	
				Elevated levels of chemA pesticides in tissue.						
					Nonpoint Source					
				Chloride		Medium	2.67	Miles	0197	1200
					Nonpoint/Point Source					
				Chromium		Medium	2.67	Miles		
				Elevated levels of chromium in tissue.						
					Nonpoint/Point Source					
				Dacthal		High	2.67	Miles	1298	
				Elevated levels of dacthal in tissue.						
					Nonpoint Source					
				DDT		High	2.67	Miles	1298	
				Elevated levels of DDT in tissue.						
					Nonpoint Source					
				Endosulfan		High	2.67	Miles	1298	
				Elevated levels of endosulfan in tissue.						
					Nonpoint Source					
				Nickel		Medium	2.67	Miles		
				Elevated levels of nickel in tissue.						
					Nonpoint/Point Source					
				Org. enrichment/Low D.O.		Medium	2.67	Miles		
					Nonpoint/Point Source					

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REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
4	R	CONEJO CREEK REACH 3 (THOUSAND OAKS CITY LIMIT TO LYNN RD.)	403.64	Silver		Medium	2.67	Miles		
				<i>Elevated levels of silver in tissue.</i>						
					Nonpoint/Point Source					
				Sulfates		Medium	2.67	Miles		
					Nonpoint/Point Source					
				Total Dissolved Solids		Medium	2.67	Miles		
					Nonpoint/Point Source					
				Toxaphene		High	2.67	Miles	1298	
				<i>Elevated levels of toxaphene in tissue and sediment.</i>						
					Nonpoint Source					
				Toxicity		High	2.67	Miles		
					Nonpoint/Point Source					
				Algae		Low	5.6	Miles	1298	
					Nonpoint/Point Source					
				Ammonia		High	5.6	Miles	1298	
					Nonpoint/Point Source					
				Cadmium		Medium	5.6	Miles		
				<i>Elevated levels of cadmium in tissue.</i>						
					Nonpoint/Point Source					
				ChemA		High	5.6	Miles	1298	
				<i>Elevated levels of chemA pesticides in tissue.</i>						
					Nonpoint Source					
				Chromium		Medium	5.6	Miles		
				<i>Elevated levels of chromium in tissue.</i>						
					Nonpoint/Point Source					
				Dacthal		High	5.6	Miles	1298	
				<i>Elevated levels of dacthal in tissue.</i>						
					Nonpoint Source					
				DDT		High	5.6	Miles	1298	
				<i>Elevated levels of DDT in tissue.</i>						
					Nonpoint Source					
				Endosulfan		High	5.6	Miles	1298	
				<i>Elevated levels of endosulfan in tissue.</i>						
					Nonpoint Source					
				Nickel		Medium	5.6	Miles		
				<i>Elevated levels of nickel in tissue.</i>						
					Nonpoint/Point Source					
				Org. enrichment/Low D.O.		Medium	5.6	Miles		
					Nonpoint/Point Source					
				Silver		Medium	5.6	Miles		
				<i>Elevated levels of silver in tissue.</i>						
					Nonpoint/Point Source					

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4	R	CONEJO CREEK REACH 4 (ABOVE LYNN RD.)	403.68	Sulfates	Nonpoint/Point Source	Medium	5.6	Miles		
				Total Dissolved Solids	Nonpoint/Point Source	Medium	5.6	Miles		
				Toxaphene <i>Elevated levels of toxaphene in tissue and sediment.</i>	Nonpoint Source	High	5.6	Miles	1298	
				Toxicity	Nonpoint/Point Source	High	5.6	Miles		
				Algae	Nonpoint/Point Source	Low	4.98	Miles		
				Ammonia	Nonpoint/Point Source	High	4.98	Miles	1298	
				Chema <i>Elevated levels of chema pesticides in tissue.</i>	Nonpoint Source	High	4.98	Miles	1298	
				Chloride	Nonpoint/Point Source	Medium	4.98	Miles	0197	1200
				Dacthal <i>Elevated levels of dacthal in tissue.</i>	Nonpoint Source	High	4.98	Miles	1298	
				DDT <i>Elevated levels of DDT in tissue.</i>	Nonpoint Source	High	4.98	Miles	1298	
				Endosulfan <i>Elevated levels of endosulfan in tissue.</i>	Nonpoint Source	High	4.98	Miles	1298	
				Org. enrichment/Low D.O.	Nonpoint/Point Source	Medium	4.98	Miles		
				Sulfates	Nonpoint/Point Source	Medium	4.98	Miles		
				Total Dissolved Solids	Nonpoint/Point Source	Medium	4.98	Miles		
				Toxaphene <i>Elevated levels of toxaphene in tissue and sediment.</i>	Nonpoint Source	High	4.98	Miles	1298	
				Toxicity	Nonpoint/Point Source	High	4.98	Miles		
				Abnormal Fish Histology	Nonpoint/Point Source	Medium	13.45	Miles		
4	R	COYOTE CREEK	405.15							

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REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
4	R	DOMINGUEZ CHANNEL (ABOVE VERMONT)	405.12	Algae		Medium	13.45	Miles		
					Nonpoint/Point Source					
				Ammonia		High	13.45	Miles		
					Nonpoint/Point Source					
				High Coliform Count		Medium	13.45	Miles		
					Nonpoint/Point Source					
				Silver		Medium	13.45	Miles		
				Elevated levels of silver in tissue.						
					Nonpoint/Point Source					
				Aldrin		Medium	9	Miles		
				Elevated levels of aldrin in tissue.						
					Nonpoint/Point Source					
				Ammonia		Low	9	Miles		
					Nonpoint/Point Source					
				ChemA		High	9	Miles		
				Elevated levels of chemA pesticides in tissue.						
					Nonpoint/Point Source					
				Chlordane		High	9	Miles		
				Elevated levels of chlordane in tissue.						
					Nonpoint/Point Source					
				Chromium		Medium	9	Miles		
				Elevated levels of chromium in sediment.						
					Nonpoint/Point Source					
				Copper		Low	9	Miles		
					Nonpoint/Point Source					
				DDT		High	9	Miles		
				Elevated levels of DDT in tissue and sediment.						
					Nonpoint/Point Source					
				Dieldrin		Medium	9	Miles		
				Elevated levels of dieldrin in tissue.						
					Nonpoint/Point Source					
				High Coliform Count		Low	9	Miles		
					Nonpoint/Point Source					
				Lead		Low	9	Miles		
				Elevated levels of lead in tissue.						
					Nonpoint/Point Source					
				PAHs		High	9	Miles		
				Elevated levels of PAHs in sediment.						
					Nonpoint/Point Source					
				PCBs		High	9	Miles		
				Elevated levels of PCBs in tissue.						
					Nonpoint/Point Source					

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REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				Zinc		High	9	Miles		
				<i>Elevated levels of zinc in sediment.</i>						
				Nonpoint/Point Source						
4	R	DOMINGUEZ CHANNEL ESTUARY (TO VERMONT)	405.12	Aldrin		Medium	8.4	Miles		
				<i>Elevated levels of aldrin in tissue.</i>						
				Nonpoint/Point Source						
				Ammonia		Low	8.4	Miles		
				Nonpoint/Point Source						
				Benthic Comm. Effects		High	8.4	Miles		
				Nonpoint/Point Source						
				ChemA		High	8.4	Miles		
				<i>Elevated levels of chemA pesticides in tissue.</i>						
				Nonpoint/Point Source						
				Chlordane		High	8.4	Miles		
				<i>Elevated levels of chlordane in tissue.</i>						
				Nonpoint/Point Source						
				Chromium		Medium	8.4	Miles		
				<i>Elevated levels of chromium in sediment.</i>						
				Nonpoint/Point Source						
				Copper		Low	8.4	Miles		
				Nonpoint/Point Source						
				DDT		High	8.4	Miles		
				<i>Elevated levels of DDT in tissue and sediment.</i>						
				Nonpoint/Point Source						
				Dieldrin		Medium	8.4	Miles		
				<i>Elevated levels of dieldrin in tissue.</i>						
				Nonpoint/Point Source						
				High Coliform Count		Low	8.4	Miles		
				Nonpoint/Point Source						
				Lead		Low	8.4	Miles		
				<i>Elevated levels of lead in tissue.</i>						
				Nonpoint/Point Source						
				PAHs		High	8.4	Miles		
				<i>Elevated levels of PAHs in sediment.</i>						
				Nonpoint/Point Source						
				PCBs		High	8.4	Miles		
				<i>Elevated levels of PCBs in tissue.</i>						
				Nonpoint/Point Source						
				Zinc		High	8.4	Miles		
				<i>Elevated levels of zinc in sediment.</i>						
				Nonpoint/Point Source						

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REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
4	R	DUCK POND AGRICULTURAL DRAIN/MUGU DRAIN/OXNARD DR #2	403.11	ChemA <i>Elevated levels of chemA pesticides in tissue.</i> Nonpoint Source		High	13.5	Miles	1298	
				Chlordane <i>Elevated levels of chlordane in tissue.</i> Nonpoint Source		High	13.5	Miles	1298	
				DDT <i>Elevated levels of DDT in tissue and sediment.</i> Nonpoint Source		High	13.5	Miles	1298	
				Nitrogen Nonpoint Source		Medium	13.5	Miles	1298	
				Sediment Toxicity Nonpoint Source		Medium	13.5	Miles		
				Toxaphene <i>Elevated levels of toxaphene in tissue.</i> Nonpoint Source		High	13.5	Miles	1298	
				Toxicity Nonpoint Source		High	13.5	Miles		
4	R	FOX BARRANCA	403.62	Boron Nonpoint Source		Medium	3.03	Miles		
				Nitrate and Nitrite Nonpoint Source		Medium	3.03	Miles	1298	
				Sulfates Nonpoint Source		Medium	3.03	Miles		
				Total Dissolved Solids Nonpoint Source		Medium	3.03	Miles		
4	R	LAS VIRGENES CREEK	404.22	High Coliform Count Nonpoint Source		High	11.47	Miles		
				Nutrients (Algae) Nonpoint Source		Medium	11.47	Miles	0193	1202
				Org. enrichment/Low D.O. Nonpoint Source		Medium	11.47	Miles		
				Scum/Foam-unnatural Nonpoint Source		Low	11.47	Miles		
				Selenium Nonpoint Source		Low	11.47	Miles		
				Trash Nonpoint Source		Low	11.47	Miles		

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REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
4	R	LINDERO CREEK REACH 1	404.23	Algae	Nonpoint Source	Medium	2.2	Miles		
				High Coliform Count	Nonpoint Source	High	2.2	Miles		
				Scum/Foam-unnatural	Nonpoint Source	Low	2.2	Miles		
				Selenium	Nonpoint Source	Low	2.2	Miles		
				Trash	Nonpoint Source	Low	2.2	Miles		
4	R	LINDERO CREEK REACH 2 (ABOVE LAKE)	404.23	Algae	Nonpoint Source	Medium	4.8	Miles		
				High Coliform Count	Nonpoint Source	High	4.8	Miles		
				Scum/Foam-unnatural	Nonpoint Source	Low	4.8	Miles		
				Selenium	Nonpoint Source	Low	4.8	Miles		
				Trash	Nonpoint Source	Low	4.8	Miles		
4	R	LOS ANGELES RIVER REACH 1 (ESTUARY TO CARSON STREET)	405.12	Ammonia	Nonpoint/Point Source	High	2.01	Miles	0194	1299
				High Coliform Count	Nonpoint/Point Source	Medium	2.01	Miles		
				Lead	Nonpoint/Point Source	Low	2.01	Miles		
				Nutrients (Algae)	Nonpoint/Point Source	Medium	2.01	Miles	0194	1299
				pH	Nonpoint/Point Source	Medium	2.01	Miles		
				Scum/Foam-unnatural	Nonpoint/Point Source	Low	2.01	Miles		
				Trash	Nonpoint/Point Source	High	2.01	Miles		
4	R	LOS ANGELES RIVER REACH 2 (CARSON TO FIGUEROA STREET)	405.15	Ammonia	Nonpoint/Point Source	High	19.37	Miles	0194	1299

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REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
4	R	LOS ANGELES RIVER REACH 3 (FIGUEROA ST TO RIVERSIDE DR.)	405.21	High Coliform Count		Medium	19.37	Miles		
				Lead	Nonpoint/Point Source	Low	19.37	Miles		
				Nutrients (Algae)	Nonpoint/Point Source	Medium	19.37	Miles	0194	1299
				Odors	Nonpoint/Point Source	Low	19.37	Miles		
				Oil	Nonpoint/Point Source	Medium	19.37	Miles		
				Scum/Foam-unnatural	Nonpoint/Point Source	Low	19.37	Miles		
				Trash	Nonpoint/Point Source	High	19.37	Miles		
					Nonpoint/Point Source					
				Ammonia	Nonpoint/Point Source	High	7.24	Miles	0194	1299
				Nutrients (Algae)	Nonpoint/Point Source	Medium	7.24	Miles	0194	1299
4	R	LOS ANGELES RIVER REACH 4 (SEPULVEDA DR. TO SEPULVEDA DAM)	405.21	Odors	Nonpoint/Point Source	Low	7.24	Miles		
				Scum/Foam-unnatural	Nonpoint/Point Source	Low	7.24	Miles		
				Trash	Nonpoint/Point Source	High	7.24	Miles		
					Nonpoint/Point Source					
				Ammonia	Nonpoint/Point Source	High	11.84	Miles	0194	1299
				High Coliform Count	Nonpoint/Point Source	Medium	11.84	Miles		
				Lead	Nonpoint/Point Source	Low	11.84	Miles		
				Nutrients (Algae)	Nonpoint/Point Source	Medium	11.84	Miles	0194	1299
				Odors	Nonpoint/Point Source	Low	11.84	Miles		
				Scum/Foam-unnatural	Nonpoint/Point Source	Low	11.84	Miles		
4	R	LOS ANGELES RIVER REACH 4 (SEPULVEDA DR. TO SEPULVEDA DAM)	405.21	Trash	Nonpoint/Point Source	High	11.84	Miles		
					Nonpoint/Point Source					

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REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
4	R	LOS ANGELES RIVER REACH 5 (AT SEPULVEDA BASIN)	405.21	Ammonia	Nonpoint/Point Source	High	1.93	Miles	0194	1299
				ChemA	Nonpoint/Point Source	Medium	1.93	Miles		
				Chlorpyrifos	Nonpoint/Point Source	Medium	1.93	Miles		
				<i>Elevated levels of chlorpyrifos in tissue.</i>						
				Nutrients (Algae)	Nonpoint/Point Source	Medium	1.93	Miles	0194	1299
				Odors	Nonpoint/Point Source	Low	1.93	Miles		
				Oil	Nonpoint/Point Source	Low	1.93	Miles		
				Scum/Foam-unnatural	Nonpoint/Point Source	Low	1.93	Miles		
				Trash	Nonpoint/Point Source	High	1.93	Miles		
4	R	LOS ANGELES RIVER REACH 6 (ABOVE SEPULVEDA FLD CNTRL BASIN)	405.21	Dichloroethylene/1,1-DCE	Nonpoint Source	Low	6.17	Miles		
				High Coliform Count	Nonpoint Source	Low	6.17	Miles		
				Tetrachloroethylene/PCE	Nonpoint Source	Low	6.17	Miles		
				Trichloroethylene/TCE	Nonpoint Source	Low	6.17	Miles		
4	R	MALIBU CREEK	404.21	Fish barriers	Dam Construction/Operation	Low	9.5	Miles		
				High Coliform Count	Nonpoint/Point Source	High	9.5	Miles		
				Nutrients (Algae)	Nonpoint/Point Source	Medium	9.5	Miles	0193	1202
				Scum/Foam-unnatural	Nonpoint/Point Source	Low	9.5	Miles		
				Trash	Nonpoint Source	Low	9.5	Miles		

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REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
4	R	MATILAJA CREEK REACH 1 (JCT. WITH N. FORK TO RESERVOIR)	402.20	Fish barriers	Dam Construction/Operation	Low	1.6	Miles		
4	R	MATILAJA CREEK REACH 2 (ABOVE RESERVOIR)	402.20	Fish barriers	Dam Construction/Operation	Low	16.8	Miles		
4	R	MEDEA CREEK REACH 1 (LAKE TO CONFL. WITH LINDERO)	404.23	Algae	Nonpoint Source	Medium	3.01	Miles		
				High Coliform Count	Nonpoint Source	High	3.01	Miles		
				Selenium	Nonpoint Source	Low	3.01	Miles		
				Trash	Nonpoint Source	Low	3.01	Miles		
4	R	MEDEA CREEK REACH 2 (ABV COFL. WITH LINDERO)	404.24	Algae	Nonpoint Source	Medium	5.44	Miles		
				High Coliform Count	Nonpoint Source	High	5.44	Miles		
				Selenium	Nonpoint Source	Low	5.44	Miles		
				Trash	Nonpoint Source	Low	5.44	Miles		
4	R	MINT CANYON CREEK REACH 1 (CONFL TO ROWLER CYN)	403.51	Nitrate and Nitrite	Nonpoint Source	Medium	8.16	Miles		
4	R	MONROVIA CANYON CREEK	405.33	Lead	Nonpoint Source	Low	2.09	Miles		
4	R	PALO COMADO CREEK	404.23	High Coliform Count	Nonpoint Source	High	7.78	Miles		
4	R	PICO KENTER DRAIN	405.13	Ammonia	Nonpoint Source	Low	4.77	Miles		
				Copper	Nonpoint Source	Medium	4.77	Miles		

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REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				Enteric Viruses	Nonpoint Source	High	4.77	Miles		
				High Coliform Count	Nonpoint Source	High	4.77	Miles		
				Lead	Nonpoint Source	Low	4.77	Miles		
				PAHs	Nonpoint Source	High	4.77	Miles		
				Toxicity	Nonpoint Source	Medium	4.77	Miles		
				Trash	Nonpoint Source	Low	4.77	Miles		
4	R	REVOLON SLOUGH MAIN BRANCH (MUGU LAGOON TO CENTRAL AVENUE)	403.11							
				Algae	Nonpoint Source	Low	8.9	Miles	1298	
				ChemA	Nonpoint Source	High	8.9	Miles	1298	
				<i>Elevated levels of chemA pesticides in tissue.</i>						
				Chlordane	Nonpoint Source	High	8.9	Miles	1298	
				<i>Elevated levels of chlordane in tissue and sediment.</i>						
				Chlorpyrifos	Nonpoint Source	High	8.9	Miles	1298	
				<i>Elevated levels of chlorpyrifos in tissue.</i>						
				Dacthal	Nonpoint Source	High	8.9	Miles	1298	
				<i>Elevated levels of dacthal in sediment.</i>						
				DDT	Nonpoint Source	High	8.9	Miles	1298	
				<i>Elevated levels of DDT in tissue and sediment.</i>						
				Dieldrin	Nonpoint Source	High	8.9	Miles	1298	
				<i>Elevated levels of dieldrin in tissue.</i>						
				Endosulfan	Nonpoint Source	High	8.9	Miles	1298	
				<i>Elevated levels of endosulfan in tissue and sediment.</i>						
				Nitrogen	Nonpoint Source	Medium	8.9	Miles	1298	
				PCBs	Nonpoint Source	High	8.9	Miles		
				<i>Elevated levels of PCBs in tissue.</i>						
				Selenium	Nonpoint Source	Low	8.9	Miles		

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REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
4	R	RIO DE SANTA CLARA/OXNARD DRAIN #3	403.11	Toxaphene		High	8.9	Miles	1298	
				<i>Elevated levels of toxaphene in tissue and sediment.</i>						
					Nonpoint Source					
				Toxicity		High	8.9	Miles		
					Nonpoint Source					
				Trash		Low	8.9	Miles		
					Nonpoint Source					
				ChemA		High	2.48	Miles	1298	
				<i>Elevated levels of chemA pesticides in tissue.</i>						
					Nonpoint Source					
4	R	RIO HONDO REACH 1 (CONFL. LA RIVER TO SNT ANA FWY)	405.15	Chlordane		High	2.48	Miles	1298	
				<i>Elevated levels of chlordane in tissue.</i>						
					Nonpoint Source					
				DDT		High	2.48	Miles	1298	
				<i>Elevated levels of DDT in tissue.</i>						
					Nonpoint Source					
				Nitrogen		Low	2.48	Miles	1298	
					Nonpoint Source					
				PCBs		High	2.48	Miles		
				<i>Elevated levels of PCBs in tissue.</i>						
4	R	RIO HONDO REACH 1 (CONFL. LA RIVER TO SNT ANA FWY)	405.15		Nonpoint Source					
				Sediment Toxicity		High	2.48	Miles		
					Nonpoint Source					
				Toxaphene		High	2.48	Miles	1298	
				<i>Elevated levels of toxaphene in tissue.</i>						
					Nonpoint Source					
				Ammonia		Low	4.19	Miles	0194	1299
					Nonpoint/Point Source					
				Copper		Low	4.19	Miles		
					Nonpoint/Point Source					
4	R	RIO HONDO REACH 1 (CONFL. LA RIVER TO SNT ANA FWY)	405.15	High Coliform Count		Low	4.19	Miles		
					Nonpoint/Point Source					
				Lead		Low	4.19	Miles		
					Nonpoint/Point Source					
				pH		Low	4.19	Miles		
					Nonpoint/Point Source					
				Trash		High	4.19	Miles		
					Nonpoint/Point Source					
				Zinc		Low	4.19	Miles		
					Nonpoint/Point Source					

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REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
4	R	RIO HONDO REACH 2 (AT SPREADING GROUNDS)	405.15	Ammonia	Nonpoint/Point Source	Medium	2.71	Miles	0194	1299
				High Coliform Count	Nonpoint/Point Source	Low	2.71	Miles		
4	R	SAN GABRIEL RIVER EAST FORK	405.43	Trash	Nonpoint Source	High	12	Miles		
4	R	SAN GABRIEL RIVER ESTUARY	405.15	Abnormal Fish Histology	Nonpoint/Point Source	Medium	2.95	Miles		
				Arsenic	Elevated levels of arsenic in tissue.	Low	2.95	Miles		
4	R	SAN GABRIEL RIVER REACH 1 (ESTUARY TO FIRESTONE)	405.15	Abnormal Fish Histology	Nonpoint/Point Source	Medium	8.73	Miles		
				Algae	Nonpoint/Point Source	Medium	8.73	Miles		
				Ammonia	Nonpoint/Point Source	High	8.73	Miles		
				High Coliform Count	Nonpoint/Point Source	Low	8.73	Miles		
				Toxicity	Nonpoint/Point Source	Medium	8.73	Miles		
4	R	SAN GABRIEL RIVER REACH 2 (FIRESTONE TO WHITTIER NARROWS DAM)	405.15	Ammonia	Nonpoint/Point Source	High	9.99	Miles		
				High Coliform Count	Nonpoint/Point Source	Low	9.99	Miles		
				Lead	Nonpoint/Point Source	Low	9.99	Miles		
4	R	SAN GABRIEL RIVER REACH 3 (WHITTIER NARROWS TO RAMONA)	405.41	Toxicity	Nonpoint/Point Source	Medium	3.52	Miles		

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REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
4	R	SAN JOSE CREEK REACH 1 (SG CONFL. TO TEMPLE STREET)	405.41	Algae	Nonpoint/Point Source	Medium	13.12	Miles		
				Ammonia	Nonpoint/Point Source	High	13.12	Miles		
				High Coliform Count	Nonpoint/Point Source	Low	13.12	Miles		
4	R	SAN JOSE CREEK REACH 2 (TEMPLE TO I-10 AT WHITE AVE.)	405.51	Algae	Nonpoint/Point Source	Medium	4.93	Miles		
				Ammonia	Nonpoint/Point Source	High	4.93	Miles		
				High Coliform Count	Nonpoint/Point Source	Low	4.93	Miles		
4	R	SANTA CLARA RIVER ESTUARY	403.11	ChemA	Nonpoint Source	Medium	2.07	Miles		
				High Coliform Count	Nonpoint Source	Low	2.07	Miles		
				Toxaphene	Nonpoint Source	Medium	2.07	Miles		
4	R	SANTA CLARA RIVER REACH 3 (DAM TO ABV SP CRK/BLW TIMBER CYN)	403.21	Ammonia	Nonpoint/Point Source	Medium	13.24	Miles		
				Chloride	Nonpoint/Point Source	Medium	13.24	Miles	1297	
4	R	SANTA CLARA RIVER REACH 7 (BLUE CUT TO WEST PIER HWY 99)	403.51	Ammonia	Nonpoint/Point Source	Medium	9.21	Miles		
				Chloride	Chloride was relisted by USEPA Nonpoint/Point Source	Medium	9.21	Miles	1297	
				High Coliform Count	Nonpoint/Point Source	Low	9.21	Miles		
				Nitrate and Nitrite	Nonpoint/Point Source	Medium	9.21	Miles		

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REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
4	R	SANTA CLARA RIVER REACH 8-W PIER HY 99 TO BOUQUET CYN RD BRG	403.51	Ammonia	Nonpoint/Point Source	Medium	3.42	Miles		
				Chloride	Nonpoint/Point Source	Medium	3.42	Miles	1297	
				Chloride was relisted by USEPA.						
				High Coliform Count	Nonpoint/Point Source	Low	3.42	Miles		
				Nitrate and Nitrite	Nonpoint/Point Source	Medium	3.42	Miles		
				Org. enrichment/Low D.O.	Nonpoint/Point Source	Medium	3.42	Miles		
4	R	SANTA CLARA RIVER REACH 9 (BOUQUET CYN RD. TO ABV LANG GAGNG)	403.51	High Coliform Count	Nonpoint/Point Source	Low	12.69	Miles		
4	R	SANTA MONICA CANYON	405.13	High Coliform Count	Nonpoint Source	High	2.9	Miles		
				Lead	Nonpoint Source	Low	2.9	Miles		
4	R	SEPULVEDA CANYON	405.13	Ammonia	Nonpoint Source	Low	6.8	Miles		
				High Coliform Count	Nonpoint Source	High	6.8	Miles		
				Lead	Nonpoint Source	Low	6.8	Miles		
4	R	STOKES CREEK	404.22	High Coliform Count	Nonpoint Source	High	5.33	Miles		
4	R	TAPO CANYON REACH 1	403.67	Boron	Nonpoint/Point Source	Medium	5.23	Miles		
				Chloride	Nonpoint/Point Source	Medium	5.23	Miles	0197	1200
				Sulfates	Nonpoint/Point Source	Medium	5.23	Miles		
				Total Dissolved Solids	Nonpoint/Point Source	Medium	5.23	Miles		

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REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
4	R	TOPANGA CANYON CREEK	404.11	Lead	Nonpoint Source	Low	8.6	Miles		
4	R	TORRANCE CARSON CHANNEL	405.12	Copper	Nonpoint Source	Low	12.6	Miles		
				High Coliform Count	Nonpoint Source	Medium	12.6	Miles		
				Lead	Nonpoint Source	Low	12.6	Miles		
4	R	TORREY CANYON CREEK	403.41	Nitrate and Nitrite	Nonpoint Source	Medium	1.7	Miles		
4	R	TRIUNFO CANYON CREEK REACH 1	404.24	Lead	Nonpoint Source	Low	4.06	Miles		
				Mercury	Nonpoint Source	Low	4.06	Miles		
4	R	TRIUNFO CANYON CREEK REACH 2	404.25	Lead	Nonpoint Source	Low	1.98	Miles		
				Mercury	Nonpoint Source	Low	1.98	Miles		
4	R	TUJUNGA WASH (LA RIVER TO HANSEN DAM)	405.21	Ammonia	Nonpoint Source	Medium	9.68	Miles	0194	1299
				Copper	Nonpoint Source	Medium	9.68	Miles		
				High Coliform Count	Nonpoint Source	Low	9.68	Miles		
				Odors	Nonpoint Source	Low	9.68	Miles		
				Scum/Foam-unnatural	Nonpoint Source	Low	9.68	Miles		
				Trash	Nonpoint Source	High	9.68	Miles		
4	R	VENTURA RIVER ESTUARY	402.10	Algae	Nonpoint/Point Source	Low	0.35	Miles		

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REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				DDT		Medium	0.35	Miles		
				<i>Elevated levels of DDT in tissue.</i>						
					Nonpoint/Point Source					
				Eutrophic		Low	0.35	Miles		
					Nonpoint/Point Source					
				Trash		Low	0.35	Miles		
					Nonpoint/Point Source					
4	R	VENTURA RIVER REACH 1 (ESTUARY TO MAIN STREET)	402.10							
				Algae		Low	0.18	Miles		
					Nonpoint/Point Source					
				Copper		Low	0.18	Miles		
				<i>Elevated levels of copper in tissue.</i>						
					Nonpoint/Point Source					
				Silver		Medium	0.18	Miles		
				<i>Elevated levels of silver in tissue.</i>						
					Nonpoint/Point Source					
				Zinc		Low	0.18	Miles		
				<i>Elevated levels of zinc in tissue.</i>						
					Nonpoint/Point Source					
4	R	VENTURA RIVER REACH 2 (MAIN ST. TO WELDON CANYON)	402.10							
				Algae		Low	4.64	Miles		
					Nonpoint/Point Source					
				Copper		Low	4.64	Miles		
				<i>Elevated levels of copper in tissue.</i>						
					Nonpoint/Point Source					
				Selenium		Low	4.64	Miles		
				<i>Elevated levels of selenium in tissue.</i>						
					Nonpoint/Point Source					
				Silver		Medium	4.64	Miles		
				<i>Elevated levels of silver in tissue.</i>						
					Nonpoint/Point Source					
				Zinc		Low	4.64	Miles		
				<i>Elevated levels of zinc in tissue.</i>						
					Nonpoint/Point Source					
4	R	VENTURA RIVER REACH 3 (WELDON CANYON TO CONFL. W/ COYOTE CR)	402.10							
				Pumping		Low	0.78	Miles		
					Nonpoint Source					
				Water Diversion		Low	0.78	Miles		
					Nonpoint Source					

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4	R	VENTURA RIVER REACH 4 (COYOTE CREEK TO CAMINO CIELO RD.)	402.20	Pumping		Low	14.94	Miles		
				Water Diversion	Nonpoint Source	Low	14.94	Miles		
4	R	VERDUGO WASH REACH 1 (LA RIVER TO VERDUGO RD.)	405.21	Algae	Nonpoint Source	Low	3.41	Miles		
				High Coliform Count	Nonpoint Source	Low	3.41	Miles		
				Trash	Nonpoint Source	High	3.41	Miles		
4	R	VERDUGO WASH REACH 2 (ABOVE VERDUGO ROAD)	405.24	Algae	Nonpoint Source	Low	5.55	Miles		
				High Coliform Count	Nonpoint Source	Low	5.55	Miles		
				Trash	Nonpoint Source	High	5.55	Miles		
4	R	WALNUT CREEK WASH (DRAINS FROM PUDDINGSTONE RESERVOIR)	405.41	pH	Nonpoint/Point Source	High	13.9	Miles		
				Toxicity	Nonpoint/Point Source	Medium	13.9	Miles		
4	R	WHEELER CANYON / TODD BARRANCA	403.21	Nitrate and Nitrite	Nonpoint Source	Medium	4.17	Miles		
4	R	WILMINGTON DRAIN	405.12	Ammonia	Nonpoint Source	Medium	4.9	Miles		
				Copper	Nonpoint Source	Low	4.9	Miles		
				High Coliform Count	Nonpoint Source	Low	4.9	Miles		
				Lead	Nonpoint Source	Low	4.9	Miles		

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REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
4	T	BALLONA CREEK WETLANDS	405.13	Arsenic		Medium	86	Acres		
				<i>Elevated levels of arsenic in tissue.</i>						
					Nonpoint Source					
				Exotic Vegetation		Low	86	Acres		
					Nonpoint Source					
				Habitat alterations		Low	86	Acres		
					Nonpoint Source					
				Hydromodification		Low	86	Acres		
					Nonpoint Source					
				Reduced Tidal Flushing		Low	86	Acres		
					Nonpoint Source					
				Trash		High	86	Acres		
					Nonpoint Source					
4	T	COLORADO LAGOON	405.12	Chlordane		High	13.6	Acres		
				<i>Elevated levels of chlordane in tissue and sediment.</i>						
					Nonpoint Source					
				DDT		High	13.6	Acres		
				<i>Elevated levels of DDT in tissue.</i>						
					Nonpoint Source					
				Dieldrin		Medium	13.6	Acres		
				<i>Elevated levels of dieldrin in tissue.</i>						
					Nonpoint Source					
				Lead		Medium	13.6	Acres		
				<i>Elevated levels of lead in tissue and sediment.</i>						
					Nonpoint Source					
				PAHs		High	13.6	Acres		
				<i>Elevated levels of PAHs in sediment.</i>						
					Nonpoint Source					
				PCBs		High	13.6	Acres		
				<i>Elevated levels of PCBs in tissue.</i>						
					Nonpoint Source					
				Sediment Toxicity		Medium	13.6	Acres		
					Nonpoint Source					
				Zinc		Medium	13.6	Acres		
				<i>Elevated levels of zinc in sediment.</i>						
					Nonpoint Source					
4	T	LOS CERRITOS CHANNEL	405.15	Ammonia		Low	16	Acres		
					Nonpoint Source					
				Copper		Low	16	Acres		
					Nonpoint Source					

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REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
5	E	DELTA WATERWAYS	544.000	High Coliform Count		Low	16	Acres		
					Nonpoint Source					
				Lead		Low	16	Acres		
					Nonpoint Source					
				Zinc		Medium	16	Acres		
					Nonpoint Source					
				Chlorpyrifos		High	480000	Acres	0198	1205
					Agriculture Urban Runoff/Storm Sewers					
				DDT		Low	480000	Acres	0104	1211
					Agriculture					
				Diazinon		High	480000	Acres	0198	1205
					Agriculture Urban Runoff/Storm Sewers					
				Electrical Conductivity		Medium	16000	Acres	0101	1211
					Agriculture					
				Group A Pesticides		Low	480000	Acres	0104	1211
					Agriculture					
				Mercury		High	480000	Acres	0198	1205
				Resource extraction sources are abandoned mines.						
	Resource Extraction									
	Org. enrichment/Low D.O.		High	75	Acres	0101	1211			
		Municipal Point Sources Urban Runoff/Storm Sewers								
5	L	BERRYESSA LAKE	512.210	Unknown Toxicity		Medium	480000	Acres	0101	1211
					Source Unknown					
5	L	CLEAR LAKE	513.520	Mercury		High	20700	Acres	0198	1205
					Resource Extraction					
5	L	CLEAR LAKE	513.520	Mercury		High	43000	Acres	0198	1205
					Resource Extraction					
				Nutrients		Low	43000	Acres	0104	1211
			Source Unknown							
5	L	DAVIS CREEK RES	513.320	Mercury		Medium	290	Acres	0198	1211
					Resource Extraction					
5	L	KESWICK RES	524.400							
				Cadmium		Medium	200	Acres	0198	1211
					Resource Extraction					
		Copper		Medium	200	Acres	0198	1211		
			Resource Extraction							

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REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				Zinc	Resource Extraction	Medium	200	Acres	0198	1211
5	L	MARSH CREEK RES	543.000	Mercury	Resource Extraction	Medium	375	Acres	0198	1211
5	L	SHASTA LAKE	506.100	Cadmium	Resource Extraction	Low	20	Acres	0104	1211
				Copper	Resource Extraction	Low	20	Acres	0104	1211
				Zinc	Resource Extraction	Low	20	Acres	0104	1211
5	L	WHISKEYTOWN RES	524.610	High Coliform Count	Septage Disposal	Low	100	Acres	0104	1211
5	R	AMERICAN RIVER, LOWER	519.210	Group A Pesticides	Urban Runoff/Storm Sewers	Low	23	Miles	0104	1211
				Mercury	Resource extraction sources are abandoned mines.	Medium	23	Miles	0101	1211
				Unknown Toxicity	Source Unknown	Low	23	Miles	0104	1211
5	R	ARCADE CREEK	519.210	Chlorpyrifos	Urban Runoff/Storm Sewers	Medium	10	Miles	0198	1211
				Diazinon	The agricultural source of diazinon for these waterbodies is from aerial deposition.	Medium	10	Miles	0198	1211
5	R	CACHE CREEK	511.300	Mercury	Resource extraction sources are abandoned mines.	High	35	Miles	0196	1205
				Unknown Toxicity	Source Unknown	Medium	35	Miles	0101	1211
5	R	CHICKEN RANCH SLOUGH	519.210	Chlorpyrifos	Urban Runoff/Storm Sewers	Medium	5	Miles	0198	1211

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REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				Diazinon		Medium	5	Miles	0198	1211
				<i>The agricultural source of diazinon for these waterbodies is from aerial deposition.</i>						
				Agriculture						
				Urban Runoff/Storm Sewers						
5	R	COLUSA DRAIN	520.210	Carbofuran/Furadan		Medium	70	Miles	0101	1211
					Agriculture					
				Group A Pesticides		Medium	70	Miles	0101	1211
					Agriculture					
				Malathion		Medium	70	Miles	0101	1211
					Agriculture					
				Methyl Parathion		Medium	70	Miles	0101	1211
					Agriculture					
				Unknown Toxicity		Medium	70	Miles	0101	1211
					Agriculture					
5	R	DOLLY CREEK	518.540	Copper		Medium	1	Miles	0101	1211
				<i>Resource extraction sources are abandoned mines.</i>						
				Resource Extraction						
				Zinc		Medium	1	Miles	0101	1211
				<i>Resource extraction sources are abandoned mines.</i>						
				Resource Extraction						
5	R	DUNN CREEK	543.000	Mercury		Low	9	Miles	0104	1211
				<i>Resource extraction sources are abandoned mines.</i>						
				Resource Extraction						
				Metals		Low	9	Miles	0104	1211
				<i>Resource extraction sources are abandoned mines.</i>						
				Resource Extraction						
5	R	ELDER CREEK	519.120	Chlorpyrifos		Medium	10	Miles	0198	1211
					Urban Runoff/Storm Sewers					
				Diazinon		Medium	10	Miles	0198	1211
				<i>The agricultural source of diazinon for these waterbodies is from aerial deposition.</i>						
				Agriculture						
				Urban Runoff/Storm Sewers						
5	R	ELK GROVE CREEK	519.110	Diazinon		Medium	5	Miles	0198	1211
				<i>The agricultural source of diazinon for these waterbodies is from aerial deposition.</i>						
				Agriculture						
				Urban Runoff/Storm Sewers						

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REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
5	R	FALL RIVER (PIT)	526.400	Sedimentation/Siltation		Medium	25	Miles	0104	1211
					Agriculture-grazing Silviculture Highway/Road/Bridge Construction					
5	R	FEATHER RIVER, LOWER	519.220	Diazinon		High	60	Miles	0198	1205
					Agriculture Urban Runoff/Storm Sewers					
				Group A Pesticides		Low	60	Miles	0104	1211
					Agriculture					
				Mercury		Medium	60	Miles	0101	1211
					Resource extraction sources are abandoned mines. Resource Extraction					
				Unknown Toxicity		Medium	60	Miles	0101	1211
					Source Unknown					
5	R	FIVE MILE SLOUGH	544.000	Chlorpyrifos		Medium	1	Miles	0198	1211
					Urban Runoff/Storm Sewers					
				Diazinon		Medium	1	Miles	0198	1211
					The agricultural source of diazinon for these waterbodies is from aerial deposition. Agriculture Urban Runoff/Storm Sewers					
5	R	FRENCH RAVINE	516.320	Bacteria		Low	1	Miles	0104	1211
					Land Disposal					
5	R	HARDING DRAIN (TURLOCK IRR DIST LATERAL #5)	535.500	Ammonia		Low	7	Miles	0104	1211
					Municipal Point Sources Agriculture					
				Chlorpyrifos		Medium	7	Miles	0198	1211
					Agriculture					
				Diazinon		Medium	7	Miles	0198	1211
					Agriculture					
				Unknown Toxicity		Medium	7	Miles	0198	1211
					Agriculture					
5	R	HARLEY GULCH	513.510	Mercury		Medium	8	Miles	0101	1211
					Resource extraction sources are abandoned mines. Resource Extraction					

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REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
5	R	HORSE CREEK	526.200	Cadmium		Low	2	Miles	0104	1211
				<i>Resource extraction sources are abandoned mines.</i>						
				Resource Extraction						
				Copper		Low	2	Miles	0104	1211
				<i>Resource extraction sources are abandoned mines.</i>						
				Resource Extraction						
				Lead		Low	2	Miles	0104	1211
				<i>Resource extraction sources are abandoned mines.</i>						
				Resource Extraction						
				Zinc		Low	2	Miles	0104	1211
				<i>Resource extraction sources are abandoned mines.</i>						
				Resource Extraction						
5	R	HUMBUG CREEK	517.320	Copper		Low	9	Miles	0104	1211
				<i>Resource extraction sources are abandoned mines.</i>						
				Resource Extraction						
				Mercury		Low	9	Miles	0104	1211
				<i>Resource extraction sources are abandoned mines.</i>						
				Resource Extraction						
				Sedimentation/Siltation		Low	9	Miles	0104	1211
				Resource Extraction						
				Zinc		Low	9	Miles	0104	1211
				<i>Resource extraction sources are abandoned mines.</i>						
				Resource Extraction						
5	R	JAMES CREEK	512.240	Mercury		Low	6	Miles	0104	1211
				<i>Resource extraction sources are abandoned mines.</i>						
				Resource Extraction						
				Nickel		Low	6	Miles	0104	1211
				<i>Resource extraction sources are abandoned mines.</i>						
				Resource Extraction						
5	R	KANAKA CREEK	517.420	Arsenic		Low	1	Miles	0104	1211
				<i>Resource extraction sources are abandoned mines.</i>						
				Resource Extraction						
5	R	KINGS RIVER (LOWER)	551.900	Electrical Conductivity		Low	30	Miles	0104	1211
				Agriculture						
				Molybdenum		Low	30	Miles	0104	1211
				Agriculture						
				Toxaphene		Low	30	Miles	0104	1211
				Agriculture						

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5	R	LITTLE BACKBONE CREEK	506.200	Acid Mine Drainage	Resource Extraction	Medium	1	Miles	0104	1211
				Cadmium	Resource extraction sources are abandoned mines.	Medium	1	Miles	0104	1211
					Resource Extraction					
				Copper	Resource extraction sources are abandoned mines.	Medium	1	Miles	0104	1211
					Resource Extraction					
				Zinc	Resource extraction sources are abandoned mines.	Medium	1	Miles	0104	1211
					Resource Extraction					
5	R	LITTLE COW CREEK	507.330	Cadmium	Resource extraction sources are abandoned mines.	Low	1	Miles	0104	1211
					Resource Extraction					
				Copper	Resource extraction sources are abandoned mines.	Low	1	Miles	0104	1211
					Resource Extraction					
				Zinc	Resource extraction sources are abandoned mines.	Low	1	Miles	0104	1211
					Resource Extraction					
5	R	LITTLE GRIZZLY CREEK	518.540	Copper	Mine Tailings	Medium	10	Miles	0101	1202
				Zinc	Mine Tailings	Medium	10	Miles	0101	1202
5	R	LONE TREE CREEK	531.400	Ammonia	Dairies	Low	15	Miles	0104	1211
				Biological Oxygen Demand	Dairies	Low	15	Miles	0104	1211
				Electrical Conductivity	Dairies	Low	15	Miles	0104	1211
5	R	MARSH CREEK	543.000	Mercury	Resource extraction sources are abandoned mines.	Low	24	Miles	0104	1211
					Resource Extraction					
				Metals	Resource extraction sources are abandoned mines.	Low	24	Miles	0104	1211
					Resource Extraction					

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5	R	MERCED RIVER, LOWER	535.000	Chlorpyrifos		High	60	Miles	0198	1205
					Agriculture					
				Diazinon		High	60	Miles	0198	1205
					Agriculture					
				Group A Pesticides		Low	60	Miles	0104	1211
					Agriculture					
5	R	MOKELUMNE RIVER, LOWER	531.200	Copper		Low	28	Miles	0104	1211
					Resource extraction sources are abandoned mines.					
					Resource Extraction					
				Zinc		Low	28	Miles	0104	1211
					Resource extraction sources are abandoned mines.					
					Resource Extraction					
5	R	MORRISON CREEK	519.120	Diazinon		Medium	20	Miles	0198	1211
					The agricultural source of diazinon for these waterbodies is from aerial deposition.					
					Agriculture					
5	R	MOSHER SLOUGH	544.000		Urban Runoff/Storm Sewers					
				Chlorpyrifos		Medium	2	Miles	0198	1211
					Urban Runoff/Storm Sewers					
				Diazinon		Medium	2	Miles	0198	1211
					The agricultural source of diazinon for these waterbodies is from aerial deposition.					
					Agriculture					
					Urban Runoff/Storm Sewers					
5	R	MUD SLOUGH	541.200	Boron		Low	16	Miles	0101	1211
					Agriculture					
				Electrical Conductivity		Low	16	Miles	0101	1211
					Agriculture					
				Pesticides		Low	16	Miles	0101	1211
					Agriculture					
				Selenium		High	16	Miles	0592	1200
					Agriculture					
				Unknown Toxicity		Low	16	Miles	0101	1211
					Agriculture					
5	R	NATOMAS EAST MAIN DRAIN	519.220	Diazinon		Medium	5	Miles	0198	1211
					The agricultural source of diazinon for these waterbodies is from aerial deposition.					
					Agriculture					
					Urban Runoff/Storm Sewers					

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REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				PCBs	Industrial Point Sources Urban Runoff/Storm Sewers	Low	12	Miles	0104	1211
5	R	ORESTIMBA CREEK	541.100	Chlorpyrifos	Agriculture	Medium	10	Miles	0198	1211
				Diazinon	Agriculture	Medium	10	Miles	0198	1211
				Unknown Toxicity	Agriculture	Medium	3	Miles	0101	1211
5	R	PANOCHÉ CREEK	542.400	Mercury	Resource extraction sources are abandoned mines. Resource Extraction	Low	25	Miles	0104	1211
				Sedimentation/Siltation	Agriculture Agriculture-grazing Road Construction	Low	40	Miles	0104	1211
				Selenium	Agriculture Agriculture-grazing Road Construction	Low	40	Miles	0104	1211
5	R	PIT RIVER	506.000	Nutrients	Agriculture Agriculture-grazing	Low	100	Miles	0104	1211
				Org. enrichment/Low D.O.	Agriculture Agriculture-grazing	Low	100	Miles	0104	1211
				Temperature	Agriculture Agriculture-grazing	Low	100	Miles	0104	1211
5	R	SACRAMENTO RIVER (RED BLUFF TO DELTA)	500.000	Diazinon	Agriculture	High	30	Miles	0198	1205
				Mercury	Resource extraction sources are abandoned mines. Resource Extraction	High	30	Miles	0198	1205
				Unknown Toxicity	Source Unknown	Medium	185	Miles	0101	1211

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5	R	SACRAMENTO RIVER (SHASTA DAM TO RED BLUFF)	508.100	Cadmium	Resource extraction sources are abandoned mines.	High	40	Miles	0196	1201
				Copper	Resource extraction sources are abandoned mines.	High	40	Miles	0196	1201
				Unknown Toxicity	Source Unknown	Medium	50	Miles	0101	1211
				Zinc	Resource extraction sources are abandoned mines.	High	40	Miles	0196	1201
5	R	SACRAMENTO SLOUGH	520.100	Diazinon	Agriculture Urban Runoff/Storm Sewers	Medium	1	Miles	0198	1211
				Mercury	Source Unknown	Medium	1	Miles	0198	1211
5	R	SALT SLOUGH	541.200	Boron	Agriculture	Low	15	Miles	0198	1211
				Chlorpyrifos	Agriculture	Low	15	Miles	0198	1211
				Diazinon	Agriculture	Low	15	Miles	0198	1211
				Electrical Conductivity	Agriculture	Low	15	Miles	0198	1211
				Selenium	Agriculture	High	15	Miles	0592	1298
				Unknown Toxicity	Agriculture	Low	15	Miles	0198	1211
5	R	SAN CARLOS CREEK	542.200	Mercury	Resource extraction sources are abandoned mines.	Low	1	Miles	0104	1211
5	R	SAN JOAQUIN RIVER	544.000	Boron	Agriculture	High	130	Miles	0697	1299
				Chlorpyrifos	Agriculture	High	130	Miles	0198	1205
				DDT	Agriculture	Low	130	Miles	0104	1211

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# 1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				Diazinon	Agriculture	High	130	Miles	0198	1205
				Electrical Conductivity	Agriculture	High	130	Miles	0697	1299
				Group A Pesticides	Agriculture	Low	130	Miles	0104	1211
				Selenium	Agriculture	High	50	Miles	0592	1200
				Unknown Toxicity	Source Unknown	Medium	130	Miles	0198	1211
5	R	SPRING CREEK	524.400	Acid Mine Drainage		High	5	Miles	0198	1211
				<i>Resource extraction sources are abandoned mines.</i>						
				Resource Extraction						
				Cadmium		High	5	Miles	0198	1211
				<i>Resource extraction sources are abandoned mines.</i>						
				Resource Extraction						
				Copper		High	5	Miles	0198	1211
				<i>Resource extraction sources are abandoned mines.</i>						
				Resource Extraction						
				Zinc		High	5	Miles	0198	1211
				<i>Resource extraction sources are abandoned mines.</i>						
				Resource Extraction						
5	R	STANISLAUS RIVER (LOWER)	535.300	Diazinon		High	48	Miles	0198	1205
				Group A Pesticides	Agriculture	Low	48	Miles	0104	1211
				Unknown Toxicity	Agriculture	Medium	48	Miles	0101	1211
				Source Unknown						
5	R	STOCKTON DEEP WATER CHANNEL	544.000	Dioxin		Medium	2	Miles		
				<i>This listing was made by USEPA.</i>						
				Point Source						
				Furans		Medium	2	Miles		
				<i>This listing was made by USEPA.</i>						
				Point Source						
				PCBs		Medium	2	Miles		
				<i>This listing was made by USEPA.</i>						
				Point Source						
5	R	STRONG RANCH SLOUGH	519.210	Chlorpyrifos	Urban Runoff/Storm Sewers	Medium	5	Miles	0198	1211

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Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				Diazinon		Medium	5	Miles	0198	1211
				<i>The agricultural source of diazinon for these waterbodies is from aerial deposition.</i>						
				Agriculture						
				Urban Runoff/Storm Sewers						
5	R	SULFUR CREEK	513.510	Mercury		High	7	Miles	0198	1205
				<i>Resource extraction sources are abandoned mines.</i>						
				Resource Extraction						
5	R	TEMPLE CREEK	531.400	Ammonia		Low	10	Miles	0104	1211
				Dairies						
				Electrical Conductivity		Low	10	Miles	0104	1211
				Dairies						
5	R	TOWN CREEK	526.200	Cadmium		Low	1	Miles	0104	1211
				<i>Resource extraction sources are abandoned mines.</i>						
				Resource Extraction						
				Copper		Low	1	Miles	0104	1211
				<i>Resource extraction sources are abandoned mines.</i>						
				Resource Extraction						
				Lead		Low	1	Miles	0104	1211
				<i>Resource extraction sources are abandoned mines.</i>						
				Resource Extraction						
				Zinc		Low	1	Miles	0104	1211
				<i>Resource extraction sources are abandoned mines.</i>						
				Resource Extraction						
5	R	TUOLUMNE RIVER (LOWER)	535.500	Diazinon		High	32	Miles	0198	1205
				Agriculture						
				Group A Pesticides		Low	32	Miles	0104	1211
				Agriculture						
				Unknown Toxicity		Medium	32	Miles	0101	1211
				Source Unknown						
5	R	WEST SQUAW CREEK	505.100	Cadmium		Medium	2	Miles	0104	1211
				<i>Resource extraction sources are abandoned mines.</i>						
				Resource Extraction						
				Copper		Medium	2	Miles	0104	1211
				<i>Resource extraction sources are abandoned mines.</i>						
				Resource Extraction						
				Lead		Medium	2	Miles	0104	1211
				<i>Resource extraction sources are abandoned mines.</i>						
				Resource Extraction						

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# 1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				Zinc		Medium	2	Miles	0104	1211
				<i>Resource extraction sources are abandoned mines.</i>						
				Resource Extraction						
5	R	WILLOW CREEK (WHISKEYTOWN)	524.630	Acid Mine Drainage		Low	3	Miles	0104	1211
				<i>Resource extraction sources are abandoned mines.</i>						
				Resource Extraction						
				Copper		Low	3	Miles	0104	1211
				<i>Resource extraction sources are abandoned mines.</i>						
				Resource Extraction						
				Zinc		Low	3	Miles	0104	1211
				<i>Resource extraction sources are abandoned mines.</i>						
				Resource Extraction						
5	W	GRASSLANDS MARSHES	541.200	Electrical Conductivity		Medium	8224	Acres	0101	1211
					Agriculture					
				Selenium		High	8224	Acres	0592	1298
					Agriculture					
6	L	BRIDGEPORT RES	630.300	Nutrients		High	3000	Acres		
				<i>Livestock grazing in wetlands upgradient of reservoir. TMDLs to be addressed during years 6-13 of the next 13 years of the TMDL development process, resources permitting.</i>						
				Agriculture						
				Sedimentation/Siltation		High	3000	Acres		
				<i>Watershed disturbance including livestock grazing. TMDLs to be addressed during years 6-13 of the next 13 years of the TMDL development process, resources permitting.</i>						
				Source Unknown						
6	L	CROWLEY LAKE	603.100	Arsenic		High	5280	Acres		
				<i>To be addressed as part of Watershed Management Initiative (WMI) for upper watershed, beginning with Years 3-5 of WMI program, if resources permit.</i>						
				Natural Sources						
				Nutrients		High	5280	Acres		
				Source Unknown						
6	L	DONNER LAKE	635.200	Priority Organics		Low	960	Acres		
				<i>PCBs in fish and sediment exceed Maximum Tissue Residue Level criteria; unknown nonpoint sources. Phase I Truckee River sediment TMDL projected for completion in 1999. Additional monitoring/study necessary to determine sources/cleanup potential for priority organics. TMDLs for organics to be addressed during years 6-13 of the next 13 years of the TMDL development process, resources permitting.</i>						
				Source Unknown						

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# 1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
6	L	EAGLE LAKE (2)	637.300	Org. enrichment/Low D.O. <i>Nutrients from wastewater disposal to land, livestock grazing, other watershed disturbance. Problems being addressed through sewerage of septic system development and RWQCB's ongoing nonpoint source program. TMDLs to be addressed during years 6-13 of the next 13 years of the TMDL development process, resources permitting.</i>		High	25000	Acres		
				Range Land Land Development Septage Disposal Nonpoint Source						
6	L	GRANT LAKE	601.000	Arsenic <i>Targeted for "easy" (already funded) TMDL documentation that arsenic from natural sources.</i>		High	1095	Acres	0198	0199
				Natural Sources						
6	L	HAIWEE RES	603.300	Copper <i>Copper problems related to algicide use to prevent taste/odor problems in drinking water supplies. Further biological monitoring being required. TMDLs to be addressed during years 6-13 of the next 13 years of the TMDL development process, resources permitting.</i>		Low	1800	Acres		
				Habitat Modification Nonpoint Source						
6	L	HORSESHOE LAKE (2)	628.000	Sedimentation/Siltation <i>Further monitoring may permit delisting. TMDLs, if needed to be addressed during years 6-13 of the next 13 years of the TMDL development process, resources permitting.</i>		Low	1	Acres		
				Construction/Land Development						
6	L	INDIAN CREEK RES	632.200	Nutrients <i>Reservoir formerly received tertiary-treated domestic wastewater from South Tahoe Public Utility District; unreliability of treatment process led to eutrophication. District is now restoring reservoir through flushing with fresh water.</i>		High	160	Acres	0198	0199
				Wastewater						

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Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
6	L	LAKE TAHOE	634.000	Nutrients		High	120000	Acres		
				Watershed disturbance, urban stormwater, atmospheric deposition. Lake is targeted for sediment and nutrient TMDLs but ability to complete them depends on availability of reliable watershed model. Model calibration, and additional watershed assessment, were funded as a result of 1997 presidential forum; TMDLs for entire watershed to be coordinated with Tahoe Regional Planning Agency's 2001 evaluation of attainment of environmental threshold standards.						
				Silviculture						
				Construction/Land Development						
				Urban Runoff/Storm Sewers						
				Other Urban Runoff						
				Wastewater						
				Hydromodification						
				Drainage/Filling Of Wetlands						
				Marinas						
				Atmospheric Deposition						
				Highway Maintenance And Runoff						
				Nonpoint Source						
				Sedimentation/Siltation		High	120000	Acres		
				Watershed disturbance including logging, construction, urban and highway runoff. Development of TMDLs depends on availability of reliable watershed model. Funding for final calibration of U.C. Davis Tahoe Research group model, and for additional watershed assessment, was provided as a result of 1997 presidential forum. TMDLs to be coordinated with Tahoe Regional Planning Agency's 2001 evaluation of attainment of environmental threshold standards.						
				Source Unknown						
6	L	PLEASANT VALLEY RES	603.200	Org. enrichment/Low D.O.		High	115	Acres		
				Problems related to watershed disturbance/reservoir management to be addressed together with problems in Crowley Lake as part of the Watershed Management Initiative; TMDLs to be addressed during years 3-5 of the next 13 years of the TMDL development process, if resources permit.						
				Flow Regulation/Modification						
				Nonpoint Source						
6	L	STAMPEDE RES	636.000	Pesticides		Low	3444	Acres		
				Sources unknown; no significant agriculture or residential development in watershed; feasibility of reducing loading probably low. Recalculation of Maximum Tissue Residue Level criteria makes delisting possible in next cycle. TMDLs, if needed, will be addressed during years 6-13 of the next 13 years of the TMDL development process.						
				Source Unknown						

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Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
6	L	TINEMAHA RES	603.200	Arsenic		Low	180	Acres		
				TMDLs to be addressed during years 6-13 of the next 13 years of the TMDL development process, resources permitting.						
				Natural Sources						
				Upstream Impoundment						
				Nonpoint Source						
				Metals		Low	180	Acres		
				Watershed disturbance, upstream geothermal sources of arsenic. TMDLs to be addressed during years 6-13 of the next 13 years of the TMDL development process, resources permitting.						
				Source Unknown						
6	L	TOPAZ LAKE	631.100	Sedimentation/Siltation		High	2300	Acres		
				Agriculture, river channel damage during January 1997 flood. TMDLs to be addressed during years 6-13 of the next 13 years of the TMDL development process, resources permitting.						
				Agriculture						
				Nonpoint Source						
6	L	TWIN LAKES	603.100	Nutrients		Low	3	Acres		
				Watershed disturbance, urban runoff; to be addressed during years 6-13 of the next 13 years of the TMDL development process, if resources permit.						
				Land Development						
				Other Urban Runoff						
				Nonpoint Source						
6	R	AMARGOSA RIVER	609.000	Salinity/TDS/Chlorides		Medium	198	Miles	0198	0199
				Internally drained river with natural high salinity; targeted for "easy" (already funded) TMDL using 1998 Section 104/106 grant funds						
				Natural Sources						
6	R	ASPEN CREEK	632.100	Metals		High	4	Miles	0198	0199
				Acid drainage from Leviathan Mine; Lahontan RWQCB mine workplan to be documented as Phase I TMDL using 1998 Section 104/106 grant funds.						
				Acid Mine Drainage						
				Natural Sources						
				Nonpoint Source						

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Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
6	R	AURORA CANYON CREEK	630.300	Habitat alterations		Low	13	Miles		
				Livestock grazing. Listed on basis of limited data; further monitoring may permit delisting. TMDLs, if needed, to be addressed during years 6-13 of the next 13 years of the TMDL development process, resources permitting.						
				Range Land						
6	R	BEAR CREEK (R6)	635.200	Sedimentation/Siltation		High	4	Miles	1195	0199
				Creek affected by hydrologic modification for ski resort/snow making pond-affected by sediment from pond dam break. Phase I sediment TMDL for Truckee River and tributaries projected to be completed for Basin Plan amendments in 1999, using 1998 Section 104/106 grant funds; Phase II work has received Section 205(j) funding and will begin in 1998.						
				Hydromodification Nonpoint Source						
6	R	BLACKWOOD CREEK	634.200	Sedimentation/Siltation		High	8	Miles	0198	0199
				Creek affected by past gravel quarry operations and other watershed disturbance. Existing USFS restoration program to be documented as phase I "easy" (already funded) TMDL using 1998 Section 104/106 grant funds.						
				Silviculture Construction/Land Development Resource Extraction Hydromodification Nonpoint Source						
6	R	BODIE CREEK	630.200	Metals		High	6	Miles		
				Affected by drainage from inactive mines, mine tailings in creek. TMDLs to be addressed during years 6-13 of the next 13 years of the TMDL development process, resources permitting.						
				Resource Extraction Mine Tailings Nonpoint Source						
6	R	BRONCO CREEK	635.200	Sedimentation/Siltation		High	1	Miles	1195	0199
				Watershed disturbance in naturally highly erosive watershed; targeted for sediment TMDL as part of larger Truckee River watershed effort. Phase I TMDL to be completed in 1999 using 1998 Section 104/106 grant funds; Phase II, using Section 205j funds, to begin in 1998.						
				Natural Sources Nonpoint Source						
6	R	BRYANT CREEK	632.100	Metals		High	10	Miles	0198	0199
				Affected by acid mine drainage from Leviathan Mine. Problem being addressed by RWQCB through Leviathan Mine workplan; workplan will be documented as Phase I "easy" (already funded) TMDL in 1998 using Section 104/106 grant funds.						
				Acid Mine Drainage Nonpoint Source						

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REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
6	R	CARSON RIVER, E FK	632.100	Nutrients		High	1	Miles		
				Probably livestock grazing. River was listed due to data collected by State of NV near state line in 1980s, probably reflecting drought conditions. NV has since delisted the river for these pollutants. Further monitoring may support delisting in CA. TMDLs, if needed, to be addressed during years 3-5 of the next 13 years of the TMDL development process, resources permitting.						
				Range Land						
				Nonpoint Source						
6	R	CLARK CANYON CREEK	630.300	Habitat alterations		Medium	5	Miles		
				Livestock grazing. Listed on basis of very limited information. CRMP has been implemented since 1980s; further monitoring may support delisting. TMDLs, if needed, to be addressed during years 6-13 of the next 13 years of the TMDL development process, resources permitting.						
				Range Land						
6	R	CLEARWATER CREEK	630.400	Sedimentation/Siltation		Medium	7	Miles		
				Livestock grazing. Listed on basis of limited data; additional monitoring may support delisting. TMDLs, if needed, to be addressed during years 6-13 of the next 13 years of the TMDL development process, resources permitting.						
				Range Land						
6	R	COTTONWOOD CREEK (1)	603.300	Water/Flow Variability		High	7	Miles		
				Lower reach of creek affected by diversions for LADWP system; TMDLs to be addressed during years 6-13 of the next 13 years of the TMDL development process, resources permitting.						
				Flow Regulation/Modification						
6	R	EAST WALKER RIVER	630.000	Metals		Medium	8	Miles		
				Inactive mines and other watershed disturbance; highway runoff. Listed initially due to elevated fish tissue levels; needs further monitoring for metals impacts and may be considered for delisting for metals in next cycle. TMDLs, if needed, will be addressed during years 6-13 of the next 13 years of the TMDL development process.						
				Range Land						
				Other Urban Runoff						
				Resource Extraction						
				Natural Sources						
				Nonpoint Source						
				Sedimentation/Siltation		High	8	Miles		
				River affected by turbid releases from Bridgeport Reservoir; major sediment discharge resulted litigation by State Department of Fish and Game. Further monitoring of beneficial use recovery may support delisting. TMDLs, if needed, to be addressed during years 6-13 of the next 13 years of the TMDL development process, resources permitting.						
				Hydromodification						

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REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
6	R	GOODALE CREEK	603.300	Sedimentation/Siltation		Low	9	Miles		
				Potential for delisting following further monitoring. TMDLs, if needed, to be addressed during years 6-13 of the next 13 years of the TMDL development process, resources permitting.						
				Range Land						
6	R	GRAY CREEK (R6)	635.000	Sedimentation/Siltation		High	4	Miles	1195	0199
				Disturbance of naturally highly erosive watershed; Phase I of the TMDL in progress, to be completed as Basin Plan amendment using 1998 Section 104/106 grant funds. Section 205(j) funding has been obtained for monitoring to begin in 1998 for use in Phase II of the TMDL.						
				Natural Sources						
				Nonpoint Source						
6	R	GREEN CREEK	630.400	Habitat alterations		Medium	1	Miles		
				Creek affected by hydroelectric dam construction, livestock grazing. TMDLs to be addressed during years 6-13 of the next 13 years of the TMDL development process.						
				Range Land						
				Hydromodification						
6	R	GREEN VALLEY LAKE CREEK	628.200	Priority Organics		Low	5	Miles		
				Priority organics (source unknown) were detected in stream in 1980's; no monitoring since. Stream needs reevaluation to determine need for listing. TMDLs, if needed, to be addressed during years 6-13 of the next 13 years of the TMDL development process, resources permitting.						
				Source Unknown						
6	R	HEAVENLY VALLEY CREEK	634.100	Sedimentation/Siltation		High	4	Miles	0198	0199
				Creek affected by ski resort construction and maintenance activities. Recently adopted resort master plan will phase future development based on accomplishment of watershed restoration projects. Master Plan currently scheduled to be documented as Phase I "easy" (already funded) TMDL using 1998 Section 104/106 grant funds. (Needs further discussion with USFS staff; recent monitoring data indicate possible need for additional sediment modeling.)						
				Construction/Land Development						
				Land Development						
				Hydromodification						
				Habitat Modification						
				Recreational Activities						
				Nonpoint Source						
6	R	HOT CREEK (1)	631.400	Metals		Medium	5	Miles	0198	0199
				Natural geothermal drainage; targeted for "easy" (already funded) TMDL using 1998 Section 104/106 grant funds						
				Natural Sources						

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REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
6	R	HOT CREEK (2)	603.100	<b>Metals</b>		High	10	Miles	0198	0199
				Natural geothermal springs. Targeted for "easy" (already funded) TMDL using Section 104/106 grant funds.						
				<b>Natural Sources</b>						
6	R	HOT SPRINGS CANYON CREEK	630.300	<b>Sedimentation/Siltation</b>		Medium	1	Miles		
				Listed on basis of limited data; further monitoring may support delisting. TMDLs, if needed, to be addressed during years 6-13 of the next 13 years of the TMDL development process.						
				<b>Range Land</b>						
6	R	INDIAN CREEK (1)	632.200	<b>Habitat alterations</b>		High	7	Miles		
				Watershed disturbance from livestock grazing. TMDLs to be addressed as part of Carson River WMI implementation.						
				<b>Pasture Land</b>						
6	R	LASSEN CREEK	637.000	<b>Flow alterations</b>		Medium	6	Miles		
				Agricultural diversions. TMDL to be addressed during years 6-13 of the next 13 years of the TMDL development process, as resources permit.						
				<b>Flow Regulation/Modification</b>						
6	R	LEE VINING CREEK	601.000	<b>Flow alterations</b>		High	11	Miles		
				Affected by diversions by Los Angeles Dept. of Water and Power. Court ordered restoration project is underway; will probably be documented as Phase I "easy" (already funded) TMDL during years 3-5 of the 13 years of TMDL implementation, resources permitting.						
				<b>Flow Regulation/Modification</b>						
6	R	LEVIATHAN CREEK	632.100	<b>Metals</b>		High	2	Miles	0198	0199
				Lower reach of creek affected by acid drainage from Leviathan Mine; reach has been diverted around tailings as part of ongoing pollution abatement project. Lahontan RWQCB workplan to be documented as Phase I "easy" (already funded) TMDL using 1998 Section 104/106 grant funds.						
				<b>Acid Mine Drainage</b>						
6	R	LITTLE HOT CREEK	603.100	<b>Arsenic</b>		Medium	1	Miles	0198	1299
				Natural (geothermal?) sources: targeted for "easy" (already funded) TMDL using 1998 Section 104-106 grant funds.						
				<b>Natural Sources</b>						
6	R	MAMMOTH CREEK	603.100	<b>Metals</b>		High	22	Miles		
				Mammoth Creek is the headwaters of Hot Creek (2); However, it is affected by urban runoff from the Town of Mammoth Lakes as well as natural sources of metals. Urban runoff problems at Mammoth are being addressed through the RWQCB's ongoing regulation and enforcement problems and the WMI.						
				<b>Natural Sources</b>						
				<b>Nonpoint Source</b>						

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REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
6	R	MILL CREEK (1)	601.000	Flow alterations		High	7	Miles		
				Creek affected by water diversions. TMDLs to be addressed during years 6-13 of the next 13 years of the TMDL development process, resources permitting.						
				Water Diversions						
6	R	MILL CREEK (3)	641.300	Sedimentation/Siltation		Medium	6	Miles		
				Livestock grazing. TMDL to be addressed during years 6-13 of the next 13 years of the TMDL development process, resources permitting.						
				Range Land						
6	R	MOJAVE RIVER	628.200	Priority Organics		High	10	Miles		
				River was 303(d) listed in 1980's due to subsurface "Barstow slug" of toxic pollutants from various urban/industrial sources; later monitoring shows main "slug" has dissipated but some areas of pollution remain. River is currently a WMI priority watershed with emphasis on revision of TDS/salinity objectives. TMDLs for "mini-slug" pollutants to be addressed, if necessary, during years 6-13 of the next 13 years of the TMDL development process, resources permitting.						
				Land Disposal						
				Hazardous Waste						
6	R	MONITOR CREEK	632.100	Metals		High	4	Miles		
				Drainage from inactive mines; other watershed disturbance. Problems to be addressed as part of Carson River WMI effort during years 3-5 of the next 13 years of TMDL development.						
				Resource Extraction						
				Natural Sources						
				Nonpoint Source						
6	R	OWENS RIVER	603.300	Arsenic		High	120	Miles		
				Arsenic from natural geothermal sources; amounts affected by reservoir management. TMDLs for Long HA (603.10) to be addressed during years 3-5 of the next 13 years of the TMDL development process, as part of WMI, if resources permit. TMDLs for Upper and Middle Owens HAs (603.20 and 603.30) to be addressed during years 6-13 if resources permit.						
				Natural Sources						
				Habitat alterations		High	120	Miles		
				TMDLs for Long HA (603.10) to be addressed in years 3-5 of the next 13 years of the TMDL development process as part of the WMI, resources permitting. TMDLs for Upper and Middle Owens HA's to be addressed during years 6-13 of the next 13 years of TMDL development, resources permitting.						
				Flow Regulation/Modification						
6	R	PINE CREEK (2)	637.300	Sedimentation/Siltation		High	24	Miles	0198	0199
				Livestock grazing; other watershed disturbance. Watershed/fisheries restoration by existing CRMP group to be documented as "easy"(already funded) TMDL, or as basis for delisting, using 1998 Section 104/106 grant funds.						
				Range Land						
				Nonpoint Source						

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# 1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

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REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
6	R	ROUGH CREEK	630.000	Habitat alterations		Medium	8	Miles		
				Livestock grazing impacts. Additional monitoring may provide grounds for delisting. TMDLs, if needed, to be addressed during years 6-13 of the next 13 years of the TMDL development process, resources permitting.						
				Range Land						
6	R	SKEDADDLE CREEK	637.100	High Coliform Count		Low	5	Miles		
				Livestock grazing on BLM land led to reports of high coliform levels several years ago; current status unknown. Further monitoring may support delisting. TMDLs, if needed, will be addressed during years 6-13 of the next 13 years of the TMDL development process, resources permitting.						
				Range Land						
6	R	SNOW CREEK	634.200	Habitat alterations		High	1	Miles		
				Land Development						
				Drainage/Filling Of Wetlands						
				Nonpoint Source						
6	R	SQUAW CREEK	635.200	Sedimentation/Siltation		High	8	Miles	1195	0199
				Watershed heavily disturbed by ski resort construction and construction of other facilities for 1960 Winter Olympics; part of creek was channelized. Lower creek has very high bedload sediment transport. Severe watershed damage occurred from January 1997 flooding. Phase I sediment TMDL to be completed using 1998 Section 104/106 grant funds; Phase II to begin in 1998 using Section 205(j) funds.						
				Construction/Land Development						
				Other Urban Runoff						
				Hydromodification						
				Drainage/Filling Of Wetlands						
				Highway Maintenance And Runoff						
				Natural Sources						
				Recreational Activities						
				Nonpoint Source						
6	R	SUSAN RIVER	637.200	Unknown Toxicity		High	59	Miles		
				River affected by natural and man-made geothermal discharges and by agricultural drainage. TMDLs to be addressed during years 6-13 of the next 13 years of the TMDL development process, resources permitting.						
				Agriculture						
				Other Urban Runoff						
				Highway Maintenance And Runoff						
				Natural Sources						
				Source Unknown						
				Nonpoint Source						

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REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
6	R	TRUCKEE RIVER	635.200	<b>Sedimentation/Siltation</b> <i>Watershed disturbance including ski resorts, silvicultural activities, urban development, reservoir construction and management; highly erosive subwatersheds. Phase I sediment TMDL to be completed using 1998 Section 104/106 grant funds; Phase II work, using Section 205(j) funds to begin in 1998.</i>		High	106	Miles	1195	0199
				<b>Source Unknown</b>						
6	R	TUTTLE CREEK	603.300	<b>Habitat alterations</b> <i>Livestock grazing problems. Potential for delisting following further monitoring. TMDLs, if needed, to be addressed during years 6-13 of the next 13 years of the TMDL development process, resources permitting.</i>		Low	10	Miles		
				<b>Range Land</b>						
6	R	WARD CREEK	634.200	<b>Sedimentation/Siltation</b> <i>Watershed disturbance. TMDLs to be developed as part of those for Lake Tahoe during years 6-13 of the next 13 years of the TMDL development process, as resources permit.</i>		High	7	Miles		
				<b>Land Development</b>						
				<b>Nonpoint Source</b>						
6	R	WEST WALKER RIVER	631.000	<b>Sedimentation/Siltation</b> <i>Agriculture, flooding, highway construction. (Watershed severely impacted by January 1997 flood; 8 miles of highway washed out and reconstructed under emergency regulations with no CEQA analysis.) TMDLs to be addressed through WMI process (once priority watersheds are rotated), probably during years 6-13 of the next 13 years of the TMDL development process, as resources permit.</i>		High	1	Miles		
				<b>Agriculture</b>						
				<b>Nonpoint Source</b>						
6	R	WOLF CREEK (1)	632.100	<b>Sedimentation/Siltation</b> <i>Livestock grazing. Problems to be addressed as part of Carson River WMI effort during years 3-5 of the next 13 years of the TMDL development process, resources permitting.</i>		High	14	Miles		
				<b>Range Land</b>						
6	S	ALKALI LAKE, LOWER	641.000	<b>Salinity/TDS/Chlorides</b> <i>Natural internally drained lake; affected by agricultural diversions from tributaries. Natural impairment to be documented as "easy" (already funded) TMDL using 1998 Section 104/106 grant funds.</i>		Medium	10855	Acres	0198	0199
				<b>Flow Regulation/Modification</b>						
				<b>Natural Sources</b>						
				<b>Nonpoint Source</b>						
6	S	ALKALI LAKE, MIDDLE	641.000	<b>Salinity/TDS/Chlorides</b> <i>Natural internally drained lake affected by agricultural diversions from tributaries. Natural impairment to be documented as "easy" (already funded) TMDL using 1998 Section 104/106 grant funds.</i>		Medium	39475	Acres	0198	0199
				<b>Flow Regulation/Modification</b>						
				<b>Natural Sources</b>						
				<b>Nonpoint Source</b>						

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REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
6	S	ALKALI LAKE, UPPER	641.000	Salinity/TDS/Chlorides		Medium	24250	Acres	0198	0199
				Natural internally drained lake affected by agricultural diversions from tributaries. Natural impairment to be documented as "easy" (already funded) TMDL using 1998 Section 104/106 grant funds.						
				Flow Regulation/Modification						
				Natural Sources						
				Nonpoint Source						
6	S	DEEP SPRINGS LAKE	605.000	Salinity/TDS/Chlorides		Medium	1400	Acres	0198	0199
				Natural internally drained lake; "natural impairment" to be documented as "easy" (already funded) TMDL using 1998 Section 104/106 grant funds.						
				Nonpoint Source						
				Nonpoint Source						
6	S	HONEY LAKE	637.200	Arsenic		Medium	55327	Acres		
				Arsenic is from ultimately from natural sources, but amounts are affected by agricultural/geothermal drainage. TMDLs to be addressed during years 6-13 of the next 13 years of the TMDL development process, probably in connection with TMDLs for Susan River system.						
				Flow Regulation/Modification						
				Natural Sources						
				Nonpoint Source						
				Salinity/TDS/Chlorides		Medium	55327	Acres		
				Natural internally directed lake affected by agricultural and geothermal drainage. TMDLs to be addressed during years 6-13 of the next 13 years of the TMDL development process, as resources permit (probably in connection with TMDLs for the Susan River.)						
				Agriculture						
				Natural Sources						
				Nonpoint Source						
6	S	HONEY LAKE WILDFOWL MGMT. PONDS	637.200	Flow alterations		Medium	500	Acres		
				Ponds were affected by 1980s drought. Further monitoring may support delisting for this parameter. TMDLs, if needed, to be addressed during years 6-13 of the next 13 years of the TMDL development process.						
				Agricultural Water Diversion						
				Metals		Medium	500	Acres		
				Ponds were affected by 1980s drought; further monitoring may support delisting for this parameter. TMDLs, if needed, to be addressed during years 6-10 of the next 13 years of the TMDL development process, as resources permit.						
				Agriculture						
				Geothermal Development						
				Natural Sources						

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REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				Salinity/TDS/Chlorides		Medium	500	Acres		
				Ponds affected by agricultural, geothermal drainage. TMDLs to be addressed during years 6-13 of the next 13 years of the TMDL development process, resources permitting.						
				Agriculture						
				Geothermal Development						
				Natural Sources						
				Trace Elements		Medium	500	Acres		
				Geothermal and agricultural drainage. Further monitoring might support delisting. TMDLs, if needed, to be addressed during years 6-13 of the next 13 years of the TMDL development process, resources permitting.						
				Geothermal Development						
				Natural Sources						
6	S	LITTLE ALKALI LAKE	603.100	Arsenic		Medium	1	Acres	0198	0199
				Naturally impaired (by geologic/geothermal sources); natural impairment to be documented as "easy" (already funded) TMDL using 1998 Section 104/106 grant funds.						
				Natural Sources						
6	S	MONO LAKE	601.000	Salinity/TDS/Chlorides		High	35000	Acres	0198	0199
				Naturally saline, internally drained lake with increased TDS due to diversions of tributaries by Los Angeles Dept. of Water and Power. Natural high levels of toxic elements to be addressed through "easy" (already funded) TMDL using Section 104/106 grant funds.						
				Flow Regulation/Modification						
				Natural Sources						
				Source Unknown						
6	S	OWENS LAKE	603.300	Salinity/TDS/Chlorides		Low	20000	Acres		
				Natural internally drained saline lake with lake level decreased, salinity increased due to diversions of tributaries by Los Angeles Department of Water and Power. Pending project by Great Basin Unified Air Pollution Control District may restore some beneficial uses to part of lakebed. TMDLs to be addressed during years 6-13 of the next 13 years of the TMDL development process, as resources permit. [20,000 acre area figure reflects past Corps of Engineers delineation of brine pool; natural lake bed is much larger.]						
				Flow Regulation/Modification						
				Natural Sources						
6	S	SEARLES LAKE	621.000	Salinity/TDS/Chlorides		Medium	26100	Acres	0198	0199
				Naturally saline, internally drained desert playa lake. Natural impairment to be documented as "easy" (already funded) TMDL using 1998 Section 104/106 grant funds.						
				Source Unknown						
6	W	AMEDEE HOT SPRINGS	637.200	Metals		Medium	1	Acres	0198	0199
				Natural geothermal springs developed for energy production; natural impairment to be documented as "easy" (already funded) TMDL using 1998 Section 104/106 grant funds.						
				Natural Sources						

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REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
6	W	BIG SPRINGS	603.100	Arsenic	Natural geothermal source of arsenic at headwaters of Owens River. Natural impairment to be documented as "easy" (already funded) TMDL using 1998 Section 104/106 grant funds.	Medium	1	Acres	0198	0199
				Natural Sources						
6	W	CINDER CONE SPRINGS	635.000	Nutrients	Springs tributary to Truckee River, affected by subsurface drainage from former wastewater disposal area (disposal discontinued 1978).	Medium	1	Acres		
				Source Unknown						
				Salinity/TDS/Chlorides	Subsurface drainage from former wastewater disposal area. Has not been monitored routinely in recent years; further monitoring may support delisting. TMDLs, if needed, to be addressed during years 3-5 of the next 13 years of the TMDL development process, as resources permit.	Medium	1	Acres		
				Wastewater						
6	W	FALES HOT SPRINGS	631.000	Metals	Natural geothermal springs; natural impairment to be documented as "easy" (already funded) TMDL using 1998 Section 104/106 grant funds.	Medium	1	Acres	0198	0199
				Natural Sources						
6	W	HONEY LAKE AREA WETLANDS	637.200	Metals	Geothermal drainage; effects of saline Honey Lake water. To be addressed during years 6-13 of the next 13 years of the TMDL development process, probably as part of TMDLs for Honey Lake and Susan River.	Medium	12000	Acres		
				Agriculture						
				Geothermal Development						
				Natural Sources						
				Nonpoint Source						
6	W	KEOUGH HOT SPRINGS	603.000	Metals	Natural geothermal springs developed for recreation. Natural impairment to be documented as "easy" (already funding) TMDL using 1998 Section 104/106 grant funds.	Medium	1	Acres	0198	0199
				Natural Sources						
6	W	TOP SPRING	637.200	Radiation	Natural source (spring was developed as domestic water source for USFS ranger station and abandoned after testing showed MCL exceedance.) Natural impairment to be documented as "easy" (already funded) TMDL using 1998 Section 104/106 grant funds.	Medium	1	Acres	0198	0199
				Natural Sources						
6	W	WENDEL HOT SPRINGS	637.200	Metals	Natural geothermal spring developed for energy. Metals source to be documented as natural for "easy" (already funded) TMDL using 1998 Section 104/106 grant funds.	Medium	1	Acres	0198	0199
				Natural Sources						

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REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
7	R	ALAMO RIVER	723.100	Pesticides <i>Pesticides may be contained in agricultural return flows. Elevated fish tissue levels. Toxic bioassay results.</i>	Agricultural Return Flows	High	52	Miles	2002	2011
				Sedimentation/Siltation <i></i>	Agricultural Return Flows	High	52	Miles	1998	2000
				Selenium <i>Selenium originates from Upper Basin Portion of Colorado River. Elevated fish tissue levels.</i>	Agricultural Return Flows	High	52	Miles	2000	2010
7	R	COACHELLA VALLEY STORM CHANNEL	719.470	Bacteria <i>Bacteria objectives violated, threat of toxic bioassay results.</i>	Source Unknown	Low	20	Miles	2004	2009
7	R	IMPERIAL VALLEY DRAINS	723.100	Pesticides <i>Elevated fish tissue levels and toxic bioassay results.</i>	Agricultural Return Flows	High	1305	Miles	2005	2011
				Sedimentation/Siltation <i>Agricultural return flows.</i>	Agricultural Return Flows	High	1305	Miles	2000	2010
				Selenium <i>Selenium originates from Upper Basin Portion of Colorado River. Elevated fish tissue levels.</i>	Agricultural Return Flows	High	1305	Miles	2000	2010
7	R	NEW RIVER (R7)	723.100	Bacteria <i>Regional Board proposes to establish TMDL in cooperation with U.S.EPA/Mexico.</i>	Agricultural Return Flows	High	60	Miles	1998	2005
				Nutrients <i>Regional Board proposes to establish TMDL in cooperation with U.S.EPA/Mexico.</i>	Agricultural Return Flows	High	60	Miles	2002	2010
				Pesticides <i></i>	Agricultural Return Flows	High	60	Miles	2002	2013
				Sedimentation/Siltation <i>Agricultural Drainage from Imperial Valley and Mexicali Valley.</i>	Agricultural Return Flows	High	60	Miles	1998	2002
				Volatile Organics/VOCs <i></i>	Agricultural Return Flows	High	60	Miles	2007	2013
7	R	PALO VERDE OUTFALL DRAIN	715.400	Bacteria <i></i>	Source Unknown	Medium	16	Miles	2005	2011

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REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
7	S	SALTON SEA	728.000	Nutrients	Agricultural Return Flows	Medium	220000	Acres	2002	2010
				Salinity	Agricultural Return Flows	Medium	220000	Acres	1998	2001
				Selenium	Selenium originates from Upper Basin Portion of Colorado River.	Medium	220000	Acres	2000	2007
					Agricultural Return Flows					
8	B	ANAHEIM BAY	801.110	Metals	Urban Runoff/Storm Sewers	Medium	180	Acres	0108	0111
					Unknown Nonpoint Source					
				Pesticides	Unknown Nonpoint Source	Medium	180	Acres	0108	0111
8	B	HUNTINGTON HARBOUR	801.110	Metals	Urban Runoff/Storm Sewers	Medium	150	Acres	0108	0111
					Boatyards					
				Pathogens	Urban Runoff/Storm Sewers	Medium	150	Acres	0108	0111
				Pesticides	Unknown Nonpoint Source	Medium	150	Acres	0108	0111
8	B	NEWPORT BAY, LOWER	801.110	Metals	Urban Runoff/Storm Sewers	High	700	Acres	0196	0107
					Contaminated Sediments					
				Nutrients	Boatyards	High	700	Acres	0196	0198
					Agriculture					
					Urban Runoff/Storm Sewers	High	700	Acres	0697	0100
				Pathogens	Urban Runoff/Storm Sewers	High	700	Acres	0199	0102
				Pesticides	Agriculture	High	700	Acres	0199	0102
					Contaminated Sediments					
				Priority Organics	Contaminated Sediments	High	700	Acres	0199	0102
					Unknown Nonpoint Source					
8	E	UPPER NEWPORT BAY ECOLOGICAL RESERVE	801.110	Metals	Urban Runoff/Storm Sewers	High	752	Acres	0199	0102

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REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
8	L	BIG BEAR LAKE	801.710	Nutrients	Agriculture	High	752	Acres	0196	0198
				Pathogens	Urban Runoff/Storm Sewers					
					Groundwater Loadings					
					Urban Runoff/Storm Sewers	High	752	Acres	0697	0100
				Pesticides	Agriculture	High	752	Acres	0199	0102
				Sedimentation/Siltation	Unknown Nonpoint Source					
					Agriculture	High	752	Acres	0196	0198
					Construction/Land Development					
					Channel Erosion					
					Erosion/Siltation					
				Copper	Resource Extraction	Medium	2970	Acres	0102	0105
				Mercury	Resource Extraction	Medium	2970	Acres	0102	0105
8	L	CANYON LAKE (RAILROAD CANYON RESERVOIR)	802.120	Metals	Resource Extraction	Medium	2970	Acres	0102	0105
				Noxious aquatic plants	Resource Extraction	Medium	2970	Acres	0102	0105
				Nutrients	Construction/Land Development					
					Unknown point source					
				Sedimentation/Siltation	Construction/Land Development	Medium	2970	Acres	0102	0105
					Snow Skiing Activities					
					Unknown Nonpoint Source					
				Nutrients	Nonpoint Source	Medium	600	Acres	0102	0104
				Pathogens	Nonpoint Source	Medium	600	Acres	0102	0104
				Sedimentation/Siltation	Unknown Nonpoint Source					
					Unknown Nonpoint Source					
					Urban Runoff/Storm Sewers					
8	L	ELSINORE, LAKE	802.310	Nutrients	Unknown Nonpoint Source	Medium	3300	Acres	0102	0104
				Org. enrichment/Low D.O.	Unknown Nonpoint Source	Medium	3300	Acres	0102	0104
				Sedimentation/Siltation	Unknown Nonpoint Source					
					Urban Runoff/Storm Sewers	Medium	3300	Acres	0102	0104

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REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				Unknown Toxicity		Medium	3300	Acres	0102	0104
				Unknown Nonpoint Source						
8	L	FULMOR, LAKE	802.210	Pathogens		Low	9	Acres	0108	0111
				Unknown Nonpoint Source						
8	L	PRADO PARK LAKE	801.210	Nutrients		Low	60	Acres	0108	0111
				Pathogens	Nonpoint Source	Low	60	Acres	0108	0111
				Nonpoint Source						
8	R	CHINO CREEK, REACH 1	801.210	Nutrients		Medium	2	Miles	0100	0105
				Pathogens	Agriculture Dairies	Medium	2	Miles	0100	0105
				Dairies Urban Runoff/Storm Sewers						
8	R	CHINO CREEK, REACH 2	801.210	High Coliform Count		Low	10	Miles	0108	0111
				Unknown Nonpoint Source						
8	R	CUCAMONGA CREEK, VALLEY REACH	801.210	High Coliform Count		Low	13	Miles	0108	0111
				Unknown Nonpoint Source						
8	R	GROUT CREEK	801.720	Metals		Medium	2	Miles	0102	0105
				Nutrients	Unknown Nonpoint Source	Medium	2	Miles	0102	0105
				Unknown Nonpoint Source						
8	R	KNICKERBOCKER CREEK	801.710	Metals		Medium	2	Miles	0103	0105
				Pathogens	Unknown Nonpoint Source	Medium	2	Miles	0103	0105
				Unknown Nonpoint Source						
8	R	LYTLE CREEK	801.400	Pathogens		Low	18	Miles	0108	0111
				Unknown Nonpoint Source						
8	R	MILL CREEK (PRADO AREA)	801.250	Nutrients		Medium	4	Miles	0100	0105
				Agriculture Dairies						

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				Pathogens		Medium	4	Miles	0100	0105
					Dairies					
				Suspended solids		Medium	4	Miles	0100	0105
					Dairies					
8	R	MILL CREEK, REACH 1	801.580	Pathogens		Low	5	Miles	0108	0111
					Unknown Nonpoint Source					
8	R	MILL CREEK, REACH 2	801.580	Pathogens		Low	8	Miles	0108	0111
					Unknown Nonpoint Source					
8	R	MOUNTAIN HOME CREEK	801.580	Pathogens		Low	4	Miles	0108	0111
					Unknown Nonpoint Source					
8	R	MOUNTAIN HOME CREEK, EAST FORK	801.700	Pathogens		Low	1	Miles	0108	0111
					Unknown Nonpoint Source					
8	R	RATHBONE (RATHBUN) CREEK	801.720	Nutrients		Medium	2	Miles	0102	0105
					Snow Skiing Activities					
					Unknown Nonpoint Source					
				Sedimentation/Siltation		Medium	2	Miles	0102	0105
					Snow Skiing Activities					
					Unknown Nonpoint Source					
8	R	SAN DIEGO CREEK, REACH 1	801.110	Metals		High	6	Miles	0199	0102
					Unknown Nonpoint Source					
				Nutrients		High	6	Miles	0196	0198
					Agriculture					
					Urban Runoff/Storm Sewers					
					Groundwater Loadings					
				Pesticides		High	6	Miles	0199	0102
					Unknown Nonpoint Source					
				Sedimentation/Siltation		High	6	Miles	0196	0198
					Agriculture					
					Construction/Land Development					
					Channel Erosion					
					Erosion/Siltation					
8	R	SAN DIEGO CREEK, REACH 2	801.110	Metals		High	6	Miles	0199	0102
					Urban Runoff/Storm Sewers					

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REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
8	R	SANTA ANA RIVER, REACH 3	801.200	Nutrients	Agriculture Urban Runoff/Storm Sewers Groundwater Loadings	High	6	Miles	0196	0198
				Sedimentation/Siltation	Agriculture Construction/Land Development Channel Erosion Erosion/Siltation	High	6	Miles	0196	0198
				Unknown Toxicity	Unknown Nonpoint Source	High	6	Miles	0199	0102
				Nutrients		Medium	3	Miles	0100	0111
				Pathogens	Dairies	Medium	3	Miles	0100	0111
				Salinity/TDS/Chlorides	Dairies	Medium	3	Miles	0100	0111
				Pathogens	Nonpoint Source	Low	12	Miles	0108	0111
				Salinity/TDS/Chlorides	Source Unknown	Low	2	Miles	0108	0111
				Pathogens	Unknown Nonpoint Source	Low	2	Miles	0108	0111
				Salinity/TDS/Chlorides	Unknown Nonpoint Source	Low	2	Miles	0108	0111
				Nutrients	Construction/Land Development	Medium	2	Miles	0102	0105
				Eutrophic	Nonpoint/Point Source	Medium	1	Acres	0705	0708
9	B	MISSION BAY	906.400	High Coliform Count	Nonpoint/Point Source	Low	1540	Acres	0799	0709
				Lead	Nonpoint/Point Source	Medium	1	Acres	0705	0708

\* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

# 1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
9	B	SAN DIEGO BAY	900.00	<b>Benthic Comm. Effects</b>		High	172	Acres	0198	0703
				The listing covers the following areas: Near Sub Base 16 acres, Near Grape Street 7 acres, Downtown Piers 10 acres, Near Coronado Bridge 30 acres, Near Chollas Creek 14 acres, San Diego Naval Station 76 acres, Seventh Street Channel 9 acres, North of 24th Street Marine Terminal 10 acres.						
				Nonpoint/Point Source						
				<b>Copper</b>		High	50	Acres	0198	0703
				This listing is for dissolved copper in the Shelter Island yacht Basin in San Diego Bay.						
				Nonpoint/Point Source						
				<b>Sediment Toxicity</b>		High	172	Acres	0198	0703
				The listing covers the following areas: Near Sub Base 16 acres, Near Grape Street 7 acres, Downtown Piers 10 acres, Near Coronado Bridge 30 acres, Near Chollas Creek 14 acres, San Diego Naval Station 76 acres, Seventh Street Channel 9 acres, North of 24th Street Marine Terminal 10 acres.						
				Nonpoint/Point Source						
9	C	PACIFIC OCEAN, ALISO HSA 901.13	901.13	<b>High Coliform Count</b>		Medium	0.01	Miles	0797	0701
				Nonpoint/Point Source						
9	C	PACIFIC OCEAN, BUENA VISTA HA 904.20	904.20	<b>High Coliform Count</b>		Low	0.02	Miles	0799	0709
				Nonpoint/Point Source						
9	C	PACIFIC OCEAN, CORONADO HA 910.10	910.10	<b>High Coliform Count</b>		Low	0.04	Miles	0799	0709
				Nonpoint/Point Source						
9	C	PACIFIC OCEAN, DANA POINT HSA 901.14	901.14	<b>High Coliform Count</b>		Low	0.06	Miles	0700	0710
				Nonpoint/Point Source						
9	C	PACIFIC OCEAN, ESCONDIDO CREEK HA 904.60	904.60	<b>High Coliform Count</b>		Low	0.02	Miles	0799	0709
				Nonpoint/Point Source						
9	C	PACIFIC OCEAN, LAGUNA BEACH HSA 901.12	901.12	<b>High Coliform Count</b>		Low	0.15	Miles	0700	0710
				Nonpoint/Point Source						
9	C	PACIFIC OCEAN, LOMA ALTA HSA 904.10	904.10	<b>High Coliform Count</b>		Low	1	Miles	0799	0709
				Nonpoint/Point Source						

\* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

# 1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
9	C	PACIFIC OCEAN, LOWER SAN JUAN HSA	901.270	High Coliform Count	Nonpoint/Point Source	Low	0.02	Miles	0700	0710
9	C	PACIFIC OCEAN, SAN CLEMENTE HA 901.30	901.30	High Coliform Count	Nonpoint/Point Source	Low	0.15	Miles	0700	0710
9	C	PACIFIC OCEAN, SAN DIEGO HU 907.00	907.00	High Coliform Count	Nonpoint/Point Source	Low	0.5	Miles	0799	0709
9	C	PACIFIC OCEAN, SAN DIEGUITO HU 905.00	905.00	High Coliform Count	Nonpoint/Point Source	Low	0.02	Miles	0799	0709
9	C	PACIFIC OCEAN, SAN LUIS REY HU 903.00	903.00	High Coliform Count	Nonpoint/Point Source	Low	0.01	Miles	0799	0709
9	C	PACIFIC OCEAN, SAN MARCOS HA 904.50	904.50	High Coliform Count	Nonpoint/Point Source	Low	0.01	Miles	0799	0709
9	C	PACIFIC OCEAN, SCRIPPS HA 906.30	906.30	High Coliform Count	Nonpoint/Point Source	Low	0.13	Miles	0799	0709
9	C	PACIFIC OCEAN, TIJUANA HU 911.00	911.00	High Coliform Count	Nonpoint/Point Source	Low	3.2	Miles	0798	0711
9	C	SAN DIEGO BAY, LINDBERGH HSA 908.21	908.21	High Coliform Count	Nonpoint/Point Source	Low	0.2	Miles	0799	0709
9	C	SAN DIEGO BAY, TELEGRAPH HSA 909.11	909.11	High Coliform Count	Nonpoint/Point Source	Low	0.01	Miles	0799	0709

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# 1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
9	E	AGUA HEDIONDA LAGOON	904.310	High Coliform Count	Nonpoint/Point Source	Low	5	Acres	0799	0709
				Sedimentation/Siltation	Nonpoint/Point Source	Medium	5	Acres	0704	0707
9	E	ALISO CREEK MOUTH OF ORANGE	901.130	High Coliform Count	Nonpoint/Point Source	Medium	0.3	Acres	0797	0701
9	E	BUENA VISTA LAGOON	904.210	High Coliform Count	Nonpoint/Point Source	Low	350	Acres	0799	0709
				Nutrients	Nonpoint/Point Source	Low	150	Acres	0704	0707
				Sedimentation/Siltation	Nonpoint/Point Source	Medium	350	Acres	0704	0707
9	E	FAMOSA SLOUGH & CHANNEL	906.400	Eutrophic	Nonpoint Source	Medium	28	Acres	0705	0708
9	E	LOMA ALTA SLOUGH	904.100	Eutrophic	Nonpoint Source	Low	8	Acres	0799	0709
				High Coliform Count	Nonpoint Source	Low	8	Acres	0799	0709
9	E	LOS PENASQUITOS LAGOON	906.100	Sedimentation/Siltation	Nonpoint/Point Source	Medium	385	Acres	0705	0708
9	E	SAN ELIJO LAGOON	904.610	Eutrophic	Nonpoint/Point Source	Low	330	Acres	0799	0709
				High Coliform Count	Nonpoint/Point Source	Low	150	Acres	0799	0709
				Sedimentation/Siltation	Nonpoint/Point Source	Medium	150	Acres	0704	0707
9	E	SAN JUAN CREEK (MOUTH)	901.200	High Coliform Count	Nonpoint/Point Source	Low	2	Acres	0700	0710
9	E	SANTA MARGARITA LAGOON	902.110	Eutrophic	Nonpoint/Point Source	High	1	Acres	0796	0705

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# 1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
9	E	TIJUANA RIVER ESTUARY	911.110	Eutrophic	Nonpoint/Point Source	Low	1	Acres	0798	0711
				High Coliform Count	Nonpoint/Point Source	Low	150	Acres	0798	0711
				Lead	Nonpoint/Point Source	Low	1	Acres	0798	0711
				Nickel	Nonpoint/Point Source	Low	1	Acres	0798	0711
				Pesticides	Nonpoint/Point Source	Low	1	Acres	0798	0711
				Thallium	Nonpoint/Point Source	Low	1	Acres	0798	0711
				Trash	Nonpoint/Point Source	Low	1	Acres	0798	0711
9	L	GUAJOME LAKE	903.110	Eutrophic	Nonpoint/Point Source	Medium	25	Acres	0708	0711
9	R	ALISO CREEK	901.130	High Coliform Count	Nonpoint/Point Source	Medium	1	Miles	0797	0701
9	R	CHOLLAS CREEK	908.220	Cadmium	Nonpoint/Point Source	High	1	Miles	0198	0703
				<i>Elevated levels in Stormwater.</i>						
				Copper	Nonpoint/Point Source	High	1	Miles	0198	0703
				<i>Elevated levels in Stormwater.</i>						
				High Coliform Count	Nonpoint/Point Source	Low	1	Miles	0799	0709
				Lead	Nonpoint/Point Source	High	1	Miles	0198	0703
				<i>Elevated levels in Stormwater.</i>						
				Toxicity	Nonpoint/Point Source	High	1	Miles	0198	0703
				<i>Toxicity in Stormwater.</i>						
				Zinc	Nonpoint/Point Source	High	1	Miles	0198	0703
				<i>Elevated levels in Stormwater.</i>						
9	R	RAINBOW CREEK	902.200	Eutrophic	Nonpoint/Point Source	High	5	Miles	0798	0700

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# 1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
9	R	SAN JUAN CREEK LOWER	901.270	High Coliform Count		Low	1	Miles	0700	0710
					Nonpoint/Point Source					
9	R	TECOLOTE CREEK	906.500	Cadmium		Medium	6	Miles	0705	0708
				<i>Elevated levels in Stormwater.</i>						
					Nonpoint/Point Source					
				Copper		Medium	6	Miles	0705	0708
				<i>Elevated levels in Stormwater.</i>						
					Nonpoint/Point Source					
				High Coliform Count		Low	6	Miles	0799	0709
					Nonpoint/Point Source					
				Lead		Medium	6	Miles	0705	0708
				<i>Elevated levels in Stormwater.</i>						
					Nonpoint/Point Source					
				Toxicity		Medium	6	Miles	0705	0708
				<i>Elevated levels in Stormwater.</i>						
					Nonpoint/Point Source					
				Zinc		Medium	6	Miles	0705	0708
				<i>Elevated levels in Stormwater.</i>						
					Nonpoint/Point Source					
9	R	TIJUANA RIVER	911.110	Eutrophic		Low	7	Miles	0798	0711
					Nonpoint/Point Source					
				High Coliform Count		Low	7	Miles	0798	0711
					Nonpoint/Point Source					
				Org. enrichment/Low D.O.		Low	7	Miles	0798	0711
					Nonpoint/Point Source					
				Pesticides		Low	7	Miles	0798	0711
					Nonpoint/Point Source					
				Solids		Low	7	Miles	0798	0711
					Nonpoint/Point Source					
				Synthetic Organics		Low	7	Miles	0798	0711
					Nonpoint/Point Source					
				Trace Elements		Low	7	Miles	0798	0711
					Nonpoint/Point Source					
				Trash		Low	7	Miles	0798	0711
					Nonpoint/Point Source					

\* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

# 1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
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## ABBREVIATIONS

### REGIONAL WATER QUALITY CONTROL BOARDS

- 1 North Coast
- 2 San Francisco Bay
- 3 Central Coast
- 4 Los Angeles
- 5 Central Valley
- 6 Lahontan
- 7 Colorado River Basin
- 8 Santa Ana
- 9 San Diego

### WATER BODY TYPE

- |                        |                         |                         |
|------------------------|-------------------------|-------------------------|
| B = BAYS AND HARBORS   | L = LAKES / RESERVOIRS  | S = SALINE LAKES        |
| C = COASTAL SHORELINES | O = OCEAN AND OPEN BAYS | T = WETLANDS, TIDAL     |
| E = ESTUARIES          | R = RIVERS / STREAMS    | W= WETLANDS, FRESHWATER |
| G = GROUND WATER       |                         |                         |

### HYDRO UNIT

"Hydro Unit" is the State Water Resources Control Board hydrological subunit area.

### START AND END DATES

Start and End Dates are shown as the year or as month/year.

### GROUP A PESTICIDES

Aldrin, dieldrin, chlordane, endrin, heptachlor, heptachlor epoxide, hexachlorocyclohexane (including lindane), endosulfan, and toxaphene

\* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

#### **D. Designated Use Support Summary**

In previous 305(b) Reports, overall use support tables were presented for each water body type. These tables are no longer a reporting requirement of CWA Section 305(b) because the presentation of overall use could mask the specific number of uses impaired. The overall use tables have been replaced by the Tables 4A-4J summarizing the extent of impairment in terms of the number of beneficial uses affected.

A determination of degree of use support likely presents a worst-case scenario of the State's water quality because a substantial portion of the State's monitoring data is collected in response to suspected problems (i.e., healthy environments are less likely than troubled ones to be targeted for monitoring).

The two assessment categories "evaluated" and "monitored" used in the following Tables 4A-4J are defined in the Guidelines for Preparation of the 1996 State Water Quality Assessments [305(b) Reports] as follows:

"Evaluated waters" are those water bodies for which the use support decision is based on information other than current site-specific ambient data, such as data on land use, location of sources, predictive modeling using estimated input variables, and some surveys of fish and game biologists. As a general guide, if an assessment is based on older ambient data (e.g., older than five years), it would be considered "evaluated".

"Monitored waters" are those water bodies for which the use support decision is principally based on current site-specific ambient data believed to accurately portray water quality conditions. Waters with data from biosurveys would be included in this category along with waters monitored by fixed-station chemical/physical monitoring. To be considered "monitored" based on fixed-station chemical/physical monitoring, waters should be sampled quarterly or more frequently.

TABLE 4A. SUMMARY OF DESIGNATED USE SUPPORT: BAYS AND HARBORS (Acres)

DEGREE OF USE SUPPORT		EVALUATED	MONITORED	TOTAL ASSESSED	Size Fully Supporting All Assessed Uses	Size Fully Supporting All Assessed Uses but Threatened for at Least One Use	Size Impaired for One or More Uses <sup>1</sup>	TOTAL ASSESSED
					144,469	13,172	339,395	497,036
					6,009	12,122	12,129	30,260
					138,460	1,050	327,266	466,776

<sup>1</sup> Impaired = Partially or Not Supporting a Designated Use

TABLE 4B. SUMMARY OF DESIGNATED USE SUPPORT: COASTAL SHORELINE (Miles)

DEGREE OF USE SUPPORT		EVALUATED	MONITORED	TOTAL ASSESSED	Size Fully Supporting All Assessed Uses	Size Fully Supporting All Assessed Uses but Threatened for at Least One Use	Size Impaired for One or More Uses <sup>1</sup>	TOTAL ASSESSED
796	0	84	712	0	75	48	760	159
919	0	0	0	123	919	0	0	0

<sup>1</sup> Impaired = Partially or Not Supporting a Designated Use

**TABLE 4C. SUMMARY OF DESIGNATED USE SUPPORT: ESTUARIES (Acres)**

DEGREE OF USE SUPPORT	ASSESSMENT CATEGORY		TOTAL ASSESSED
	EVALUATED	MONITORED	
<i>Size Fully Supporting All Assessed Uses</i>	6,436	440	6,876
<i>Size Fully Supporting All Assessed Uses but Threatened for at Least One Use</i>	2	731	733
<i>Size Impaired for One or More Uses<sup>1</sup></i>	11,145	60,177	71,322
<b>TOTAL ASSESSED</b>	17,583	61,348	78,931

<sup>1</sup> Impaired = Partially or Not Supporting a Designated Use

**TABLE 4D. SUMMARY OF DESIGNATED USE SUPPORT: GROUND WATER (Square Miles)**

DEGREE OF USE SUPPORT	ASSESSMENT CATEGORY		TOTAL ASSESSED
	EVALUATED	MONITORED	
<i>Size Fully Supporting All Assessed Uses</i>	29,689	9,462	39,151
<i>Size Fully Supporting All Assessed Uses but Threatened for at Least One Use</i>	1,860	517	2,377
<i>Size Impaired for One or More Uses<sup>1</sup></i>	7,263	14,790	22,053
<b>TOTAL ASSESSED</b>	38,812	24,769	63,581

<sup>1</sup> Impaired = Partially or Not Supporting a Designated Use

**TABLE 4E. SUMMARY OF DESIGNATED USE SUPPORT: LAKES / RESERVOIRS (Acres)**

DEGREE OF USE SUPPORT	ASSESSMENT CATEGORY		TOTAL ASSESSED
	EVALUATED	MONITORED	
<i>Size Fully Supporting All Assessed Uses</i>	127,107	88,112	215,219
<i>Size Fully Supporting All Assessed Uses but Threatened for at Least One Use</i>	5,079	54,630	59,709
<i>Size Impaired for One or More Uses<sup>1</sup></i>	39,668	426,886	466,554
<b>TOTAL ASSESSED</b>	171,854	569,628	741,482

<sup>1</sup> Impaired = Partially or Not Supporting a Designated Use

**TABLE 4F. SUMMARY OF DESIGNATED USE SUPPORT: OCEAN and OPEN BAYS (Acres)**

DEGREE OF USE SUPPORT	ASSESSMENT CATEGORY		TOTAL ASSESSED
	EVALUATED	MONITORED	
<i>Size Fully Supporting All Assessed Uses</i>	314,196	294	314,490
<i>Size Fully Supporting All Assessed Uses but Threatened for at Least One Use</i>	3006	0	3006
<i>Size Impaired for One or More Uses<sup>1</sup></i>	0	0	0
<b>TOTAL ASSESSED</b>	317,202	294	317,496

<sup>1</sup> Impaired = Partially or Not Supporting a Designated Use

**TABLE 4G. SUMMARY OF DESIGNATED USE SUPPORT: RIVERS / STREAMS (Miles)**

DEGREE OF USE SUPPORT	ASSESSMENT CATEGORY		TOTAL ASSESSED
	EVALUATED	MONITORED	
<i>Size Fully Supporting All Assessed Uses</i>	2,264	1,080	3,344
<i>Size Fully Supporting All Assessed Uses but Threatened for at Least One Use</i>	1,535	336	1,871
<i>Size Impaired for One or More Uses<sup>1</sup></i>	5,542	6,722	12,264
<b>TOTAL ASSESSED</b>	9,341	8,138	17,479

<sup>1</sup> Impaired = Partially or Not Supporting a Designated Use

**TABLE 4H. SUMMARY OF DESIGNATED USE SUPPORT: SALINE LAKES (Acres)**

DEGREE OF USE SUPPORT	ASSESSMENT CATEGORY		TOTAL ASSESSED
	EVALUATED	MONITORED	
<i>Size Fully Supporting All Assessed Uses</i>	0	0	0
<i>Size Fully Supporting All Assessed Uses but Threatened for at Least One Use</i>	0	0	0
<i>Size Impaired for One or More Uses<sup>1</sup></i>	65,125	367,783	432,908
<b>TOTAL ASSESSED</b>	65,125	367,783	432,908

<sup>1</sup> Impaired = Partially or Not Supporting a Designated Use



**TABLE 4I. SUMMARY OF DESIGNATED USE SUPPORT: WETLANDS, FRESHWATER (Acres)**

DEGREE OF USE SUPPORT	ASSESSMENT CATEGORY		TOTAL ASSESSED
	EVALUATED	MONITORED	
<i>Size Fully Supporting All Assessed Uses</i>	14,946	0	14,946
<i>Size Fully Supporting All Assessed Uses but Threatened for at Least One Use</i>	708	0	708
<i>Size Impaired for One or More Uses<sup>1</sup></i>	41,889	9,561	51,450
<b>TOTAL ASSESSED</b>	57,543	9,561	67,104

<sup>1</sup> Impaired = Partially or Not Supporting a Designated Use

**TABLE 4J. SUMMARY OF DESIGNATED USE SUPPORT: WETLANDS, TIDAL (Acres)**

DEGREE OF USE SUPPORT	ASSESSMENT CATEGORY		TOTAL ASSESSED
	EVALUATED	MONITORED	
<i>Size Fully Supporting All Assessed Uses</i>	0	0	0
<i>Size Fully Supporting All Assessed Uses but Threatened for at Least One Use</i>	0	3	3
<i>Size Impaired for One or More Uses<sup>1</sup></i>	70,920	181	71,101
<b>TOTAL ASSESSED</b>	70,920	184	71,104

<sup>1</sup> Impaired = Partially or Not Supporting a Designated Use

## E. Individual Use Summary

### Use Support Classifications

The U.S. EPA categories of Fully Supporting, Fully Supporting But Threatened, Partially Supporting, and Not Supporting, are described below:

*Fully Supporting* refers to waters of good quality in the WBS database, excluding the *Fully Supporting But Threatened* category which is treated separately. "Good" waters support and enhance all designated beneficial uses.

*Fully Supporting But Threatened* refers to those portions of good quality waters in the WBS database which specifically identify at least one beneficial use as threatened.

*Partially Supporting* refers to all intermediate and less severely impaired waters in the WBS database. "Intermediate" waters support beneficial uses with an occasional degradation of water quality. The term "intermediate" usually indicates suspected impacts to beneficial uses, i.e., a problem is indicated but inadequate data are available. "Impaired" water bodies cannot reasonably be expected to attain or maintain applicable water quality standards, and at least one beneficial use shows some degree of impairment.

*Not Supporting* refers to those water bodies in which a beneficial use is severely impaired and which staff judges to merit serious attention.

Tables 5A-5J show the level of support for each of the seven U.S. EPA designated beneficial uses in different types of water bodies. These include Fish Consumption, Shellfishing, Aquatic Life Support, Swimming, Secondary Contact, Drinking Water Supply, and Agriculture. California has more beneficial use categories than U.S. EPA's designated use categories. For Tables 5A-5J, California beneficial use designations have been grouped into the seven basic U.S. EPA beneficial use categories as outlined below:

<u>U.S. EPA DESIGNATED USE CATEGORIES</u>	<u>EQUIVALENT CALIFORNIA BENEFICIAL USE CATEGORY*</u>
Fish Consumption	Ocean Commercial and Sport Fishing
Shellfishing	Shellfish Harvesting
Aquatic Life Support	Warm Freshwater Habitat Cold Freshwater Habitat Fresh Water Replacement Preservation of Biological Habitats of Special Significance Estuarine Habitat Marine Habitat Fish Spawning Fish Migration Rare and Endangered Species Wildlife Habitat Saline Water Habitat Aquaculture
Swimming	Water Contact Recreation
Secondary Contact	Non-Contact Water Recreation
Drinking Water Supply	Municipal and Domestic Supply
Agriculture	Agricultural Supply

\* A description of these California beneficial uses is included in the Appendix.

Beneficial use support status is determined for entire water bodies or portions of water bodies based on the length or areal extent represented by monitoring data or other evaluation criteria. In many cases, different portions of a water body have a different use support status. In certain cases where information is not available to determine the limits of impaired areas, the entire water body is considered impaired.

**TABLE 5A. INDIVIDUAL USE SUPPORT SUMMARY: BAYS AND HARBORS (Acres)**

GOALS	USE	SIZE FULLY SUPPORTING	SIZE SUPPORTING BUT THREATENED	SIZE PARTIALLY SUPPORTING	SIZE NOT SUPPORTING	SIZE NOT ATTAINABLE	SIZE NOT ASSESSED
<b>Protect &amp; Enhance Ecosystems</b>	<i>Aquatic Life Support</i>	144,509	1,400	312,465	26,837	-	11,982
<b>Protect and Enhance Public Health</b>	<i>Fish Consumption</i>	161,509	12,830	310,165	12,479	-	210
	<i>Shellfishing</i>	166,690	12,680	285,665	5,033	-	210
	<i>Swimming</i>	165,550	830	316,250	2,013	-	12,550
	<i>Secondary Contact</i>	169,788	830	312,465	1,560	-	12,550
	<i>Drinking Water Supply</i>	*	*	*	*	*	*
<b>Social and Economic</b>	<i>Agriculture</i>	5,000	0	15,800	0	-	0
	<i>Cultural or Ceremonial</i>	*	*	*	*	*	*

"\*" = Category not applicable

"-" = Category applicable but no data available

"0" = Category applicable, but size of waters in the category is zero

**TABLE 5B. INDIVIDUAL USE SUPPORT SUMMARY: COASTAL SHORELINE (Miles)**

GOALS	USE	SIZE FULLY SUPPORTING	SIZE SUPPORTING BUT THREATENED	SIZE PARTIALLY SUPPORTING	SIZE NOT SUPPORTING	SIZE NOT ATTAINABLE	SIZE NOT ASSESSED
Protect & Enhance Ecosystems	<i>Aquatic Life Support</i>	791	0	51	0	-	0
Protect and Enhance Public Health	<i>Fish Consumption</i>	558	0	54	34	-	0
	<i>Shellfishing</i>	725	0	54	1	-	2
	<i>Swimming</i>	716	0	91	25	-	2
	<i>Secondary Contact</i>	777	0	51	4	-	2
	<i>Drinking Water Supply</i>	*	*	*	*	*	*
Social and Economic	<i>Agriculture</i>	0	0	0	0	-	0
	<i>Cultural or Ceremonial</i>	*	*	*	*	*	*

"\*" = Category not applicable

"-" = Category applicable but no data available

"0" = Category applicable, but size of waters in the category is zero

**TABLE 5C. INDIVIDUAL USE SUPPORT SUMMARY: ESTUARIES (Acres)**

GOALS	USE	SIZE FULLY SUPPORTING	SIZE SUPPORTING BUT THREATENED	SIZE PARTIALLY SUPPORTING	SIZE NOT SUPPORTING	SIZE NOT ATTAINABLE	SIZE NOT ASSESSED
<b>Protect &amp; Enhance Ecosystems</b>	<i>Aquatic Life Support</i>	6,734	731	60,816	3,528	-	20,140
<b>Protect and Enhance Public Health</b>	<i>Fish Consumption</i>	7,232	527	55,614	2,805	-	17,735
	<i>Shellfishing</i>	4,272	492	3,587	805	-	19,233
	<i>Swimming</i>	7,479	951	8,203	814	0	22,377
	<i>Secondary Contact</i>	8,447	923	56,208	782	-	21,446
	<i>Drinking Water Supply</i>	0	0	51,469	0	-	0
<b>Social and Economic</b>	<i>Agriculture</i>	0	0	3,644	0	-	2
	<i>Cultural or Ceremonial</i>	*	*	*	*	*	*

"\*" = Category not applicable

"-" = Category applicable but no data available

"0" = Category applicable, but size of waters in the category is zero

**TABLE 5D. INDIVIDUAL USE SUPPORT SUMMARY: GROUND WATER (Square Miles)**

GOALS	USE	SIZE FULLY SUPPORTING	SIZE SUPPORTING BUT THREATENED	SIZE PARTIALLY SUPPORTING	SIZE NOT SUPPORTING	SIZE NOT ATTAINABLE	SIZE NOT ASSESSED
Protect & Enhance Ecosystems	Aquatic Life Support	470	208	1130	-	-	15,783
Protect and Enhance Public Health	Fish Consumption	-	-	-	-	-	1,580
	Shellfishing	-	-	-	-	-	-
	Swimming	-	-	-	-	-	1,580
	Secondary Contact	-	-	-	-	-	1,580
	Drinking Water Supply	32,956	2,329	15,372	1,515	-	11,497
Social and Economic	Agriculture	25,579	790	7,722	799	20	21,043
	Cultural or Ceremonial	*	*	*	*	*	*

"\*" = Category not applicable

"-" = Category applicable but no data available

"0" = Category applicable, but size of waters in the category is zero

**TABLE 5E. INDIVIDUAL USE SUPPORT SUMMARY: LAKES / RESERVOIRS (Acres)**

GOALS	USE	SIZE FULLY SUPPORTING	SIZE SUPPORTING BUT THREATENED	SIZE PARTIALLY SUPPORTING	SIZE NOT SUPPORTING	SIZE NOT ATTAINABLE	SIZE NOT ASSESSED
Protect & Enhance Ecosystems	Aquatic Life Support	172,114	57,267	326,814	127,053	-	76,740
Protect and Enhance Public Health	Fish Consumption	135,387	60,136	169,644	125,177	-	206,388
	Shellfishing	*	*	*	*	-	*
	Swimming	167,891	73,509	308,452	125,884	-	73,989
	Secondary Contact	181,285	60,501	307,165	125,457	-	85,209
	Drinking Water Supply	166,967	20,569	292,980	203		74,803
Social and Economic	Agriculture	157,926	31,417	127,263	125,722	-	88,830
	Cultural or Ceremonial	*	*	*	*	*	*

"\*" = Category not applicable

"-" = Category applicable but no data available

"0" = Category applicable, but size of waters in the category is zero



**TABLE 5F. INDIVIDUAL USE SUPPORT SUMMARY: OCEAN and OPEN BAYS (Acres)**

GOALS	USE	SIZE FULLY SUPPORTING	SIZE SUPPORTING BUT THREATENED	SIZE PARTIALLY SUPPORTING	SIZE NOT SUPPORTING	SIZE NOT ATTAINABLE	SIZE NOT ASSESSED
<b>Protect &amp; Enhance Ecosystems</b>	<i>Aquatic Life Support</i>	312,706	0	0	0	-	6
<b>Protect and Enhance Public Health</b>	<i>Fish Consumption</i>	312,706	0	0	0	-	6
	<i>Shellfishing</i>	312,706	0	0	0	-	6
	<i>Swimming</i>	312,706	0	0	0	-	6
	<i>Secondary Contact</i>	312,706	0	0	0	-	6
	<i>Drinking Water Supply</i>	*	*	*	*	*	*
<b>Social and Economic</b>	<i>Agriculture</i>	*	*	*	*	*	*
	<i>Cultural or Ceremonial</i>	*	*	*	*	*	*

"\*" = Category not applicable

"-" = Category applicable but no data available

"0" = Category applicable, but size of waters in the category is zero

**TABLE 5G. INDIVIDUAL USE SUPPORT SUMMARY: RIVERS / STREAMS (Miles)**

GOALS	USE	SIZE FULLY SUPPORTING	SIZE SUPPORTING BUT THREATENED	SIZE PARTIALLY SUPPORTING	SIZE NOT SUPPORTING	SIZE NOT ATTAINABLE	SIZE NOT ASSESSED
Protect & Enhance Ecosystems	Aquatic Life Support	2,963	1,422	5,970	1,934	-	4,016
Protect and Enhance Public Health	Fish Consumption	2,347	739	4,795	193	-	3877
	Shellfishing	3	0	19	0	-	0
	Swimming	2,918	1,303	5,784	2061	-	3744
	Secondary Contact	3,438	1,227	5,536	1,896	-	3,985
	Drinking Water Supply	2,663	1,078	4,973	365	-	2,906
Social and Economic	Agriculture	2,316	1,049	4,532	524	-	3,736
	Cultural or Ceremonial	*	*	*	*	*	*

"\*" = Category not applicable

"-" = Category applicable but no data available

"0" = Category applicable, but size of waters in the category is zero

**TABLE 5H. INDIVIDUAL USE SUPPORT SUMMARY: SALINE LAKES (Acres)**

GOALS	USE	SIZE FULLY SUPPORTING	SIZE SUPPORTING BUT THREATENED	SIZE PARTIALLY SUPPORTING	SIZE NOT SUPPORTING	SIZE NOT ATTAINABLE	SIZE NOT ASSESSED
Protect & Enhance Ecosystems	<i>Aquatic Life Support</i>	0	0	394,552	0	-	3,334
Protect and Enhance Public Health	<i>Fish Consumption</i>	0	0	0	0	-	55,827
	<i>Shellfishing</i>	0	0	0	0	-	0
	<i>Swimming</i>	0	0	294,475	0	-	0
	<i>Secondary Contact</i>	0	0	394,052	0	-	3,834
	<i>Drinking Water Supply</i>	0	500	114,802	0	-	0
Social and Economic	<i>Agriculture</i>	0	0	94,802	0	-	0
	<i>Cultural or Ceremonial</i>	*	*	*	*	*	*

"\*" = Category not applicable

"-" = Category applicable but no data available

"0" = Category applicable, but size of waters in the category is zero

**TABLE 5I. INDIVIDUAL USE SUPPORT SUMMARY: WETLANDS, FRESHWATER (Acres)**

GOALS	USE	SIZE FULLY SUPPORTING	SIZE SUPPORTING BUT THREATENED	SIZE PARTIALLY SUPPORTING	SIZE NOT SUPPORTING	SIZE NOT ATTAINABLE	SIZE NOT ASSESSED
Protect & Enhance Ecosystems	<i>Aquatic Life Support</i>	14,943	400	9,685	0	-	18,100
Protect and Enhance Public Health	<i>Fish Consumption</i>	173	0	0	0	-	15,092
	<i>Shellfishing</i>	0	0	495	0	-	0
	<i>Swimming</i>	15,232	400	9,070	0	-	18,100
	<i>Secondary Contact</i>	15,558	400	9,069	0	-	18,100
	<i>Drinking Water Supply</i>	476	1	320	0	-	18,060
Social and Economic	<i>Agriculture</i>	0	0	9,209	0	-	18,060
	<i>Cultural or Ceremonial</i>	*	*	*	*	*	*

"\*" = Category not applicable

"-" = Category applicable but no data available

"0" = Category applicable, but size of waters in the category is zero

**TABLE 5J. INDIVIDUAL USE SUPPORT SUMMARY: WETLANDS, TIDAL (Acres)**

GOALS	USE	SIZE FULLY SUPPORTING	SIZE SUPPORTING BUT THREATENED	SIZE PARTIALLY SUPPORTING	SIZE NOT SUPPORTING	SIZE NOT ATTAINABLE	SIZE NOT ASSESSED
Protect & Enhance Ecosystems	<i>Aquatic Life Support</i>	0	3	1,905	181	-	36,430
Protect and Enhance Public Health	<i>Fish Consumption</i>	0	-	-	165	-	0
	<i>Shellfishing</i>	-	-	-	-	-	850
	<i>Swimming</i>	0	0	0	167	-	866
	<i>Secondary Contact</i>	0	0	0	167	-	866
	<i>Drinking Water Supply</i>	*	*	*	*	*	*
Social and Economic	<i>Agriculture</i>	*	*	*	*	*	*
	<i>Cultural or Ceremonial</i>	*	*	*	*	*	*

"\*" = Category not applicable

"-" = Category applicable but no data available

"0" = Category applicable, but size of waters in the category is zero

## **F. Total Sizes of Waters Impaired by Various Cause Categories**

The WBS database contains the portion (length or areal extent) of water bodies that are not fully supporting their designated uses (i.e., partially and not supporting uses) because of a specific pollutant or stressor. Causes are pollutants or stressors that contribute to the actual or threatened impairment of designated uses. Stressors are factors or conditions (other than specific pollutants) that cause impairment (e.g., flow and other habitat alterations, presence of exotic species).

Tables 6A-6I present, for each Water body type, the length or areal extent of all impaired water bodies that are affected by one or more of 30 specific categories. The measurements in Tables 6A-6I are not additive because a water body may be affected by several pollutants or stressors, and its size is counted in each relevant cause category.

The types of contributions to impairment used in Tables 6A-6I are defined as follows:

A "major" contributor is a pollutant or stressor that is either the only one responsible for nonsupport of any designated use or it predominates over other pollutants or stressors.

A "moderate" contributor is a pollutant or stressor that is the only one responsible for partial support of any use, predominates over other causes of partial support, or is one of multiple causes of nonsupport that have a significant impact on designated use attainment.

A "minor" contributor is a pollutant or stressor that is one of multiple causes responsible for nonsupport or partial support and is judged to contribute relatively little to this nonattainment.

TABLE 6A.

## TOTAL SIZES OF WATERS IMPAIRED BY VARIOUS CAUSE CATEGORIES

## BAYS AND HARBORS (Acres)

CAUSE CATEGORY	SIZE OF WATERS BY CONTRIBUTION TO IMPAIRMENT	
	MAJOR	MODERATE/MINOR
Cause/Stressor unknown		
Toxicity (Unknown toxicant)	208	24,630
Pesticides	10,505	164,212
Priority organic chemical	860	252,520
Nonpriority organic chemical		24,519
Metals	25,206	283,235
Ammonia		
Cyanide		
Sulfates		
Chlorine		
Other inorganics		
Nutrients		8,980
pH		
Siltation	2,300	7,980
Organic enrichment/low DO		1,540
Salinity/TDS/chlorides		
Thermal modifications		
Flow alterations		145,740
Other habitat alterations	12,000	142,631
Pathogen indicators	3,993	7,433
Radiation		
Oil and grease		
Taste and odor		
Suspended solids		
Noxious aquatic plants (macrophytes)		700
Total toxics	178	
Turbidity		
Exotic species		145,560
Excessive algal growth		
Inappropriate littoral vegetation		

TABLE 6B.

## TOTAL SIZES OF WATERS IMPAIRED BY VARIOUS CAUSE CATEGORIES

## COASTAL SHORELINE (Miles)

CAUSE CATEGORY	SIZE OF WATERS BY CONTRIBUTION TO IMPAIRMENT	
	MAJOR	MODERATE/MINOR
Cause/Stressor unknown		
Toxicity (Unknown toxicant)		
Pesticides	2	10
Priority organic chemical		
Nonpriority organic chemical		
Metals		26
Ammonia		
Cyanide		
Sulfates		
Chlorine		
Other inorganics		
Nutrients		
pH		
Siltation		
Organic enrichment/low DO		
Salinity/TDS/chlorides		
Thermal modifications		
Flow alterations		
Other habitat alterations		
Pathogen indicators	26	65
Radiation		
Oil and grease		
Taste and odor		
Suspended solids		
Noxious aquatic plants (macrophytes)		
Total toxics		
Turbidity		
Exotic species		
Excessive algal growth		
Inappropriate littoral vegetation		



TABLE 6C.

## TOTAL SIZES OF WATERS IMPAIRED BY VARIOUS CAUSE CATEGORIES

## ESTUARIES (Acres)

CAUSE CATEGORY	SIZE OF WATERS BY CONTRIBUTION TO IMPAIRMENT	
	MAJOR	MODERATE/MINOR
Cause/Stressor unknown		
Toxicity (Unknown toxicant)		50,338
Pesticides		56,016
Priority organic chemical		54,488
Nonpriority organic chemical		
Metals	48,000	11,263
Ammonia		1,011
Cyanide		
Sulfates		
Chlorine		
Other inorganics		
Nutrients	1,678	5,013
pH		28
Siltation	390	9,884
Organic enrichment/low DO	111	648
Salinity/TDS/chlorides		48,044
Thermal modifications	28	6,670
Flow alterations	348	6,318
Other habitat alterations	348	1,250
Pathogen indicators	1,335	2,514
Radiation		
Oil and grease		300
Taste and odor		
Suspended solids		
Noxious aquatic plants (macrophytes)	330	386
Total toxics		150
Turbidity		308
Exotic species	28	856
Excessive algal growth		
Inappropriate littoral vegetation		

TABLE 6D.

## TOTAL SIZES OF WATERS IMPAIRED BY VARIOUS CAUSE CATEGORIES

LAKES / RESERVOIRS (Acres)

CAUSE CATEGORY	SIZE OF WATERS BY CONTRIBUTION TO IMPAIRMENT	
	MAJOR	MODERATE/MINOR
Cause/Stressor unknown		702
Toxicity (Unknown toxicant)		3,908
Pesticides	510	126,886
Priority organic chemical		960
Nonpriority organic chemical		382
Metals	120,000	180,527
Ammonia		1,672
Cyanide		
Sulfates		
Chlorine		
Other inorganics		
Nutrients	188,280	12,511
pH		973
Siltation	120,000	12,715
Organic enrichment/low DO	968	30,674
Salinity/TDS/chlorides	971	566
Thermal modifications		
Flow alterations		3,711
Other habitat alterations		78
Pathogen indicators	25,000	
Radiation		
Oil and grease		
Taste and odor	28	120,338
Suspended solids		59
Noxious aquatic plants (macrophytes)	43,688	124,865
Total toxics		42,772
Turbidity		59
Exotic species		
Excessive algal growth		
Inappropriate littoral vegetation		

TABLE 6E.

## TOTAL SIZES OF WATERS IMPAIRED BY VARIOUS CAUSE CATEGORIES

## OCEAN AND OPEN BAYS (Acres)

CAUSE CATEGORY	SIZE OF WATERS BY CONTRIBUTION TO IMPAIRMENT	
	MAJOR	MODERATE/MINOR
Cause/Stressor unknown	0	0
Toxicity (Unknown toxicant)	0	0
Pesticides	0	0
Priority organic chemical	0	0
Nonpriority organic chemical	0	0
Metals	0	0
Ammonia	0	0
Cyanide	0	0
Sulfates	0	0
Chlorine	0	0
Other inorganics	0	0
Nutrients	0	0
pH	0	0
Siltation	0	0
Organic enrichment/low DO	0	0
Salinity/TDS/chlorides	0	0
Thermal modifications	0	0
Flow alterations	0	0
Other habitat alterations	0	0
Pathogen indicators	0	0
Radiation	0	0
Oil and grease	0	0
Taste and odor	0	0
Suspended solids	0	0
Noxious aquatic plants (macrophytes)	0	0
Total toxics	0	0
Turbidity	0	0
Exotic species	0	0
Excessive algal growth	0	0
Inappropriate littoral vegetation	0	0

**TABLE 6F.**  
**TOTAL SIZES OF WATERS IMPAIRED BY VARIOUS CAUSE CATEGORIES**  
**RIVERS / STREAMS (Miles)**

CAUSE CATEGORY	SIZE OF WATERS BY CONTRIBUTION TO IMPAIRMENT	
	MAJOR	MODERATE/MINOR
Cause/Stressor unknown		
Toxicity (Unknown toxicant)	296	785
Pesticides	313	2,281
Priority organic chemical	70	198
Nonpriority organic chemical		19
Metals	584	3,125
Ammonia	31	527
Cyanide		
Sulfates		
Chlorine	14	16
Other inorganics		132
Nutrients	212	3,302
pH	25	180
Siltation	160	4,406
Organic enrichment/low DO	50	859
Salinity/TDS/chlorides	285	1,113
Thermal modifications		1,130
Flow alterations	717	474
Other habitat alterations	114	1,694
Pathogen indicators	231	2,559
Radiation		
Oil and grease		140
Taste and odor		62
Suspended solids	11	1,112
Noxious aquatic plants (macrophytes)	19	218
Total toxics	16	560
Turbidity	77	336
Exotic species		11
Excessive algal growth		
Inappropriate littoral vegetation		

TABLE 6G.

## TOTAL SIZES OF WATERS IMPAIRED BY VARIOUS CAUSE CATEGORIES

## SALINE LAKES (Acres)

CAUSE CATEGORY	SIZE OF WATERS BY CONTRIBUTION TO IMPAIRMENT	
	MAJOR	MODERATE/MINOR
Cause/Stressor unknown		
Toxicity (Unknown toxicant)		
Pesticides		
Priority organic chemical		
Nonpriority organic chemical		
Metals	55,328	295,827
Ammonia		
Cyanide		
Sulfates		
Chlorine		
Other inorganics	129,907	
Nutrients		
pH	92,282	
Siltation		55,327
Organic enrichment/low DO		
Salinity/TDS/chlorides	132,830	300,077
Thermal modifications		
Flow alterations	139,052	500
Other habitat alterations	35,000	1,400
Pathogen indicators		220,000
Radiation		35,000
Oil and grease		
Taste and odor		
Suspended solids		
Noxious aquatic plants (macrophytes)		
Total toxics	110,328	
Turbidity		
Exotic species		
Excessive algal growth		
Inappropriate littoral vegetation		

TABLE 6H.

## TOTAL SIZES OF WATERS IMPAIRED BY VARIOUS CAUSE CATEGORIES

## WETLANDS, FRESHWATER (Acres)

CAUSE CATEGORY	SIZE OF WATERS BY CONTRIBUTION TO IMPAIRMENT	
	MAJOR	MODERATE/MINOR
Cause/Stressor unknown		
Toxicity (Unknown toxicant)		866
Pesticides		1,420
Priority organic chemical		936
Nonpriority organic chemical		
Metals	8,229	13,218
Ammonia		
Cyanide		
Sulfates		
Chlorine		
Other inorganics		1
Nutrients		1,482
pH		
Siltation		1,136
Organic enrichment/low DO		345
Salinity/TDS/chlorides	8,226	39,571
Thermal modifications		
Flow alterations		27,477
Other habitat alterations	3	41,596
Pathogen indicators		34
Radiation		
Oil and grease		468
Taste and odor		
Suspended solids		
Noxious aquatic plants (macrophytes)		
Total toxics	1	2
Turbidity		
Exotic species		
Excessive algal growth		
Inappropriate littoral vegetation		

TABLE 6I.

## TOTAL SIZES OF WATERS IMPAIRED BY VARIOUS CAUSE CATEGORIES

## WETLANDS, TIDAL (Acres)

CAUSE CATEGORY	SIZE OF WATERS BY CONTRIBUTION TO IMPAIRMENT	
	MAJOR	MODERATE/MINOR
Cause/Stressor unknown		
Toxicity (Unknown toxicant)		14
Pesticides	14	3
Priority organic chemical		
Nonpriority organic chemical		14
Metals	151	57,029
Ammonia		16
Cyanide		
Sulfates		
Chlorine		
Other inorganics		
Nutrients		57,000
pH		16
Siltation		
Organic enrichment/low DO		57,000
Salinity/TDS/chlorides		57,000
Thermal modifications		
Flow alterations		151
Other habitat alterations		151
Pathogen indicators	16	
Radiation		
Oil and grease		
Taste and odor		
Suspended solids		
Noxious aquatic plants (macrophytes)		
Total toxics		
Turbidity		
Exotic species		151
Excessive algal growth		
Inappropriate littoral vegetation		

## **G. Total Sizes of Waters Impaired by Various Source Categories**

The WBS database contains the portion (length or areal extent) of water bodies that are not fully supporting their designated uses (i.e., partially and not supporting uses) that are affected by a specific source. Sources are the facilities or activities that contribute pollutants or stressors resulting in impairment of designated uses in a water body.

Tables 7A-7I present, for each Water body type, the total length or areal extent of all impaired water bodies that are affected by each category of source. In Tables 7A-7I the measurements are not additive because a water body may be affected by several different sources of pollution and the appropriate size is counted in each relevant cause category.

The definitions for the types of contributions to impairment used in Tables 7A-7I are as follows:

A "major" contributor is a source that is either the only one responsible for nonsupport of any designated use or it predominates over other sources.

A "moderate" contributor is a source that is the only one responsible for partial support of any use, predominates over other sources of partial support, or is one of multiple sources of nonsupport that have a significant impact on designated use attainment.

A "minor" contributor is a source that is one of multiple sources responsible for nonsupport or partial support and is judged to contribute relatively little to this nonattainment.



TABLE 7A.

## TOTAL SIZES OF WATERS IMPAIRED BY VARIOUS SOURCE CATEGORIES

## BAYS AND HARBORS (Acres)

SOURCE CATEGORY	SIZE OF WATERS BY CONTRIBUTION TO IMPAIRMENT	
	MAJOR	MODERATE/MINOR
Industrial Point Sources	139,000	170,606
Municipal Point Sources		304,960
Combined Sewer Overflows	1,540	
Agriculture	2,460	234,412
Crop-related sources	160	2,300
Grazing-related sources		16,320
Intensive animal feeding operations		
Silviculture		
Construction		
Urban Runoff/Storm Sewers	13,540	184,087
Resource Extraction	252,520	35,120
Land Disposal	5	413
Hydromodification	145,560	24,680
Habitat Modification (non-hydromod)		700
Marinas		7,899
Erosion from Derelict Land		
Atmospheric Deposition		269,160
Septage Disposal	4,860	7,820
Leaking Underground Storage Tanks		202,880
Highway Maintenance and Runoff		
Spills (Accidental)		25,049
Contaminated Sediments		25,446
Debris and Bottom Deposits		
Internal Nutrient Cycling (primarily lakes)		
Sediment Resuspension		
Natural Sources		269,288
Recreational Activities		
Salt Storage Sites		
Ground Water Loadings		104,400
Ground Water Withdrawal		
Other	12,000	104,400
Unknown Source		254,738
Sources Outside State Jurisdiction/Borders		

TABLE 7B.

## TOTAL SIZES OF WATERS IMPAIRED BY VARIOUS SOURCE CATEGORIES

COASTAL SHORELINE (Miles)

SOURCE CATEGORY	SIZE OF WATERS BY CONTRIBUTION TO IMPAIRMENT	
	MAJOR	MODERATE/MINOR
Industrial Point Sources		1
Municipal Point Sources		
Combined Sewer Overflows		
Agriculture		28
Crop-related sources		
Grazing-related sources		
Intensive animal feeding operations		
Silviculture		
Construction		3
Urban Runoff/Storm Sewers	5	86
Resource Extraction		25
Land Disposal		
Hydromodification		
Habitat Modification (non-hydromod)		
Marinas		1
Erosion from Derelict Land		
Atmospheric Deposition		
Septage Disposal		24
Leaking Underground Storage Tanks		
Highway Maintenance and Runoff		
Spills (Accidental)		60
Contaminated Sediments		
Debris and Bottom Deposits		
Internal Nutrient Cycling (primarily lakes)		
Sediment Resuspension		
Natural Sources		16
Recreational Activities		
Salt Storage Sites		
Ground Water Loadings		
Ground Water Withdrawal		
Other		
Unknown Source		
Sources Outside State Jurisdiction/Borders		

TABLE 7C.

## TOTAL SIZES OF WATERS IMPAIRED BY VARIOUS SOURCE CATEGORIES

## ESTUARIES (Acres)

SOURCE CATEGORY	SIZE OF WATERS BY CONTRIBUTION TO IMPAIRMENT	
	MAJOR	MODERATE/MINOR
Industrial Point Sources	3,720	50,350
Municipal Point Sources		3,838
Combined Sewer Overflows	150	651
Agriculture	757	58,192
Crop-related sources		2,864
Grazing-related sources	319	2,000
Intensive animal feeding operations		330
Silviculture		
Construction	1,039	1,813
Urban Runoff/Storm Sewers	901	57,446
Resource Extraction	51,400	
Land Disposal	150	2,386
Hydromodification	6,963	48,785
Habitat Modification (non-hydromod)	413	1
Marinas		
Erosion from Derelict Land		
Atmospheric Deposition		3,400
Septage Disposal		37
Leaking Underground Storage Tanks		
Highway Maintenance and Runoff	413	
Spills (Accidental)		331
Contaminated Sediments	330	2,886
Debris and Bottom Deposits		
Internal Nutrient Cycling (primarily lakes)		
Sediment Resuspension		
Natural Sources		6,246
Recreational Activities	28	32
Salt Storage Sites		
Ground Water Loadings		
Ground Water Withdrawal		
Other		
Unknown Source		51,824
Sources Outside State Jurisdiction/Borders		

TABLE 7D.

## TOTAL SIZES OF WATERS IMPAIRED BY VARIOUS SOURCE CATEGORIES

## LAKES / RESERVOIRS (Acres)

SOURCE CATEGORY	SIZE OF WATERS BY CONTRIBUTION TO IMPAIRMENT	
	MAJOR	MODERATE/MINOR
Industrial Point Sources	295	
Municipal Point Sources		
Combined Sewer Overflows		
Agriculture	3000	36,861
Crop-related sources		59
Grazing-related sources	3000	35,036
Intensive animal feeding operations		
Silviculture	120,000	1,410
Construction	120,000	29,042
Urban Runoff/Storm Sewers	120,320	9,346
Resource Extraction	77,865	30,675
Land Disposal	120,160	
Hydromodification	121,800	19,123
Habitat Modification (non-hydromod)	122,280	3,640
Marinas	120,000	700
Erosion from Derelict Land		
Atmospheric Deposition	120,000	4,617
Septage Disposal		25,952
Leaking Underground Storage Tanks		
Highway Maintenance and Runoff	120,000	25,320
Spills (Accidental)		19
Contaminated Sediments		431
Debris and Bottom Deposits		
Internal Nutrient Cycling (primarily lakes)		
Sediment Resuspension		
Natural Sources	12,930	44,878
Recreational Activities		3,937
Salt Storage Sites		
Ground Water Loadings		
Ground Water Withdrawal		
Other	25	2,601
Unknown Source	163,000	56,701
Sources Outside State Jurisdiction/Borders		

TABLE 7E.

## TOTAL SIZES OF WATERS IMPAIRED BY VARIOUS SOURCE CATEGORIES

## OCEAN AND OPEN BAYS (Acres)

SOURCE CATEGORY	SIZE OF WATERS BY CONTRIBUTION TO IMPAIRMENT	
	MAJOR	MODERATE/MINOR
Industrial Point Sources	0	0
Municipal Point Sources	0	0
Combined Sewer Overflows	0	0
Agriculture	0	0
Crop-related sources	0	0
Grazing-related sources	0	0
Intensive animal feeding operations	0	0
Silviculture	0	0
Construction	0	0
Urban Runoff/Storm Sewers	0	0
Resource Extraction	0	0
Land Disposal	0	0
Hydromodification	0	0
Habitat Modification (non-hydromod)	0	0
Marinas	0	0
Erosion from Derelict Land	0	0
Atmospheric Deposition	0	0
Septage Disposal	0	0
Leaking Underground Storage Tanks	0	0
Highway Maintenance and Runoff	0	0
Spills (Accidental)	0	0
Contaminated Sediments	0	0
Debris and Bottom Deposits	0	0
Internal Nutrient Cycling (primarily lakes)	0	0
Sediment Resuspension	0	0
Natural Sources	0	0
Recreational Activities	0	0
Salt Storage Sites	0	0
Ground Water Loadings	0	0
Ground Water Withdrawal	0	0
Other	0	0
Unknown Source	0	0
Sources Outside State Jurisdiction/Borders	0	0

TABLE 7F.

## TOTAL SIZES OF WATERS IMPAIRED BY VARIOUS SOURCE CATEGORIES

## RIVERS / STREAMS (Miles)

SOURCE CATEGORY	SIZE OF WATERS BY CONTRIBUTION TO IMPAIRMENT	
	MAJOR	MODERATE/MINOR
Industrial Point Sources	34	612
Municipal Point Sources	24	1,144
Combined Sewer Overflows		7
Agriculture	466	3,493
Crop-related sources	81	1,612
Grazing-related sources	17	1,464
Intensive animal feeding operations		88
Silviculture	63	1,854
Construction	188	612
Urban Runoff/Storm Sewers	95	1,727
Resource Extraction	661	805
Land Disposal	10	207
Hydromodification	518	557
Habitat Modification (non-hydromod)	200	817
Marinas		1
Erosion from Derelict Land		
Atmospheric Deposition		93
Septage Disposal		220
Leaking Underground Storage Tanks		114
Highway Maintenance and Runoff		258
Spills (Accidental)		327
Contaminated Sediments	19	
Debris and Bottom Deposits		
Internal Nutrient Cycling (primarily lakes)		
Sediment Resuspension		
Natural Sources	51	1,858
Recreational Activities	12	255
Salt Storage Sites		
Ground Water Loadings		10
Ground Water Withdrawal	120	65
Other		159
Unknown Source	1	1008
Sources Outside State Jurisdiction/Borders	60	

TABLE 7G.

## TOTAL SIZES OF WATERS IMPAIRED BY VARIOUS SOURCE CATEGORIES

## SALINE LAKES (Acres)

SOURCE CATEGORY	SIZE OF WATERS BY CONTRIBUTION TO IMPAIRMENT	
	MAJOR	MODERATE/MINOR
Industrial Point Sources		
Municipal Point Sources		
Combined Sewer Overflows		
Agriculture		351,807
Crop-related sources		220,000
Grazing-related sources		1,400
Intensive animal feeding operations		
Silviculture		
Construction		55,827
Urban Runoff/Storm Sewers		
Resource Extraction		
Land Disposal		
Hydromodification	90,327	75,080
Habitat Modification (non-hydromod)		
Marinas		
Erosion from Derelict Land		
Atmospheric Deposition		
Septage Disposal		
Leaking Underground Storage Tanks		
Highway Maintenance and Runoff		
Spills (Accidental)		
Contaminated Sediments		
Debris and Bottom Deposits		
Internal Nutrient Cycling (primarily lakes)		
Sediment Resuspension		
Natural Sources	158,323	12,755
Recreational Activities		
Salt Storage Sites		
Ground Water Loadings		
Ground Water Withdrawal		119,052
Other		
Unknown Source	26,100	35,000
Sources Outside State Jurisdiction/Borders		

TABLE 7H.

## TOTAL SIZES OF WATERS IMPAIRED BY VARIOUS SOURCE CATEGORIES

## WETLANDS, FRESHWATER (Acres)

SOURCE CATEGORY	SIZE OF WATERS BY CONTRIBUTION TO IMPAIRMENT	
	MAJOR	MODERATE/MINOR
Industrial Point Sources		
Municipal Point Sources		
Combined Sewer Overflows		
Agriculture	8,226	42,941
Crop-related sources		615
Grazing-related sources		29,113
Intensive animal feeding operations		
Silviculture		12,001
Construction	1	1,220
Urban Runoff/Storm Sewers	1	1,316
Resource Extraction	2	2
Land Disposal		402
Hydromodification	1	27,477
Habitat Modification (non-hydromod)	451	356
Marinas		
Erosion from Derelict Land		
Atmospheric Deposition		
Septage Disposal		2
Leaking Underground Storage Tanks		1
Highway Maintenance and Runoff		
Spills (Accidental)		1
Contaminated Sediments		
Debris and Bottom Deposits		
Internal Nutrient Cycling (primarily lakes)		
Sediment Resuspension		
Natural Sources	3	39,410
Recreational Activities		1
Salt Storage Sites		
Ground Water Loadings		1
Ground Water Withdrawal		
Other		12,001
Unknown Source		3
Sources Outside State Jurisdiction/Borders		



TABLE 71.

## TOTAL SIZES OF WATERS IMPAIRED BY VARIOUS SOURCE CATEGORIES

## WETLANDS, TIDAL (Acres)

SOURCE CATEGORY	SIZE OF WATERS BY CONTRIBUTION TO IMPAIRMENT	
	MAJOR	MODERATE/MINOR
Industrial Point Sources		16
Municipal Point Sources		
Combined Sewer Overflows		
Agriculture		57,000
Crop-related sources		
Grazing-related sources		
Intensive animal feeding operations		
Silviculture		
Construction		
Urban Runoff/Storm Sewers		57,183
Resource Extraction		
Land Disposal		
Hydromodification		57,151
Habitat Modification (non-hydromod)		151
Marinas		
Erosion from Derelict Land		
Atmospheric Deposition		
Septage Disposal		
Leaking Underground Storage Tanks		
Highway Maintenance and Runoff		
Spills (Accidental)		19
Contaminated Sediments		
Debris and Bottom Deposits		
Internal Nutrient Cycling (primarily lakes)		
Sediment Resuspension		
Natural Sources		184
Recreational Activities		151
Salt Storage Sites		
Ground Water Loadings		
Ground Water Withdrawal		
Other		
Unknown Source		
Sources Outside State Jurisdiction/Borders		

## H. Public Health Concerns

### 1. Sizes of Waters Affected by Toxicants

Toxic substances are a major emphasis of the 1998 water quality assessment. The information assessed includes types of media and pollutants monitored, results of toxic substance monitoring, sediment contamination, toxic constituents in fish and shellfish tissue, fish kills and abnormalities, fishing advisories or bans, and specific sources of toxics for impaired waters. This information is contained in the WBS database as individual water body assessments. The results are reflected in the various cause and source categories used for reporting impairment from toxic substances, the designated use support status determinations, and assessment comments.

Table 8 summarizes the total size of waters monitored for and impacted by toxic substances for each of the water body types. This shows all waters found to be impacted by pesticides, priority organics, nonpriority organics, metals, ammonia, chlorine, other inorganics, or toxicity (toxicant unknown) with either a high or moderate contribution to impairment. It should be noted that this summary includes not only waters which do not support their designated uses, but also waters where uses are currently supported, but are considered threatened by toxic substances.

**TABLE 8**  
**TOTAL SIZE AFFECTED BY TOXICANTS**

<b>WATER BODY TYPE</b>	<b>SIZE MONITORED FOR TOXICS</b>	<b>SIZE WITH ELEVATED LEVELS OF TOXICANTS</b>
Bays and Harbors (acres)	469,749	319,657
Coastal Shoreline (miles)	109	10
Estuaries (acres)	60,416	51,576
Ground Water (square miles)	34,686	24,858
Lakes / Reservoirs (acres)	562,041	218,165
Ocean and Open Bays (acres)	0	0
Rivers / Streams (miles)	7,416	3,884
Saline Lakes (acres)	367,783	121,683
Wetlands, Freshwater (acres)	13,144	9,528
Wetlands, Tidal (acres)	184	181

## **2. Health Warnings**

The Office of Environmental Health Hazard Assessment (OEHHA) determines whether a public health hazard exists in eating fish or waterfowl from certain locations in California. These risk assessments are based on laboratory testing data and monitoring for toxic substances in fish tissue. Over the past several years the health advisories listed in Table 9 have been issued by OEHHA and listed in the California Sport Fishing Regulations published by the Fish and Game commission and by the California Department of Fish and Game. The percent area of rivers and lakes in California with fish consumption advisories is shown in Table 10.

**TABLE 9**  
**FISH CONSUMPTION ADVISORIES FOR CALIFORNIA WATERS**

REGION	WATER BODY TYPE	HYDROLOGICAL SUB UNIT AREA	COUNTY	WATER BODY NAME	SIZE OF AREA RESTRICTED	CONTAMINANT	FISH WITH RESTRICTED CONSUMPTION
1	Lake	109.530	Lake	Clear Lake	43,000 acres	Mercury	Largemouth bass, White catfish, Channel catfish, Brown bullhead, Blackfish, Crappie, and Hitch
2	Bay & Estuary	Several	-Several	San Francisco Bay and Delta	NA*	Mercury, PCBs and other chemicals	Striped bass, Sturgeon, Croakers, (Richmond Harbor Channel only: Surfperches, Bullheads, Gobies, and Shellfish)
2	Lake	207.210	Solano	Lake Herman	110 acres	Mercury	Largemouth bass
2	Reservoir	205.400	Santa Clara	Guadalupe Reservoir	80 acres	Mercury	Any type of fish
2	Reservoir	205.400	Santa Clara	Calero Reservoir	350 acres	Mercury	Any type of fish
2	Reservoir	205.400	Santa Clara	Almaden Reservoir	62 acres	Mercury	Any type of fish
2	River	205.400	Santa Clara	Guadalupe River and associated percolation ponds	30 miles	Mercury	Any type of fish
2	Creek	205.400	Santa Clara	Guadalupe Creek and associated percolation ponds	6 miles	Mercury	Any type of fish
2	Creek	205.400	Santa Clara	Alamitos Creek and associated percolation ponds	21 miles	Mercury	Any type of fish
3	Lake	309.820	San Luis Obispo	Lake Nacimiento	5,370 acres	Mercury	Largemouth bass
4	Bay	404.356	Los Angeles	Point Dume, Malibu (Malibu Bay)	NA*	PCBs and DDT	White croaker
4	Bay	404.210	Los Angeles	Malibu Pier (Malibu Bay)	NA*	PCBs and DDT	Queen fish
4	Bay	413.000	Los Angeles	Short Bank (Malibu Bay)	NA*	PCBs and DDT	White croaker
4	Bay	405.120	Los Angeles	Redondo Pier (Malibu Bay)	NA*	PCBs and DDT	Corbina
4	Bay	405.110	Los Angeles	Point Vicente Palos Verde-Northwest (Malibu Bay)	NA*	PCBs and DDT	White croaker
4	Bay	405.110	Los Angeles	White's Point (Malibu Bay)	NA*	PCBs and DDT	White croaker, Sculpin, Rockfishes, Kelp bass
4	Bay	405.120	Los Angeles	Los Angeles/Long Beach Harbor (esp. Cabrillo Pier) (San Pedro Bay)	NA*	PCBs and DDT	White croaker, Queenfish, Black croaker, Surfperches
4	Bay	405.120	Los Angeles	Los Angeles/Long Beach Breakwater (Ocean side) (Long Beach Harbor)	NA*	PCBs and DDT	White croaker, Queenfish, Black croaker, Surfperches
4	Bay	405.120	Los Angeles	Belmont Pier, Pier J (Long Beach Harbor)	NA*	PCBs and DDT	Surfperches
4	Ocean	413.000	Los Angeles	Horseshoe Kelp	NA*	PCBs and DDT	Sculpin
5	Lake	512.210	Napa	Lake Berryessa	20,700 acres	Mercury	Largemouth bass, Smallmouth bass, White catfish, Channel catfish, Rainbow trout
4	Lake	405.120	Los Angeles	Machado Lake (Harbor Park Lake)	45.2 acres	Chlordane and DDT	Goldfish, Carp
5	Rivers	541.200	Merced	Grasslands	35 miles	Selenium	Any type of fish
7	Lake	728.000	Imperial and Riverside	Salton Sea	220,000 acres	Selenium	Croaker, Orangemouth corvina, Sargo, and Tilapia
8	Bay	801.110	Orange	Newport Pier (Newport Bay)	NA*	PCBs and DDT	White croaker, Corbina

NA = size of restricted area is unclear

**TABLE 10.**  
**PERCENT AREA OF LAKES AND RIVERS WITH FISH CONSUMPTION RESTRICTIONS**

<b>WATER BODY TYPE</b>	<b>TOTAL AREA IN CALIFORNIA</b>	<b>TOTAL AREA WITH RESTRICTIONS</b>	<b>PERCENT AREA WITH RESTRICTIONS</b>
Lakes	1,672,684 acres	291,717 acres	17.4
Rivers	211,513 miles	92 miles	0.04

### **3. Ocean Beaches Affected By Bathing Area Closures**

Chapter 961, Statutes of 1992 (SB 1865, Hart) requires the Director of Environmental Health of each coastal county to report to the SWRCB annually by March 30 the number of beach closures due to threats to public health within their jurisdiction. The SWRCB is then required to submit this information to the Legislature by the following September 30. In 1996, there were 187 beach closures, 63 more than in 1995. Table 11 lists the number of beach closures/postings for 1996 for each coastal county, organized geographically from north to south.

The vast majority of the closures were due to the release of inadequately treated sewage resulting from broken, blocked, or damaged lines, heavy influx of rainwater, power outages, and pump failures. The other causes of closures included urban runoff and unknown sources. One beach in Orange County was closed due to the appearance of about 250 syringes on the beach. The county beaches north of San Francisco continued to have good water quality. Most closures occurred from Santa Barbara County south. This difference between north and south is consistent from year to year and is linked to the greater recreational use of beaches in the southern half of the State. Monitoring programs are generally more extensive in southern California and more vigorous monitoring often reveals more contamination. Also, the mild weather in southern California allows for beach recreation during the rainy season, and rainfall runoff often leads to closures.

Seven counties reported no closures for both 1995 and 1996. Three counties showed an increased number of closures but a decrease in the overall

number of days closed. Four counties reported fewer closures. San Mateo County reported the largest increase, more than tripling the number of closures. Staff at the San Mateo County Health Department attributed the increase to the reinstatement of a routine monitoring program. Health Department staff felt these data show the value of routine monitoring; if you look more often you may discover more problems.

Comparisons of closure totals among counties are difficult to interpret. One reason for this is the local system for naming a beach. A named beach in one county may be only a few hundred yards long, whereas a beach in a different county can be five miles long. Some agencies do not report individual beach names in their reports to the SWRCB. Therefore, identifying a closure incident does not reveal the length of coastline affected. Some counties routinely post storm drains but do not include these data in their yearly report.

The more heavily urbanized shorelines have more closures than less populated areas. City storm drains can carry contaminated runoff directly to the ocean. A recent report from the Santa Monica Bay Restoration Project linked an increased risk of intestinal and respiratory illness with swimming in water contaminated with storm water drainage. This information has led to permanent warnings in areas where city storm drains empty to the ocean.

Other factors that confound trend analysis include the following:

- Professional judgement and past experience often form the sole basis for closing a beach. Different conditions may trigger closures in different counties.
- Yearly changes in the duration and intensity of rainfall events affect the number of beach closures. It is difficult to make comparisons as beach closures can be caused by prolonged wet weather in "wet years" as well as cloudbursts in low rainfall years.
- Part of the response to past beach closure problems associated with overflows and sewerage systems spills involves increased monitoring, which has the potential to reveal more problems.

The SWRCB and the coastal RWQCBs operate several programs to address the causes of beach closures. The core regulatory program of permitting, enforcement, and compliance monitoring plays a vital role. For example, the responsible sewerage entity must report sewage spills of greater than 100 gallons to the appropriate RWQCB. In addition to follow-up activities, such incidents are tabulated and presented to RWQCB members at their monthly public meetings. In regard to oil spills, the typical reportable quantity is one barrel and such instances are reported to the Office of Emergency Services which in turn contacts the appropriate RWQCB. Where urban runoff has caused a closure, the recent implementation of storm water permits under the National Pollutant Discharge Elimination System (federal permits program) will assist in follow-up action. Other programs which assist in addressing the cause of beach closures include cooperative and public outreach partnership endeavors such as the Santa Monica Bay Restoration Project, the development of ocean water quality standards (California Ocean Plan), and funding assistance such as the State Revolving Fund Program.

TABLE 11

## CALIFORNIA BEACH CLOSURES DURING 1996

COUNTY (NORTH TO SOUTH)	NUMBER OF CLOSURES/POSTINGS	NUMBER OF DAYS CLOSED/POSTED	REASON(S)
Del Norte	0	0	
Humboldt	0	0	
Mendocino	0	0	
Sonoma	0	0	
Marin	0	0	
San Francisco	30	190	Rain and construction
Contra Costa	0	0	
Alameda	0	0	
San Mateo	48	1,144	Sewage
Santa Cruz	1	3	Sewage
Monterey	0	0	
San Luis Obispo	2	40	Storm runoff
Santa Barbara	5	86	Sewage spills, urban runoff
Ventura	1	3	Sewage spill
Los Angeles	4	10	Discharge of inadequately treated sewage
Orange	22	277	Pump failure, line blockage, one closure involved 250 syringes found on beach
San Diego	74	1,365	Sewage, urban runoff, 3 of the 74 are permanent closures (accounts for 1,095 of days closed)



#### **IV. GROUND WATER ASSESSMENT**

California includes ground waters in its statewide WBS database. The WBS database provides the major and minor causes and sources affecting the water quality of a particular ground water basin. The causes and sources of impairment for each ground water assessed in the WBS database are presented in Table 12A. The causes and sources shown for each ground water impairment are not necessarily linked. Tables 12B and 12C present the total area of ground waters in the WBS impaired by various cause and source categories, respectively. Table 12B and 12C were developed in the same manner as Tables 6A-6I and Tables 7A-7I in Section III (Surface Water Assessment).

**TABLE 12A. CAUSES AND SOURCES OF GROUND WATER IMPAIRMENT**

REGION	WATER BODY NAME	HYDRO UNIT	CAUSES*	SIZE**	SOURCES*	SIZE**	TOTAL SIZE**
1	ALEXANDER VALLEY AREA	114.25	Oil and grease	23	Lust/Leaking Undergrnd Stor. Tanks	23	23
			Priority organics	23			
1	ANDERSON VALLEY	1-190	Oil and grease	5	Lust/Leaking Undergrnd Stor. Tanks	5	5
			Priority organics	5	Petroleum Activities	5	
					Resource Extraction	5	
					Spills	5	
1	ANNAPOLIS OHLSON RANCH	1-490	Oil and grease	10	Lust/Leaking Undergrnd Stor. Tanks	10	10
1	BIG RIVER VALLEY	1-450	Oil and grease	5	Lust/Leaking Undergrnd Stor. Tanks	5	5
			Priority organics	5	Spills	5	
1	BODEGA BAY AREA	1-210	Oil and grease	5	Lust/Leaking Undergrnd Stor. Tanks	5	5
			Petroleum/Gasoline	5	Spills	5	
			Priority organics	5			
1	CLOVERDALE AREA	114.25	Oil and grease	9	Lust/Leaking Undergrnd Stor. Tanks	9	9
			Pesticides	9	Spills	9	
			Priority organics	9			
1	EEL RIVER VALLEY	1-100	Oil and grease	0	Lust/Leaking Undergrnd Stor. Tanks	120	120
			Priority organics	0	Spills	120	
1	EUREKA PLAIN	1-90	Oil and grease	60	Land Disposal	60	60
			Priority organics	60	Landfills	60	
					Lust/Leaking Undergrnd Stor. Tanks	60	
					Petroleum Activities	60	
					Resource Extraction	60	
					Spills	60	
1	FORT BRAGG TERRACE AREA	1-210	Oil and grease	24	Lust/Leaking Undergrnd Stor. Tanks	24	24
			Priority organics	24	Spills	24	
1	GARBERVILLE TOWN AREA	1-320	Oil and grease	0	Lust/Leaking Undergrnd Stor. Tanks	5	5
			Priority organics	0	Spills	5	
1	GUALALA RIVER VALLEY	1-470	Oil and grease	5	Lust/Leaking Undergrnd Stor. Tanks	5	5
			Priority organics	5			
1	HEALDSBURG AREA	114.25	Oil and grease	27	Lust/Leaking Undergrnd Stor. Tanks	27	27
			Priority organics	27	Spills	27	

\* Causes and Sources are not linked.

\*\* "Size" refers to the affected size (square miles) of the water body and "Total Size" refers to the size of the entire water body.

TABLE 12A. CAUSES AND SOURCES OF GROUND WATER IMPAIRMENT

REGION	WATER BODY NAME	HYDRO UNIT	CAUSES*	SIZE**	SOURCES*	SIZE**	TOTAL SIZE**
1	LEGGETT AREA	1000000	Oil and grease	2	Lust/Leaking Undergrnd Stor. Tanks	2	2
			Priority organics	2			
1	LITTLE LAKE VALLEY	1-130	Oil and grease	17	Lust/Leaking Undergrnd Stor. Tanks	17	17
			Priority organics	17	Spills	17	
1	LOWER RUSSIAN RIVER VALLEY	114.10	Oil and grease	9	Lust/Leaking Undergrnd Stor. Tanks	9	9
			Priority organics	9	Spills	9	
1	MAD RIVER VALLEY	1-80	Oil and grease	60	Lust/Leaking Undergrnd Stor. Tanks	60	60
			Priority organics	60	Spills	60	
1	MODOC PLATEAU PVA	1-240	Oil and grease	3000	Lust/Leaking Undergrnd Stor. Tanks	3000	3000
			Priority organics	3000	Petroleum Activities	3000	
					Resource Extraction	3000	
					Spills	3000	
1	SANTA ROSA PLAINS	114.22	Metals	96	Agriculture	96	96
			Nutrients	96	Lust/Leaking Undergrnd Stor. Tanks	96	
			Oil and grease	96	Petroleum Activities	96	
			Priority organics	96	Resource Extraction	96	
					Spills	96	
1	SHASTA VALLEY	1-40	Oil and grease	340	Lust/Leaking Undergrnd Stor. Tanks	340	340
			Pesticides	0	Petroleum Activities	340	
			Priority organics	0	Resource Extraction	340	
					Spills	340	
1	SMITH RIVER PLAIN	1-10	Pesticides	70	Agriculture	70	70
			Petroleum/Gasoline	70	Lust/Leaking Undergrnd Stor. Tanks	70	
			Priority organics	70	Spills	70	
1	UKIAH VALLEY	114.31	Metals	16	Lust/Leaking Undergrnd Stor. Tanks	16	16
			Priority organics	16	Petroleum Activities	16	
					Resource Extraction	16	
					Spills	16	
1	WEAVERVILLE AREA	1000000	Petroleum/Gasoline	2	Lust/Leaking Undergrnd Stor. Tanks	2	2
			Priority organics	2	Spills	2	
1	WINDSOR AREA	1000000	Metals	2	Lust/Leaking Undergrnd Stor. Tanks	2	2
			Oil and grease	2	Spills	2	

\* Causes and Sources are not linked.

\*\* "Size" refers to the affected size (square miles) of the water body and "Total Size" refers to the size of the entire water body.

**TABLE 12A. CAUSES AND SOURCES OF GROUND WATER IMPAIRMENT**

REGION	WATER BODY NAME	HYDRO UNIT	CAUSES*	SIZE**	SOURCES*	SIZE**	TOTAL SIZE**
2	ALAMEDA CREEK (NILES CONE) GW	204.300	Priority organics	2			
			Nonpriority organics	96	Lust/Leaking Undergrnd Stor. Tanks	96	97
			Priority organics	96			
			Salinity/TDS/chlorides	96			
2	LIVERMORE VALLEY GW	204.300	Nonpriority organics	170	Lust/Leaking Undergrnd Stor. Tanks	170	170
2	PETALUMA VALLEY GW	206.300	Pathogens/Path.Indicators	41	Agriculture	41	41
2	SANTA CLARA VALLEY GW	205.300	Nonpriority organics	20	Lust/Leaking Undergrnd Stor. Tanks	20	240
			Priority organics	20			
			Salinity/TDS/chlorides	20			

\* Causes and Sources are not linked.

\*\* "Size" refers to the affected size (square miles) of the water body and "Total Size" refers to the size of the entire water body.

TABLE 12A. CAUSES AND SOURCES OF GROUND WATER IMPAIRMENT

REGION	WATER BODY NAME	HYDRO UNIT	CAUSES*	SIZE**	SOURCES*	SIZE**	TOTAL SIZE**
3	ARROYO GRANDE VALLEY-NIPOMO MESA AREA	310.320	Chloroform	90	Industrial Point Sources	90	90
			Priority organics	90	Source Unknown	90	
			Toluene	90			
			Total Trihalomethanes	90			
3	BIG SUR GROUNDWATER BASIN	308.000	Chloroform	1	Source Unknown	1	1
			Dibromochloromethane/DBCM	1			
			Freon II	1			
			Nonpriority organics	1			
			Priority organics	1			
3	CARMEL VALLEY	307.000	Chloroform	10	Agriculture	10	10
			Nitrates	10	Source Unknown	10	
			Nutrients	10			
			PCE/Tetrachloroethylene	10			
			Priority organics	10			
3	CHORRO VALLEY	310.220	Bromodichloromethane/BDCM	20	Agricultural Return Flows	20	20
			Chloroform	20	Agriculture	20	
			Flow alteration	20	Groundwater Withdrawal	20	
			Nitrates	20	Irrigated Crop Production	20	
			Nutrients	20	Land Disposal	20	
			Priority organics	20	Municipal Point Sources	20	
			Salinity/TDS/chlorides	4	Nonpoint Source	20	
					Point Source(unspecified)	20	
					Saltwater Intrusion	20	
					Source Unknown	20	
3	CUYAMA VALLEY	312.000	Priority organics	105	Industrial Point Sources	105	105
			Toluene	105			
3	GILROY-HOLLISTER	305.000	Nitrates	350	Agriculture	350	350
			Nutrients	350	Industrial Point Sources	350	
			PCE/Tetrachloroethylene	350	Source Unknown	350	
			Priority organics	350			
			TCA/Trichloroethane	350			
			TCE/Trichloroethylene	350			
3	GOLETA BASIN	315.310	Bromoform	16	Source Unknown	16	16
			Chloroform	16			

\* Causes and Sources are not linked.

\*\* "Size" refers to the affected size (square miles) of the water body and "Total Size" refers to the size of the entire water body.

**TABLE 12A. CAUSES AND SOURCES OF GROUND WATER IMPAIRMENT**

REGION	WATER BODY NAME	HYDRO UNIT	CAUSES*	SIZE**	SOURCES*	SIZE**	TOTAL SIZE**
			Dichlorobromomethane/DCBM	16			
			Freon II	16			
			Nonpriority organics	16			
			Priority organics	16			
			Total Trihalomethanes	16			
3	LANGLEY AREA GROUNDWATER BASIN	300.000	Nitrates	27	Agriculture	27	27
			Nutrients	27			
3	LOS OSOS VALLEY	310.220	Nitrates	20	Agriculture	20	20
			Nutrients	20	Groundwater Loadings	20	
			Salinity/TDS/chlorides	20	Groundwater Withdrawal	20	
					Irrigated Crop Production	20	
					Nonpoint Source	20	
					Saltwater Intrusion	20	
					Septage Disposal	20	
3	MONTECITO AREA	315.330	Chloroform	3	Source Unknown	3	3
			Dichloroethylene/DCE	3			
			Priority organics	3			
			TCA/Trichloroethane	3			
3	PAJARO VALLEY	305.000	Bromodichloromethane/BDCM	120	Agricultural Return Flows	120	120
			Bromoform	120	Agriculture	120	
			Chloroform	120	Groundwater Loadings	120	
			Chromium	120	Groundwater Withdrawal	120	
			Dibromochloromethane/DBCM	120	Industrial Point Sources	120	
			Diethylhexylphthalate/DEHP	120	Irrigated Crop Production	120	
			Iron	120	Nonpoint Source	120	
			Lead	120	Point Source(unspecified)	120	
			Manganese	120	Source Unknown	120	
			Mercury	120			
			Metals	120			
			Nonpriority organics	120			
			Nutrients	120			
			PCE/Tetrachloroethylene	120			
			Priority organics	120			
			Salinity/TDS/chlorides	120			

\* Causes and Sources are not linked.

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TABLE 12A. CAUSES AND SOURCES OF GROUND WATER IMPAIRMENT

REGION	WATER BODY NAME	HYDRO UNIT	CAUSES*	SIZE**	SOURCES*	SIZE**	TOTAL SIZE**
3	PASO ROBLES BASIN	309.800	Saltwater Intrusion	120			
			Sulfates	120			
			TCE/Trichloroethylene	120			
			Total Trihalomethanes	120			
			Bromodichloromethane/BDCM	886	Source Unknown	886	886
			Bromoform	886			
			Chloroform	886			
			Dichlorobenzene	886			
			Dichloroethylene/DCE	886			
			Freon II	886			
			Nonpriority organics	886			
			Priority organics	886			
			Toluene	886			
3	SALINAS VALLEY, EASTSIDE AQUIFER	309.000	Total Trihalomethanes	886			
			Dichloroethane/DCA	124	Agriculture	124	124
			Freon II	124	Agriculture-irrigation tailwater	124	
			Nitrates	124	Animal Operations	124	
			Nonpriority organics	124	Natural Sources	124	
			Nutrients	124	Septage Disposal	124	
			PCE/Tetrachloroethylene	124	Source Unknown	124	
			Priority organics	124			
			Salinity/TDS/chlorides	124			
			Toluene	124			
3	SALINAS VALLEY, FOREBAY	309.000	Nitrates	167	Agriculture	167	167
			Nutrients	167	Animal Operations	167	
			Priority organics	167	Lust/Leaking Undergrnd Stor. Tanks	167	
			Salinity/TDS/chlorides	167	Nonpoint Source	167	
3	SALINAS VALLEY, PRESSURE	309.000	Nitrates	124	Agriculture	124	124
			Nutrients	124	Animal Operations	124	
			Priority organics	124	Point Source(unspecified)	124	
			Salinity/TDS/chlorides	124	Saltwater Intrusion	124	
					Septage Disposal	124	
3	SALINAS VALLEY, UPPER VALLEY AQUIFER	309.000	Cadmium	205	Agriculture	205	205
			Metals	205	Industrial Point Sources	205	

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TABLE 12A. CAUSES AND SOURCES OF GROUND WATER IMPAIRMENT

REGION	WATER BODY NAME	HYDRO UNIT	CAUSES*	SIZE**	SOURCES*	SIZE**	TOTAL SIZE**
3	SAN ANTONIO CREEK VALLEY	313.000	Nitrates	205	Land Disposal	205	25
			Nutrients	205	Natural Sources	205	
			Priority organics	205	Septage Disposal	205	
			Salinity/TDS/chlorides	205			
			Trace Elements	205			
			Chlorides	25	Industrial Point Sources	25	
			Heptachlor	25	Source Unknown	25	
			Herbicides	25			
			Metals	25			
			Pesticides	25			
			Priority organics	25			
			Salinity/TDS/chlorides	25			
			Sulfates	25			
			Total Dissolved Solids	25			
3	SAN LUIS OBISPO VALLEY	310.240	Chloroform	15	Agriculture	15	15
			Overdraft	15	Industrial Point Sources	15	
			PCE/Tetrachloroethylene	15	Source Unknown	15	
			Priority organics	15			
3	SANTA BARBARA BASIN	315.320	Bromoform	20	Industrial Point Sources	20	20
			Dichloroethane/DCA	20	Source Unknown	20	
			Dichloroethylene/DCE	20			
			Nonpriority organics	20			
			PCE/Tetrachloroethylene	20			
			Priority organics	20			
			Total Trihalomethanes	20			
3	SANTA MARIA RIVER VALLEY	312.000	Atrazine	265	Agriculture	265	265
			Bromoform	265	Industrial Point Sources	265	
			Dibromochloromethane/DBCM	265	Irrigated Crop Production	265	
			Dichloroethane/DCA	265	Municipal Point Sources	265	
			Freon II	265	Source Unknown	265	
			Nitrates	265			
			Nonpriority organics	265			
			Nutrients	265			
			Other inorganics	265			

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TABLE 12A. CAUSES AND SOURCES OF GROUND WATER IMPAIRMENT

REGION	WATER BODY NAME	HYDRO UNIT	CAUSES*	SIZE**	SOURCES*	SIZE**	TOTAL SIZE**
3	SANTA YNEZ RIVER VALLEY	314.000	PCE/Tetrachloroethylene	265			
			Pesticides	265			
			Priority organics	265			
			Salinity/TDS/chlorides	265			
			TCA/Trichloroethane	265			
			TCE/Trichloroethylene	265			
			Total Trihalomethanes	265			
			Benzene	123	Agriculture	123	123
			Dichloroethylene/DCE	123	Agriculture-irrigation tailwater	123	
			Nonpriority organics	123	Agriculture-subsurface drainage	123	
			Priority organics	123	Lust/Leaking Undergrnd Stor. Tanks	123	
			Salinity/TDS/chlorides	123	Municipal Point Sources	123	
			Toluene	123	Point Source(unspecified)	123	
			Xylene	123	Source Unknown	123	
3	SCOTTS VALLEY	304.000			Unknown point source	123	
			Chloroform	60	Industrial Point Sources	60	60
			Dichlorobenzene	60	Source Unknown	60	
			Diethylhexylphthalate/DEHP	60			
			PCE/Tetrachloroethylene	60			
			Priority organics	60			
			TCE/Trichloroethylene	60			
			Toluene	60			
3	SEASIDE AREA GROUNDWATER BASIN	309.500	Total Trihalomethanes	60			
			Chlorine	50	Industrial Point Sources	50	50
			Dichloroethylene/DCE	50	Source Unknown	50	
			Freon II	50			
			Methylene	50			
			Nonpriority organics	50			
			PCE/Tetrachloroethylene	50			
			Priority organics	50			
			TCA/Trichloroethane	50			
			TCE/Trichloroethylene	50			
			Toluene	50			

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**TABLE 12A. CAUSES AND SOURCES OF GROUND WATER IMPAIRMENT**

REGION	WATER BODY NAME	HYDRO UNIT	CAUSES*	SIZE**	SOURCES*	SIZE**	TOTAL SIZE**
4	ARROYO SANTA ROSA BASIN	403.63	Nonpriority organics	5	Agriculture	5	5
			Nutrients	5	Septage Disposal	5	
4	CENTRAL BASIN LOWER- PRODUCTION ZONES	405.15	Priority organics	277	Groundwater Loadings	277	277
					Land Disposal	77	
					Landfills	277	
4	CENTRAL BASIN UPPER-SHALLOW AND SEMI-PERCHED AQUIFERS	405.15	Priority organics	277	Illegal dumping	277	277
					Industrial Point Sources	277	
					Other	277	
					Urban Runoff/Storm Sewers	277	
4	CHINO AREA BASIN	481.21	Nutrients	10	Agriculture	10	10
					Animal Operations	10	
					Septage Disposal	10	
4	LOWER OJAI VALLEY BASIN	402.32	Nutrients	23	Agriculture	23	23
					Animal Operations	23	
					Septage Disposal	23	
4	LOWER VENTURA BASIN	402.1	Nutrients	8	Agriculture	8	8
					Animal Operations	8	
					Septage Disposal	8	
					Urban Runoff/Storm Sewers	8	
4	MAIN SAN GABRIEL VALLEY BASIN	405.42	Priority organics	141	Industrial Point Sources	141	141
					Land Disposal	41	
					Landfills	141	
4	OXNARD PLAIN BASIN	403.11	Nutrients	111	Agriculture	111	111
			Salinity/TDS/chlorides	111	Groundwater Loadings	111	
					Groundwater Withdrawal	111	
					Septage Disposal	111	
4	PLEASANT VALLEY BASIN	403.12	Salinity/TDS/chlorides	36	Groundwater Loadings	36	36
					Septage Disposal	36	
4	PUENTE BASIN	405.41	Priority organics	16	Agriculture	16	16
			Salinity/TDS/chlorides	16	Industrial Point Sources	16	
					Land Disposal	16	
					Landfills	16	

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TABLE 12A. CAUSES AND SOURCES OF GROUND WATER IMPAIRMENT

REGION	WATER BODY NAME	HYDRO UNIT	CAUSES*	SIZE**	SOURCES*	SIZE**	TOTAL SIZE**
4	RAYMOND BASIN	405.31	Priority organics	37	Industrial Point Sources	37	37
					Land Disposal	37	
					Landfills	37	
4	SAN ANTONIO CREEK AREA BASIN	402.2	Nutrients	4	Agriculture	4	4
					Animal Operations	4	
					Septage Disposal	4	
					Urban Runoff/Storm Sewers	4	
4	SANTA CLARA-PIRU CREEK BASIN	403.41	Nutrients	14	Agriculture	14	14
					Animal Operations	14	
					Septage Disposal	14	
					Urban Runoff/Storm Sewers	14	
4	SANTA CLARA-SESPE BASIN	403.31	Nutrients	31	Agriculture	31	31
					Septage Disposal	31	
4	SANTA MONICA BASIN	405.13	Priority organics	40	Industrial Point Sources	40	40
4	SIERRA PELONA VALLEY BASIN	403.55	Nutrients	11	Agriculture	11	11
					Animal Operations	11	
					Septage Disposal	11	
4	VERDUGO BASIN	405.24	Nutrients	11	Septage Disposal	11	11
4	WEST COAST BASIN LOWER- PRODUCTION ZONES	405.12	Salinity/TDS/chlorides	141	Groundwater Loadings	141	141
					Groundwater Withdrawal	141	
4	WEST COAST BASIN UPPER- SHALLOW AND SEMI-PERCHED ZONES	405.12	Priority organics	141	Groundwater Withdrawal	141	141
			Salinity/TDS/chlorides	141	Illegal dumping	141	
					Industrial Point Sources	141	
					Urban Runoff/Storm Sewers	141	

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**TABLE 12A. CAUSES AND SOURCES OF GROUND WATER IMPAIRMENT**

REGION	WATER BODY NAME	HYDRO UNIT	CAUSES*	SIZE**	SOURCES*	SIZE**	TOTAL SIZE**
5	CHOWCHILLA BASIN PORT	5-22	DBCP/Dibromochloropropane	230	Agriculture	230	230
			Nitrates	230	Animal Operations	230	
			Nonpriority organics	230	Dairies	230	
			Nutrients	230	Industrial Point Sources	230	
			Pesticides	230	Lust/Leaking Undergrnd Stor. Tanks	230	
			Priority organics	230	Septage Disposal	230	
			Salinity/TDS/chlorides	230			
5	DELTA - MENDOTA BASIN PORT	5-22	Arsenic	365	Agriculture	365	365
			Boron	365	Industrial Point Sources	365	
			Metals	365	Lust/Leaking Undergrnd Stor. Tanks	365	
			Nitrates	365	Natural Sources	365	
			Nonpriority organics	365			
			Nutrients	365			
			Priority organics	365			
			Salinity/TDS/chlorides	365			
			Selenium	365			
			Trace Elements	365			
5	EASTERN SAN JOAQUIN COUNTY BASIN PORT	5-22	DBCP/Dibromochloropropane	1140	Agriculture	1140	1140
			Nitrates	1140	Animal Operations	1140	
			Nonpriority organics	1140	Dairies	1140	
			Nutrients	1140	Industrial Point Sources	1140	
			Pesticides	1140	Lust/Leaking Undergrnd Stor. Tanks	1140	
			Priority organics	1140	Natural Sources	1140	
			Salinity/TDS/chlorides	1140	Septage Disposal	1140	
5	KAWEAH BASIN PORT	5-22	DBCP/Dibromochloropropane	690	Agriculture	690	690
			Nitrates	690	Animal Operations	690	
			Nonpriority organics	690	Dairies	690	
			Nutrients	690	Industrial Point Sources	690	
			Pesticides	690	Lust/Leaking Undergrnd Stor. Tanks	690	
			Priority organics	690	Septage Disposal	690	
			Salinity/TDS/chlorides	690			
5	KERN COUNTY BASIN PORT	5-22	Arsenic	3770	Agriculture	3770	3770
			DBCP/Dibromochloropropane	3770	Animal Operations	3770	
			Metals	3770	Dairies	3770	

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TABLE 12A. CAUSES AND SOURCES OF GROUND WATER IMPAIRMENT

REGION	WATER BODY NAME	HYDRO UNIT	CAUSES*	SIZE**	SOURCES*	SIZE**	TOTAL SIZE**
			Nitrates	3770	Industrial Point Sources	3770	
			Nonpriority organics	3770	Lust/Leaking Undergrnd Stor. Tanks	3770	
			Nutrients	3770	Natural Sources	3770	
			Pesticides	3770	Septage Disposal	3770	
			Priority organics	3770			
			Salinity/TDS/chlorides	3770			
			Selenium	3770			
			Trace Elements	3770			
5	KINGS BASIN PORT	5-22	DBCP/Dibromochloropropane	1610	Agriculture	1610	1610
			Nitrates	1610	Animal Operations	1610	
			Nonpriority organics	1610	Dairies	1610	
			Nutrients	1610	Industrial Point Sources	1610	
			Pesticides	1610	Lust/Leaking Undergrnd Stor. Tanks	1610	
			Priority organics	1610	Septage Disposal	610	
			Salinity/TDS/chlorides	1610			
5	MADERA BASIN PORT	5-22	DBCP/Dibromochloropropane	580	Agriculture	580	580
			Nitrates	580	Animal Operations	580	
			Nonpriority organics	580	Dairies	580	
			Nutrients	580	Industrial Point Sources	580	
			Pesticides	580	Lust/Leaking Undergrnd Stor. Tanks	580	
			Priority organics	580	Septage Disposal	580	
			Salinity/TDS/chlorides	580			
5	MERCED BASIN PORT	5-22	DBCP/Dibromochloropropane	690	Agriculture	690	690
			Nitrates	690	Animal Operations	690	
			Nonpriority organics	690	Dairies	690	
			Nutrients	690	Industrial Point Sources	690	
			Pesticides	690	Lust/Leaking Undergrnd Stor. Tanks	690	
			Priority organics	690	Septage Disposal	690	
5	MODESTO BASIN PORT	5-22	DBCP/Dibromochloropropane	340	Agriculture	340	340
			Nitrates	340	Dairies	340	
			Nonpriority organics	340	Industrial Point Sources	340	
			Nutrients	340	Lust/Leaking Undergrnd Stor. Tanks	340	
			Pesticides	340	Septage Disposal	340	
			Priority organics	340			

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**TABLE 12A. CAUSES AND SOURCES OF GROUND WATER IMPAIRMENT**

REGION	WATER BODY NAME	HYDRO UNIT	CAUSES*	SIZE**	SOURCES*	SIZE**	TOTAL SIZE**
5	SACRAMENTO COUNTY BASIN PORT	5-22	Nonpriority organics	750	Industrial Point Sources	750	750
			Priority organics	750	Lust/Leaking Undergrnd Stor. Tanks	750	
5	TRACY BASIN PORT	5-22	Arsenic	570	Agriculture	570	570
			Boron	570	Industrial Point Sources	570	
			Metals	570	Lust/Leaking Undergrnd Stor. Tanks	570	
			Molybdenum	570	Natural Sources	570	
			Nitrates	570	Septage Disposal	570	
			Nonpriority organics	570			
			Nutrients	570			
			Priority organics	570			
			Salinity/TDS/chlorides	570			
			Trace Elements	570			
5	TULARE LAKE BASIN PORT	5-22	Arsenic	780	Agriculture	780	780
			Boron	780	Industrial Point Sources	780	
			Metals	780	Lust/Leaking Undergrnd Stor. Tanks	780	
			Molybdenum	780	Natural Sources	780	
			Nitrates	780			
			Nonpriority organics	780			
			Nutrients	780			
			Priority organics	780			
			Salinity/TDS/chlorides	780			
			Selenium	780			
5	TULE BASIN PORT	5-22	Trace Elements	780			730
			Uranium	780			
			Arsenic	730	Agriculture	730	
			DBCP/Dibromochloropropane	730	Animal Operations	730	
			Metals	730	Dairies	730	
			Nitrates	730	Industrial Point Sources	730	
			Nonpriority organics	730	Lust/Leaking Undergrnd Stor. Tanks	730	
			Nutrients	730	Natural Sources	730	
			Pesticides	730	Septage Disposal	730	
			Priority organics	730			
5	TURLOCK BASIN PORT	5-22	Salinity/TDS/chlorides	730			545
			Trace Elements	730			
5	TURLOCK BASIN PORT	5-22	DBCP/Dibromochloropropane	545	Agriculture	545	545

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TABLE 12A. CAUSES AND SOURCES OF GROUND WATER IMPAIRMENT

REGION	WATER BODY NAME	HYDRO UNIT	CAUSES*	SIZE**	SOURCES*	SIZE**	TOTAL SIZE**
5	WESTSIDE BASIN PORT	5-22	Nitrates	545	Dairies	545	1040
			Nonpriority organics	545	Industrial Point Sources	545	
			Nutrients	545	Lust/Leaking Undergrnd Stor. Tanks	545	
			Pesticides	545	Septage Disposal	545	
			Priority organics	545			
			Salinity/TDS/chlorides	545			
			Boron	1040	Agriculture	1040	
			Metals	1040	Natural Sources	1040	
			Salinity/TDS/chlorides	1040			
			Selenium	1040			
			Trace Elements	1040			

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**TABLE 12A. CAUSES AND SOURCES OF GROUND WATER IMPAIRMENT**

REGION	WATER BODY NAME	HYDRO UNIT	CAUSES*	SIZE**	SOURCES*	SIZE**	TOTAL SIZE**
6	ANTELOPE VALLEY (NL)	6-7	Metals	1	Agriculture	36	36
			Nitrates	36	Natural Sources	1	
			Nutrients	36	Septage Disposal	36	
			Salinity/TDS/chlorides	1			
			Trace Elements	1			
6	ANTELOPE VALLEY (SL)	6-44	Coliform	122	Hazardous Waste	122	1622
			Flow alteration	1622	Land Disposal	1622	
			Metals	122	Landfills	1622	
			Nitrates	122	Lust/Leaking Undergrnd Stor. Tanks	122	
			Nutrients	122	Natural Sources	1622	
			Pathogens/Path.Indicators	122	Resource Extraction	1622	
			Priority organics	122	Septage Disposal	1622	
			Salinity/TDS/chlorides	1622	Spills	122	
					Urban Runoff/Storm Sewers	122	
6	BICYCLE VALLEY	6-25	Salinity/TDS/chlorides	120	Natural Sources	120	120
6	BRIDGEPORT VALLEY	6-8	Coliform	100	Agriculture	100	100
			Metals	100	Lust/Leaking Undergrnd Stor. Tanks	2	
			Nitrates	100	Natural Sources	100	
			Nutrients	100	Resource Extraction	100	
			Oil and grease	2	Septage Disposal	100	
			Other inorganics	100	Urban Runoff/Storm Sewers	2	
			Pathogens/Path.Indicators	100			
			Priority organics	2			
			Salinity/TDS/chlorides	100			
6	BROADWELL VALLEY	6-32	Flow alteration	120	Flow Regulation/Modification	120	120
			Salinity/TDS/chlorides	120	Hydromodification	120	
					Natural Sources	120	
6	CADY SPRINGS RECHARGE AREA	6-0000	Coliform	6	Land Disposal	6	6
			Nitrates	6	Nonpoint Source	6	
			Nutrients	6	Septage Disposal	6	
			Pathogens/Path.Indicators	6	Wastewater - land disposal	6	
			Salinity/TDS/chlorides	6			
6	CALIFORNIA VALLEY	6-79	Salinity/TDS/chlorides	60	Natural Sources	60	60

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REGION	WATER BODY NAME	HYDRO UNIT	CAUSES*	SIZE**	SOURCES*	SIZE**	TOTAL SIZE**
6	CARSON VALLEY	6-6	Coliform	20	Agriculture	20	20
			Nitrates	20	Land Disposal	20	
			Nutrients	20	Septage Disposal	20	
			Pathogens/Path.Indicators	20			
6	CAVES CANYON VALLEY	6-38	Salinity/TDS/chlorides	100	Natural Sources	100	100
6	COSO VALLEY	6-55	Salinity/TDS/chlorides	50	Natural Sources	50	50
6	COYOTE LAKE VALLEY	6-37	Salinity/TDS/chlorides	150	Natural Sources	150	150
6	CUDDEBACK VALLEY	6-50	Salinity/TDS/chlorides	180	Natural Sources	180	180
6	DARWIN VALLEY	6-57	Salinity/TDS/chlorides	70	Natural Sources	70	70
6	DEATH VALLEY	6-18	Flow alteration	1320	Flow Regulation/Modification	1320	1320
			Metals	1320	Hydromodification	1320	
			Salinity/TDS/chlorides	1320	Natural Sources	1320	
			Trace Elements	1320			
6	DENNING SPRING VALLEY	6-78	Salinity/TDS/chlorides	18	Natural Sources	18	18
6	DOG VALLEY	6-0000	Arsenic	1	Flow Regulation/Modification	7	7
			Coliform	7	Hydromodification	7	
			Flow alteration	7	Lust/Leaking Undergrnd Stor. Tanks	1	
			Metals	1	Natural Sources	7	
			Nitrates	7	Septage Disposal	7	
			Nutrients	7			
			Oil and grease	1			
			Pathogens/Path.Indicators	7			
			Priority organics	1			
			Trace Elements	1			
6	EAGLE LAKE AREA	6-96	Coliform	2	Agriculture	22	22
			Metals	22	Lust/Leaking Undergrnd Stor. Tanks	2	
			Nitrates	2	Natural Sources	22	
			Nutrients	2	Septage Disposal	2	
			Oil and grease	2			
			Pathogens/Path.Indicators	2			
			Priority organics	2			
6	EL MIRAGE VALLEY	6-43	Salinity/TDS/chlorides	70	Natural Sources	70	120

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REGION	WATER BODY NAME	HYDRO UNIT	CAUSES*	SIZE**	SOURCES*	SIZE**	TOTAL SIZE**
6	FREMONT VALLEY	6-46	Flow alteration	220	Agriculture	330	330
			Metals	220	Flow Regulation/Modification	330	
			Salinity/TDS/chlorides	220	Hydromodification	330	
			Trace Elements	220	Mine Tailings	330	
					Natural Sources	330	
					Resource Extraction	330	
6	GOLDSTONE VALLEY	6-48	Salinity/TDS/chlorides	30	Natural Sources	30	30
6	HARPER VALLEY	6-47	Salinity/TDS/chlorides	210	Natural Sources	210	510
6	HONEY LAKE VALLEY	6-4	Coliform	490	Agriculture	490	490
			Flow alteration	490	Agriculture-subsurface drainage	490	
			Metals	1	Construction/Land Development	490	
			Nitrates	490	Geothermal Development	490	
			Nonpriority organics	1	Hazardous Waste	1	
			Nutrients	490	Land Disposal	1	
			Oil and grease	1	Lust/Leaking Undergrnd Stor. Tanks	1	
			Pathogens/Path.Indicators	490	Natural Sources	490	
			Priority organics	1	Nonpoint Source	490	
			Salinity/TDS/chlorides	490	Out-of-state source	490	
			Trace Elements	490	Resource Extraction	490	
					Septage Disposal	490	
6	INDIAN WELLS VALLEY	6-54	Flow alteration	20	Groundwater Withdrawal	20	520
			Salinity/TDS/chlorides	20	Hydromodification	20	
					Natural Sources	20	
6	IVANPAH VALLEY	6-30	Flow alteration	300	Flow Regulation/Modification	300	300
			Metals	300	Hydromodification	300	
			Salinity/TDS/chlorides	180	Natural Sources	300	
			Trace Elements	180	Resource Extraction	300	
6	KELSO LANDER VALLEY	6-69	Salinity/TDS/chlorides	17	Natural Sources	17	17
6	LANGFORD VALLEY	6-36	Salinity/TDS/chlorides	50	Hazardous Waste	50	50
					Land Disposal	50	
					Lust/Leaking Undergrnd Stor. Tanks	50	
					Natural Sources	50	
					Spills	50	

\* Causes and Sources are not linked.

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**TABLE 12A. CAUSES AND SOURCES OF GROUND WATER IMPAIRMENT**

REGION	WATER BODY NAME	HYDRO UNIT	CAUSES*	SIZE**	SOURCES*	SIZE**	TOTAL SIZE**
6	LEACH VALLEY	6-27	Salinity/TDS/chlorides	70	Natural Sources	70	70
6	LEVIATHAN MINE AREA	6-0000	Metals	1	Acid Mine Drainage	1	1
			pH (High or Low)	1	Hydromodification	1	
6	LONG VALLEY (NL)	6-104	Coliform	28	Agriculture	28	28
			Flow alteration	28	Flow Regulation/Modification	28	
			Nitrates	28	Hydromodification	28	
			Nutrients	28	Septage Disposal	28	
			Pathogens/Path.Indicators	28			
6	LOWER KINGSTON VALLEY	6-21	Salinity/TDS/chlorides	290	Natural Sources	290	290
6	LOWER MOJAVE RIVER VALLEY	6-40	Flow alteration	300	Agriculture	51	300
			Metals	1	Flow Regulation/Modification	300	
			Nitrates	51	Hazardous Waste	51	
			Nutrients	51	Hydromodification	300	
			Oil and grease	51	Land Disposal	51	
			Priority organics	51	Landfills	51	
			Salinity/TDS/chlorides	300	Lust/Leaking Undergrnd Stor. Tanks	51	
			Trace Elements	300	Natural Sources	300	
					Nonpoint Source	300	
					Septage Disposal	51	
					Spills	51	
6	MADELINE PLAINS	6-2	Coliform	270	Natural Sources	270	270
			Metals	270	Septage Disposal	270	
			Nitrates	270			
			Nutrients	270			
			Other inorganics	270			
			Pathogens/Path.Indicators	270			
			Salinity/TDS/chlorides	270			
			Trace Elements	270			
6	MARTIS VALLEY	6-67	Coliform	6	Flow Regulation/Modification	6	25
			Flow alteration	6	Highway Maintenance And Runoff	6	
			Metals	6	Hydromodification	6	
			Nitrates	6	Land Disposal	1	
			Nutrients	6	Lust/Leaking Undergrnd Stor. Tanks	1	
			Oil and grease	1	Natural Sources	6	

\* Causes and Sources are not linked.

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**TABLE 12A. CAUSES AND SOURCES OF GROUND WATER IMPAIRMENT**

REGION	WATER BODY NAME	HYDRO UNIT	CAUSES*	SIZE**	SOURCES*	SIZE**	TOTAL SIZE**
6	MESQUITE VALLEY	6-29	Pathogens/Path.Indicators	6	Septage Disposal	6	
			Priority organics	1	Urban Runoff/Storm Sewers	6	
			Trace Elements	6			
	MESQUITE VALLEY	6-29	Salinity/TDS/chlorides	70	Natural Sources	70	120
	MIDDLE AMARGOSA VALLEY	6-20	Salinity/TDS/chlorides	620	Natural Sources	620	620
	MIDDLE MOJAVE RIVER VALLEY	6-41	Cause Unknown	3	Agriculture	3	430
			Metals	3	Industrial Land Treatment	3	
			Oil and grease	3	Land Disposal	3	
			Priority organics	3	Landfills	3	
			Salinity/TDS/chlorides	3	Lust/Leaking Undergrnd Stor. Tanks	3	
			Trace Elements	3	Natural Sources	3	
					Spills	3	
	MODOC PLATEAU PVA (REG 6)	6-103	Salinity/TDS/chlorides	100	Natural Sources	100	100
	MONO VALLEY	6-9	Coliform	82	Flow Regulation/Modification	250	250
			Flow alteration	82	Hydromodification	250	
			Nitrates	82	Land Disposal	82	
			Nutrients	82	Natural Sources	250	
			Pathogens/Path.Indicators	82	Septage Disposal	82	
			Salinity/TDS/chlorides	82			
			Trace Elements	82			
	OWENS VALLEY	6-12	Cause Unknown	1030	Flow Regulation/Modification	1030	1030
			Coliform	1030	Hazardous Waste	2	
			Flow alteration	1030	Hydromodification	1030	
			Metals	1030	Land Disposal	1030	
			Nutrients	1030	Landfills	1030	
			Oil and grease	2	Lust/Leaking Undergrnd Stor. Tanks	1030	
			Pathogens/Path.Indicators	1030	Nonpoint Source	1030	
			Priority organics	2	Resource Extraction	1030	
			Salinity/TDS/chlorides	1030	Septage Disposal	1030	
	PANAMINT VALLEY	6-58	Metals	360	Lust/Leaking Undergrnd Stor. Tanks	360	360
			Oil and grease	360	Mine Tailings	360	
			Priority organics	360	Natural Sources	360	
			Salinity/TDS/chlorides	360	Resource Extraction	360	

\* Causes and Sources are not linked.

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TABLE 12A. CAUSES AND SOURCES OF GROUND WATER IMPAIRMENT

REGION	WATER BODY NAME	HYDRO UNIT	CAUSES*	SIZE**	SOURCES*	SIZE**	TOTAL SIZE**
			Trace Elements	360	Spills	360	
6	RIGGS VALLEY	6-23	Salinity/TDS/chlorides	100	Natural Sources	100	100
6	SEARLES VALLEY	6-52	Metals	1	Mine Tailings	1	250
			Oil and grease	1	Natural Sources	250	
			Salinity/TDS/chlorides	250	Resource Extraction	1	
6	SILVER LAKE VALLEY	6-34	Salinity/TDS/chlorides	40	Natural Sources	40	40
6	SODA LAKE VALLEY	6-33	Salinity/TDS/chlorides	500	Natural Sources	500	590
6	SQUAW VALLEY	6-0000	Flow alteration	3	Flow Regulation/Modification	3	3
			Herbicides	1	Highway Maintenance And Runoff	3	
			Nitrates	3	Hydromodification	3	
			Nutrients	3	Land Disposal	3	
			Oil and grease	1	Lust/Leaking Undergrnd Stor. Tanks	1	
			Pesticides	1	Recreational Activities	3	
			Priority organics	1	Spills	1	
					Urban Runoff/Storm Sewers	3	
6	SUPERIOR VALLEY	6-49	Salinity/TDS/chlorides	170	Natural Sources	170	170
6	SURPRISE VALLEY	6-1	Coliform	151	Agriculture	151	350
			Flow alteration	151	Irrigated Crop Production	151	
			Metals	151	Natural Sources	151	
			Nitrates	151	Resource Extraction	151	
			Nutrients	151	Septage Disposal	151	
			Pathogens/Path.Indicators	151			
			Salinity/TDS/chlorides	151			
			Trace Elements	151			
6	TAHOE VALLEY-NORTH	6-5.02	Arsenic	1	Groundwater Withdrawal	4	4
			Flow alteration	4	Hydromodification	4	
			Metals	1	Land Disposal	4	
			Nutrients	4	Landfills	4	
			Priority organics	1	Lust/Leaking Undergrnd Stor. Tanks	4	
			Trace Elements	1	Natural Sources	4	
					Nonpoint Source	4	
					Septage Disposal	4	
					Spills	4	

\* Causes and Sources are not linked.

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TABLE 12A. CAUSES AND SOURCES OF GROUND WATER IMPAIRMENT

REGION	WATER BODY NAME	HYDRO UNIT	CAUSES*	SIZE**	SOURCES*	SIZE**	TOTAL SIZE**
6	TAHOE VALLEY-SOUTH	6-5.01			Urban Runoff/Storm Sewers	4	21
					Wastewater - land disposal	4	
			Metals	3	Highway Maintenance And Runoff	3	
			Nitrates	3	Land Disposal	3	
			Nutrients	3	Lust/Leaking Undergrnd Stor. Tanks	3	
			Priority organics	3	Natural Sources	3	
			Radiation	3	Nonpoint Source	3	
			Salinity/TDS/chlorides	3	Recreational Activities	3	
					Source Unknown	3	
					Urban Runoff/Storm Sewers	3	
					Wastewater - land disposal	3	
6	TROY VALLEY	6-39	Salinity/TDS/chlorides	130	Natural Sources	120	130
6	TWIN LAKE AREA	6-0000	Coliform	5	Highway Maintenance And Runoff	5	5
			Nitrates	5	Septage Disposal	5	
			Nutrients	5	Urban Runoff/Storm Sewers	5	
			Oil and grease	2			
			Pathogens/Path.Indicators	5			
			Priority organics	2			
6	UPPER KINGSTON VALLEY	6-22	Salinity/TDS/chlorides	270	Natural Sources	270	270
6	UPPER MOJAVE RIVER VALLEY	6-42	Coliform	625	Hazardous Waste	75	625
			Flow alteration	625	Land Disposal	75	
			Nitrates	625	Lust/Leaking Undergrnd Stor. Tanks	75	
			Nutrients	625	Natural Sources	625	
			Pathogens/Path.Indicators	625	Resource Extraction	625	
			Priority organics	25	Septage Disposal	625	
			Salinity/TDS/chlorides	625	Spills	625	
6	WILLOW CREEK VALLEY	6-3	Nutrients	1	Nonpoint Source	20	20
6	WINGATE VALLEY	6-19	Salinity/TDS/chlorides	70	Natural Sources	70	70

\* Causes and Sources are not linked.

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TABLE 12A. CAUSES AND SOURCES OF GROUND WATER IMPAIRMENT

REGION	WATER BODY NAME	HYDRO UNIT	CAUSES*	SIZE**	SOURCES*	SIZE**	TOTAL SIZE**
7	BORREGO VALLEY	722.13	Nonpriority organics	110	Lust/Leaking Undergrnd Stor. Tanks	110	110
7	COACHELLA VA. GW.	719.47	Cause Unknown	690	Land Disposal	690	690
			Nitrates	690	Landfills	690	
			Nonpriority organics	690	Lust/Leaking Undergrnd Stor. Tanks	690	
			Nutrients	690	Septage Disposal	690	
			Pathogens/Path. Indicators	690			
7	LUCERNE VALLEY	701.00	Nonpriority organics	260	Lust/Leaking Undergrnd Stor. Tanks	260	260
7	MORONGO VALLEY	719.43	Cause Unknown	1	Land Disposal	1	14
					Landfills	1	
7	NEEDLES VALLEY	713.30	Chromium	140	Hazardous Waste	140	140
			Metals	140	Land Disposal	140	
			Nonpriority organics	140	Lust/Leaking Undergrnd Stor. Tanks	140	
7	PALO VERDE VA.	715.40	Nonpriority organics	200	Lust/Leaking Undergrnd Stor. Tanks	200	200
7	TWENTYNINE PALMS VALLEY	709.10	Priority organics	180	Land Disposal	180	180
					Landfills	180	
7	WARD VALLEY	712	Radiation	770	Land Disposal	770	770
					Landfills	770	

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**TABLE 12A. CAUSES AND SOURCES OF GROUND WATER IMPAIRMENT**

REGION	WATER BODY NAME	HYDRO UNIT	CAUSES*	SIZE**	SOURCES*	SIZE**	TOTAL SIZE**
8	BUNKER HILL I GW	801.520	PCE/Tetrachloroethylene	22	Industrial Point Sources	22	22
			Priority organics	22			
			TCE/Trichloroethylene	22			
8	BUNKER HILL II GW	801.520	DBCP/Dibromochloropropane	77	Agriculture	77	77
			Nitrates	77	Industrial Point Sources	77	
			Nutrients	77	Nonpoint Source	77	
			PCE/Tetrachloroethylene	77	Point Source(unspecified)	77	
			Pesticides	77			
			Priority organics	77			
			TCE/Trichloroethylene	77			
8	BUNKER HILL PRESSURE GW	801.520	DBCP/Dibromochloropropane	24	Agriculture	24	24
			Nitrates	24	Construction/Land Development	24	
			Nutrients	24	Industrial Point Sources	24	
			PCE/Tetrachloroethylene	24	Nonpoint Source	24	
			Pesticides	24	Point Source(unspecified)	24	
			Priority organics	24	Urban Runoff/Storm Sewers	24	
			Salinity/TDS/chlorides	24			
			TCE/Trichloroethylene	24			
8	CHINO I GW	801.210	DBCP/Dibromochloropropane	90	Agriculture	90	90
			Nitrates	90	Construction/Land Development	90	
			Nutrients	90	Urban Runoff/Storm Sewers	90	
			Pesticides	90			
8	CHINO II GW	801.210	DBCP/Dibromochloropropane	104	Agriculture	104	104
			Nitrates	104	Dairies	104	
			Nutrients	104	Industrial Point Sources	104	
			PCE/Tetrachloroethylene	104	Nonpoint Source	104	
			Pesticides	104			
			Priority organics	104			
			Salinity/TDS/chlorides	104			
			TCE/Trichloroethylene	104			
			Total Dissolved Solids	104			
8	CHINO III GW	801.210	Nitrates	48	Agriculture	48	48
			Nutrients	48	Dairies	48	
			Salinity/TDS/chlorides	48			

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TABLE 12A. CAUSES AND SOURCES OF GROUND WATER IMPAIRMENT

REGION	WATER BODY NAME	HYDRO UNIT	CAUSES*	SIZE**	SOURCES*	SIZE**	TOTAL SIZE**
8	SANTA ANA FOREBAY GW	801.110	Nitrates	105	Agriculture	105	105
			Nutrients	105	Construction/Land Development	105	
			Organic enrichment/Low DO	105	Industrial Point Sources	105	
			PCE/Tetrachloroethylene	105	Municipal Point Sources	105	
			Priority organics	105			
			Salinity/TDS/chlorides	105			
			TCE/Trichloroethylene	105			
			TOC/Total Organic Carbon	105			
8	SANTA ANA PRESSURE GW	801.110	Nitrates	139	Industrial Point Sources	139	139
			Nutrients	139	Municipal Point Sources	139	
			Organic enrichment/Low DO	139	Urban Runoff/Storm Sewers	139	
			PCE/Tetrachloroethylene	139			
			Priority organics	139			
			Salinity/TDS/chlorides	139			
			TCE/Trichloroethylene	139			
			TOC/Total Organic Carbon	139			

\* Causes and Sources are not linked.

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**TABLE 12A. CAUSES AND SOURCES OF GROUND WATER IMPAIRMENT**

<b>REGION</b>	<b>WATER BODY NAME</b>	<b>HYDRO UNIT</b>	<b>CAUSES*</b>	<b>SIZE**</b>	<b>SOURCES*</b>	<b>SIZE**</b>	<b>TOTAL SIZE**</b>
9	BARRETT LAKE HA GW	911.30	Salinity/TDS/chlorides	0	Agriculture	0	97
					Agriculture-animal	0	
					Animal Operations	0	
					Irrigated Crop Production	0	
9	CAMERON HA GW	911.70	Salinity/TDS/chlorides	0	Agriculture	0	45
					Agriculture-animal	0	
					Animal Operations	0	
					Irrigated Crop Production	0	
9	CAMPO HA GW	911.80	Salinity/TDS/chlorides	0	Agriculture	0	107
					Agriculture-animal	0	
					Animal Operations	0	
					Irrigated Crop Production	0	
9	DULZURA HA GW	910.30	Salinity/TDS/chlorides	0	Agriculture	0	100
					Agriculture-animal	0	
					Animal Operations	0	
					Irrigated Crop Production	0	
9	EL MONTE	907.15	Salinity/TDS/chlorides	0	Agriculture	0	15
					Agriculture-animal	0	
					Animal Operations	0	
					Irrigated Crop Production	0	
9	JAMUL VALLEY	909.21	Salinity/TDS/chlorides	0	Agriculture	0	5
					Agriculture-animal	0	
					Animal Operations	0	
					Irrigated Crop Production	0	
9	LAS PULGAS VALLEY	901.52	Salinity/TDS/chlorides	0	Agriculture	0	3
					Agriculture-animal	0	
					Animal Operations	0	
					Irrigated Crop Production	0	
9	LOWER SAN LUIS REY HA GW	903.10	Salinity/TDS/chlorides	40	Agriculture	40	186
					Agriculture-animal	40	
					Animal Operations	40	
					Irrigated Crop Production	40	
9	LOWER SWEETWATER HA GW	909.10	Salinity/TDS/chlorides	49	Animal Operations	49	49

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TABLE 12A. CAUSES AND SOURCES OF GROUND WATER IMPAIRMENT

REGION	WATER BODY NAME	HYDRO UNIT	CAUSES*	SIZE**	SOURCES*	SIZE**	TOTAL SIZE**
9	MIDDLE SWEETWATER HA GW	909.20	Salinity/TDS/chlorides	0	Irrigated Crop Production	49	85
					Agriculture	0	
					Agriculture-animal	0	
					Animal Operations	0	
9	MISSION VALLEY	907.11	Salinity/TDS/chlorides	11	Irrigated Crop Production	0	11
					Agriculture	11	
					Agriculture-animal	11	
					Animal Operations	11	
9	MONSERATE HA GW	903.20	Salinity/TDS/chlorides	0	Irrigated Crop Production	11	171
					Agriculture	0	
9	MORENA HA GW	911.50	Salinity/TDS/chlorides	0	Animal Operations	0	24
					Agriculture	0	
					Agriculture-animal	0	
9	NATIONAL CITY HA GW	908.30	Salinity/TDS/chlorides	0	Irrigated Crop Production	0	11
					Agriculture	0	
					Agriculture-animal	0	
					Animal Operations	0	
9	OTAY VALLEY HA GW	910.20	Salinity/TDS/chlorides	1	Irrigated Crop Production	0	47
					Agriculture	1	
					Agriculture-animal	1	
					Animal Operations	1	
9	PINE VALLEY	911.30	Salinity/TDS/chlorides	0	Priority organics	1	2
					Salinity/TDS/chlorides	1	
					Agriculture	0	
					Agriculture-animal	0	
9	POTRERO HA GW	911.20	Salinity/TDS/chlorides	0	Animal Operations	0	81
					Irrigated Crop Production	0	
					Agriculture	0	
					Agriculture-animal	0	
9	POWAY HA GW	906.20	Salinity/TDS/chlorides	41	Animal Operations	0	41
					Irrigated Crop Production	0	
					Agriculture	41	
					Agriculture-animal	41	

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TABLE 12A. CAUSES AND SOURCES OF GROUND WATER IMPAIRMENT

REGION	WATER BODY NAME	HYDRO UNIT	CAUSES*	SIZE**	SOURCES*	SIZE**	TOTAL SIZE**
					Animal Operations	41	
					Irrigated Crop Production	41	
9	RANCHO SANTA FE	905.11	Salinity/TDS/chlorides	0	Agriculture	0	6
					Agriculture-animal	0	
					Animal Operations	0	
					Irrigated Crop Production	0	
9	SAN DIEGUITO VALLEY	9-12	Salinity/TDS/chlorides	6	Agriculture	6	6
					Agriculture-animal	6	
					Animal Operations	6	
					Irrigated Crop Production	6	
9	SAN MATEO CANYON HA GW	901.40	Salinity/TDS/chlorides	0	Agriculture	0	135
					Agriculture-animal	0	
					Animal Operations	0	
					Irrigated Crop Production	0	
9	SAN ONOFRE HA GW	901.50	Salinity/TDS/chlorides	0	Agriculture	0	103
					Agriculture-animal	0	
					Animal Operations	0	
					Irrigated Crop Production	0	
9	SAN PASQUAL HA GW	905.30	Salinity/TDS/chlorides	6	Agriculture	6	66
					Agriculture-animal	6	
					Animal Operations	6	
					Irrigated Crop Production	6	
9	SANTA MARGARITA GW	902.11	Salinity/TDS/chlorides	13	Agriculture	13	13
					Agriculture-animal	13	
					Animal Operations	13	
					Irrigated Crop Production	13	
9	SANTA MARIA VALLEY HA GW	905.40	Nitrates	24	Animal Operations	24	57
			Salinity/TDS/chlorides	24	Irrigated Crop Production	24	
9	SWEETWATER VALLEY	909.11	Salinity/TDS/chlorides	0	Agriculture	0	3
					Agriculture-animal	0	
					Animal Operations	0	
					Irrigated Crop Production	0	

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TABLE 12A. CAUSES AND SOURCES OF GROUND WATER IMPAIRMENT

REGION	WATER BODY NAME	HYDRO UNIT	CAUSES*	SIZE**	SOURCES*	SIZE**	TOTAL SIZE**
9	TECATE VALLEY	911.81	Salinity/TDS/chlorides	0	Agriculture	0	1
					Agriculture-animal	0	
					Animal Operations	0	
					Irrigated Crop Production	0	
9	TEMECULA VALLEY	9-5	Chlorides	150	Agriculture	150	150
			Diesel	150	Landfills	150	
			Herbicides	150	Lust/Leaking Undergrnd Stor. Tanks	150	
			Iron	150	Municipal Point Sources	150	
			Manganese	150	Septage Disposal	150	
			Metals	150	Source Unknown	150	
			Nitrates	150	Specialty Crop Production	150	
			Nutrients	150	Surface Mining	150	
			Oil and grease	150	Urban Runoff/Storm Sewers	150	
			Pesticides	150			
			Salinity/TDS/chlorides	150			
			Sulfates	150			
			Total Dissolved Solids	150			
9	TIJUANA VALLEY HA GW	911.10	Salinity/TDS/chlorides	30	Agriculture	30	30
					Agriculture-animal	30	
					Animal Operations	30	
					Irrigated Crop Production	30	

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**TABLE 12A. CAUSES AND SOURCES OF GROUND WATER IMPAIRMENT**

REGION	WATER BODY NAME	HYDRO UNIT	CAUSES*	SIZE**	SOURCES*	SIZE**	TOTAL SIZE**
ABBREVIATIONS							
<b>REGIONAL WATER QUALITY CONTROL BOARDS</b>							
1	North Coast						
2	San Francisco Bay						
3	Central Coast						
4	Los Angeles						
5	Central Valley						
6	Lahontan						
7	Colorado River Basin						
8	Santa Ana						
9	San Diego						

\* Causes and Sources are not linked.

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TABLE 12B.

**TOTAL SIZES (Square Miles) OF GROUND WATERS  
IMPAIRED BY VARIOUS CAUSE CATEGORIES**

CAUSE CATEGORY	SIZE OF WATERS BY CONTRIBUTION TO IMPAIRMENT	
	MAJOR	MODERATE/MINOR
Cause/Stressor unknown		1,723
Toxicity (Unknown toxicant)		
Pesticides	7,500	3,489
Priority organic chemical	335	20,821
Nonpriority organic chemical	388	15,303
Metals	4,531	5,726
Ammonia		
Cyanide		
Sulfates		145
Chlorine		50
Other inorganics	535	
Nutrients	5,920	10,097
pH	1	
Siltation		
Organic enrichment/low DO		244
Salinity/TDS/chlorides	11,620	12,519
Thermal modifications		
Flow alterations	2,590	2,957
Other habitat alterations		
Pathogen indicators	627	866
Radiation		770
Oil and grease	3	4,119
Taste and odor		
Suspended solids		
Noxious aquatic plants (macrophytes)		
Total toxics		
Turbidity		
Exotic species		
Excessive algal growth		
Inappropriate littoral vegetation		

TABLE 12C.

**TOTAL SIZES (Square Miles) OF GROUND WATERS  
IMPAIRED BY VARIOUS SOURCE CATEGORIES**

SOURCE CATEGORY	SIZE OF WATERS BY CONTRIBUTION TO IMPAIRMENT	
	MAJOR	MODERATE/MINOR
Industrial Point Sources	715	14,503
Municipal Point Sources	388	264
Combined Sewer Overflows		
Agriculture	6,399	10,476
Crop-related sources	385	411
Grazing-related sources		
Intensive animal feeding operations	4,460	6,017
Silviculture		
Construction		709
Urban Runoff/Storm Sewers		842
Resource Extraction	1,030	7,136
Land Disposal	54	5,130
Hydromodification	2,701	718
Habitat Modification (non-hydromod)		
Marinas		
Erosion from Derelict Land		
Atmospheric Deposition		
Septage Disposal	6,522	8,914
Leaking Underground Storage Tanks	126	19,859
Highway Maintenance and Runoff		17
Spills (Accidental)	625	4,463
Contaminated Sediments		
Debris and Bottom Deposits		
Internal Nutrient Cycling (primarily lakes)		
Sediment Resuspension		
Natural Sources	6,937	11,522
Recreational Activities		3
Salt Storage Sites		
Ground water Loadings	20	685
Ground water Withdrawal	140	437
Other		277
Unknown Source	448	1,730
Sources Outside State Jurisdiction/Borders		490



## APPENDIX

### BENEFICIAL USE DESIGNATIONS

"Beneficial uses" are the many ways water can be used either directly by people or for their overall benefit. Drinking and bathing are obvious examples, but there are many others, such as uses by industry, agriculture, commerce, and wildlife. The SWRCB recognizes 23 beneficial uses summarized below:

Municipal and Domestic Supply (MUN)—Uses of water for community, military, or individual water supply systems including, but not limited to, drinking water supply.

Agricultural Supply (AGR)—Uses of water for farming, horticulture, or ranching including, but not limited to irrigation, stock watering, or support of vegetation for range grazing.

Industrial Process Supply (PRO)—Uses of water for industrial activities that depend primarily on water quality.

Industrial Service Supply (IND)—Uses of water for industrial activities that do not depend primarily on water quality including, but not limited to, mining, cooling water supply, hydraulic conveyance, gravel washing, fire protection, or oil well repressurization.

Ground Water Recharge (GWR)—Uses of water for natural or artificial recharge of ground water for purposes of future extraction, maintenance of water quality, or halting of saltwater intrusion into freshwater aquifers.

Freshwater Replenishment (FRSH)—Uses of water for natural or artificial maintenance of surface water quantity or quality (e.g., salinity).

Navigation (NAV)—Uses of water for shipping, travel, or other transportation by private, military, or commercial vessels.

Hydropower Generation (POW)—Uses of water for hydropower generation.

Water Contact Recreation (REC-1)–Uses of water for recreational activities involving body contact with water, where ingestion of water is reasonably possible. These uses include, but are not limited to, swimming, wading, water-skiing, skin and scuba diving, surfing, white water activities, fishing, or use of natural hot springs.

Noncontact Water Recreation (REC-2)–Uses of water for recreational activities involving proximity to water, but not normally involving body contact with water where ingestion of water is reasonably possible. These uses include, but are not limited to, picnicking, sunbathing, hiking, beachcombing, camping, boating, tidepool and marine life study, hunting, sightseeing, or aesthetic enjoyment in conjunction with the above activities.

Ocean Commercial and Sport Fishing (COMM)–Uses of water for commercial or recreational collection of fish, shellfish, or other organisms including, but not limited to, uses involving organisms intended for human consumption or bait purposes.

Aquaculture (AQUA)–Uses of water for aquaculture or mariculture operations including, but not limited to, propagation, cultivation, maintenance, or harvesting of aquatic plants and animals for human consumption or bait purposes.

Warm Freshwater Habitat (WARM)–Uses of water that support warm water ecosystems including, but not limited to, preservation or enhancement of aquatic habitats, vegetation, fish, or wildlife, including invertebrates.

Cold Freshwater Habitat (COLD)–Uses of water that support cold water ecosystems including, but not limited to, preservation or enhancement of aquatic saline habitats, vegetation, fish, or wildlife, including invertebrates.

Inland Saline Water Habitat (SAL)–Uses of water that support inland saline water ecosystems including, but not limited to, preservation or enhancement of aquatic saline habitats, vegetation, fish, or wildlife, including invertebrates.

Estuarine Habitat (EST)–Uses of water that support estuarine ecosystems including, but not limited to, preservation or enhancement of estuarine habitats, vegetation, fish, shellfish, or wildlife (e.g., estuarine mammals, waterfowl, shorebirds).

Marine Habitat (MAR)—Uses of water that support marine ecosystems including, but not limited to, preservation or enhancement of marine habitats, vegetation such as kelp, fish, shellfish, or wildlife (e.g., marine mammals, shorebirds).

Wildlife Habitat (WILD)—Uses of water that support terrestrial ecosystems including, but not limited to, preservation and enhancement of terrestrial habitats, vegetation, wildlife (e.g., mammals, birds, reptiles, amphibians, invertebrates), or wildlife water and food sources.

Preservation of Biological Habitats of Special Significance (BIOL)—Uses of water that support designated areas or habitats, such as established refuges, parks, sanctuaries, ecological reserves, or Areas of Special Biological Significance (ASBS), where the preservation or enhancement of natural resources requires special protection.

Rare, Threatened, or Endangered Species (RARE)—Uses of water that support habitats necessary, at least in part, for the survival and successful maintenance of plant or animal species established under State or federal law as rare, threatened or endangered.

Migration of Aquatic Organisms (MIGR)—Uses of water that support habitats necessary for migration or other temporary activities by aquatic organisms, such as anadromous fish.

Spawning, Reproduction, and/or Early Development (SPWN)—Uses of water that support high quality aquatic habitats suitable for reproduction and early development of fish.

Shellfish Harvesting (SHELL)—Uses of water that support habitats suitable for the collection of filter-feeding shellfish (e.g., clams, oysters, and mussels) for human consumption, commercial, or sports purposes.

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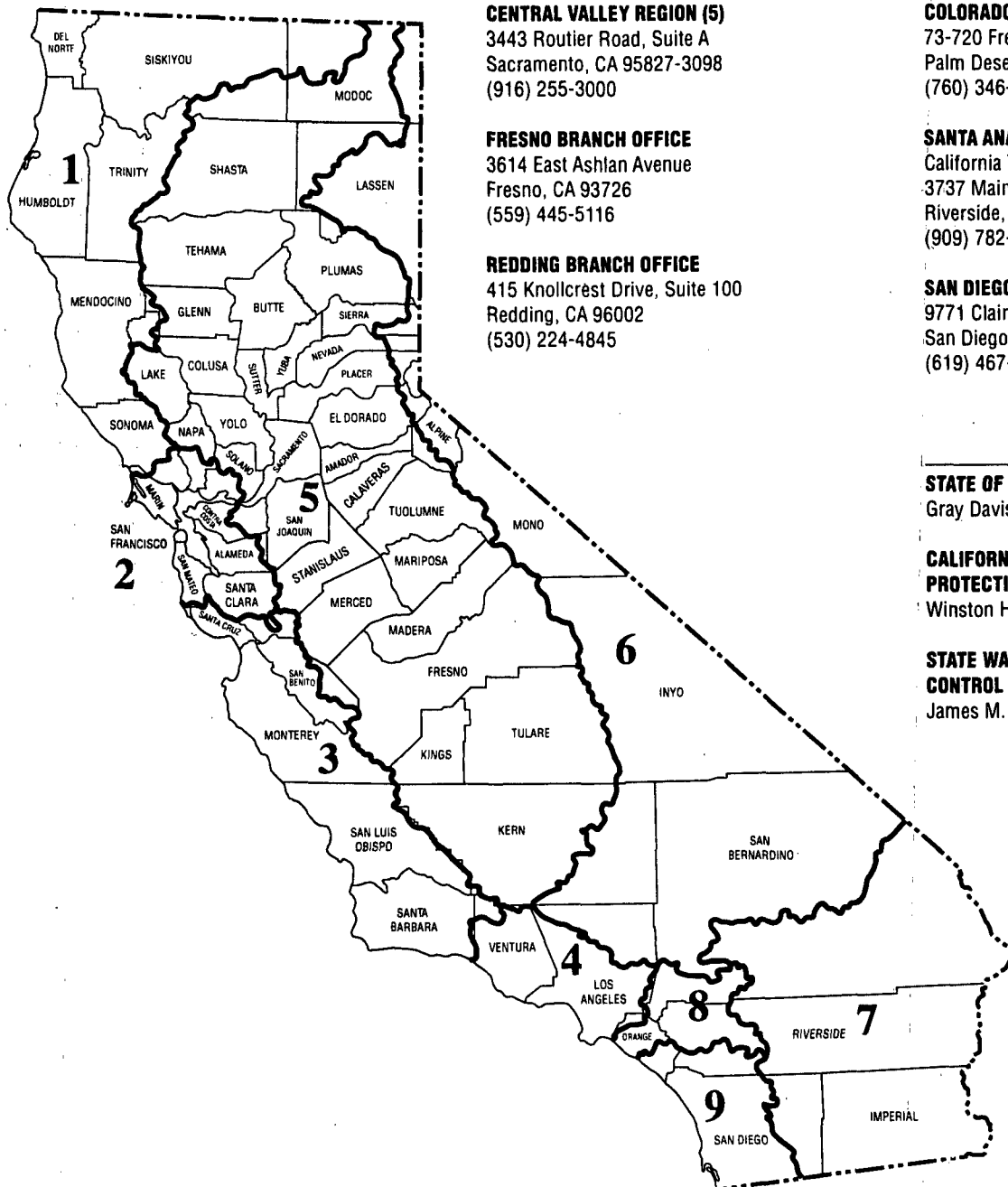
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