

STAFF REPORT
VOLUME III

**REVISION OF THE CLEAN WATER ACT SECTION 303(d)
LIST OF WATER QUALITY LIMITED SEGMENTS**

WATER BODY FACT SHEETS SUPPORTING
THE SECTION 303(d) RECOMMENDATIONS



APRIL 2002

DRAFT

DIVISION OF WATER QUALITY
STATE WATER RESOURCES CONTROL BOARD
CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY

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Staff Report by the
Division of Water Quality
State Water Resources Control Board

***REVISION OF THE CLEAN WATER ACT SECTION 303(d)
LIST OF WATER QUALITY LIMITED SEGMENTS***

Water Body Fact Sheets Supporting the Section 303(d) Recommendations

Volume III

This Staff Report supporting the revision of the Clean Water Act Section 303(d) list of water quality limited segments has three parts: (1) Volume I which contains the listing methodology and a summary of the proposed additions, deletions, changes, and priorities; (2) Volume II which contains summaries of the proposals for the North Coast, San Francisco Bay, Central Coast, and Los Angeles Regional Water Quality Control Boards (RWQCBs); and (3) Volume III which contains summaries of the proposals for the Central Valley, Lahontan, Colorado River Basin, Santa Ana, and San Diego RWQCBs. Each proposal is presented in a water body fact sheet.

This document is Volume III of the Staff Report. Proposed changes to the Section 303(d) list are included for the following RWQCBs:

- Central Valley (Region 5)
- Lahontan (Region 6)
- Colorado River Basin (Region 7)
- Santa Ana (Region 8)
- San Diego (Region 9)

Each RWQCB section in this volume is divided into the following parts:

- Recommended Changes to the Section 303(d) list
- Water Body Fact Sheets for each proposal
- List of the data and information used

Regional Water Quality Control Board

CENTRAL VALLEY REGION (5)



SECTION 303 (d) LIST PROPOSALS

Region 5 Summary of Recommendations

Water Body	Pollutant/Medium /Beneficial Use	RWQCB Recommendation	SWRCB Recommendation
Arcade Creek	Copper/Water/Aquatic Life	List	List the entire reach of Arcade Creek from it's headwaters to the Natomas East Main drainage Canal.
Avena Drain	Ammonia/Water/Aquatic Life	List	List for Ammonia, the drain begins on a dairy farm east of Brennan Ave. The upper 6.5 miles of Avena Drain has disassociated ammonia levels in exceedance of CDFG criterion, WQO for Toxicity is being exceeded.
Avena Drain	Pathogens/Water/Aquatic Life	List	List for Pathogens, the drain begins on a dairy farm east of Brennan Ave. The upper 6.5 miles of Avena Drain has E. coli. levels in exceedance of USEPA criterion.
Bear Creek	Mercury/Water/Aquatic Life	List	List for Mercury in Bear Creek from it's confluence with the unnamed creek that flows along Rathburn Mercury Mine to it's confluence with Cache Creek.
Lower Bear River	Diazinon/Water/Aquatic Life	List	List Lower Bear River, Diazinon was shown to be in exceedance of the objectives by using CDFG criteria to determine criterion exceedance.
Upper Bear River	Mercury/Water/Fish Consumption	List	List for Mercury in the Upper Bear River from the Rollins reservoir to Lake Combie. Data shows the WQO is not being attained.

Water Body	Pollutant/Medium /Beneficial Use	RWQCB Recommendation	SWRCB Recommendation
Black Butte Reservoir	Mercury/Water/Fish Consumption	List	List: List for Mercury in all of Black Butte Reservoir. All of the composite samples were at or above USEPA criterion, used to determine that the objective is not being attained.
Butte Slough	Diazinon/Water/Aquatic Life	List	List : List Butte Slough for Diazinon.
Butte Slough	Molinate/Water/Aquatic Life	List	List: List for Molinate in all of Butte Slough.
Lower Calaveras River	Low Dissolved Oxygen/Water/Aquatic Life	List	List: List for Low Dissolved Oxygen in the Lower Calaveras River between Stockton Diversion Channel and the San Joaquin River.
Lower Calaveras River	Pathogens/Water/REC-1	List	List: List for Pathogens. Both sampling locations are within the urban Stockton Area. The lower 5 miles of Lower Calaveras River are in exceedance of USEPA criterion, WQO is exceeded.
Camanche Reservoir	Aluminum/Water/Aquatic Life	List	List: List the entire Camanche reservoir for Aluminum.
Camp Far West Reservoir	Mercury/Water/Fish Consumption	List	List: List for Mercury for all of Camp Far West Reservoir (2,002 acres)
Clover Creek	Fecal Coliform/Water/REC1	List	List: List for Fecal Coliform Bacteria. The data have shown that using the WQO criteria there exist exceedances of the WQO for bacteria for REC1 List the lower 10.5 miles of Clover creek.
Colusa Basin Drain	Azinphos- methyl/Water/Aquatic Life	List	List: List for Azinphos-methyl. List the entire Colusa Basin drain.

Water Body	Pollutant/Medium /Beneficial Use	RWQCB Recommendation	SWRCB Recommendation
Colusa Basin Drain	Diazinon/Water/Aquatic Life.	List	List: List for Diazinon. List the entire Colusa Basin drain. The levels of Diazinon are in exceedance of the WQO.
Colusa Basin Drain	Molinate/Water/Aquatic Life	List	List: List for Molinate for the entire Colusa Basin Drain.
Del Puerto Creek	Chlorpyrifos/Water/Aquatic Life	List	List: List for Chlorpyrifos for the lower 5 miles between I-5 and the San Joaquin River. The data have shown exceedance of the WQO.
Del Puerto Creek	Diazinon/Water/Aquatic Life	List	List: List for Diazinon. List the lower 5 miles between I-5 and the San Joaquin River. The data have shown exceedance of the WQO.
Don Pedro Lake	Mercury/Water/Fish Consumption	List	List: List for Mercury in all reservoir of Don Pedro Lake.
Five Mile Slough	Low Dissolved Oxygen/Water/Aquatic Life	List	List: List for Dissolved Oxygen in Five Mile Slough from the Plymouth Rd. bridge to the confluence with Fourteen Mile Slough.
Five Mile Slough	Pathogens/Water/REC-1	List	List: List for pathogens. The bacteria data have shown exceedance for the USEPA criterion and the WQO has been exceeded. List the Five Mile Slough from the head of the slough at Alexandria Place to the confluence with Fourteen mile slough.

Water Body	Pollutant/Medium /Beneficial Use	RWQCB Recommendation	SWRCB Recommendation
Ingram/Hospital Creek	Chlorpyrifos/Water/Aquatic Life	List	List: List for Chlorpyrifos. The data have shown exceedance for the CDFG criterion and hence the WQO has been exceeded. List the Ingram/Hospital Creek from their confluence east of Dairy Rd. to the San Joaquin River.
Ingram/Hospital Creek	Diazinon/Water/Aquatic Life	List	List: List for Diazinon. The data have shown exceedance for the CDFG criterion and the WQO has been exceeded. List the Ingram/Hospital Creek from their confluence east of Dairy Rd. to the San Joaquin River.
Jack Slough	Diazinon/Water/Aquatic Life	List	List: List for Diazinon. The data have shown exceedance for the CDFG criterion and the WQO has been exceeded. List the Slough for 11 miles upstream of Highway 70 (sampling sites for USGS/RB), and 2 miles downstream from that point, prior to the confluence of Jack Slough and Feather River.
Lake Combie	Mercury/Water/Fish Consumption	List	List: List Lake Combie for Mercury.
Lake Englebright	Mercury/Water/Fish Consumption	List	List: List Lake Englebright for Mercury.
Little Deer Creek	Mercury/Water/Fish consumption	List	List: List all of Little Deer Creek for Mercury.
Lower Mokelumne River	Aluminum/Water/Aquatic Life	List	List: List the lower Mokelumne River from the Camanche Dam to the Delta for Aluminum.

Water Body	Pollutant/Medium /Beneficial Use	RWQCB Recommendation	SWRCB Recommendation
Mormon Slough	Low Dissolved Oxygen/Water/Aquatic Life	List	List: List the Mormon Slough between, Commerce Street and the Stockton Deep Water Channel for Low Dissolved Oxygen. The data clearly shows that the WQO for Dissolved Oxygen are being exceeded.
Mormon Slough	Pathogens/Water/REC-1	List	List: List the Mormon Slough from the confluence with the Deep Water channel to the confluence with the Stockton Diverting Channel for pathogens. The bacterial data show the WQO is exceeded.
Mosher Slough	Low Dissolved Oxygen/Water/Aquatic Life	List	List: List for Dissolved Oxygen. List Mosher Slough from the 1-5 bridge to the confluence with Bear Creek. The WQO is being exceeded.
Mosher Slough	Pathogens/Water/REC-1	List	List: List for Pathogens. The bacterial data show the WQO is exceeded (REC- 1). List the Mosher Slough from Mosher Creek to the confluence with the Bear Creek.
Newman Wasteway	Chlorpyrifos/Water/Aquatic Life	List	List: List for Chlorpyrifos. List the entire Wasteway. The data have shown exceedance of the WQO, using CDFG criteria.
Newman Wasteway	Diazinon/Water/Aquatic Life	List	List: List for Diazinon. List the entire Wasteway. The data have shown exceedance of the WQO, using CDFG criteria.

Water Body	Pollutant/Medium /Beneficial Use	RWQCB Recommendation	SWRCB Recommendation
Oak Run Creek	Fecal Coliform/Water/REC1	List	List: List for Fecal Coliform Bacteria. List the middle reach, 4.5 miles of Oak run creek. From 16.5 miles before the confluence to 12 miles from the confluence
Orestimba Creek	Azinphos-methyl/Water/Aquatic Life	List	List: List for Azinphos-methyl. List the lower ten miles from the foothills to the San Joaquin River. The WQO has been exceeded.
Orestimba Creek	DDE/Water/Fish Consumption and Drinking Water	List	List: List the lower ten miles from the foothills to the San Joaquin River for DDE. The WQO has been exceeded.
Lower Putah Creek	Mercury/Water/Fish Consumption	List	List: List the Lower Putah Creek from Lake Solano to Putah Creek for Mercury. The data show exceedance of the WQO using USEPA criteria for mercury.
Lower Putah Creek	Unknown Toxicity/Water/Aquatic Life	List	Watch List: Unknown toxicity. Available toxicity data suggest that Lower Putah Creek is impaired by toxins from unknown sources, from downstream of lake Berryessa to the Putah Creek sinks.
Upper Putah Creek	Unknown Toxicity/Water/Aquatic Life	List	Watch List: List for unknown toxicity. Available toxicity data suggest that Upper Putah Creek is impaired by toxins from unknown sources, for the lower 27 miles.
Rollins Reservoir	Mercury/Water/Fish Consumption	List	List: List all of Rollins Reservoir for Mercury. The data show exceedance of the WQO using USEPA criteria for mercury.

Summary of Recommendations 5-6

Water Body	Pollutant/Medium /Beneficial Use	RWQCB Recommendation	SWRCB Recommendation
Lower San Joaquin River	Mercury/Water/Fish Consumption	List	List: List Lower San Joaquin River for Mercury. The data show exceedance of the WQO using USEPA criteria for mercury.
Scotts Flat Reservoir	Mercury/Water/Fish Consumption	List	List: List all of Scotts Flat Reservoir for Mercury. The data show exceedance of the WQO using USEPA criteria for mercury.
Smith Canal	Low Dissolved Oxygen/Water/Aquatic Life	List	List: List Smith Canal from Yosemite lake to the confluence with the San Joaquin River for Dissolved Oxygen. The data have shown that the WQO for Dissolved Oxygen is not being attained.
Smith Canal	Organophosphorus Pesticides/Water/Aquatic Life	List	List: List the Smith Canal from the Yosemite Lake to the confluence with the San Joaquin River for OP pesticides. The data show exceedance of the WQO.
Smith Canal	Pathogens/Water/REC-1	List	List: List Smith Canal from Yosemite Lake to the confluence with the San Joaquin River for Pathogens. The data show an exceedance of the WQO.
South Cow Creek	Fecal Coliform/Water/REC1	List	List: List South Cow Creek 14 miles from the confluence to 7 miles before the confluence for Fecal Coliform. The data show an average that is clearly in exceedance of the WQO for bacteria- REC 1.
Lower Stanislaus River	Mercury/Water/Fish Consumption	List	List: List for Mercury. The data show an exceedance of the USEPA criteria, which shows an exceedance of the WQO.

Water Body	Pollutant/Medium /Beneficial Use	RWQCB Recommendation	SWRCB Recommendation
Stockton Deep Water Channel	Pathogens/Water/REC-1	List	List: List all of the Stockton Deep Water Channel for Pathogens. The WQO has been exceeded.
Sutter Bypass	Diazinon/Water/Aquatic Life	List	List: List the entire length of Sutter Bypass for Diazinon. The data show an exceedance of the WQO.
Walker Slough	Pathogens/Water/REC-1	List	List: List all of Walker Slough for Pathogens. The WQO has been exceeded, using the USEPA criterion.
Wolf Creek	Fecal Coliform/Water/REC1	List	List: List all of Wolf Creek for Fecal Coliform. The data show that there is an exceedance of the WQO for bacteria REC1
American River Lower	Group A Pesticides/Water/Aquatic Life	Delist	Delist: The new data show that the NAS and USFDA criteria are not being exceeded. Therefore the WQO for Group A pesticides for toxicity and pesticides are being attained and no longer need to be listed on the 303(d) List for Group A Pesticide, WQO exceedance. Remove the entire length of the lower American River, Nimbus Dam to the Sacramento River attains WQO for Group A pesticides.
Cache Creek	Mercury and Unknown Toxicity	Change in Total Size and Size Affected.	Change in Total Size and Size Affected.
Camanche Reservoir	Copper	Change in listing to include reservoir on list separate from the river.	Change in listing to include reservoir on list separate from the river.
Camanche Reservoir	Zinc	Change in listing to include reservoir on list separate from the river.	Change in listing to include reservoir on list separate from the river.

Summary of Recommendations 5-8

Water Body	Pollutant/Medium /Beneficial Use	RWQCB Recommendation	SWRCB Recommendation
Delta Waterways	Dissolved Oxygen	Change in Total Size and Size Affected.	Change in Total Size and Size Affected.
Delta Waterways	Chlorpyrifos, DDT, Diazinon, Group A pesticides, Mercury, and Unknown Toxicity.	Change in Total Size and Size Affected.	Change in Total Size and Size Affected.
Dunn Creek	Mercury and Metals.	Change in Total Size and Size Affected.	Change in Total Size and Size Affected.
Fall River	Sedimentation and Siltation	Change in size affected.	Change in size affected.
French Ravine	Bacteria	Change in Total Size and Size Affected.	Change in Total Size and Size Affected.
Horse Creek	All metals (Cadmium, Copper, Lead, Zinc)	Change in size affected.	Change in size affected.
Humbug Creek	Sedimentation and Siltation, Mercury, Copper, and Zinc.	Change in size affected.	Change in size affected.
James Creek	Nickel and Mercury	Change in Total Size and Size Affected.	Change in Total Size and Size Affected.
Lower Mokelumne River	Copper	Change in areal extent.	Change in areal extent.
Lower Mokelumne River	Zinc	Change in areal extent.	Change in areal extent.
Marsh Creek	Mercury	Change in Total Size and Size Affected.	Change in Total Size and Size Affected.
Marsh Creek	Metals	Change in Total Size and Size Affected.	Change in Total Size and Size Affected.
Mosher Slough	Diazinon and Chlorpyrifos	Change in Total size affected.	Change in Total size affected.
San Carlos Creek	Mercury	Change in Total Size and Size Affected.	Change in Total Size and Size Affected.

Summary of Recommendations 5-9

Water Body	Pollutant/Medium /Beneficial Use	RWQCB Recommendation	SWRCB Recommendation
Lower Stanislaus River	Diazinon, Group A Pesticides, Unknown toxicity	Change in Total Size and Size Affected.	Change in Total Size and Size Affected.
Lower Toulumne River	Diazinon	Change in Total Size and Size Affected.	Change in Total Size and Size Affected.
Lower Toulumne River	Group A Pesticides, Unknown Toxicity	Change in Total Size and Size Affected.	Change in Total Size and Size Affected.

Region 5

Arcade Creek

Water Body	Arcade Creek
Stressor/Media/Beneficial Use	Copper/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Generally limited consideration to those organizations that conduct monitoring using documented QA/QC procedures
Linkage between measurement endpoint and beneficial use or standard	Copper linked to Aquatic Life Beneficial Use.
Utility of measure for judging if standards or uses are not attained	USEPA CTR Freshwater Aquatic Life Criteria for Dissolved Copper, WQO.
Water Body-specific Information	Data = 4 years (2/96-5/00), Data measured at the site, Species or Indicator present at site, Environmental Conditions considered at site.
Data used to assess water quality	Copper Concentration Data = 40 samples, 8 exceeded the CCC and 3 exceeded the CMC. They used the USEPA CTR criteria for dissolved copper.
Spatial representation	The USGS and the SWRP combined collected 40 samples from Arcade Creek
Temporal representation	Data collected by USGS and SWRP from 2/1996 to 5/2000
Data type	Numerical data
Use of standard method	USGS and City of Sacramento methods
Potential Source(s) of Pollutant	Urban Runoff/Storm Sewers
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	List the entire reach of Arcade Creek from it's headwaters to the Natomas East Main drainage Canal.

Region 5

Avena Drain

Water Body	Avena Drain
Stressor/Media/Beneficial Use	Ammonia/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Generally limited consideration to those organizations that conduct monitoring using documented QA/QC procedures.
Linkage between measurement endpoint and beneficial use or standard	Ammonia linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	CDFG criteria for ammonia levels, WQO.
Water Body-specific Information	Data = 10 years (1991- 2001), Data measured at the site, Species or Indicator present at site, Environmental Conditions considered at site.
Data used to assess water quality	Ammonia Data = Over a period of 10 years, all of the samples contained undissociated ammonia levels above CDFG criterion, and all of the samples exceed some to most of the LC50s for various freshwater species.
Spatial representation	The Avena Drain, at Van Allen Rd. and Brennan Ave. 10 of the 12 Dairies located along the drain are located on the upper 6.5 miles.
Temporal representation	Data collected over a period of 10 years, during known discharges of wastewater.
Data type	Numerical data
Use of standard method	CDFG methods
Potential Source(s) of Pollutant	Agriculture/Dairies (manure carried in wastewater to Avena Drain).
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	List for Ammonia, the drain begins on a dairy farm east of Brennan Ave. The upper 6.5 miles of Avena Drain has disassociated ammonia levels in exceedance of CDFG criterion, WQO for Toxicity is being exceeded.

Region 5

Avena Drain

Water Body	Avena Drain
Stressor/Media/Beneficial Use	Pathogens/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Generally limited consideration to those organizations that conduct monitoring using documented QA/QC procedures.
Linkage between measurement endpoint and beneficial use or standard	Pathogens linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	WQO for toxicity, USEPA Criterion
Water Body-specific Information	Data = 4 months (10/2000-1/2001), Data measured at the site, Species or Indicator present at site, Environmental Conditions considered at site.
Data used to assess water quality	E.coli Data = 14 samples collected from six locations, three locations have Geometric Means, and they all exceeded USEPA criterion for E. coli. 13 of the 14 samples collected exceed the USEPA single sample criterion for E. coli levels.
Spatial representation	Data collected from six locations on Avena Drain.
Temporal representation	Data collected on 5 dates between 10/2000 and 1/2001.
Data type	Numerical data
Use of standard method	Delta Keeper Bacteria Data
Potential Source(s) of Pollutant	Agriculture/Dairies (manure carried in wastewater to Avena Drain).
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	List for Pathogens, the drain begins on a dairy farm east of Brennan Ave. The upper 6.5 miles of Avena Drain has E. coli. levels in exceedance of USEPA criterion.

Region 5

Bear Creek

Water Body	Bear Creek
Stressor/Media/Beneficial Use	Mercury/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Generally limited consideration to those organizations that conduct monitoring using documented QA/QC procedures.
Linkage between measurement endpoint and beneficial use or standard	Mercury linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	USEPA CTR for Mercury, WQO.
Water Body-specific Information	Data = 13 days over two years (4/96 to 2/98), Data measured at the site, Species or Indicator present at site, Environmental Conditions considered at site.
Data used to assess water quality	Water quality data = 19 samples total, 13 samples out of the 19 had concentrations of mercury above USEPA criterion (50 ng/L).
Spatial representation	Four Separate locations were sampled along the creek.
Temporal representation	Data collected on thirteen days between April 1996 and February 1998.
Data type	Numerical data
Use of standard method	
Potential Source(s) of Pollutant	Extraction/Abandoned Mines
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	List for Mercury in Bear Creek from it's confluence with the unnamed creek that flows along Rathburn Mercury Mine to it's confluence with Cache Creek.

Region 5

Lower Bear River

Water Body	Lower Bear River
Stressor/Media/Beneficial Use	Diazinon/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Generally limited consideration to those organizations that conduct monitoring using documented QA/QC procedures.
Linkage between measurement endpoint and beneficial use or standard	Diazinon linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	CDFG criteria for Diazinon levels(acute and chronic), WQO.
Water Body-specific Information	Data = 2 years (94 and 2000), Data measured at the site, Species or Indicator present at site, Environmental Conditions considered at site.
Data used to assess water quality	Diazinon Data = 14 samples total, 3 samples exceeded the CDFG criteria.
Spatial representation	The Data was collected from Berry Road along the River.
Temporal representation	Data was collected over 14 days, 14 times during two years (94 and 2000)
Data type	Numerical data
Use of standard method	CDFG methods
Potential Source(s) of Pollutant	Agriculture (Diazinon Spray used on dormant almond and stonefruit crops)
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	List Lower Bear River, Diazinon was shown to be in exceedance of the objectives by using CDFG criteria to determine criterion exceedance.

Region 5

Upper Bear River

Water Body	Upper Bear River
Stressor/Media/Beneficial Use	Mercury/Water/Fish Consumption
Data quality assessment. Extent to which data quality requirements met.	Generally limited consideration to those organizations that conduct monitoring using documented QA/QC procedures.
Linkage between measurement endpoint and beneficial use or standard	Mercury linked to Fish Consumption BU.
Utility of measure for judging if standards or uses are not attained	USEPA criteria for Mercury, Human Consumption Levels
Water Body-specific Information	Data = 3 fish in 1 day, Data measured at the site, Species or Indicator present at site, Environmental conditions considered at site.
Data used to assess water quality	Mercury Data. Three fish were collected from the River by USGS, tissue had concentrations of 0.38 to 0.43 ppm, all of them exceeding the USEPA mercury criteria of 0.3 ppm. This criteria is used to determine attainment of the narrative toxicity objective.
Spatial representation	All the trophic level 3 fish were collected in the river at Dog Bar Road.
Temporal representation	All the fish were collected on Sept. 23, 1999
Data type	Numerical data
Use of standard method	USGS methods
Potential Source(s) of Pollutant	Resource Extraction (abandoned mines)
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	List for Mercury in the Upper Bear River from the Rollins reservoir to Lake Combie. Data shows the WQO is not being attained.

Region 5

Black Butte Reservoir

Water Body	Black Butte Reservoir
Stressor/Media/Beneficial Use	Mercury/Water/Fish Consumption
Data quality assessment. Extent to which data quality requirements met.	Generally limited consideration to those organizations that conduct monitoring using documented QA/QC procedures.
Linkage between measurement endpoint and beneficial use or standard	Mercury linked to Fish consumption.
Utility of measure for judging if standards or uses are not attained	USEPA criteria for Mercury, Human Consumption Levels
Water Body-specific Information	Data = 3 days over 1 year, Data measured at the site, Species or Indicator present at site, Environmental conditions considered at site.
Data used to assess water quality	Data = There were 65 fish sampled total. 38 composite samples of trophic level 3 fish, 27 composite samples of trophic level 4 fish, ALL of the samples were at or above USEPA mercury criteria, this criteria is used to determine attainment of the narrative toxicity objective.
Spatial representation	Fish collected from three regions of the reservoir, Burris Creek arm, Stony Creek Arm and Angler's cove.
Temporal representation	The samples of 65 fish were collected on 11/25/97, and 12/4-5/97
Data type	Numerical data
Use of standard method	OEHHA methods
Potential Source(s) of Pollutant	Resource Extraction (abandoned mines)
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	List: List for Mercury in all of Black Butte Reservoir. All of the composite samples were at or above USEPA criterion, used to determine that the objective is not being attained.

Region 5

Butte Slough

Water Body	Butte Slough
Stressor/Media/Beneficial Use	Diazinon/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Generally limited consideration to those organizations that conduct monitoring using documented QA/QC procedures.
Linkage between measurement endpoint and beneficial use or standard	Diazinon linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	CDFG criteria for Diazinon levels (acute and chronic), WQO.
Water Body-specific Information	Data = 2 years (94 and 2000), Data measured at the site, Species or Indicator present at site, Environmental Conditions considered at site.
Data used to assess water quality	Diazinon Data = 38 samples total, 20 samples exceeded the chronic CDFG criteria and 18 samples exceeded the acute CDFG criteria.
Spatial representation	Samples were collected at one site only, Lower pass road.
Temporal representation	Samples were collected during two years, 1994 and 2000 during January and February
Data type	Numerical data
Use of standard method	Regional board and USGS study methods
Potential Source(s) of Pollutant	Agriculture (Diazinon Spray used on dormant almond and stonefruit crops)
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	List : List Butte Slough for Diazinon.

Region 5

Butte Slough

Water Body	Butte Slough
Stressor/Media/Beneficial Use	Molinate/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Generally limited consideration to those organizations that conduct monitoring using documented QA/QC procedures.
Linkage between measurement endpoint and beneficial use or standard	Molinate linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	CDFG criteria for Molinate levels, WQO.
Water Body-specific Information	Data = 6 years (1994-2000), Data measured at the site, Species or indicator present at site, Environmental conditions considered at the site.
Data used to assess water quality	Molinate Data = 99 samples were collected and over six years 7 samples exceeded the CDFG criterion for Molinate there is a low confidence of 5 % exceedance of the objective. The CDFG criteria was used to determine that the narrative objectives for pesticide and toxicity are not being attained.
Spatial representation	Samples were collected at one site only, Lower pass road.
Temporal representation	99 samples were collected during 1994 to 2000 during May and June
Data type	Numerical data
Use of standard method	CDPR and Regional Board study method
Potential Source(s) of Pollutant	Agriculture (Molinate Aerial Spray used on rice fields)
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	List: List for Molinate in all of Butte Slough.

Region 5

Lower Calaveras River

Water Body	Lower Calaveras River
Stressor/Media/Beneficial Use	Low Dissolved Oxygen/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Generally limited consideration to those organizations that conduct monitoring using documented QA/QC procedures.
Linkage between measurement endpoint and beneficial use or standard	Low Dissolved Oxygen linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	Basin Plan WQO for Dissolved Oxygen
Water Body-specific Information	Data = 2 Years (1996 and 1999-2000), Data measured at the site, Species or Indicator present at site, Environmental Conditions considered at site.
Data used to assess water quality	Dissolved Oxygen Data = 44 samples were collected, and of those samples 18 were below the Objective (5.0 mg/L), showing that the WQO is not being attained.
Spatial representation	Samples were collected at one site in the middle of the Stockton Urban area.
Temporal representation	44 samples were collected over a 2 year period. Samples were taken Oct./Nov. 1996 and from Nov. 99 -Feb. 2000
Data type	Numerical data
Use of standard method	Delta Keeper Data
Potential Source(s) of Pollutant	Urban Runoff/Storm Sewers
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	List: List for Low Dissolved Oxygen in the Lower Calaveras River between Stockton Diversion Channel and the San Joaquin River.

Region 5

Lower Calaveras River

Water Body	Lower Calaveras River
Stressor/Media/Beneficial Use	Pathogens/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Generally limited consideration to those organizations that conduct monitoring using documented QA/QC procedures.
Linkage between measurement endpoint and beneficial use or standard	Pathogens linked to REC-1 Beneficial uses.
Utility of measure for judging if standards or uses are not attained	WQO , USEPA Criterion
Water Body-specific Information	Data = 2 years (2000- 2001), Data measured at the site, Species or Indicator present at site, Environmental Conditions considered at site.
Data used to assess water quality	E. coli Data = 37 samples collected from two locations, 26 samples from an upstream location have a Geometric Mean, and they all exceeded USEPA criterion for E. coli. The 11 samples collected from the downstream location have a Geometric that doesn't exceed the USEPA criterion for E.coli. However all of the Downstream samples individually exceed the USEPA 'single' sample criterion for E. coli levels. The USEPA criteria is used to translate the narrative WQO , and it has been shown that it's been exceeded.
Spatial representation	Two sampling locations exist. One Sampling location is near the mouth of the river and the other is 4 miles upstream.
Temporal representation	The upstream location samples were collected over 10 months, 2000-2001. The downstream location was sampled over 7 months in 2000.
Data type	Numerical data
Use of standard method	Delta Keeper Data
Potential Source(s) of Pollutant	Urban Runoff/Recreation
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	List: List for Pathogens. Both sampling locations are within the urban Stockton Area. The lower 5 miles of Lower Calaveras River are in exceedance of USEPA criterion, WQO is exceeded.

Region 5

Camanche Reservoir

Water Body	Camanche Reservoir
Stressor/Media/Beneficial Use	Aluminum/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Generally limited consideration to those organizations that conduct monitoring using documented QA/QC procedures.
Linkage between measurement endpoint and beneficial use or standard	Aluminum linked to Aquatic Life uses.
Utility of measure for judging if standards or uses are not attained	WQO, USEPA NWRAQ criteria for aluminum.
Water Body-specific Information	Data = 7 Years, Data measured at the site, Species or Indicator present at site, Environmental Conditions considered at site.
Data used to assess water quality	Data = There were 260 samples taken over seven years. Of those samples 18 exceeded the NWRAQ criterion. There exists a low confidence in 7% of the samples exceeding the objective. The NWRAQ was used to determine the narrative objective for toxicity. 1995 data had unusually high TSS values based on the EBMUD data set
Spatial representation	Data collected from 8 locations on Camanche Reservoir.
Temporal representation	Data were collected over 7 years (1993-2000).
Data type	Numerical data
Use of standard method	EBMUD methods for sampling
Potential Source(s) of Pollutant	Resource Extraction (abandoned mines)
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	List: List the entire Camanche reservoir for Aluminum.

Region 5

Camp Far West Reservoir

Water Body	Camp Far West Reservoir
Stressor/Media/Beneficial Use	Mercury/Water/Fish Consumption
Data quality assessment. Extent to which data quality requirements met.	Generally limited consideration to those organizations that conduct monitoring using documented QA/QC procedures.
Linkage between measurement endpoint and beneficial use or standard	Mercury linked to fish consumption.
Utility of measure for judging if standards or uses are not attained	Basin Plan WQO , USEPA criterion for human health consumption levels of mercury
Water Body-specific Information	Data = 12 years (1987 to 1999), Data measured at the site, Species or Indicator present at site, Environmental Conditions considered at site.
Data used to assess water quality	Data = 36 sampled fish from Trophic level 4. The fish had an average level of mercury of 0.69 ppm , more than double the concentration level criteria of the USEPA which is 0.3 ppm. OEHHHA is in the process of developing a state advisory for Placer, Yuba and Nevada Counties, based on this USGS data.
Spatial representation	Sampled 4 targeted areas of the Reservoir.
Temporal representation	Samples were collected during twelve years, 1987 to 1999
Data type	Numerical data
Use of standard method	USGS and TSMP sampling methods
Potential Source(s) of Pollutant	Resource Extraction (abandoned mines)
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	List: List for Mercury for all of Camp Far West Reservoir (2,002 acres)

Region 5

Clover Creek

Water Body	Clover Creek
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC1
Data quality assessment. Extent to which data quality requirements met.	Generally limited consideration to those organizations that conduct monitoring using documented QA/QC procedures.
Linkage between measurement endpoint and beneficial use or standard	Fecal coliform linked to (REC -1)WQO for Bacteria.
Utility of measure for judging if standards or uses are not attained	WQO for bacteria, REC 1 objective.
Water Body-specific Information	Data = 5 months (June - October 1999), Data measured at the site, Species or Indicator present at site, Environmental Conditions considered at site.
Data used to assess water quality	Data was collected and the average levels were above 300 MPN/100ml, exceeding the WQO Geometric Mean levels of 200 MPN/100ml for at least 5 months. The WQO has been exceeded. Many of the samples were above the 30 day basin plan criteria of 400 MPN/100ml.
Spatial representation	Data were collected from the lower reach of Clover Creek (10.5 miles)
Temporal representation	5 Months from 6/99- 10/99
Data type	Numerical data
Use of standard method	Hannaford and North State Institute for Sustainable Communities, sampling methods.
Potential Source(s) of Pollutant	Human and/or Livestock Sources
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	List: List for Fecal Coliform Bacteria. The data have shown that using the WQO criteria there exist exceedances of the WQO for bacteria for REC1 List the lower 10.5 miles of Clover creek.

Region 5

Colusa Basin Drain

Water Body	Colusa Basin Drain
Stressor/Media/Beneficial Use	Azinphos-methyl/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Generally limited consideration to those organizations that conduct monitoring using documented QA/QC procedures.
Linkage between measurement endpoint and beneficial use or standard	Azinphos-methyl linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	WQO, USEPA criteria for azinphos-methyl.
Water Body-specific Information	Data = 3 years (1996-1998), Data measured at the site, Species or Indicator present at site, Environmental conditions considered at site.
Data used to assess water quality	Data = 21 samples were analyzed, out of those 6 (28%) of the samples were equal or above the USEPA criteria used to determine the narrative objectives attainment.
Spatial representation	Data were collected at Road 99E, along the Colusa Basin Drain.
Temporal representation	Data were collected over 3 years (1996-1998), at least once a month.
Data type	Numerical data
Use of standard method	CDPR method
Potential Source(s) of Pollutant	Agriculture (Used to control insects on almonds, walnuts and other crops).
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	List: List for Azinphos-methyl. List the entire Colusa Basin drain.

Region 5

Colusa Basin Drain

Water Body	Colusa Basin Drain
Stressor/Media/Beneficial Use	Diazinon/Water/Aquatic Life.
Data quality assessment. Extent to which data quality requirements met.	Generally limited consideration to those organizations that conduct monitoring using documented QA/QC procedures.
Linkage between measurement endpoint and beneficial use or standard	Diazinon linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	WQO, CDFG criteria for Diazinon.
Water Body-specific Information	Data = 6 years (1994-2000), Data measured at the site, Species or indicator present at site, Environmental conditions considered at the site.
Data used to assess water quality	Data = 56 samples were analyzed for Diazinon, out of those 14 (25%) exceeded the chronic CDFG criterion, and 10 (18%) samples exceeded the CDFG Acute Criterion for Diazinon. The CDFG criterion was used to determine whether the WQO was being attained.
Spatial representation	Data were collected at Road 99E, along the Colusa Basin Drain.
Temporal representation	Data were collected for 6 years from 1994-2000.
Data type	Numerical data
Use of standard method	CDFG methods
Potential Source(s) of Pollutant	Agriculture
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	List: List for Diazinon. List the entire Colusa Basin drain. The levels of Diazinon are in exceedance of the WQO.

Region 5

Colusa Basin Drain

Water Body	Colusa Basin Drain
Stressor/Media/Beneficial Use	Molinate/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Generally limited consideration to those organizations that conduct monitoring using documented QA/QC procedures.
Linkage between measurement endpoint and beneficial use or standard	Molinate linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	CDFG criteria for Molinate levels, WQO.
Water Body-specific Information	Data = 6 years (1994-2000), Data measured at the site, Species or indicator present at site, Environmental conditions considered at the site.
Data used to assess water quality	Data = 133 samples, of those 42 (32%) samples were equal or above the CDFG criterion used to determine if the WQO was being exceeded.
Spatial representation	Data were collected in the Colusa Basin Drain.
Temporal representation	Data were collected over 6 years (1994-2000).
Data type	Numerical data
Use of standard method	CDPR methods
Potential Source(s) of Pollutant	Agriculture (Molinate Aerial Spray used on rice fields)
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	List: List for Molinate for the entire Colusa Basin Drain.

Region 5

Del Puerto Creek

Water Body	Del Puerto Creek
Stressor/Media/Beneficial Use	Chlorpyrifos/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Generally limited consideration to those organizations that conduct monitoring using documented QA/QC procedures.
Linkage between measurement endpoint and beneficial use or standard	Chlorpyrifos linked to Aquatic life.
Utility of measure for judging if standards or uses are not attained	CDFG criterion Chlorpyrifos levels, WQO
Water Body-specific Information	Data = 3 Years (1991-1993), Data measured at the site, Species or Indicator present at site, Environmental conditions considered at site.
Data used to assess water quality	Data = 30 Samples, of those 10 samples (33%) exceeded the chronic criterion, and 10 of those samples (33%) exceeded the acute criterion of CDFG. These criterion were used to show exceedance of the WQO.
Spatial representation	Data were collected for the lower section (5 miles) of the creek.
Temporal representation	Data were collected for 3 years from 1991-1993.
Data type	Numerical data
Use of standard method	CDPR methods
Potential Source(s) of Pollutant	Agriculture (application on orchards and field crops)
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	List: List for Chlorpyrifos for the lower 5 miles between I-5 and the San Joaquin River. The data have shown exceedance of the WQO.

Region 5

Del Puerto Creek

Water Body	Del Puerto Creek
Stressor/Media/Beneficial Use	Diazinon/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Generally limited consideration to those organizations that conduct monitoring using documented QA/QC procedures.
Linkage between measurement endpoint and beneficial use or standard	Diazinon linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	Narrative WQO for Toxicity and pesticides, CDFG criterion for Diazinon.
Water Body-specific Information	Data = 3 Years (1991-1993), Data measured at the site, Species or Indicator present at site, Environmental conditions considered at site.
Data used to assess water quality	Data = 30 Samples, of those 10 samples (33%) exceeded the chronic criteria, and 9 of those samples (30%) exceeded the acute criteria of the CDFG. These criteria were used to show exceedance of the WQO.
Spatial representation	Data were collected for the lower section (5 miles) of the creek.
Temporal representation	Data were collected for 3 years from 1991-1993.
Data type	Numerical data
Use of standard method	CDPR methods
Potential Source(s) of Pollutant	Agriculture
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	List: List for Diazinon. List the lower 5 miles between I-5 and the San Joaquin River. The data have shown exceedance of the WQO.

Region 5

Don Pedro Lake

Water Body	Don Pedro Lake
Stressor/Media/Beneficial Use	Mercury/Water/Fish Consumption
Data quality assessment. Extent to which data quality requirements met.	Generally limited consideration to those organizations that conduct monitoring using documented QA/QC procedures.
Linkage between measurement endpoint and beneficial use or standard	Mercury linked to Fish Consumption.
Utility of measure for judging if standards or uses are not attained	Basin Plan WQO, USEPA criterion for human health consumption levels of mercury.
Water Body-specific Information	Data = 6 Years (1981-1987), Data measured at the site, Species or Indicator present at site, Environmental conditions considered at site.
Data used to assess water quality	Data = 32 Trophic Level 4 fish, the fish sampled had an average 0.54ppm concentration of mercury, clearly exceeding the USEPA criteria of 0.3 ppm. The USEPA criterion was used to determine that the narrative WQO was being exceeded.
Spatial representation	Data were collected from the northern most arms of Don Pedro Lake, (12,960 acres).
Temporal representation	Data were collected from 1981-1987 (6 years).
Data type	Numerical data
Use of standard method	TSMP methods
Potential Source(s) of Pollutant	Resource Extraction (abandoned mines)
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	List: List for Mercury in all reservoir of Don Pedro Lake.

Region 5

Five Mile Slough

Water Body	Five Mile Slough
Stressor/Media/Beneficial Use	Low Dissolved Oxygen/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Generally limited consideration to those organizations that conduct monitoring using documented QA/QC procedures.
Linkage between measurement endpoint and beneficial use or standard	Dissolved Oxygen linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	Basin Plan WQO for Dissolved Oxygen
Water Body-specific Information	Data = 2 Years (1999-2000 and 1996), Data measured at the site, Species or Indicator present at site, Environmental conditions considered at site.
Data used to assess water quality	Data = 41 samples of Dissolved Oxygen values, with 24 of those samples falling below the WQO of 5 mg/L .
Spatial representation	Data were collected in the Five Mile slough
Temporal representation	The Data were collected over 2 years, from 11/99-2/00 and also from 10/96- 11/96.
Data type	Numerical data
Use of standard method	DeltaKeeper methods
Potential Source(s) of Pollutant	Urban Runoff/Storm Sewers
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	List: List for Dissolved Oxygen in Five Mile Slough from the Plymouth Rd. bridge to the confluence with Fourteen Mile Slough.

Region 5

Five Mile Slough

Water Body	Five Mile Slough
Stressor/Media/Beneficial Use	Pathogens/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Generally limited consideration to those organizations that conduct monitoring using documented QA/QC procedures.
Linkage between measurement endpoint and beneficial use or standard	Pathogens linked to REC-1 Beneficial uses.
Utility of measure for judging if standards or uses are not attained	Basin Plan WQO
Water Body-specific Information	Data = 10 Months (2000-2001), Data measured at the site, Species or Indicator present at site, Environmental conditions considered at site.
Data used to assess water quality	Data = 29 samples were collected and the average levels were above the USEPA criteria, exceeding the WQO. Some of the Geometric Mean levels also exceeded the single day USEPA criterion.
Spatial representation	Data were collected at two locations, one upstream and one downstream. A total of 29 samples were collected.
Temporal representation	The samples were collected during 10 months, 2000-2001. The upstream location was sampled once each month in April, August 2000 and February 2001
Data type	Numerical data
Use of standard method	DeltaKeeper methods
Potential Source(s) of Pollutant	Urban Runoff/Recreation
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	List: List for pathogens. The bacteria data have shown exceedance for the USEPA criterion and the WQO has been exceeded. List the Five Mile Slough from the head of the slough at Alexandria Place to the confluence with Fourteen mile slough.

Region 5

Ingram/Hospital Creek

Water Body	Ingram/Hospital Creek
Stressor/Media/Beneficial Use	Chlorpyrifos/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Generally limited consideration to those organizations that conduct monitoring using documented QA/QC procedures.
Linkage between measurement endpoint and beneficial use or standard	Chlorpyrifos linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	CDFG criteria Chlorpyrifos levels, WQO.
Water Body-specific Information	Data = 3 years (1991-93), Data measured at the site, Species or Indicator present at site, Environmental conditions considered at site.
Data used to assess water quality	Data = 26 samples, out of those 7 samples exceeded the chronic criteria and 7 samples exceeded the acute criterion, 14 total of 26 (54%). The criteria used are the CDFG criterion used to determine if the WQO has been exceeded.
Spatial representation	The samples were collected from the Ingram/Hospital Creek.
Temporal representation	The samples were collected from December to June, for three years.
Data type	Numerical data
Use of standard method	CDFG methods
Potential Source(s) of Pollutant	Agriculture
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	List: List for Chlorpyrifos. The data have shown exceedance for the CDFG criterion and hence the WQO has been exceeded. List the Ingram/Hospital Creek from their confluence east of Diary Rd. to the San Joaquin River.

Region 5

Ingram/Hospital Creek

Water Body	Ingram/Hospital Creek
Stressor/Media/Beneficial Use	Diazinon/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Generally limited consideration to those organizations that conduct monitoring using documented QA/QC procedures.
Linkage between measurement endpoint and beneficial use or standard	Diazinon linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	WQO, CDFG criteria for Diazinon
Water Body-specific Information	Data = 3 years (1991-93), Data measured at the site, Species or Indicator present at site, Environmental conditions considered at site.
Data used to assess water quality	Data = 32 samples, out of those 16 samples exceeded the chronic criterion and 11 samples exceeded the acute criteria, 27 total of 32 (84%). The criterion used are the CDFG criterion used to determine if the WQO has been exceeded.
Spatial representation	The samples were collected from the Ingram/Hospital Creek.
Temporal representation	The samples were collected over 3 years, with 32 samples total.
Data type	Numerical data
Use of standard method	CDFG methods
Potential Source(s) of Pollutant	Agriculture
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	List: List for Diazinon. The data have shown exceedance for the CDFG criterion and the WQO has been exceeded. List the Ingram/Hospital Creek from their confluence east of Diary Rd. to the San Joaquin River.

Region 5

Jack Slough

Water Body	Jack Slough
Stressor/Media/Beneficial Use	Diazinon/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Generally limited consideration to those organizations that conduct monitoring using documented QA/QC procedures.
Linkage between measurement endpoint and beneficial use or standard	Diazinon linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	WQO, CDFG criteria for Diazinon.
Water Body-specific Information	Data = 2 years (1994 and 2000), Data measured at the site, Species or Indicator present at site, Environmental conditions considered at site.
Data used to assess water quality	Data = 19 samples, out of those 19 samples exceeded the chronic criterion and the acute criterion, 19 total of 19 (100%). The criterion used are the CDFG criterion used to determine if the WQO has been exceeded. Some of the samples were 16 times the chronic levels of CDFG water quality criterion.
Spatial representation	The samples were collected from slough during rain events.
Temporal representation	The samples were collected over 2 years (94 and 2000), during January and February.
Data type	Numerical data
Use of standard method	Regional board and USGS study methods
Potential Source(s) of Pollutant	Agriculture (application on orchards and field crops)
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	List: List for Diazinon. The data have shown exceedance for the CDFG criterion and the WQO has been exceeded. List the Slough for 11 miles upstream of Highway 70 (sampling sites for USGS/RB), and 2 miles downstream from that point, prior to the confluence of Jack Slough and Feather River.

Region 5

Lake Combie

Water Body	Lake Combie
Stressor/Media/Beneficial Use	Mercury/Water/Fish Consumption
Data quality assessment. Extent to which data quality requirements met.	Generally limited consideration to those organizations that conduct monitoring using documented QA/QC procedures.
Linkage between measurement endpoint and beneficial use or standard	Mercury linked to Fish Consumption.
Utility of measure for judging if standards or uses are not attained	Basin Plan WQO , USEPA criterion for human health consumption levels of mercury
Water Body-specific Information	Data = 1 Year (1999), Data measured at the site, Species or Indicator present at site, Environmental conditions considered at site.
Data used to assess water quality	USGS Data = 9 trophic level 4 fish. They had an average mercury concentration of 0.91ppm, exceeding the 0.3 ppm USEPA criteria. OEHHA is in the process of developing a state advisory for Nevada County based on this data.
Spatial representation	Data was collected from Lake Combie (360 acres).
Temporal representation	The data was collected during one year, 1999.
Data type	Numerical data
Use of standard method	USGS methods
Potential Source(s) of Pollutant	Unknown
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	List: List Lake Combie for Mercury.

Region 5

Lake Englebright

Water Body	Lake Englebright
Stressor/Media/Beneficial Use	Mercury/Water/Fish Consumption
Data quality assessment. Extent to which data quality requirements met.	Generally limited consideration to those organizations that conduct monitoring using documented QA/QC procedures.
Linkage between measurement endpoint and beneficial use or standard	Mercury linked to Fish Consumption.
Utility of measure for judging if standards or uses are not attained	Basin Plan WQO for Toxicity for Mercury, USEPA criterion for human health consumption levels of mercury
Water Body-specific Information	Data = 4 Years (1996-1999), Data measured at the site, Species or Indicator present at site, Environmental conditions considered at site.
Data used to assess water quality	USGS and UC Davis Data = 21 trophic level 4 fish and 9 trophic level 3 fish. The level 4 and level 3 fish had an average mercury concentration of 0.55 ppm and 0.51 ppm respectively exceeding the 0.3 ppm USEPA criteria. OEHHHA is in the process of developing a state advisory for Nevada County based on this Data.
Spatial representation	Data was collected for Fish Tissue at three locations on the lake.
Temporal representation	Data was collected between 1994 and 2000.
Data type	Numerical data
Use of standard method	USGS and UC Davis methods
Potential Source(s) of Pollutant	Resource Extraction (abandoned mines)
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	List: List Lake Englebright for Mercury.

Region 5

Little Deer Creek

Water Body	Little Deer Creek
Stressor/Media/Beneficial Use	Mercury/Water/Fish consumption
Data quality assessment. Extent to which data quality requirements met.	Generally limited consideration to those organizations that conduct monitoring using documented QA/QC procedures.
Linkage between measurement endpoint and beneficial use or standard	Mercury linked to Fish Consumption.
Utility of measure for judging if standards or uses are not attained	Basin Plan WQO for Toxicity for Mercury, USEPA criterion for human health consumption levels of mercury
Water Body-specific Information	Data = 1 Year (1999), Data measured at the site, Species or Indicator present at site, Environmental conditions considered at site.
Data used to assess water quality	USGS and UC Davis Data = 9 trophic level 3 fish. They had an average mercury concentration of 0.32 ppm, exceeding the 0.3 ppm USEPA criterion. OEHHHA is in the process of developing a state advisory for Nevada County based on this data.
Spatial representation	Samples collected in Little Deer Creek at Pioneer park.
Temporal representation	Samples were collected on October 6th, 1999.
Data type	Numerical data
Use of standard method	USGS methods
Potential Source(s) of Pollutant	Resource Extraction (abandoned mines)
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	List: List all of Little Deer Creek for Mercury.

Region 5

Lower Mokelumne River

Water Body	Lower Mokelumne River
Stressor/Media/Beneficial Use	Aluminum/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Generally limited consideration to those organizations that conduct monitoring using documented QA/QC procedures.
Linkage between measurement endpoint and beneficial use or standard	Aluminum linked to WQO for Toxicity and chemical constituents.
Utility of measure for judging if standards or uses are not attained	WQO , USEPA NWRAQ and MCL criteria for aluminum.
Water Body-specific Information	Data = 4 Years (1988-1992), Data measured at the site, Species or Indicator present at site, Environmental conditions considered at site.
Data used to assess water quality	Data = 257 samples collected between 1988 and 1992. 35 samples exceeded the NRWAQ Maximum Criterion, and 13 exceeded the MCL criterion. These data show that using the NRWAQ and the MCL criterion, the WQO is exceeded.
Spatial representation	The samples were collected at three locations along the river.
Temporal representation	The samples were collected over 4 years (88'-92').
Data type	Numerical data
Use of standard method	EBMUD methods for sampling
Potential Source(s) of Pollutant	Resource Extraction (abandoned mines)
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	List: List the lower Mokelumne River from the Camanche Dam to the Delta for Aluminum.

Region 5

Mormon Slough

Water Body	Mormon Slough
Stressor/Media/Beneficial Use	Low Dissolved Oxygen/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Generally limited consideration to those organizations that conduct monitoring using documented QA/QC procedures.
Linkage between measurement endpoint and beneficial use or standard	Low Dissolved Oxygen linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	Basin Plan WQO for Dissolved Oxygen
Water Body-specific Information	Data = 2 Years (1999- 2000), Data measured at the site, Species or Indicator present at site, Environmental Conditions considered at site.
Data used to assess water quality	Data = 30 samples with 27 of those samples falling below the WQO of 5 mg/L.
Spatial representation	The data were collected from Mormon Slough
Temporal representation	The data were collected over 2 years, from 11/99-2/00.
Data type	Numerical data
Use of standard method	DeltaKeeper methods
Potential Source(s) of Pollutant	Urban Runoff/Storm Sewers
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	List: List the Mormon Slough between, Commerce Street and the Stockton Deep Water Channel for Low Dissolved Oxygen. The data clearly shows that the WQO for Dissolved Oxygen are being exceeded.

Region 5

Mormon Slough

Water Body	Mormon Slough
Stressor/Media/Beneficial Use	Pathogens/Water/REC-I
Data quality assessment. Extent to which data quality requirements met.	Generally limited consideration to those organizations that conduct monitoring using documented QA/QC procedures.
Linkage between measurement endpoint and beneficial use or standard	Pathogens linked to REC-I beneficial uses.
Utility of measure for judging if standards or uses are not attained	Basin Plan WQO
Water Body-specific Information	Data = 10 Months (2000-2001), Data measured at the site, Species or Indicator present at site, Environmental conditions considered at site.
Data used to assess water quality	Data = 31 samples with a calculated Geometric mean. The Geometric mean = 1,272 MPN per 100ml, exceeding the 126 per 100 ml USEPA criterion. The WQO has been exceeded.
Spatial representation	The data were collected from Mormon Slough at one sampling location.
Temporal representation	The data were sampled from one location over a ten month period of time (2000-2001)
Data type	Numerical data
Use of standard method	DeltaKeeper methods
Potential Source(s) of Pollutant	Urban Runoff/Recreation
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	List: List the Mormon Slough from the confluence with the Deep Water channel to the confluence with the Stockton Diverting Channel for pathogens. The bacterial data show the WQO is exceeded.

Region 5

Mosher Slough

Water Body	Mosher Slough
Stressor/Media/Beneficial Use	Low Dissolved Oxygen/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Generally limited consideration to those organizations that conduct monitoring using documented QA/QC procedures.
Linkage between measurement endpoint and beneficial use or standard	Low Dissolved Oxygen linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	Basin Plan WQO for Dissolved Oxygen
Water Body-specific Information	Data = 2 Years (1996 and 99- 2000), Data measured at the site, Species or Indicator present at site, Environmental Conditions considered at site.
Data used to assess water quality	Data = 43 samples of Dissolved Oxygen values, with 19 (44%) of those samples falling below the WQO of 5 mg/L .
Spatial representation	The Dissolved Oxygen data were collected in Mosher Slough.
Temporal representation	The data were collected 11/99 and 2/00, and also in 11/96 and 10/96.
Data type	Numerical data
Use of standard method	DeltaKeeper methods
Potential Source(s) of Pollutant	Urban Runoff/Storm Drains.
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	List: List for Dissolved Oxygen. List Mosher Slough from the I-5 bridge to the confluence with Bear Creek. The WQO is being exceeded.

Region 5

Mosher Slough

Water Body	Mosher Slough
Stressor/Media/Beneficial Use	Pathogens/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Generally limited consideration to those organizations that conduct monitoring using documented QA/QC procedures.
Linkage between measurement endpoint and beneficial use or standard	Pathogens linked to REC-1 Beneficial uses.
Utility of measure for judging if standards or uses are not attained	Basin Plan WQO
Water Body-specific Information	Data = 1Year (2001), Data measured at the site, Species or Indicator present at site, Environmental conditions considered at site.
Data used to assess water quality	Data = 31 samples, 29 of which exceeded the CDHS 30 day criterion for E. coli.
Spatial representation	The date were collected in Mosher Slough.
Temporal representation	The data were collected during 2001, from May- February.
Data type	Numerical data
Use of standard method	DeltaKeeper methods
Potential Source(s) of Pollutant	Urban Runoff/Storm Sewers
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	List: List for Pathogens. The bacterial data show the WQO is exceeded (REC-1). List the Mosher Slough from Mosher Creek to the confluence with the Bear Creek.

Region 5

Newman Wasteway

Water Body	Newman Wasteway
Stressor/Media/Beneficial Use	Chlorpyrifos/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Generally limited consideration to those organizations that conduct monitoring using documented QA/QC procedures.
Linkage between measurement endpoint and beneficial use or standard	Chlorpyrifos linked to Aquatic life.
Utility of measure for judging if standards or uses are not attained	CDFG criteria Chlorpyrifos levels, WQO
Water Body-specific Information	Data = 3 years (1991-93), Data measured at the site, Species or Indicator present at site, Environmental conditions considered at site.
Data used to assess water quality	Data =10 samples, out of those, 2 samples exceeded the chronic criteria and 2 samples exceeded the acute criteria, 4 total of 10 (40%). Data ranged to up to 15 times the criteria levels.
Spatial representation	The data were collected from the Newman Wasteway
Temporal representation	Data were collected for 3 years from 1991-1993. Sampling between January and April.
Data type	Numerical data
Use of standard method	CDFG methods
Potential Source(s) of Pollutant	Agriculture
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	List: List for Chlorpyrifos. List the entire Wasteway. The data have shown exceedance of the WQO, using CDFG criteria.

Region 5

Newman Wasteway

Water Body	Newman Wasteway
Stressor/Media/Beneficial Use	Diazinon/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Generally limited consideration to those organizations that conduct monitoring using documented QA/QC procedures.
Linkage between measurement endpoint and beneficial use or standard	Diazinon linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	WQO for Toxicity and Pesticides ,CDFG criteria for Diazinon
Water Body-specific Information	Data = 3 years (1991-93), Data measured at the site, Species or Indicator present at site, Environmental conditions considered at site.
Data used to assess water quality	Data =10 samples, out of those,4 samples exceeded the chronic criteria and 3 samples exceeded the acute criteria, 7 total of 10 (70%). Data ranged to up to 700 times the criteria levels.
Spatial representation	The data were collected from the Newman Wasteway
Temporal representation	Data were collected for 3 years (1991-93)
Data type	Numerical data
Use of standard method	CDFG methods
Potential Source(s) of Pollutant	Agriculture (Used on nut and fruit orchards in winter months)
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	List: List for Diazinon. List the entire Wasteway. The data have shown exceedance of the WQO, using CDFG criteria.

Region 5

Oak Run Creek

Water Body	Oak Run Creek
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC1
Data quality assessment. Extent to which data quality requirements met.	Generally limited consideration to those organizations that conduct monitoring using documented QA/QC procedures.
Linkage between measurement endpoint and beneficial use or standard	Fecal coliform linked to Recreation -1 WQO for Bacteria.
Utility of measure for judging if standards or uses are not attained	WQO for bacteria, Rec-1
Water Body-specific Information	Data = 5 months (June - October 1999), Data measured at the site, Species or Indicator present at site, Environmental Conditions considered at site.
Data used to assess water quality	Data was collected and the average levels were 400 MPN/100ml, exceeding the WQO Geometric Mean levels of 200 MPN/100ml for at least 5 months. The WQO has been exceeded. Many of the samples were above the 30 day basin plan criteria of 400 MPN/100ml.
Spatial representation	Data were collected from the middle reach of Oak Creek.
Temporal representation	Data were collected between June and October of 1999.
Data type	Numerical data
Use of standard method	Hannaford and North State Institute for Sustainable Communities, sampling methods.
Potential Source(s) of Pollutant	Human and/or Livestock Sources
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	List: List for Fecal Coliform Bacteria. List the middle reach, 4.5 miles of Oak run creek. From 16.5 miles before the confluence to 12 miles from the confluence

Region 5

Orestimba Creek

Water Body	Orestimba Creek
Stressor/Media/Beneficial Use	Azinphos-methyl/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Generally limited consideration to those organizations that conduct monitoring using documented QA/QC procedures.
Linkage between measurement endpoint and beneficial use or standard	Azinphos-methyl linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	WQO, USEPA criteria for azinphos-methyl.
Water Body-specific Information	Data = 2 years (1992-1993), Data measured at the site, Species or Indicator present at site, Environmental conditions considered at site.
Data used to assess water quality	Data = 46 samples, 9 of which are above the USEPA criteria levels.
Spatial representation	Data were collected from the Creek at River Road.
Temporal representation	Data were collected from 1992-1993 from Feb. 1992- November 1993.
Data type	Numerical data
Use of standard method	USEPA methods
Potential Source(s) of Pollutant	Agriculture (Used to control insects on almonds, walnuts and other crops).
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	List: List for Azinphos-methyl. List the lower ten miles from the foothills to the San Joaquin River. The WQO has been exceeded.

Region 5

Orestimba Creek

Water Body	Orestimba Creek
Stressor/Media/Beneficial Use	DDE/Water/Fish Consumption and Drinking Water
Data quality assessment. Extent to which data quality requirements met.	Generally limited consideration to those organizations that conduct monitoring using documented QA/QC procedures.
Linkage between measurement endpoint and beneficial use or standard	DDE linked to Fish Consumption and Drinking Water for the protection of Human health.
Utility of measure for judging if standards or uses are not attained	USEPA - CTR for DDE, WQO.
Water Body-specific Information	Data = 1 year (1993), Data measured at the site, Species or Indicator present at site, Environmental conditions considered at site.
Data used to assess water quality	Data =40 samples, 15 of which exceed the USEPA criterion for DDE, exceeding the WQO.
Spatial representation	Data were collected by USGS from the Creek at River Road.
Temporal representation	Data were collected in 1993, primarily in Jan. and March, with additional sampling May- June, and minimal sampling during the rest of the year.
Data type	Numerical data
Use of standard method	USGS methods
Potential Source(s) of Pollutant	Historical Agriculture (prior to being banned in 1972)
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	List: List the lower ten miles from the foothills to the San Joaquin River for DDE. The WQO has been exceeded.

Region 5

Lower Putah Creek

Water Body	Lower Putah Creek
Stressor/Media/Beneficial Use	Mercury/Water/Fish Consumption
Data quality assessment. Extent to which data quality requirements met.	Generally limited consideration to those organizations that conduct monitoring using documented QA/QC procedures.
Linkage between measurement endpoint and beneficial use or standard	Mercury linked to Fish Consumption.
Utility of measure for judging if standards or uses are not attained	Basin Plan WQO, USEPA criterion for human health consumption levels of mercury
Water Body-specific Information	Data = 2 Years (1997-1998), Data measured at the site, Species or Indicator present at site, Environmental conditions considered at site.
Data used to assess water quality	USDHHS-ATSDR and UC Davis Data = 67 trophic level 4 fish and 204 trophic level 3 fish. The level 4 fish had 39 fish in exceedance of the criteria levels above 0.3 ppm. The trophic level 3 fish had 6 fish exceeding the 0.3 ppm USEPA criteria.
Spatial representation	Data was collected from Lower Putah creek between Lake Berryessa and Putah Creek.
Temporal representation	Data was collected in 1997 and 1998.
Data type	Numerical data
Use of standard method	USDHHS-ATSDR and UCD methods
Potential Source(s) of Pollutant	Mining, unknown source.
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	List: List the Lower Putah Creek from Lake Solano to Putah Creek for Mercury. The data show exceedance of the WQO using USEPA criteria for mercury.

Region 5

Lower Putah Creek

Water Body	Lower Putah Creek
Stressor/Media/Beneficial Use	Unknown Toxicity/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Generally limited consideration to those organizations that conduct monitoring using documented QA/QC procedures.
Linkage between measurement endpoint and beneficial use or standard	Toxicity linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	Basin plan WQO for toxicity and comparing toxicity data results to Lab control results.
Water Body-specific Information	Data = 2 Years (1998-1999), Data measured at the site, Environmental conditions considered at site.
Data used to assess water quality	Toxicity Data was collected monthly and during rain events as well (at least 24 samples). 16 of the samples resulted in impaired growth, impaired reproduction and mortality. Further TIE test were run and the tests failed to pinpoint the cause while ammonia and pathogenicity were illuminated as causes.
Spatial representation	Routine monthly samples and samples during rain events were collected. Water quality analysis, toxicity tests and TIEs were conducted on water samples collected in lower Putah Creek.
Temporal representation	The water samples were collected during 1998 and 1999, routine monthly sampling and sampling rain events.
Data type	Numerical data
Use of standard method	Laboratory Methods conducting TIEs.
Potential Source(s) of Pollutant	Unknown
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	Watch List: Unknown toxicity. Available toxicity data suggest that Lower Putah Creek is impaired by toxins from unknown sources, from downstream of lake Berryessa to the Putah Creek sinks.

Region 5

Upper Putah Creek

Water Body	Upper Putah Creek
Stressor/Media/Beneficial Use	Unknown Toxicity/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Generally limited consideration to those organizations that conduct monitoring using documented QA/QC procedures.
Linkage between measurement endpoint and beneficial use or standard	Toxicity linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	Basin plan WQO for toxicity and comparing toxicity data results to Lab control results.
Water Body-specific Information	Data = 2 Years (1998-1999), Data measured at the site, Environmental conditions considered at site.
Data used to assess water quality	On four of the sampling dates the water caused reproductive impairments to Ceriodaphnia They were analyzed using TIE. The results showed an unknown toxicant that suggests that a non-polar, organic chemical caused the impairments. A July 1999 sample showed impairment to growth to Selenastrum, toxicity unknown. Overall approximately 20% of the samples resulted in unknown toxicity.
Spatial representation	Data were collected just upstream from Lake Berryessa on Upper Putah Creek.
Temporal representation	Data were collected from the Upper Putah Creek between 1998-1999 and were collected once a month.
Data type	Numerical data
Use of standard method	Laboratory Methods conducting TIEs.
Potential Source(s) of Pollutant	Unknown
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	Watch List: List for unknown toxicity. Available toxicity data suggest that Upper Putah Creek is impaired by toxins from unknown sources, for the lower 27 miles.

Region 5

Rollins Reservoir

Water Body	Rollins Reservoir
Stressor/Media/Beneficial Use	Mercury/Water/Fish Consumption
Data quality assessment. Extent to which data quality requirements met.	Generally limited consideration to those organizations that conduct monitoring using documented QA/QC procedures.
Linkage between measurement endpoint and beneficial use or standard	Mercury linked to Fish Consumption.
Utility of measure for judging if standards or uses are not attained	Basin Plan WQO, USEPA criterion for human health consumption levels of mercury
Water Body-specific Information	Data = 15 Years (1984-1999), Data measured at the site, Species or Indicator present at site, Environmental conditions considered at site.
Data used to assess water quality	USGS and TSMP Data = 50 trophic level 4 fish. The level 4 fish had an average mercury concentration of 0.32 ppm exceeding the 0.3 ppm USEPA criteria used to determine attainment of the WQO. The WQO has been exceeded. OEHHA is in the process of developing a state advisory for Nevada County based on this Data.
Spatial representation	50 Fish were collected from Rollins Reservoir from the midsection, Bear River Arm and the Greenhorn Creek Arm.
Temporal representation	50 fish were collected from Rollins reservoir between 1984 and 1999, over 15 years.
Data type	Numerical data
Use of standard method	USGS and TSMP sampling methods
Potential Source(s) of Pollutant	Resource Extraction
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	List: List all of Rollins Reservoir for Mercury. The data show exceedance of the WQO using USEPA criteria for mercury.

Region 5

Lower San Joaquin River

Water Body	Lower San Joaquin River
Stressor/Media/Beneficial Use	Mercury/Water/Fish Consumption
Data quality assessment. Extent to which data quality requirements met.	Generally limited consideration to those organizations that conduct monitoring using documented QA/QC procedures.
Linkage between measurement endpoint and beneficial use or standard	Mercury linked to fish consumption.
Utility of measure for judging if standards or uses are not attained	Basin Plan WQO, USEPA criterion for human health consumption levels of mercury
Water Body-specific Information	Data = 20 Years (1979-1999), Data measured at the site, Species or Indicator present at site, Environmental conditions considered at site.
Data used to assess water quality	TSMP and SFEI Data = 264 trophic level 4 fish. The level 4 fish had an average mercury concentration of 0.45 ppm exceeding the 0.3 ppm USEPA criteria used to determine attainment of the WQO. The WQO has been exceeded.
Spatial representation	Data were collected in the San Joaquin River.
Temporal representation	Fish were collected in the San Joaquin River between 1979 and 1999, over a 20 year period.
Data type	Numerical data
Use of standard method	TSMP and SFEI methods
Potential Source(s) of Pollutant	Resource Extraction (abandoned mines)
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	List: List Lower San Joaquin River for Mercury. The data show exceedance of the WQO using USEPA criteria for mercury.

Region 5

Scotts Flat Reservoir

Water Body	Scotts Flat Reservoir
Stressor/Media/Beneficial Use	Mercury/Water/Fish Consumption
Data quality assessment. Extent to which data quality requirements met.	Generally limited consideration to those organizations that conduct monitoring using documented QA/QC procedures.
Linkage between measurement endpoint and beneficial use or standard	Mercury linked to fish consumption.
Utility of measure for judging if standards or uses are not attained	Basin Plan WQO, USEPA criterion for human health consumption levels of mercury
Water Body-specific Information	Data = 2 Days (9/1999), Data measured at the site, Species or Indicator present at site, Environmental conditions considered at site.
Data used to assess water quality	USGS Data = 7 trophic level 4 fish. The level 4 fish had an average mercury concentration of 0.38 ppm exceeding the 0.3 ppm USEPA criteria used to determine attainment of the WQO. The WQO has been exceeded.
Spatial representation	Data were collected from Scotts reservoir.
Temporal representation	7 fish were collected on September 7 and 8th, 1999.
Data type	Numerical data
Use of standard method	USGS sampling methods.
Potential Source(s) of Pollutant	Resource Extraction (abandoned mines)
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	List: List all of Scotts Flat Reservoir for Mercury. The data show exceedance of the WQO using USEPA criteria for mercury.

Region 5

Smith Canal

Water Body	Smith Canal
Stressor/Media/Beneficial Use	Low Dissolved Oxygen/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Generally limited consideration to those organizations that conduct monitoring using documented QA/QC procedures.
Linkage between measurement endpoint and beneficial use or standard	Low Dissolved Oxygen linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	Basin Plan WQO for Dissolved Oxygen
Water Body-specific Information	Data = 5 Years (1994 - 98), Data measured at the site, Species or Indicator present at site, Environmental Conditions considered at site.
Data used to assess water quality	RB/Delta Keeper Data = 41 samples of Dissolved Oxygen values, with 31 (75%) of those samples falling below the WQO of 5 mg/L . Other data was considered from resident observation of fish kills in 1994 to DeltaKeeper Data collected over the years. The WQO for Dissolved Oxygen has not been attained.
Spatial representation	Data were collected from Smith canal by the RB and others
Temporal representation	The data were collected from Smith canal over a period of 5 years, during dry seasons and rain seasons, yearly.
Data type	Numerical data
Use of standard method	NCRWQCB, DeltaKeeper, City of Stockton methods.
Potential Source(s) of Pollutant	Urban Runoff/Storm Sewers
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	List: List Smith Canal from Yosemite lake to the confluence with the San Joaquin River for Dissolved Oxygen. The data have shown that the WQO for Dissolved Oxygen is not being attained.

Region 5

Smith Canal

Water Body	Smith Canal
Stressor/Media/Beneficial Use	Organophosphorus Pesticides/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Generally limited consideration to those organizations that conduct monitoring using documented QA/QC procedures.
Linkage between measurement endpoint and beneficial use or standard	Pesticides linked to WQO for pesticides.
Utility of measure for judging if standards or uses are not attained	WQO, USEPA criteria for OP pesticides
Water Body-specific Information	Data = 5 Years (1994 - 98), Data measured at the site, Species or Indicator present at site, Environmental Conditions considered at site.
Data used to assess water quality	Data = OP pesticides were tested from 8 water samples between 1994-98. TIE , toxicity tests and TUs of the OP pesticides were run and calculated. 4/8 samples showed survival impairment on the first day and 8/8 samples showed 100% mortality to Ceriodaphnia within 7 days. Data indicate that the OP pesticide caused the toxicity, Diazinon and Chlorpyrifos were ruled out. The OP concentrations are all above the chronic and acute CDFG criteria. Using the CDFG criteria the WQO has been exceeded.
Spatial representation	Data were collected from one location in the Smith Canal.
Temporal representation	Data were collected between 1994 and 1998
Data type	Numerical data
Use of standard method	CDFG methods
Potential Source(s) of Pollutant	Urban Runoff
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	List: List the Smith Canal from the Yosemite Lake to the confluence with the San Joaquin River for OP pesticides. The data show exceedance of the WQO.

Region 5

Smith Canal

Water Body	Smith Canal
Stressor/Media/Beneficial Use	Pathogens/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Generally limited consideration to those organizations that conduct monitoring using documented QA/QC procedures.
Linkage between measurement endpoint and beneficial use or standard	Pathogens linked to narrative WQO for toxicity.
Utility of measure for judging if standards or uses are not attained	Basin Plan for WQO for toxicity for pathogens.
Water Body-specific Information	Data = 1Year (2001), Data measured at the site, Species or Indicator present at site, Environmental conditions considered at site.
Data used to assess water quality	Data = A Geometric Mean has been calculated for samples at three separate locations along the canal. The locations all exceeded the USEPA criteria for E. coli. 2 of the locations exceeded the criteria up to 50 times the criteria level, and the other location has exceeded the USEPA single sample criterion. Using the USEPA criteria the WQO is exceeded.
Spatial representation	The data were collected at three separate locations. Yosemite Lake canal, one quarter mile downstream in the canal, and near the mouth of the canal.
Temporal representation	The data were collected during one year (2001).
Data type	Numerical data
Use of standard method	DeltaKeeper methods
Potential Source(s) of Pollutant	Urban Runoff/Recreation
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	List: List Smith Canal from Yosemite Lake to the confluence with the San Joaquin River for Pathogens. The data show an exceedance of the WQO.

Region 5

South Cow Creek

Water Body	South Cow Creek
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC1
Data quality assessment. Extent to which data quality requirements met.	Generally limited consideration to those organizations that conduct monitoring using documented QA/QC procedures.
Linkage between measurement endpoint and beneficial use or standard	Fecal coliform linked to REC1 BU and WQO for Bacteria.
Utility of measure for judging if standards or uses are not attained	WQO for bacteria, Rec-1
Water Body-specific Information	Data = 5 months (June - October 1999), Data measured at the site, Species or Indicator present at site, Environmental Conditions considered at site.
Data used to assess water quality	Data was collected and the average levels were approx. 800 MPN/100ml, exceeding the WQO Geometric Mean levels of 200 MPN/100ml, at this level for at least 5 months in 1999. The WQO has been exceeded. Many of the samples were above the 30 day basin plan criteria of 400 MPN/100ml.
Spatial representation	Waters were sampled from the middle reach of the creek.
Temporal representation	The samples were taken over 5 months, between June and October of 1999.
Data type	Numerical data
Use of standard method	Hannaford and North State Institute for Sustainable Communities, sampling methods.
Potential Source(s) of Pollutant	Human and/or Livestock Sources
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	List: List South Cow Creek 14 miles from the confluence to 7 miles before the confluence for Fecal Coliform. The data show an average that is clearly in exceedance of the WQO for bacteria-REC 1.

Region 5

Lower Stanislaus River

Water Body	Lower Stanislaus River
Stressor/Media/Beneficial Use	Mercury/Water/Fish Consumption
Data quality assessment. Extent to which data quality requirements met.	Generally limited consideration to those organizations that conduct monitoring using documented QA/QC procedures.
Linkage between measurement endpoint and beneficial use or standard	Mercury linked to Fish Consumption.
Utility of measure for judging if standards or uses are not attained	Basin Plan WQO, USEPA criterion for human health consumption levels of mercury
Water Body-specific Information	Data = 20 Years (1978-1998), Data measured at the site, Species or Indicator present at site, Environmental conditions considered at site.
Data used to assess water quality	TSMP and SFEI Data = 45 trophic level 4 fish. The level 4 fish had an average mercury concentration of 0.53 ppm exceeding the 0.3 ppm USEPA criteria used to determine attainment of the WQO. The WQO has been exceeded.
Spatial representation	The data were collected from the Lower Stanislaus River.
Temporal representation	The data were collected over 20 years from 1978-1998.
Data type	Numerical data
Use of standard method	TSMP and SFEI methods
Potential Source(s) of Pollutant	Resource Extraction (abandoned mines)
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	List: List for Mercury. The data show an exceedance of the USEPA criteria, which shows an exceedance of the WQO.

Region 5

Stockton Deep Water Channel

Water Body	Stockton Deep Water Channel
Stressor/Media/Beneficial Use	Pathogens/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Generally limited consideration to those organizations that conduct monitoring using documented QA/QC procedures.
Linkage between measurement endpoint and beneficial use or standard	Pathogens linked REC-1 Beneficial uses.
Utility of measure for judging if standards or uses are not attained	Basin Plan for WQO for bacteria (REC-1).
Water Body-specific Information	Data = 6 months (2000), Data measured at the site, Species or Indicator present at site, Environmental conditions considered at site.
Data used to assess water quality	Data = A Geometric Mean has been calculated for 28 samples at 14 each at two separate locations along the canal. Both the locations have exceeded the USEPA criteria for E.coli. Using the USEPA criteria the WQO is exceeded.
Spatial representation	The data were collected from two separate sampling, locations. One at McLeod Lake and the other one mile upstream at Morelli Park.
Temporal representation	The data were collected over six months in 2000, with 14 samples at two different locations, 28 samples total.
Data type	Numerical data
Use of standard method	DeltaKeeper methods
Potential Source(s) of Pollutant	Urban Runoff/Recreation
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	List: List all of the Stockton Deep Water Channel for Pathogens. The WQO has been exceeded.

Region 5

Sutter Bypass

Water Body	Sutter Bypass
Stressor/Media/Beneficial Use	Diazinon/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Generally limited consideration to those organizations that conduct monitoring using documented QA/QC procedures.
Linkage between measurement endpoint and beneficial use or standard	Diazinon linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	WQO, CDFG criteria for Diazinon.
Water Body-specific Information	Data = 4 years (1996-2000), Data measured at the site, Species or Indicator present at site, Environmental conditions considered at site.
Data used to assess water quality	Data = 78 samples, out of those, 18 samples exceeded the chronic criteria and 6 samples exceeded the acute criteria, 24 total exceedances of 78 samples. The criteria used are the CDFG criteria used to determine if the WQO has been exceeded.
Spatial representation	The data were collected from the Sutter Bypass.
Temporal representation	The data were sampled 78 times between December and March, the winter orchard dormant season.
Data type	Numerical data
Use of standard method	CDFG methods
Potential Source(s) of Pollutant	Agriculture
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	List: List the entire length of Sutter Bypass for Diazinon. The data show an exceedance of the WQO.

Region 5

Walker Slough

Water Body	Walker Slough
Stressor/Media/Beneficial Use	Pathogens/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Generally limited consideration to those organizations that conduct monitoring using documented QA/QC procedures.
Linkage between measurement endpoint and beneficial use or standard	Pathogens linked REC-1 Beneficial uses.
Utility of measure for judging if standards or uses are not attained	Basin Plan for WQO for bacteria (REC-1).
Water Body-specific Information	Data = 6 months (2000-2001), Data measured at the site, Species or Indicator present at site, Environmental conditions considered at site.
Data used to assess water quality	Data = A Geometric Mean has been calculated for 28 samples at 14 each at two separate locations along the canal. Both the locations have greatly exceeded the USEPA criteria for E. coli. Some exceeded by up to 14 times the criteria level. Using the USEPA criteria the WQO is exceeded.
Spatial representation	The data were collected from two locations, one upstream and one downstream.
Temporal representation	The data were collected during six months over 2000-2001, and 14 samples were taken at two separate locations, for a total of 28 samples.
Data type	Numerical data
Use of standard method	DeltaKeeper methods
Potential Source(s) of Pollutant	Urban Runoff/Recreation
Alternative Enforceable Program	.
RWQCB Recommendation	List
SWRCB Staff Recommendation	List: List all of Walker Slough for Pathogens. The WQO has been exceeded, using the USEPA criterion.

Region 5

Wolf Creek

Water Body	Wolf Creek
Stressor/Media/Beneficial Use	Fecal Coliform/Water/REC1
Data quality assessment. Extent to which data quality requirements met.	Generally limited consideration to those organizations that conduct monitoring using documented QA/QC procedures.
Linkage between measurement endpoint and beneficial use or standard	Fecal coliform linked to Recreation -1 WQO for Bacteria.
Utility of measure for judging if standards or uses are not attained	WQO for bacteria, Rec-1
Water Body-specific Information	Data = 2 years (2000-2001), Data measured at the site, Species or Indicator present at site, Environmental Conditions considered at site.
Data used to assess water quality	Data was collected upstream and downstream of the GVWTP and the calculated Geometric Mean was 1491 MPN/100ml for the Total coliform, exceeding the WQO Geometric Mean levels of 200 MPN/100ml,. Downstream of the GVWTP the geometric Mean was 1000MPN/100ml for the total coliform, exceeding the WQO Geometric Mean levels of 200 MPN/100ml.The WQO has been exceeded. Both the upstream and downstream calculated Geometric Means for Fecal Coliform were in exceedance as well. Some of them reached 2300MPN/100ml, in February 2000.
Spatial representation	The data were collected upstream and downstream of the GVWTP.
Temporal representation	The data were collected over two years, 2000-2001.
Data type	Numerical data
Use of standard method	Waste Discharge Reports GVWTP, and Regional Board methods.
Potential Source(s) of Pollutant	Urban Runoff/Recreation/Agriculture
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	List: List all of Wolf Creek for Fecal Coliform. The data show that there is an exceedance of the WQO for bacteria REC1

Region 5

American River Lower

Water Body	American River Lower
Stressor/Media/Beneficial Use	Group A Pesticides/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	Generally limited consideration to those organizations that conduct monitoring using documented QA/QC procedures.
Linkage between measurement endpoint and beneficial use or standard	Group A Pesticides are linked to Aquatic Life
Utility of measure for judging if standards or uses are not attained	Basin Plan, WQO for pesticides and toxicity for Group A pesticides. NAS/USFDA tissue criteria.
Water Body-specific Information	Data = 11 years (1979-1990) and 2 years later (1997-1999), Data measured at the site, Species or Indicator present at site, Environmental Conditions considered at site.
Data used to assess water quality	The American River was originally placed on the 303(d) List for Group A Pesticide Concentrations based on fish tissue data reported by the TSMP. The TSMP analysis included all the group A pesticide for 15 fish tissue samples. 3 out of those 15 samples had an average concentration of 56.2 ppb.. exceeding the criteria of NAS and USFDA. When only considering Dieldrin and Chlordane concentration the weighted average changes to 55.7 ppb. Therefore Dieldrin and Chlordane account for almost all of the Group A pesticides historically found in fish in the River. Recently fish tissue collected for SRWP, 7 tissue samples were examined for Dieldrin and Chlordane. None of the samples analyzed exceeded the criteria for NAS and USFDA. The WQO is being attained. A direct comparison of the earlier TSMP study and the SRWP study can be made, the recent data show the criteria are not being exceeded.
Spatial representation	In the TSMP studies, fish were collected from the River at Highway 160 and downstream of Watt Ave. In the SRWP studies the fish were collected from the river at Discovery park and J St. The spatial coverage from the two studies overlaps sufficiently so that fish tissue concentration are comparable.
Temporal representation	The data were collected for the TSMP study from 1979-1990, and the SRWP study sampled from 1997-1999.
Data type	Numerical Data
Use of standard method	TSMP and SRWP methods
Potential Source(s) of Pollutant	Unknown
Alternative Enforceable Program	
RWQCB Recommendation	Delist
SWRCB Staff Recommendation	Delist: The new data show that the NAS and USFDA criteria are not

Region 5

American River Lower

being exceeded. Therefore the WQO for Group A pesticides for toxicity and pesticides are being attained and no longer need to be listed on the 303(d) List for Group A Pesticide, WQO exceedance. Remove the entire length of the lower American River, Nimbus Dam to the Sacramento River attains WQO for Group A pesticides.

Region 5

Cache Creek

Water Body	Cache Creek
Stressor/Media/Beneficial Use	Mercury and Unknown Toxicity
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	Change listing from the total length of 60 miles to 81 miles. Extent of impairment to be changed from 35 miles to 81 miles.
Data used to assess water quality	Foe and Croyle (1998) indicated that the total length of Cache creek is 81 miles.
Spatial representation	
Temporal representation	
Data type	
Use of standard method	
Potential Source(s) of Pollutant	
Alternative Enforceable Program	
RWQCB Recommendation	Change in Total Size and Size Affected.
SWRCB Staff Recommendation	Change in Total Size and Size Affected.

Region 5

Camanche Reservoir

Water Body	Camanche Reservoir
Stressor/Media/Beneficial Use	Copper
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	Camanche Reservoir was included in the 1998 303(d) list as part of the lower Mokelumne River listing for Copper. RB wants to list the Camanche Reservoir separate from the Mokelumne River, as a listing for Copper.
Data used to assess water quality	The original listing was in 1992, the entire lake, Camanche Reservoir is listed for Copper as part of the Mokelumne. RB feels that it should now be listed separate from the original Mokelumne River listing because, it is more appropriate to list reservoirs separate from their downstream drainages, from a watershed management strategy perspective. Rivers and reservoirs have different management strategies.
Spatial representation	
Temporal representation	
Data type	
Use of standard method	
Potential Source(s) of Pollutant	Resource Extraction/Abandoned Mines.
Alternative Enforceable Program	
RWQCB Recommendation	Change in listing to include reservoir on list separate from the river.
SWRCB Staff Recommendation	Change in listing to include reservoir on list separate from the river.

Region 5

Camanche Reservoir

Water Body	Camanche Reservoir
Stressor/Media/Beneficial Use	Zinc
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	Camanche Reservoir was included in the 1998 303(d) list as part of the lower Mokelumne River listing for Zinc. RB wants to list the Camanche Reservoir separate from the Mokelumne River, as a listing for Zinc.
Data used to assess water quality	The original listing was in 1992, the entire lake, Camanche Reservoir is listed for Zinc as part of the Mokelumne. RB feels that it should now be listed separate from the original Mokelumne River listing because, it is more appropriate to list reservoirs separate from their downstream drainages, from a watershed management strategy perspective. Rivers and reservoirs have different management strategies.
Spatial representation	
Temporal representation	
Data type	
Use of standard method	
Potential Source(s) of Pollutant	Resource Extraction/Abandoned Mines.
Alternative Enforceable Program	
RWQCB Recommendation	Change in listing to include reservoir on list separate from the river.
SWRCB Staff Recommendation	Change in listing to include reservoir on list separate from the river.

Region 5

Delta Waterways

Water Body	Delta Waterways
Stressor/Media/Beneficial Use	Dissolved Oxygen
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	Change listing from the total size of 480,000 acres to 48,000 acres. Extent of affected area to be changed from a size affected of 75 acres to 1,461 acres.
Data used to assess water quality	The total size of the Delta is 48,000 acres, a misprint occurred in the final 1998 303(d) list. The size should be changed to the true size. The area of the Delta affected by Low Dissolved Oxygen is an area of 1,461 acres. Therefore the total size of the Delta should be changed for Low D.O listing.
Spatial representation	
Temporal representation	
Data type	
Use of standard method	
Potential Source(s) of Pollutant	
Alternative Enforceable Program	
RWQCB Recommendation	Change in Total Size and Size Affected.
SWRCB Staff Recommendation	Change in Total Size and Size Affected.

Region 5

Delta Waterways

Water Body	Delta Waterways
Stressor/Media/Beneficial Use	Chlorpyrifos, DDT, Diazinon, Group A pesticides, Mercury, and Unknown Toxicity.
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	Change listing from the total size of 480,000 acres to 48,000 acres.
Data used to assess water quality	The total size of the Delta is 48,000 acres, a misprint occurred in the final 1998 303(d) list. The size should be changed to the true size. Therefore the total size of the Delta should be changed to these sizes for all listed pollutants; Chlorpyrifos, DDT, Diazinon, Group A pesticides, Mercury, and Unknown Toxicity.
Spatial representation	
Temporal representation	
Data type	
Use of standard method	
Potential Source(s) of Pollutant	
Alternative Enforceable Program	
RWQCB Recommendation	Change in Total Size and Size Affected.
SWRCB Staff Recommendation	Change in Total Size and Size Affected.

Region 5

Dunn Creek

Water Body	Dunn Creek
Stressor/Media/Beneficial Use	Mercury and Metals.
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	Change listing from the total length of 9 miles to 3 miles. Extent of affected area to be changed from 9 miles to 1 mile.
Data used to assess water quality	Stotton et al. (1996a) and Iovenitti et al. (1989) indicate that the total length of the creek is 3 miles.
Spatial representation	
Temporal representation	
Data type	
Use of standard method	
Potential Source(s) of Pollutant	Resource Extraction/Abandoned Mines.
Alternative Enforceable Program	
RWQCB Recommendation	Change in Total Size and Size Affected.
SWRCB Staff Recommendation	Change in Total Size and Size Affected.

Region 5

Fall River

Water Body	Fall River
Stressor/Media/Beneficial Use:	Sedimentation and Siltation
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	Change listing from the total length of 25 miles to 9.5 miles.
Data used to assess water quality	Evidence suggests that the upper Fall River is impaired relative to lower Fall River. CRWQCB-CVR 1982, CDWR 1998, NSR and T. Holmes 1997, Tetra Tech 1998, USDA 1983.
Spatial representation	
Temporal representation	
Data type	
Use of standard method	
Potential Source(s) of Pollutant	
Alternative Enforceable Program	
RWQCB Recommendation	Change in size affected.
SWRCB Staff Recommendation	Change in size affected.

Region 5

French Ravine

Water Body	French Ravine
Stressor/Media/Beneficial Use	Bacteria
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	Change listing from the total length of 1 mile to 4 miles.
Data used to assess water quality	French Ravine has a length of 4 miles from it's headwaters to it's confluence with Wolf Creek. Horizons Technology, Inc. 1997.
Spatial representation	
Temporal representation	
Data type	
Use of standard method	
Potential Source(s) of Pollutant	
Alternative Enforceable Program	
RWQCB Recommendation	Change in Total Size and Size Affected.
SWRCB Staff Recommendation	Change in Total Size and Size Affected.

Region 5

Horse Creek

Water Body	Horse Creek
Stressor/Media/Beneficial Use	All metals (Cadmium, Copper, Lead, Zinc)
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	Change listing from the total size of extent of impairment from 2 miles to 1 mile.
Data used to assess water quality	Water Quality data indicate that metals affect Horse Creek downstream from rising star mine, which is located 1 mile downstream of the headwater. Montoya and Pan (1992) indicate that Horse creek is 2 miles. The listing should start at the mine which is 1 mile downstream. Total size of listing for metals should be 1 mile, not 2.
Spatial representation	
Temporal representation	
Data type	
Use of standard method	
Potential Source(s) of Pollutant	
Alternative Enforceable Program	
RWQCB Recommendation	Change in size affected.
SWRCB Staff Recommendation	Change in size affected.

Region 5

Humbug Creek

Water Body	Humbug Creek
Stressor/Media/Beneficial Use	Sedimentation and Siltation, Mercury, Copper, and Zinc.
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	Change listing extent of impairment from 9 miles to 3 miles.
Data used to assess water quality	Montoya and Pan (1992) indicate that Humbug creek is 9 miles. The listing should start at the Malakoff Diggins mine which is 3 miles upstream of the confluence with the Yuba River. Total size of listing for metals should be in Humbug creek downstream of Malakoff Diggins mine 3 miles, not 9.
Spatial representation	
Temporal representation	
Data type	
Use of standard method	
Potential Source(s) of Pollutant	Resource Extraction/Abandoned mines.
Alternative Enforceable Program	
RWQCB Recommendation	Change in size affected.
SWRCB Staff Recommendation	Change in size affected.

Region 5

James Creek

Water Body	James Creek
Stressor/Media/Beneficial Use	Nickel and Mercury
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	Change listing from the total length of 6 miles to 9 miles. Extent of affected area to be changed from 6 miles to 8.5 mile.
Data used to assess water quality	Buer et al. (1979), Montoya and Pan (1992), USGS (1980, 1987a, 1987b, 1997), indicate that the total length of James Creek is 9 miles. The inflow mine drainage starts 0.5 miles downstream, hence 8.5 miles affected size.
Spatial representation	
Temporal representation	
Data type	
Use of standard method	
Potential Source(s) of Pollutant	Resource Extraction/Abandoned mines.
Alternative Enforceable Program	
RWQCB Recommendation	Change in Total Size and Size Affected.
SWRCB Staff Recommendation	Change in Total Size and Size Affected.

Region 5

Lower Mokelumne River

Water Body	Lower Mokelumne River
Stressor/Media/Beneficial Use	Copper
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	Mokelumne River was included in the 1998 303(d) list as all of the lower Mokelumne River listing for Copper. RB wants to list the Mokelumne from the Camanche Dam to the Delta, as a listing for Copper.
Data used to assess water quality	The original listing was in 1992, all of lower Mokelumne River was listed for Copper as part of the Mokelumne. RB feels that it should now be listed as Lower Mokelumne River listing from Camanche Dam to Delta because, it is more appropriate to list reservoirs separate from their downstream drainages, from a watershed management strategy perspective. Rivers and reservoirs have different management strategies.
Spatial representation	
Temporal representation	
Data type	
Use of standard method	
Potential Source(s) of Pollutant	Resource Extraction/Abandoned mines.
Alternative Enforceable Program	
RWQCB Recommendation	Change in areal extent.
SWRCB Staff Recommendation	Change in areal extent.

Region 5

Lower Mokelumne River

Water Body	Lower Mokelumne River
Stressor/Media/Beneficial Use	Zinc
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	Mokelumne River was included in the 1998 303(d) list as all of the lower Mokelumne River listing for Zinc. RB wants to list the Mokelumne from the Camanche Dam to the Delta, as a listing for Zinc.
Data used to assess water quality	The original listing was in 1992, all of lower Mokelumne River was listed for Zinc as part of the Mokelumne. RB feels that it should now be listed as Lower Mokelumne River listing from Camanche Dam to Delta because, it is more appropriate to list reservoirs separate from their downstream drainages, from a watershed management strategy perspective. Rivers and reservoirs have different management strategies.
Spatial representation	
Temporal representation	
Data type	
Use of standard method	
Potential Source(s) of Pollutant	Resource Extraction/Abandoned mines.
Alternative Enforceable Program	
RWQCB Recommendation	Change in areal extent.
SWRCB Staff Recommendation	Change in areal extent.

Region 5

Marsh Creek

Water Body	Marsh Creek
Stressor/Media/Beneficial Use	Mercury
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	Change listing from the total length of 24 miles to 16.5 miles. Extent of affected area to be changed from all of Marsh Creek, to Marsh Creek from Dunn Creek to Marsh Creek Reservoir.
Data used to assess water quality	The affected length of Marsh Creek for this listing is only the 16.5 miles from Dunn Creek to the Marsh Creek Reservoir.
Spatial representation	
Temporal representation	
Data type	
Use of standard method	
Potential Source(s) of Pollutant	
Alternative Enforceable Program	
RWQCB Recommendation	Change in Total Size and Size Affected.
SWRCB Staff Recommendation	Change in Total Size and Size Affected.

Region 5

Marsh Creek

Water Body	Marsh Creek
Stressor/Media/Beneficial Use	Metals
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	Change listing from the total length of 24 miles to 8.5 miles. Extent of affected area to be changed from all of Marsh Creek to Marsh Creek from Dunn Creek to Marsh Creek Reservoir.
Data used to assess water quality	The affected length of Marsh Creek for this listing is only the 8.5 miles from Dunn Creek to the Marsh Creek Reservoir.
Spatial representation	
Temporal representation	
Data type	
Use of standard method	
Potential Source(s) of Pollutant	
Alternative Enforceable Program	
RWQCB Recommendation	Change in Total Size and Size Affected.
SWRCB Staff Recommendation	Change in Total Size and Size Affected.

Region 5

Mosher Slough

Water Body	Mosher Slough
Stressor/Media/Beneficial Use	Diazinon and Chlorpyrifos
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	Change listing from the total length of 3 miles to 5 miles.
Data used to assess water quality	Mosher Slough is 5 miles in length. Horizons Technology, Inc. 1997, DeLorme 1998.
Spatial representation	
Temporal representation	
Data type	
Use of standard method	
Potential Source(s) of Pollutant	
Alternative Enforceable Program	
RWQCB Recommendation	Change in Total size affected.
SWRCB Staff Recommendation	Change in Total size affected.

Region 5

San Carlos Creek

Water Body	San Carlos Creek
Stressor/Media/Beneficial Use	Mercury
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	Change listing from the total length of 1 mile to 9 miles. Extent of affected area to be changed from 1 mile to 4 miles.
Data used to assess water quality	San Carlos Creek has a length of 9 miles, from its headwaters at San Benito Mountain to its confluence with Silver Creek. CRWQCB-CVR 1995, USGS 1958-2000.
Spatial representation	
Temporal representation	
Data type	
Use of standard method	
Potential Source(s) of Pollutant	
Alternative Enforceable Program	
RWQCB Recommendation	Change in Total Size and Size Affected.
SWRCB Staff Recommendation	Change in Total Size and Size Affected.

Region 5

Lower Stanislaus River

Water Body	Lower Stanislaus River
Stressor/Media/Beneficial Use	Diazinon, Group A Pesticides, Unknown toxicity
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	Change listing from the total length of 48 miles to 58 miles. Extent of affected area to be changed from 48 miles to 58 miles.
Data used to assess water quality	USGS topographic maps indicate that the total length of the River is 58 miles. (USGS 1958-2000)
Spatial representation	
Temporal representation	
Data type	
Use of standard method	
Potential Source(s) of Pollutant	
Alternative Enforceable Program	
RWQCB Recommendation	Change in Total Size and Size Affected.
SWRCB Staff Recommendation	Change in Total Size and Size Affected.

Region 5

Lower Toulumne River

Water Body	Lower Toulumne River
Stressor/Media/Beneficial Use	Diazinon
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	Change listing from the total length of 32 miles to 54 miles. Extent of affected area to be changed from 32 miles to 42 miles.
Data used to assess water quality	USGS topographic maps indicate that the total length of the River is 54 miles. (USGS 1958-2000) Chemical analysis indicate the length affected by Diazinon is 42 miles.
Spatial representation	
Temporal representation	
Data type	
Use of standard method	
Potential Source(s) of Pollutant	
Alternative Enforceable Program	
RWQCB Recommendation	Change in Total Size and Size Affected.
SWRCB Staff Recommendation	Change in Total Size and Size Affected.

Region 5

Lower Toulumne River

Water Body	Lower Toulumne River
Stressor/Media/Beneficial Use	Group A Pesticides, Unknown Toxicity
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	Change listing from the total length of 32 miles to 54 miles. Extent of affected area to be changed from 32 miles to 54 miles.
Data used to assess water quality	USGS topographic maps indicate that the total length of the River is 54 miles. (USGS 1958-2000) Chemical analysis indicate the entire length is affected by Group A pesticides.
Spatial representation	
Temporal representation	
Data type	
Use of standard method	
Potential Source(s) of Pollutant	
Alternative Enforceable Program	
RWQCB Recommendation	Change in Total Size and Size Affected.
SWRCB Staff Recommendation	Change in Total Size and Size Affected.

Reference List for Region 5

Staff Report

California Regional Water Quality Control Board. Central Valley Region. 2001. Draft Staff Report on Recommended Changes to California's Clean Water Act Section 303(d) List. September 27, 2001.

Technical References

Alpers, C.N. and M.P. Hunerlach. 2000. *Mercury Contamination from Historic Gold Mining in California*. U.S. Geological Survey. Fact Sheet FS-061-00. May 2000.

Bailey, H.C., L. Deanovic, E. Reyes, T. Kimball, K. Larsen, K. Cortright, V. Connor, and D. Hinton. 2000. *Diazinon and Chlorpyrifos in Urban Waterways in Northern California*. USA. *Environmental Toxicology and Chemistry* (19) 82-87.

Bailey, H.C., J.L. Miller, M.J. Miller, L.C. Wiborg, L. Deanovic, and T. Shed. 1997. *Joint Acute Toxicity of Diazinon and Chlorpyrifos to Ceriodaphnia dubia*. *Environmental Toxicology and Chemistry* (16) 2304-2308.

Brodberg, R. K. and G.A. Pollock. 1999. *Prevalence of Selected Target Chemical Contaminants in Sport Fish from Two California Lakes: Public Health Designed Screening Study*. California Environmental Protection Agency, Office of Environmental Health Hazard Assessment.

Buer, S.M., S.R. Phillippe, and T.R. Pinkos. 1979. *Inventory and Assessment of Water Quality Problems related to Abandoned and Inactive Mines in the Central Valley Region of California*. CRWQCB-CVR (California Regional Water Quality Control Board, Central Valley Region).

California Rice Commission. 2001. *CA Rice*. www.calrice.org/environment/balance-cheet/chap3.html

CCME (Canadian Council of Ministers of the Environment). 1991. Appendix IX- A protocol for the derivation of water quality guidelines for the protection of aquatic life (April 1991). In: Canadian water quality guidelines, Canadian Council of Resource and Environment Ministers, 1987. Prepared by the Task Force on Water Quality Guidelines. [Updated and reprinted with minor revisions and editorial changes in Canadian environmental quality guidelines, Chapter 4, Canadian Council of Ministers of the Environment, 1999, Winnipeg.]

CDM (Camp Dresser & McKee Inc). 1999. *Assessment of Water Quality Data from Smith Canal*. July 27, 1999. (Appendix B-2 to City of Stockton & San Joaquin County Storm Water Management Program).

CCR (California Code of Regulations). Title 17 §7958 *Bacteriological Standards*.

CDFG (California Department of Fish and Game). 1991. *Lower Mokelumne River Fisheries Plan*. The Resources Agency, Department of Fish and Game, Streamflow Requirements Program. November 1991. CDHS (California Department of Health Services). 2000. *Draft Guidance for Fresh Water Beaches*. July 27, 2000.

CDPR (California Department of Pesticide Regulation). 1997. *Information on Rice Pesticides-Submitted to the California Regional Water Quality Control Board*. California Environmental Protection Agency, Department of Pesticide Regulation. Environmental Monitoring and Pest Management Branch. Environmental Hazards Assessment Program. December 23 1997.

CDPR (California Department of Pesticide Regulation). 2000a. *Surface Water Database (SWDB)*, as of July 15, 2000.

CDPR (California Department of Pesticide Regulation). 2000b. *Pesticide Use Report (PUR) Database*. Preliminary 2000 Pesticide Use Data.

CDWR (California Department of Water Resources). 1993. *Dams within Jurisdiction of the State of California*. DWR Bulletin 17. As presented by the Berkeley Digital Library Project. Accessed on August 23, 2001. Accessed: (<http://elib.cs.berkeley.edu/dams/about.html>).

CDWR (California Department of Water Resources). 1998. *Aquatic Monitoring and Assessment for the Upper Fall River, Memorandum Report*. May 1998.

Chen C. and W. Tsai. 1999. *Application of Stockton's Water Quality Model to Evaluate Stormwater Impact on Smith Canal*. February 23, 1999. (Attachment to March 17, 1999 letter from City of Stockton, G. Birdzell).

Chilcott, J. 1992. *Agenda Item #11 for Meeting of California Regional Water Quality Control Board, Central Valley Region*. September 25, 1992. Fresno, CA. Staff Report on Consideration of Water Body Designations to Comply with Provisions of the Water Quality Control Plan for Inland Surface Waters of California. Appendix B.

CH2MHILL. 2000a. *Closure Report: Penn Mine Environmental Restoration Project*. Prepared for: East Bay Municipal Utility District and Regional Water Quality Control Board-Central Valley Region. Oakland, California. December 2000.

CH2MHILL. 2000b. (Draft) *Post-Restoration Final Effectiveness Report: Penn Mine Environmental Restoration Project*. Prepared for: East Bay Municipal Utility District and Regional Water Quality Control Board-Central Valley Region. Oakland, California. September 2000.

City of Grass Valley. 2000. *Discharger self-monitoring reports (DSMRs) for Grass Valley Waste Water Treatment Plant*.

City of Grass Valley. 2001. *Discharger self-monitoring reports (DSMRs) for Grass Valley Waste Water Treatment Plant*. Cortright, K., L. Deanovic, H. Bailey, and D. Hinton. 1995. *Stockton Urban Runoff April 1995-June 1995 Report- Prepared for: Central Valley Regional Water Quality Control Board*.

CRWQCB-CVR (California Regional Water Quality Control Board, Central Valley Region). 1978. *Waste Discharge Requirements for Mount Diablo Quicksilver Mine, Contra Costa County*. Sacramento, Ca: CRWQCB.

CRWQCB-CVR (California Regional Water Quality Control Board, Central Valley Region). 1982. *Fall River Water Quality Monitoring*.

CRWQCB-CVR (California Regional Water Quality Control Board, Central Valley Region). 1995. *Futures Foundation, New Idria Mine File*. 1971-1995 Electronic database of all water sampling results for San Carlos Creek and New Idria Mine drainage. Mercury data for water samples collected June 1971 to December 1995.

CRWQCB-CVR (California Regional Water Quality Control Board, Central Valley Region). 1998. *The Water Quality Control Plan (Basin Plan) for the California Regional Water Quality Control Board, Central Valley Region — The Sacramento River Basin and the San Joaquin River Basin*. Fourth Edition. CRWQCB-CVR, Sacramento, Ca. <http://www.swrcb.ca.gov/~rwqcb5/bsnplnab.pdf>

CRWQCB-CVR (California Regional Water Quality Control Board, Central Valley Region). 1999a. (Enclosure 5) *Waste Discharge Requirements (WDRs) Order No. 99-052, Madera County Maintenance District 22A, Oakhurst Wastewater Treatment Facility, Madera County*, (with Supporting Data and Analyses). 30 April 1999 (Rescinded on 17 April 2000).

CRWQCB-CVR (California Regional Water Quality Control Board, Central Valley Region). 1999b. (Enclosure 6), January 1996-January 2000, *Fresno River Water Quality Data from Self-Monitoring Reports, Madera County Maintenance District 22A, Oakhurst Wastewater Treatment Facility, Madera County*.

CRWQCB-CVR (California Regional Water Quality Control Board, Central Valley Region). 2001a. *Avena Drain File*. File Containing Regional Board Staff Field notes and lab results from Avena Drain and surrounding dairies.

CRWQCB-CVR (California Regional Water Quality Control Board, Central Valley Region). 2001b. *Public Solicitation of Water Quality Information* letter. Sacramento, California. 21 February 2001.

CRWQCB-SFB (California Regional Water Quality Control Board, San Francisco Bay Region), State Water Resources Control Board, and California Department of Fish and Game. 1995. *Contaminant Levels in Fish Tissue from San Francisco Bay: Final Report*. CRWQCB-SFB, Oakland, CA. Davis, J.A., M.D. May, G. Ichikawa, and D. Crane. 2000. *Contaminant Concentrations in Fish from the Sacramento-San Joaquin Delta and Lower San Joaquin River — 1998*. San Francisco Estuary Institute report. Richmond, California. September 2000.

DeLorme. 1998. *Northern California Atlas and Gazetteer- Detailed Topographic Maps*. 1:150,000 Scale. Fourth Edition. (<http://www.delorme.com>.)

Dileanis, P.D., J.L. Domagalski, and K.P. Bennett. 2000. *Occurrence and Transport of Diazinon in the Sacramento River and its Tributaries During Three Winter Storms, January-February 2000*. U.S. Geological Survey Water Resources Investigations draft report. Sacramento, CA. As presented in *Water Quality Management Strategy for Diazinon in the Sacramento and Feather Rivers*. Sacramento River Watershed Program. Organophosphate Focus Group. March 30, 2000.

Domagalski, J.L. 2000. *Pesticide Monitoring in the Sacramento River Basin for the USGS National Water Quality Assessment Program*. Report in prep. USGS. As presented in CDPR, 2000a. Domagalski, J.L., 2001. Telephone conversation between Joe Domagalski (Sacramento River Basin NAWQA Study Unit, Chief, U.S. Geological Survey) and Joe Karkoski (Sacramento River Watershed TMDL Unit, Chief, California Regional Water Quality Control Board, Central Valley Region) on 4 September 2001, regarding sampling sites included in NAWQA studies.

EBMUD (East Bay Municipal Utility District). 2000. *All About EBMUD*. EBMUD Public Affairs Office publication. http://www.ebmud.com/pubs/annual/allaboutebmud_2000.pdf. Last accessed: August 2, 2001.

EBMUD (East Bay Municipal Utility District). 2001. Unpublished dissolved copper concentration data for the lower Mokelumne River downstream of Camanche Dam, generated as part of EBMUD's NPDES requirements. Provided electronically by Alexander R. Coate (Manager of Regulatory Compliance, EBMUD) to Michelle L. Wood (Environmental Specialist, Central Valley Regional Water Quality Control Board) on August 2, 2001.

EDAW, Inc. 1992. *Draft EIS/EIR for the Updated Water Supply Management Program, Volume III, Technical Appendices B1 and B2*. Prepared for: East Bay Municipal Utility District. Oakland, California. December 1992.

Foe, C. 1995. *Insecticide Concentrations and Invertebrate Bioassay Mortality in Agricultural Return Water from the San Joaquin Basin*. Central Valley Regional Water Quality Control Board. Sacramento, CA December 1995.

Foe, C. and W. Croyle. 1998. *Mercury Concentrations and Loads from the Sacramento River and from Cache Creek to the Sacramento-San Joaquin Delta Estuary*. California Regional Water Quality Control Board, Central Valley Region Report. Sacramento, Ca. June 1998.

Fujimura, R. 1991a. *Chemical and Toxicity Test Results from the San Joaquin River at Three Sites from July 2 to September 13, 1991*. Memorandum to Lisa Ross, Department of Pesticide Regulation. Sacramento, CA. November 6, 1991. As presented in CDPR, 2000a.

Fujimura, R. 1991b. *Chemical and Toxicity Test Results from the San Joaquin River and Tributaries During March 4 to April 26, 1991*. Memorandum to Lisa Ross, Department of Pesticide Regulation. Sacramento, CA. November 6, 1991. As presented in CDPR, 2000a.

Fujimura, R. 1993a. *Chemical Analyses and Bioassay Test Results for Samples Collected from December 29 to February 25, 1993*. Memorandum to Brian Finlayson, Pesticide Investigations Unit, California Department of Fish and Game. Rancho Cordova, CA. March 26, 1993. As presented in CDPR, 2000a.

Fujimura, R. 1993b. *Chemical Analyses and Bioassay Test Results for Samples Collected from July 9 to September 9, 1992*. Memorandum to Brian Finlayson, Pesticide Investigations Unit, California Department of Fish and Game. Rancho Cordova, CA. March 23, 1993. As presented in CDPR, 2000a.

Fujimura, R. 1993c. *Chemical Analyses and Bioassay Test Results for Samples Collected from March 16 to April 30, 1992*. Memorandum to Brian Finlayson, Pesticide Investigations Unit, California Department of Fish and Game. Rancho Cordova, CA. March 22, 1993. As presented in CDPR, 2000a.

Fujimura, R. 1993d. *Chemical Analyses and Bioassay Test Results for Samples Collected from December 23, 1991 to February 27, 1992*. Memorandum to Brian Finlayson, Pesticide Investigations Unit, California Department of Fish and Game. Rancho Cordova, CA. February 23, 1993. As presented in CDPR, 2000a.

Gorder, N.K.N. and J.M. Lee. 1995. *Information on rice pesticides submitted to the California Regional Water Quality Control Board Central Valley Region*. Environmental Monitoring and Pest Management Branch, Department of Pesticide Regulation, Sacramento, CA. December 28, 1995.

Gorder, N.K.N. and J.M. Lee. 1997. *Information on rice pesticides submitted to the California Regional Water Quality Control Board Central Valley Region*. Environmental Monitoring and Pest Management Branch, Department of Pesticide Regulation, Sacramento, CA. December 23, 1997.

Gorder, N.K.N., J.M. Lee, and K. Newhart. 1996. *Information on rice pesticides submitted to the California Regional Water Quality Control Board Central Valley Region*. Environmental Monitoring and Pest Management Branch, Department of Pesticide Regulation, Sacramento, CA.

Gorder, N.K.N. and K. Newhart. 1998. *Information on rice pesticides submitted to the California Regional Water Quality Control Board Central Valley Region*. Environmental Monitoring and Pest Management Branch, Department of Pesticide Regulation, Sacramento, CA. December 31, 1998.

Hannaford, M.J., and North State Institute for Sustainable Communities. 2000. Preliminary Water Quality Assessment of Cow Creek Tributaries. Department of Fish and Game. May 15, 2000. (<http://www.delta.dfg.ca.gov/afrp/documents/cowcrk.rpt.pdf>).

Harrington, J.M. 1990. *Hazard Assessment of the Rice Insecticides Molinate and Thiobencarb to Aquatic Life in the Sacramento River System*. California Department of Fish and Game. Environmental Services Division. Administrative Report 90-1. Sacramento, CA

Holmes, R., C. Foe, and V. de Vlaming. 2000. *Sources and Concentrations of Diazinon in the Sacramento Watershed During the 1994 Orchard Dormant Spray Season*. California Regional Water Quality Control Board – Central Valley Region. Sacramento, CA. As presented in CDPR, 2000a.

Horizons Technology, Inc. 1997. Sure! MAPS® RASTER Map Sets (U.S. Geological Survey 7.5' Topographic Quadrangles), Version 2.1.2.

Iovenitti, J.L., Weiss Associates, and J. Wessman. 1989. *Mount Diablo Mine: Surface Impoundment Technical Report*. Pleasant Hill, Ca.

Jennings, B. 2001. *Letter from Bill Jennings (DeltaKeeper A Project of San Francisco BayKeeper) to Mr. Jerry Bruns and Mr. Joe Karkoski (California Regional Water Quality Control Board, Central Valley Region) dated May 14, 2001, regarding DeltaKeeper comments on section 303(d) list update*. May 14, 2001.

Larry Walker Associates. 2001a. SRWP 99-00 Database. Unpublished Data.

Larry Walker Associates. 2001b. *Sacramento River Watershed Program Annual Monitoring Report: 1999-2000*. Prepared for the Sacramento River Watershed Program by Larry Walker Associates, Davis, California.

Larsen, K., K.A. Cortright., P. Young, V. Connor, L.A. Deanovic, D.E. Hinton. 1998. *Stockton Fish Kills Associated With Urban Storm Runoff: The Role of Low Dissolved Oxygen*. CRWQCB-CVR. June 1998.

Larsen, K., M. McGraw, V. Connor, L. Deanovic, T. Kimball, and D. Hinton. 2000. *Cache Creek and Smith Canal Watersheds Toxicity Monitoring Results: 1998-1999 Final Report*. November 2000.

Lee, G.F. and A. Jones-Lee. 2000a. *Dissolved Oxygen Depletion in the Stockton Sloughs*. August 2000. (Prepared for DeltaKeeper).

Lee, G.F. and A. Jones-Lee. 2000b. *Issues in Developing the San Joaquin River Deep Water Ship Channel DO TMDL*. Report to San Joaquin River Dissolved Oxygen Total Maximum Daily Load Steering Committee and the CRWQCB-CVR. August 17, 2000.

Lee, G.F. and A. Jones-Lee. 2001a. *Review of the City of Stockton Urban Stormwater Runoff Aquatic Life Toxicity Studies Conducted by the Central Valley Regional Water Quality Control Board, DeltaKeeper, and the University of California, Davis, Aquatic Toxicology Laboratory between 1994 and 1999*. Draft Report. April 2001. G. Fred Lee & Associates. El Macero, CA. (Prepared for DeltaKeeper).

Lee, G.F. and A. Jones-Lee. 2001b. *Review of the City of Stockton Urban Stormwater Runoff Aquatic Life Toxicity Studies Conducted by the Central Valley Regional Water Quality Control Board, DeltaKeeper, and the University of California, Davis, Aquatic Toxicology Laboratory between 1994 and 1999*. Final Report. November 2001. G. Fred Lee & Associates. El Macero, CA. (Prepared for DeltaKeeper).

Marshack, J.B. 2000. *A Compilation of Water Quality Goals*. California Regional Water Quality Control Board, Central Valley Region Report. August 2000, updated October 11, 2000; December 5, 2000; February 8, 2001; April 18, 2001; and July 26, 2001.

May, J.T., R.L. Hothem, C.N. Alpers, and M.A. Law. 2000. *Mercury Bioaccumulation in Fish in a Region Affected by Historic Gold Mining: The South Yuba River, Deer Creek, and Bear River Watersheds, California, 1999*. U.S. Geological Survey. Sacramento, CA. 2000.

McKee and Wolf. 1971. *Water Quality Criteria*. Publication 3-A. California State Water Control Board. Sacramento, California.

Menconi, M. and S. Gray. 1992. *Hazard Assessment of the Insecticide Carbofuran to Aquatic Organisms in the Sacramento River System*. California Department of Fish and Game, Environmental Services Division. Administrative Report 92-3. Sacramento, CA.

Menconi, M. and J.M. Harrington. 1992. *Hazard Assessment of the Insecticide Methyl Parathion to Aquatic Life in the Sacramento River System*. California Department of Fish and Game. Environmental Services Division. Administrative Report 92-1. Sacramento, CA.

Montoya, B. and X. Pan. 1992. *Inactive Mine Drainage in the Sacramento Valley, California*. California Regional Water Quality Control Board, Central Valley Region Report. July 1992.

NAS (National Academy of Science). 1973. *A Report of the Committee on Water Quality: Water Quality Criteria, 1972*. U.S. Environmental Protection Agency, National Academy of Science-National Academy of Engineers (NAS). EPA R3-

73-033.NCWA (Northern California Water Association). 2001. *The Lower Butte Creek Project*. (http://norcalwater.org/lower_butte_creek_project.htm). Last updated 4 September 2001.

Nevada County. 2000. *Press Release, Three County Environmental Health Agencies Issue Interim Public Health Notification on Mercury in Fish*. Nevada County, Department of Environmental Health. (http://www.co.nevada.ca.us/ehealth/hg/press_release_10-03-00.htm).

Newhart, K. and K. Bennett. 1999. *Information on Rice Pesticides-Submitted to the California Regional Water Quality Control Board*. California Environmental Protection Agency, Department of Pesticide Regulation. Environmental Monitoring and Pest Management Branch. Environmental Hazards Assessment Program. December 31, 1999.

Newhart, K., D. Jones, and S. Ceesay. 2000. *Information on Rice Pesticides-Submitted to the California Regional Water Quality Control Board*. California Environmental Protection Agency, Department of Pesticide Regulation. Environmental Monitoring and Pest Management Branch. Environmental Hazards Assessment Program. December 31, 2000.

Nichols, J., S. Bradbury, and J. Swartout. 1999. *Derivation of wildlife values for mercury in Journal of Toxicology and Environmental Health*: 325-355.

Nordmark, C. 1998. *Preliminary Results of Acute and Chronic Toxicity Testing of Surface Water Monitored in the Sacramento River Watershed, Winter 1997-98*. Memorandum to Don Weaver, Environmental Monitoring and Pest Management, Department of Pesticide Regulation. Sacramento, CA. July 31, 1998. As presented in CDPR, 2000a.

Nordmark, C. 1999. *Preliminary Results of Acute and Chronic Toxicity Testing of Surface Water Monitored in the Sacramento River Watershed, Winter 1998-99*. Memorandum to Don Weaver, Environmental Monitoring and Pest Management, Department of Pesticide Regulation, Sacramento, CA. May 26, 1999. As presented in CDPR, 2000a.

Nordmark, C. 2000. In prep. *Preliminary Results of Acute and Chronic Toxicity Testing of Surface Water Monitored in the Sacramento River Watershed, Winter 1999-00*. Memorandum to Don Weaver, Environmental Monitoring and Pest Management, Department of Pesticide Regulation. Sacramento, CA. As presented in CDPR, 2000a. Nordmark, C.E., K.P. Bennett, H. Feng, J. Hernandez, and P. Lee. 1998. *Occurrence of aquatic toxicity and dormant spray pesticide detections in the Sacramento River watershed, Winter 1996-97*. Environmental Hazards Assessment Program, Environmental Monitoring and Pest Management Branch. Department of Pesticide Regulation. Sacramento, CA. Report EH98-01. February, 1998. As presented in CDPR, 2000a.

North State Resources and T. Holmes (prepared for the Fall River Resource Conservation District). *A study of the Habitat Characteristics of the Aquatic Vegetation of the Upper Fall River: Final Report*. Redding, Ca. December 8, 1997.

OEHHA (Office of Environmental Health Hazard Assessment). 1987. *Methyl Mercury In Northern Coastal Mountain Lakes: Guidelines for Sport Fish Consumption For Clear Lake (Lake County), Lake Berryessa (Napa County), And Lake Herman (Solano County)*. James W. Stratton, Daniel Smith, Anna M. Fan, and Steven Book. Hazard Evaluation Section and the Epidemiological Studies and Surveillance Section, Berkeley, California.

OEHHA (Office of Environmental Health Hazard Assessment). 1999. *Health Risk Categories and Cancer Risk. Values for Chemicals without California Public Health Goals: molinate*. www.oehha.ca.gov/risk/ChemicalIDB/withoutPHG.asp?name=molinate&number=221267

OEHHA (Office of Environmental Health Hazard Assessment). 2000. *Draft Evaluation of Potential Health Effects of Eating Fish From Black Butte Reservoir (Glenn and Tehama Counties): Guidelines for Sport Fish Consumption*, Pesticide and Environmental Toxicology Section, California Environmental Protection Agency, Office of Environmental Health Hazard Assessment.

OMR (Office of Mine Reclamation). 2000. *California's Abandoned Mines – A Report on the Magnitude and Scope of the Issue in the State*. California Department of Conservation, Office of Mine Reclamation, Abandoned Mine Lands Unit (OMR). Sacramento, CA. June 2000.

PANNA (Pesticide Action Network, North America). 2000. *DPR surface water database with exceedances indicated*. 9/24/00. PANNA

Panshin, S.Y., N.M. Dubrovsky, J.M. Gronberg and J.L. Domagalski. 1998. *Occurrence and distribution of dissolved pesticides in the San Joaquin River Basin, California*. U.S. Geological Survey. Water Resources Investigations Report 98-4032. National Water Quality Assessment Program. As presented in CDPR, 2000a.

Ross, L. 1992. *Preliminary Results of the San Joaquin River Study; Summer, 1991*. Memorandum to Kean Goh. Environmental Hazards Assessment Program, Environmental Monitoring and Pest Management Branch. California Department of Pesticide Regulation. Sacramento, CA. May 21, 1992.

Ross, L. 1993. *Preliminary Results of the San Joaquin River Study; Summer, 1992*. Memorandum to Kean Goh. Environmental Hazards Assessment Program, Environmental Monitoring and Pest Management Branch. California Department of Pesticide Regulation. Sacramento, CA. September 22, 1993. As presented in C DPR, 2000a.

Ross, L., J. Stein, J. Hsu, J. White, and K. Hefner. 1996. *Distribution and Mass Loading of Insecticides in the San Joaquin River, California: Winter 1991-92 and 1992-93*. Environmental Hazards Assessment Program, Environmental Monitoring and Pest Management Branch. California Department of Pesticide Regulation. Sacramento, CA. Report EH 96-02. November, 1996. As presented in C DPR, 2000a.

Ross, L., J. Stein, J. Hsu, J. White, and K. Hefner. 1999. *Distribution and Mass Loading of Insecticides in the San Joaquin River, California: Spring 1991 and 1992*. Environmental Hazards Assessment Program, Environmental Monitoring and Pest Management Branch. California Department of Pesticide Regulation. Sacramento, CA. Report EH 99-01. April, 1999. As presented in C DPR, 2000a.

Russick, K. 2001. *Characterization of OP Pesticides in Sacramento Urban Runoff and Receiving Waters*. Unpublished Draft CALFED Repot. Russik Environmental Consultant, Elk Grove, California.

SCH EIR. 1996. *Draft EIR for The Penn Mine Site, Long-Term Solution Project*. Prepared for: East Bay Municipal Utility District and Regional Water Quality Control Board-Central Valley Region. SCH EIR No. 95103036. May 1996.

Siepmann, S. and B.J. Finlayson. 2000. *Water Quality Criteria for Diazinon and Chlorpyrifos*. California Department of Fish and Game. Office of Spill Prevention and Response. Administrative Report 00-3. Sacramento, CA.

Siepmann, S. and M.J. Jones. 1998a. *Hazard Assessment of the Insecticide Carbaryl to Aquatic Life in the Sacramento-San Joaquin River System*. California Department of Fish and Game. Office of Spill Prevention and Response. Administrative Report 98-1. Sacramento, CA.

Siepmann, S. and S.B. Slater. 1998b. *Hazard Assessment of the Insecticide Malathion to Aquatic Life in the Sacramento-San Joaquin River System*. California Department of Fish and Game. Office of Spill Prevention and Response. Administrative Report 98-2. Sacramento, CA.

Slotton, D.G., S.M. Ayers, and J.E. Reuter. 1996a. *Marsh Creek Watershed: 1995 Mercury Assessment Project—Final Report March 1996*. Report Prepared for Contra Costa County, March 1996.

Slotton, D.G., S.M. Ayers, J.E. Reuter, and C.R. Goldman. 1995. *Gold Mining Impacts on Food Chain Mercury in Northwestern Sierra Nevada Streams*. Technical Completion Report for the University of California Resources Center, Project W-816. University of California, Davis, Division of Environmental Studies. August 1995.

Slotton, D.G., S.M. Ayers, J.E. Reuter, and C.R. Goldman. 1996b. *Gold Mining Impacts on Food Chain Mercury in Northwestern Sierra Nevada Streams (1996 Revision)*. University of California, Davis, Division of Environmental Studies. December 1996.

Slotton, D.G., S.M. Ayers, J.E. Reuter, and C.R. Goldman. 1997. *Cache Creek Watershed Preliminary Mercury Assessment, Using Benthic Macro-Invertebrates – Final Report, June 1997*. University of California, Davis, Division of Environmental Studies, June 1997.

Slotton, D.G., S.M. Ayers, J.E. Reuter, C.R. Goldman. 1999. *Lower Putah Creek 1997-1998 Mercury Biological Distribution Study. February 1999*. Dept. of Environmental Science and Policy, University of California, Davis. February 1999.

Slotton, D.G., T.H. Suchanek, and S.M. Ayers. 2000. *Delta Wetlands Restoration and the Mercury Question: Year 2 Findings of the CALFED UC Davis Mercury Study*. IEP Newsletter. 13(4): 34-44.

SWRCB (State Water Resources Control Board). 1990. *Water Quality Problems Associated with Operation of Pardee and Camanche Reservoir*. State Water Resources Control Board, Division of Water Quality staff report.

SWRCB (State Water Resources Control Board). 1995. *Toxic Substances Monitoring Program: Freshwater Bioaccumulation Monitoring Program: Data Base*. As presented in TSMP database (Metals_Wet). SWRCB (State Water Resources Control Board). 1999. *1998 California 303(d) List and Priority Schedule*. Approved by U.S. Environmental Protection Agency, Region 9. May 12, 1999. (<http://www.swrcb.ca.gov/tmdl/docs/303d98.pdf>).

SWRCB (State Water Resources Control Board). 2001. Undated memorandum from Stan Martinson, Chief, Division of Water Quality. *Solicitation of Water Quality Information*. E-mail sent 14 February 2001.

Tetra Tech, Inc (for the Fall River Resource Conservation District). 1998. *Analysis of Sedimentation and Action Plan Development for the Upper Fall River, Shasta County, California*. San Francisco, Ca. May 20, 1998.

- USBR (U.S. Bureau of Reclamation). 2001. *U.S. Bureau of Reclamation DataWeb: Power Plants, Dams & Reservoirs*. Accessed on August 22, 2001 (<http://dataweb.usbr.gov/>).
- USDA (U.S. Department of Agriculture), River Basin Planning Staff, in cooperation with Fall River Resource Conservation District. 1983. *Fall River Watershed Area Study, Summary Report*. Davis, Ca. June 1983.
- USDHHS-ATSDR (U.S. Department of Health and Human Services, Agency for Toxic Substances and Disease Registry). 1994. *Public Health Statement for DDT, DDE, and DDD*. May 1994. (<http://www.atsdr.cdc.gov/ToxProfiles/phs8908.html>)
- USDHHS-ATSDR (U.S. Department of Health and Human Services, Agency for Toxic Substances and Disease Registry). 1995. *ToxFAQs - DDT, DDE, and DDD*. September 1995. (<http://www.atsdr.cdc.gov/tfacts35.html>)
- USDHHS-ATSDR (U.S. Department of Health and Human Services, Agency for Toxic Substances and Disease Registry). 1997. *Fish Sampling in Putah Creek, 1996, Laboratory for Energy Related Health Research, Davis, Yolo County California, Cerclis No. CA2890190000*. Agency for Toxic Substance and Disease Registry (ATSDR). April 1997.
- USDHHS-ATSDR (U.S. Department of Health and Human Services, Agency for Toxic Substances and Disease Registry). 1998. *Health Consultation, Fish Sampling in Putah Creek (Phase II), Laboratory for Energy Related Health Research, Davis, Yolo County California, Cerclis No. CA2890190000*. Agency for Toxic Substance and Disease Registry. September 1998.
- USEPA (U.S. Environmental Protection Agency). 1976. *Quality Criteria for Water (The Red Book)*.
- USEPA (U.S. Environmental Protection Agency). 1986a. *Ambient Water Quality Criteria for Bacteria*. EPA # 44015-84-002.
- USEPA (U.S. Environmental Protection Agency). 1995. *Great Lakes Water Quality Initiative Technical Support Document for Wildlife Criteria*. EPA-820-B-95-009. U.S. Environmental Protection Agency, Office of Water. March 1995.
- USEPA (U.S. Environmental Protection Agency). 1997a. *Mercury Study Report to Congress, Vol. 6. An Ecological Assessment for Anthropogenic Mercury Emissions in the United States*. U.S. Environmental Protection Agency, Office of Air Quality Planning & Standards and Office of Research and Development. Washington, DC.
- USEPA (U.S. Environmental Protection Agency). 1997b. *National Clarifying Guidance For 1998 State and Territory Clean Water Act Section 303(d) Listing Decisions*. USEPA Office of Water. August 17, 1997. (<http://www.epa.gov/owow/tmdl/lisgid.html>)
- USEPA (U.S. Environmental Protection Agency). 1998. *Bacterial Water Quality Standards Status Report*. EPA-823-R-98-003. U.S. Environmental Protection Agency, Office of Water Report. May 1998.
- USEPA (U.S. Environmental Protection Agency). 1999. *National Recommended Water Quality Criteria – Correction*. EPA 822-Z-99-001. April 1999. U.S. Environmental Protection Agency, Office of Water. Washington, DC. (<http://www.epa.gov/ost/pc/revcom.pdf>).
- USEPA (U.S. Environmental Protection Agency). 2000a. *Water Quality Standards; Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule*. U.S. Environmental Protection Agency, 40 CFR, Part 131, in Federal Register, Volume 65, No. 97. Thursday, May 18, 2000.
- USEPA (U.S. Environmental Protection Agency). 2000b. *Guidance for Assessing Chemical Contaminant Data for Use in Fish Advisories. Volume I, Fish Sampling and Analysis, Third Edition*. U.S. Environmental Protection Agency, Office of Water. EPA 823-B-00-007. November, 2000.
- USEPA (U.S. Environmental Protection Agency). 2001a. *Protocol for Developing Pathogen TMDLs*. EPA 841-R-00-002. Office of Water Report (4503F). U.S. Environmental Protection Agency. Washington, DC. January 2001.
- USEPA (U.S. Environmental Protection Agency). 2001b. *Water Quality Criterion for Protection of Human Health: Methylmercury*. EPA-823-R-01-001. U.S. Environmental Protection Agency, Office of Science and Technology. January 2001.
- USFDA (U.S. Food and Drug Administration). 1984. *Shellfish Sanitation Interpretation: Action Levels for Chemical and Poisonous Substances*. USFDA, Shellfish Sanitation Branch. Washington, DC. June 1984.
- USFDA (U.S. Food and Drug Administration). 1995. *Mercury in Fish: Cause for Concern?*. In *FDA Consumer* magazine, September 1994, with revisions made in May 1995. Washington, DC. As found at <http://www.fda.gov/fdac/reprints/mercury.html>. November, 2001.

USFWS (U.S. Fish & Wildlife Service). 1992. *Before the State Water Resources Control: In the Matter of the Water Rights Hearing for the Lower Mokelumne River – Closing Statement, Enclosure 2 (EBMUD Data – Aluminum, Cadmium, Zinc, Iron and Zinc)*. Prepared by J.W. Burke, III (Regional Solicitor, USFWS Pacific Southwest Region) and Lynn Cox (Assistant Regional Solicitor, USFWS Pacific Southwest Region).

USGS (U.S. Geological Survey). 1958-2000. California 7.5' Topographic Quadrangle, as presented by TopoZone.com (© 2000 Maps a la carte, Inc.). Accessed on March 13, 2001 (<http://www.topozone.com/default.asp>) *Ciervo Mountain* (1969), *Idria* (1969), *San Benito Mountain* (1981), and *Tumey Hills* (1971), *La Grange* (1987), *Westley* (1991), and *Brush Lake* (1969), *Chiles Valley* (1980), *Aetna Springs* (1987), *Walter Springs* (1987b.), *Desert Reservoir* (1997).

USGS (U.S. Geological Survey). 2001. *National Water Information System*. <http://water.usgs.gov/nwis/> (August 28, 2001).

Westcot, D.W., C.A. Enos, and P.A. Lowry. 1991. Preliminary Estimate of Salt and Trace Element Loading to the San Joaquin River by Ephemeral Streams Draining the Eastern Slope of the Coast Range (Diablo Range). CRWQCB-CVR. Sacramento, Ca.

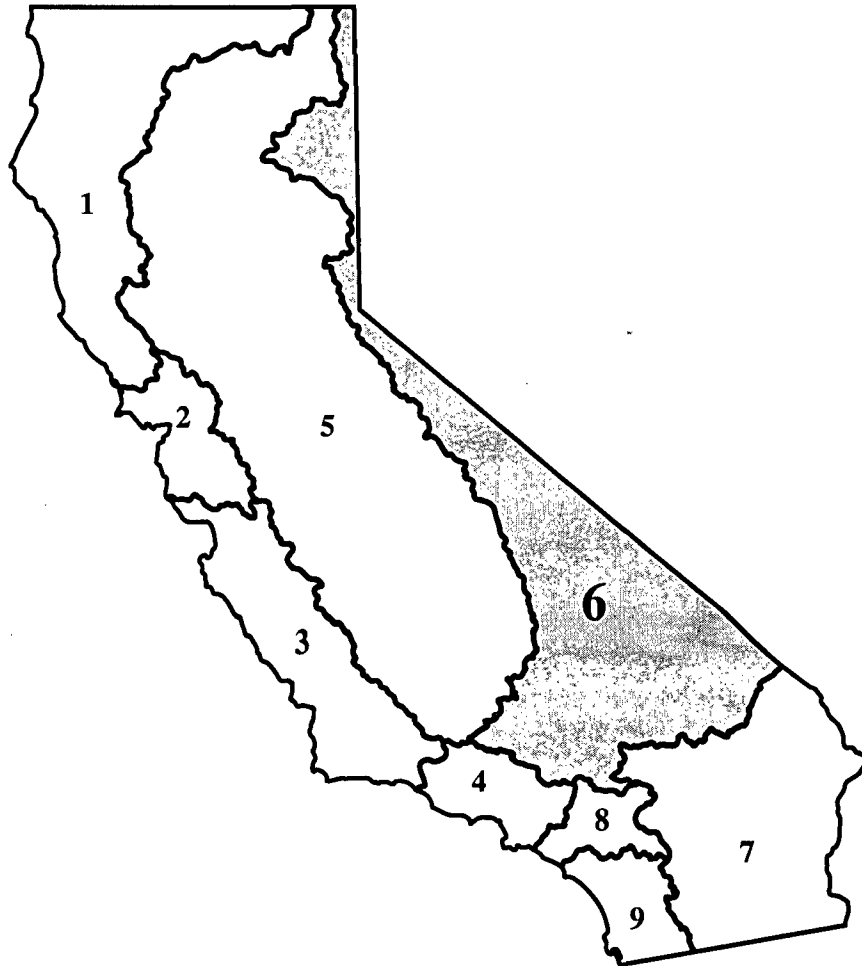
WHO (World Health Organization). 1993. *Guidelines for Drinking Water Quality*, 2nd edition. Geneva, WHO.
www.who.int/water_sanitation_health/GDWQ/Chemicals/molinatesum.htm.

Woodward-Clyde. 1992. *Source Identification and Control Report, December 1, 1992*. Report prepared for the Santa Clara Valley Nonpoint Source Pollution Control Program by Woodward-Clyde Consultants, Oakland, California.

Young, K.D. and E.L. Thackston. 1999. *Housing density and bacterial loading in urban streams*. *Journal of Environment*

Regional Water Quality Control Board

LAHONTAN REGION (6)



SECTION 303 (d) LIST PROPOSALS

Region 6 Summary of Recommendations

Water Body	Pollutant/Medium /Beneficial Use	RWQCB Recommendation	SWRCB Recommendation
Robinson Creek, Hwy 395 to Bridgeport Reservoir	Nitrogen/Water/Aquatic life	List	Watch list, due to exceedence observed in single sample.
Buckeye Creek	Phosphorus/Water/Aquatic life	List	Watch list, due to exceedence observed in single sample.
Buckeye Creek	Pathogens/Water/Human health	List	List
Swauger Creek	Phosphorus/Water/Aquatic life	List	List
Swauger Creek	Pathogens/Water/Human health	List	List
Mojave River between Upper and Lower Narrows	TDS/Water/Drinking	Delist. RWQCB staff recommended listing. Board removed listing.	Delist
Mojave River between Upper and Lower Narrows	Sulfate/Water/Drinking	Delist. RWQCB staff recommended listing. Board removed listing.	Delist
Mojave River between Upper and Lower Narrows	Chloride/Water/Aquatic life	Delist. RWQCB staff recommended listing. Board removed listing.	Delist
Donner Lake	Priority Organics/Water/Human health	Delist based on limited data used to list. No OEHA advisory in effect. No recent data available.	Maintain listing. TSMP data is sufficient (two composite samples of 13 fish), and exceedances of WQO are large enough to maintain listing. PCB concentrations were 165 and 102 ppb. (MTRL is 5.3 ppb). Chlordane result was 26.2 ppb. MTLR is 8.0 ppb. RB may request TSMP to schedule monitoring before next listing cycle.

Water Body	Pollutant/Medium /Beneficial Use	RWQCB Recommendation	SWRCB Recommendation
Stampede Reservoir	Pesticides (lindane)/Tissue/Human health	Delist because original listing was based on limited data. Only one data point was available during 1989 listing. WQO for lindane is 2.5 ug/kg and original sample result was 2.6 ug/kg. Place on Watch List for additional monitoring.	Delist because original listing was based on limited data. Only one data point was available during 1989 listing. WQO for lindane is 2.5 ug/kg and original sample result was 2.6 ug/kg. Place on Watch List for additional monitoring.
Wendell Hot Springs, Amedee Hot Springs, Hot Creek, Fales Hot Springs, Little Hot Creek, Little Alkali Lake, Deep Springs Lake, Keogh Hot Springs, Amaragosa River	Salinity, metals, arsenic	Delist due to natural causes of impairments. Basin Plan amendments for 9 waters to remove MUN use have been approved by SWRCB. Use attainability analysis has been prepared by RWQCB.	Delist due to natural causes of impairments. Basin Plan amendments for 9 waters to remove MUN use have been approved by SWRCB. Use attainability analysis has been prepared by RWQCB.
Upper Alkali Lake	Salinity, TDS, Chlorides/Water/Drinking	Delist because exceedence of standards is due to natural causes. TMDL is not applicable.	Delist because exceedence of standards is due to natural causes. TMDL is not applicable.
Middle Alkali Lake	Salinity, TDS, Chlorides/Water/Drinking	Delist because exceedence of standards is due to natural causes. TMDL is not applicable.	Delist because exceedence of standards is due to natural causes. TMDL is not applicable.
Lower Alkali Lake	Salinity, TDS, Chlorides/Water/Drinking	Delist because exceedence of standards is due to natural causes. TMDL is not applicable.	Delist because exceedence of standards is due to natural causes. TMDL is not applicable.
Top Spring	Radiation/Water/Human health	Delist because exceedence of standards is due to natural causes. TMDL is not applicable.	Delist because exceedence of standards is due to natural causes. TMDL is not applicable.
Snow Creek	Habitat Alterations/Habitat/Aquatic life	Delist due to implementation of a wetland/riparian restoration program that included removal of fill material, restoration of the stream channel, revegetation, and installation of culverts to allow fish passage and reduce highway flooding.	Delist due to implementation of a wetland/riparian restoration program that included removal of fill material, restoration of the stream channel, revegetation, and installation of culverts to allow fish passage and reduce highway flooding.

Water Body	Pollutant/Medium /Beneficial Use	RWQCB Recommendation	SWRCB Recommendation
East Fork Carson River	Nutrients/Water/Aquatic life	Delist based on faulty data used in original listing, and current data that shows that no impairment of beneficial uses.	Delist based on faulty data used in original listing, and current data that shows that no impairment of beneficial uses.
East Walker River	Metals/Tissue/Human health	Delist because original listing was based on inappropriate use of EDLs as WQOs. EDLs are Elevated Data Levels that are the 85th and 95th percentiles of all data collected, and are not WQOs.	Delist because original listing was based on inappropriate use of EDLs as WQOs. EDLs are Elevated Data Levels that are the 85th and 95th percentiles of all data collected, and are not WQOs.
Mono Lake	Salinity, TDS, Chlorides/Water/Aquatic life, Wildlife	Delist because high concentrations of salts and trace elements are from natural sources. SWRCB Decision 1631 establishes conditions to control lake level and salt concentrations.	Delist because an alternative enforceable program is in place. SWRCB Decision 1631 establishes conditions to control lake level and salt concentrations. Salt concentrations are not solely due to natural causes. Fifty years of water diversions caused a 45 foot drop in lake level, which caused increases in salt concentrations above those caused by natural sources. SWRCB Decision 1631 established a restored lake level of 6391 feet to meet water quality standards.
Grant Lake	Arsenic/Water, Tissue/Drinking, Human health	Delist due to natural causes. Beneficial uses are drinking water supply for City of Los Angeles and fish consumption. Water is blended in order to meet current drinking water standard at the tap. 1991 TSMP data showed no exceedences of fish consumption criteria.	Delist due to natural causes. Beneficial uses are drinking water supply for City of Los Angeles and fish consumption. Water is blended in order to meet current drinking water standard at the tap. 1991 TSMP data showed no exceedences of fish consumption criteria.

Water Body	Pollutant/Medium /Beneficial Use	RWQCB Recommendation	SWRCB Recommendation
Big Springs	Arsenic/Water/Drinking	Delist due to natural causes. Beneficial use is drinking water supply for City of Los Angeles Arsenic is removed from this water supply before delivery for use.	Delist due to natural causes. Beneficial use is drinking water supply for City of Los Angeles Arsenic is removed from this water supply before delivery for use.
Crowley Lake	Arsenic/Water/Drinking	Delist due to natural causes. Beneficial use is drinking water supply for City of Los Angeles Arsenic is removed from this water supply before delivery for use.	Delist due to natural causes. Beneficial use is drinking water supply for City of Los Angeles Arsenic is removed from this water supply before delivery for use.
Tinemaha Reservoir	Arsenic/Water/Drinking	Delist due to natural causes. Beneficial use is drinking water supply for City of Los Angeles Arsenic is removed from this water supply before delivery for use.	Delist due to natural causes. Beneficial use is drinking water supply for City of Los Angeles Arsenic is removed from this water supply before delivery for use.
Searles Lake	Petroleum Hydrocarbons/Water/WILD, REC-1, REC-2, SAL	List	List
Blackwood Creek (Tributary to Lake Tahoe)	Nitrogen/Water/Aquatic Life	List	List
Blackwood Creek (Tributary to Lake Tahoe)	Phosphorus/Water/Aquatic Life	List	List
Blackwood Creek (Tributary to Lake Tahoe)	Iron (plant nutrient)/Water/Aquatic Life	List	List
Heavenly Valley Creek between USFS boundary and confluence with Trout Creek	Sediment/Water/Aquatic Life	List	List
Heavenly Valley Creek	Chloride/Water/Aquatic Life	List	Watch list, due to major source believed to be of natural origin.
Heavenly Valley Creek, within USFS boundary	Phosphorus/Water/Aquatic Life	List	Watch list, due to major source believed to be of natural origin

Water Body	Pollutant/Medium /Beneficial Use	RWQCB Recommendation	SWRCB Recommendation
Unnamed creek (aka Hidden Valley Creek)	Chloride/Water/Aquatic Life	List	Watch list, due to major source believed to be of natural origin.
Unnamed creek (aka Hidden Valley Creek)	Phosphorus/Water/Aquatic Life	List	Watch list, due to major source believed to be of natural origin
General Creek (Tributary to Lake Tahoe)	Phosphorus/Water/Aquatic Life	List	List
General Creek (Tributary to Lake Tahoe)	Iron (plant nutrient)/Water/Aquatic Life	List	List
Upper Truckee River (Tributary to Lake Tahoe)	Phosphorus/Water/Aquatic Life	List	List
Upper Truckee River (Tributary to Lake Tahoe)	Iron (plant nutrient)/Water/Aquatic Life	List	List
Upper Truckee River (Tributary to Lake Tahoe)	Pathogens/Water/Human Health	List	List
Big Meadow Creek (Tributary to Lake Tahoe)	Pathogens/Water/Human health	List	List
Trout Creek (Tributary to Lake Tahoe)	Phosphorus/Water/Aquatic Life	List	List
Trout Creek (Tributary to Lake Tahoe)	Nitrogen/Water/Aquatic Life	List	List
Trout Creek (Tributary to Lake Tahoe)	Iron (plant nutrient)/Water/Aquatic Life	List	List
Trout Creek (Tributary to Lake Tahoe)	Pathogens/Water/Human health	List	List
Tallac Creek (Tributary To Lake Tahoe)	Pathogens/Water/Human Health	List	List
Ward Creek (Tributary To Lake Tahoe)	Nitrogen/Water/Aquatic Life	List	List

Summary of Recommendations 6-5

Water Body	Pollutant/Medium /Beneficial Use	RWQCB Recommendation	SWRCB Recommendation
Ward Creek (Tributary To Lake Tahoe)	Phosphorus/Water/Aquatic Life	List	List
Ward Creek (Tributary to Lake Tahoe)	Iron (plant nutrient)/Water/Aquatic Life	List	List
West Fork Carson River, Headwaters to Woodfords	Phosphorus/Water/Aquatic Life	List	List
West Fork Carson River, Headwaters to Woodfords	Nitrogen/Water/Aquatic Life	List	List
West Fork Carson River, Headwaters to Woodfords	Percent sodium/Water/Crop protection	List	List
West Fork Carson River, Woodfords to Paynesville	Percent sodium	List	List
West Fork Carson River, Woodfords to Paynesville	Nitrogen	List	List
West Fork Carson River, Woodfords to Paynesville	Pathogens/Water/Human health	List	List
Monitor Creek	Sulfate./Water/Drinking	List	List
Monitor Creek	TDS/Water/Drinking	List	List
Indian Creek	Pathogens/Water/Human health	List	List
East Walker River above Bridgeport Reservoir	Pathogens/Water/Human health	List	List
East Walker River below Bridgeport Reservoir	Nitrogen/Water/Aquatic Life	List	List
East Walker River below Bridgeport Reservoir	Phosphorus/Water/Aquatic Life	List	List

Summary of Recommendations 6-6

Water Body	Pollutant/Medium /Beneficial Use	RWQCB Recommendation	SWRCB Recommendation
Virginia Creek	Pathogens/Water/Human health	Do not list	Do not list
Robinson Creek	Pathogens/Water/Human health	List	List
Owens River	Arsenic/Water/Drinking	Delist due to natural causes. Beneficial use is drinking water supply for City of Los Angeles. Arsenic is removed from this water supply before delivery for use.	Delist due to natural causes. Beneficial use is drinking water supply for City of Los Angeles. Arsenic is removed from this water supply before delivery for use.
Owens Lake	Salinity, TDS, Chlorides/Water/Drinking, Aquatic life	Delist due to natural sources of salts and trace elements. Except for a few inches of water used to wet the dry lakebed to reduce particulate air pollution, no water remains. Not a drinking water supply.	Delist due to natural sources of salts and trace elements. Except for a few inches of water used to wet the dry lakebed to reduce particulate air pollution, no water remains. Not a drinking water supply.
Hot Creek	Metals/Water/Drinking	Delist due to natural sources of metals.	Delist due to natural sources of metals.
Mojave River	Priority Organics/Water/Human health	Delist because pollutants were present in groundwater portion of this intermittent stream, and listings are limited to surface waters. Also a 1991 USGS study showed that priority pollutants are no longer present in concentrations of concern in the area affected by the groundwater plume.	Delist because pollutants were present in groundwater portion of this intermittent stream, and listings are limited to surface waters. Also a 1991 USGS study showed that priority pollutants are no longer present in concentrations of concern in the area affected by the groundwater plume.

Water Body	Pollutant/Medium /Beneficial Use	RWQCB Recommendation	SWRCB Recommendation
Searles Lake	Salinity, TDS, Chlorides/Water/Drinking	Delist because impairment resulting from salinity/TDS/chlorides is from natural sources, and the lake is supporting aquatic life uses to the extent possible under extreme environmental conditions.	Insufficient information to Delist. No monitoring data provided to show that discharges of brine from IMCC do not elevate brine concentration above already high natural levels. Factsheet states that, Most of the surface water currently on the lakebed is brine extracted from beneath the lakebed by IMCC and returned to the lakebed following the extraction of minerals. Insufficient information to show that waterfowl deaths are caused solely by petroleum hydrocarbons and not affected by elevated brine levels.
Eagle Lake	Nitrogen, Phosphorus	Change listing from low dissolved oxygen to separate listings for nitrogen and phosphorus.	Change listing from low dissolved oxygen to separate listings for nitrogen and phosphorus.
Lake Tahoe	Nitrogen, Phosphorus/Water/Aquatic life	Clarify previous listing for nutrients. Replace nutrient listing with separate listings for nitrogen and phosphorus.	Clarify previous listing for nutrients. Replace nutrient listing with separate listings for nitrogen and phosphorus.
Monitor Creek	Iron, silver, aluminum, manganese/Water/Aquatic life	Clarify metals listing. Replace metals listing with listings for 4 specific metals- iron, silver, aluminum, manganese.	Clarify metals listing. Replace metals listing with listings for 4 specific metals - iron, silver, aluminum, manganese.

Region 6

Robinson Creek, Hwy 395 to Bridgeport Reservoir

Water Body	Robinson Creek, Hwy 395 to Bridgeport Reservoir
Stressor/Media/Beneficial Use	Nitrogen/Water/Aquatic life
Data quality assessment. Extent to which data quality requirements met.	QA procedures used
Linkage between measurement endpoint and beneficial use or standard	Yes
Utility of measure for judging if standards or uses are not attained	Measurement can be directly compared to WQO
Water Body-specific Information	Data collected between January-June 2001.
Data used to assess water quality	1 of 6 (16.7%) samples exceeded the 90th percentile WQO of 0.80 mg/L. No more than 10% of samples are to exceed the 90th percentile WQO.
Spatial representation	Targeted in water body. Locations unknown.
Temporal representation	Data collected between January-June 2001.
Data type	WQO and water column chemistry data are numeric values
Use of standard method	Yes
Potential Source(s) of Pollutant	Livestock
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	Watch list, due to exceedence observed in single sample.

Region 6

Buckeye Creek

Water Body	Buckeye Creek
Stressor/Media/Beneficial Use	Phosphorus/Water/Aquatic life
Data quality assessment. Extent to which data quality requirements met.	QA procedures used
Linkage between measurement endpoint and beneficial use or standard	Yes
Utility of measure for judging if standards or uses are not attained	Measurement can be directly compared to WQO
Water Body-specific Information	Data collected in 2000-2001.
Data used to assess water quality	Annual mean values for 2000-2001 did not exceed annual mean WQO (0.06 mg/L). The annual means for 2000-2001 were 0.029 mg/L. One of 9 samples (11%) in 2000 exceeded the 90th percentile WQO. The WQO allows no more than 10% of samples to exceed the 90th percentile value.
Spatial representation	Targeted in water body. Locations unknown.
Temporal representation	Annual mean
Data type	WQO and water column chemistry data are numeric values
Use of standard method	Yes
Potential Source(s) of Pollutant	Partially natural sources
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	Watch list, due to exceedence observed in single sample.

Region 6

Buckeye Creek

Water Body	Buckeye Creek
Stressor/Media/Beneficial Use	Pathogens/Water/Human health
Data quality assessment. Extent to which data quality requirements met.	QA procedures used
Linkage between measurement endpoint and beneficial use or standard	Yes
Utility of measure for judging if standards or uses are not attained	Measurement can be directly compared to WQO
Water Body-specific Information	Data collected from April 2000-June 2001.
Data used to assess water quality	At least 5 of 10 (50%), and at least 6 of 14 samples (43%) exceeded the 40/100 ml WQO.
Spatial representation	Targeted in water body. Locations unknown.
Temporal representation	Data collected from April 2000-June 2001
Data type	Fecal coliform counts are numeric information
Use of standard method	Yes
Potential Source(s) of Pollutant	High bacterial counts coincide with months when livestock are present. Natural sources of bacteria may also occur.
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	List

Region 6

Swauger Creek

Water Body	Swauger Creek
Stressor/Media/Beneficial Use	Phosphorus/Water/Aquatic life
Data quality assessment. Extent to which data quality requirements met.	QA procedures used
Linkage between measurement endpoint and beneficial use or standard	Yes
Utility of measure for judging if standards or uses are not attained	Measurement can be directly compared to WQO
Water Body-specific Information	Data collected from 2000-2001
Data used to assess water quality	Data showed violations of the WQO (0.06 mg/L as an annual mean) in both years.
Spatial representation	Targeted in water body. Locations unknown.
Temporal representation	Annual mean.
Data type	WQO and water column chemistry data are numeric values
Use of standard method	Yes
Potential Source(s) of Pollutant	Partially natural sources
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	List

Region 6

Swauger Creek

Water Body	Swauger Creek
Stressor/Media/Beneficial Use	Pathogens/Water/Human health
Data quality assessment. Extent to which data quality requirements met.	QA procedures used
Linkage between measurement endpoint and beneficial use or standard	Yes
Utility of measure for judging if standards or uses are not attained	Measurement can be directly compared to WQO
Water Body-specific Information	Data collected from March 2000- June 2001
Data used to assess water quality	Data exceeded the WQO (40/100 ml) in at least 5 of 16 samples (31%). The WQO allows no more than 10% of samples to exceed the 40/100 ml.
Spatial representation	Targeted in water body. Locations unknown.
Temporal representation	Data collected from March 2000- June 2001
Data type	Fecal coliform counts are numeric information
Use of standard method	Yes
Potential Source(s) of Pollutant	Livestock, wildlife, septic systems, human recreational users.
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	List

Region 6

Searles Lake

Water Body	Searles Lake
Stressor/Media/Beneficial Use	Petroleum Hydrocarbons/Water/WILD, REC-1, REC-2, SAL
Data quality assessment. Extent to which data quality requirements met.	QA procedures used for sampling. Numerous (at least 13) observations of visible oil on Lake waters, banks, channels and ponds. Over 150 dead waterfowl collected by CDFG. Waterfowl encrusted with brine and oil. Oil found in internal organs of waterfowl.
Linkage between measurement endpoint and beneficial use or standard	Yes
Utility of measure for judging if standards or uses are not attained	Measurement can be compared to WQO directly.
Water Body-specific Information	13 site inspections by Regional Board staff between February and June, 2000.
Data used to assess water quality	Visible oil observed. Sample collected showed 156,000 ppm TPH.
Spatial representation	Visible oil observed at numerous locations
Temporal representation	Visible oil observed on more than 13 occasions during a 5-month period.
Data type	13 site inspections by Regional Board staff between February and June, 2000. Visible oil observed. Sample collected showed 156,000 ppm TPH.
Use of standard method	Yes for one sample collected
Potential Source(s) of Pollutant	Source is IMCC Chemical mineral extraction operation.
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	List

Region 6

Blackwood Creek (Tributary to Lake Tahoe)

Water Body	Blackwood Creek (Tributary to Lake Tahoe)
Stressor/Media/Beneficial Use	Nitrogen/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	QA procedures used
Linkage between measurement endpoint and beneficial use or standard	Yes
Utility of measure for judging if standards or uses are not attained	Measurement can be compared to WQO directly.
Water Body-specific Information	Samples collected from creek mouth between 1989-1996 by Lake Tahoe Interagency Monitoring Program.
Data used to assess water quality	Violations of WQO for total Nitrogen (0.19 mg/L annual mean) in 6 of 8 water years
Spatial representation	Samples collected from creek mouth
Temporal representation	Samples collected between 1989-1996
Data type	WQO and water column chemistry data are numeric values
Use of standard method	Yes
Potential Source(s) of Pollutant	Sources are atmospheric deposition, erosion, stormwater
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	List

Region 6

Blackwood Creek (Tributary to Lake Tahoe)

Water Body	Blackwood Creek (Tributary to Lake Tahoe)
Stressor/Media/Beneficial Use	Phosphorus/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	QA procedures used
Linkage between measurement endpoint and beneficial use or standard	Yes
Utility of measure for judging if standards or uses are not attained	Measurement can be compared to WQO directly.
Water Body-specific Information	Samples collected from creek mouth between 1989-1996 by Lake Tahoe Interagency Monitoring Program.
Data used to assess water quality	Violations of WQO for total Phosphorus in 15 of 17 water years from 1980-1996.
Spatial representation	Samples collected from creek mouth
Temporal representation	Samples collected between 1989-1996
Data type	WQO and water column chemistry data are numeric values
Use of standard method	Yes
Potential Source(s) of Pollutant	Erosion from severely disturbed areas (logging, gravel mining), atmospheric, deposition, stormwater, forest fire.
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	List

Region 6

Blackwood Creek (Tributary to Lake Tahoe)

Water Body	Blackwood Creek (Tributary to Lake Tahoe)
Stressor/Media/Beneficial Use	Iron (plant nutrient)/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	QA procedures used
Linkage between measurement endpoint and beneficial use or standard	Yes
Utility of measure for judging if standards or uses are not attained	Measurement can be compared to WQO directly.
Water Body-specific Information	Samples collected from creek mouth between 1989-1996 by Lake Tahoe Interagency Monitoring Program.
Data used to assess water quality	Violations of WQO for total iron in 8 of 8 water years, from 1989-1996.
Spatial representation	Samples collected from creek mouth
Temporal representation	Samples collected between 1989-1996
Data type	WQO and water column chemistry data are numeric values
Use of standard method	Yes
Potential Source(s) of Pollutant	Erosion from severely disturbed areas (logging, gravel mining)
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	List

Region 6

Heavenly Valley Creek between USFS boundary and confluence with

Water Body	Heavenly Valley Creek between USFS boundary and confluence with Trout Creek
Stressor/Media/Beneficial Use	Sediment/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	No data for this reach. Listing based on information from upper reach, for which a TMDL has been completed.
Linkage between measurement endpoint and beneficial use or standard	No data for this reach. Listing based on information from upper reach, for which a TMDL has been completed.
Utility of measure for judging if standards or uses are not attained	No data for this reach. Listing based on information from upper reach, for which a TMDL has been completed.
Water Body-specific Information	No data for this reach. Listing based on information from upper reach, for which a TMDL has been completed.
Data used to assess water quality	No data for this reach. Listing based on information from upper reach, for which a TMDL has been completed.
Spatial representation	No data for this reach. Listing based on information from upper reach, for which a TMDL has been completed.
Temporal representation	No data for this reach. Listing based on information from upper reach, for which a TMDL has been completed.
Data type	No data for this reach. Listing based on information from upper reach, for which a TMDL has been completed.
Use of standard method	No data for this reach. Listing based on information from upper reach, for which a TMDL has been completed.
Potential Source(s) of Pollutant	Source is erosion from upstream developments.
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	List

Region 6

Heavenly Valley Creek

Water Body	Heavenly Valley Creek
Stressor/Media/Beneficial Use	Chloride/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	QA procedures used
Linkage between measurement endpoint and beneficial use or standard	Yes
Utility of measure for judging if standards or uses are not attained	Measurement can be compared to WQO directly.
Water Body-specific Information	Data collected between 1997-2001 by USFS.
Data used to assess water quality	Annual means of samples collected from 6 sites all exceeded standard, 0.15 mg/L annual mean'
Spatial representation	Samples collected from 6 sites
Temporal representation	Annual means of samples
Data type	WQO and water column chemistry data are numeric values
Use of standard method	Yes
Potential Source(s) of Pollutant	Mostly natural background, other sources may be road salt, atmospheric, Deposition
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	Watch list, due to major source believed to be of natural origin.

Region 6

Heavenly Valley Creek, within USFS boundary

Water Body	Heavenly Valley Creek, within USFS boundary
Stressor/Media/Beneficial Use	Phosphorus/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	QA procedures used
Linkage between measurement endpoint and beneficial use or standard	Yes
Utility of measure for judging if standards or uses are not attained	Measurement can be directly compared to WQO
Water Body-specific Information	Data collected between 1997-2001 by USFS.
Data used to assess water quality	Annual means of samples collected from 6 sites all exceeded standard, 0.015 mg/L annual mean.
Spatial representation	Data collected from 6 sites.
Temporal representation	Annual means of samples.
Data type	WQO and water column chemistry data are numeric values
Use of standard method	Yes
Potential Source(s) of Pollutant	Natural geologic sources. Other sources may be atmospheric, deposition, erosion from disturbed areas.
Alternative Enforceable Program	Coordination with TMDL for Trout Creek
RWQCB Recommendation	List
SWRCB Staff Recommendation	Watch list, due to major source believed to be of natural origin

Region 6

Unnamed creek (aka Hidden Valley Creek)

Water Body	Unnamed creek (aka Hidden Valley Creek)
Stressor/Media/Beneficial Use	Chloride/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	QA procedures used
Linkage between measurement endpoint and beneficial use or standard	Yes
Utility of measure for judging if standards or uses are not attained	Measurement can be directly compared to WQO
Water Body-specific Information	Data collected in 1997-98.
Data used to assess water quality	Annual means for both years exceed the WQO (0.15 mg/L annual mean)
Spatial representation	Targeted in water body. Locations unknown.
Temporal representation	Annual means for both years
Data type	WQO and water column chemistry data are numeric values
Use of standard method	Yes
Potential Source(s) of Pollutant	Natural geologic sources. Other sources may be atmospheric, deposition, erosion from disturbed areas.
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	Watch list, due to major source believed to be of natural origin.

Region 6

Unnamed creek (aka Hidden Valley Creek)

Water Body	Unnamed creek (aka Hidden Valley Creek)
Stressor/Media/Beneficial Use	Phosphorus/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	QA procedures used
Linkage between measurement endpoint and beneficial use or standard	Yes
Utility of measure for judging if standards or uses are not attained	Measurement can be directly compared to WQO
Water Body-specific Information	Data collected in 1997-98.
Data used to assess water quality	Annual means for both years exceed the WQO (0.015 mg/L annual mean)
Spatial representation	Targeted in water body. Locations unknown.
Temporal representation	Annual means for 2 years
Data type	WQO and water column chemistry data are numeric values
Use of standard method	Yes
Potential Source(s) of Pollutant	Natural background sources.
Alternative Enforceable Program	Coordination with TMDL for Trout Creek
RWQCB Recommendation	List
SWRCB Staff Recommendation	Watch list, due to major source believed to be of natural origin

Region 6

General Creek (Tributary to Lake Tahoe)

Water Body	General Creek (Tributary to Lake Tahoe)
Stressor/Media/Beneficial Use	Phosphorus/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	QA procedures used
Linkage between measurement endpoint and beneficial use or standard	Yes
Utility of measure for judging if standards or uses are not attained	Measurement can be directly compared to WQO
Water Body-specific Information	Data collected in 1981-96.
Data used to assess water quality	Annual means for 12 of 16 water years exceed the WQO (0.015 mg/L annual mean)
Spatial representation	Targeted in water body. Locations unknown.
Temporal representation	Annual means for 12 of 16 water years
Data type	WQO and water column chemistry data are numeric values
Use of standard method	Yes
Potential Source(s) of Pollutant	Major sources from erosion, atmospheric deposition, stormwater
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	List

Region 6

General Creek (Tributary to Lake Tahoe)

Water Body	General Creek (Tributary to Lake Tahoe)
Stressor/Media/Beneficial Use	Iron (plant nutrient)/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	QA procedures used
Linkage between measurement endpoint and beneficial use or standard	Yes
Utility of measure for judging if standards or uses are not attained	Measurement can be directly compared to WQO
Water Body-specific Information	Data collected in 1989-96.
Data used to assess water quality	Annual means for 8 of 8 water years exceed the WQO (0.03 mg/L annual mean)
Spatial representation	Targeted in water body. Locations unknown.
Temporal representation	Annual means for 8 of 8 water years
Data type	WQO and water column chemistry data are numeric values
Use of standard method	Yes
Potential Source(s) of Pollutant	Major sources from erosion, stormwater
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	List

Region 6

Upper Truckee River (Tributary to Lake Tahoe)

Water Body	Upper Truckee River (Tributary to Lake Tahoe)
Stressor/Media/Beneficial Use	Phosphorus/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	QA procedures used
Linkage between measurement endpoint and beneficial use or standard	Yes
Utility of measure for judging if standards or uses are not attained	Measurement can be directly compared to WQO
Water Body-specific Information	Data collected in 1980-96.
Data used to assess water quality	Annual means for 17 of 17 water years exceed the WQO (0.015 mg/L annual mean)
Spatial representation	Targeted in water body. Locations unknown.
Temporal representation	Annual means for 17 of 17 water years
Data type	WQO and water column chemistry data are numeric values
Use of standard method	Yes
Potential Source(s) of Pollutant	Erosion, fertilizer use, stormwater
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	List

Region 6

Upper Truckee River (Tributary to Lake Tahoe)

Water Body	Upper Truckee River (Tributary to Lake Tahoe)
Stressor/Media/Beneficial Use	Iron (plant nutrient)/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	QA procedures used
Linkage between measurement endpoint and beneficial use or standard	Yes
Utility of measure for judging if standards or uses are not attained	Measurement can be directly compared to WQO
Water Body-specific Information	Data collected in 1989-96.
Data used to assess water quality	Annual means for 8 of 8 water years exceed the WQO (0.03 mg/L annual mean)
Spatial representation	Targeted in water body. Locations unknown.
Temporal representation	Annual means for 8 of 8 water years
Data type	WQO and water column chemistry data are numeric values
Use of standard method	Yes
Potential Source(s) of Pollutant	Natural background, increased loading due to land disturbance, stormwater.
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	List

Region 6

Upper Truckee River (Tributary to Lake Tahoe)

Water Body	Upper Truckee River (Tributary to Lake Tahoe)
Stressor/Media/Beneficial Use	Pathogens/Water/Human Health
Data quality assessment. Extent to which data quality requirements met.	QA procedures used
Linkage between measurement endpoint and beneficial use or standard	Yes
Utility of measure for judging if standards or uses are not attained	Measurement can be directly compared to WQO
Water Body-specific Information	Data collected in 1999-2001
Data used to assess water quality	Violations of WQO observed in July, August and Sept. 2001, during grazing season. (WQO = 20/100ml log mean during any 30-day period or not more than 10% of samples to exceed 40/100 ml in any 30-day period)
Spatial representation	Violations of WQO observed at 2 stations in 2000 at end of grazing season.
Temporal representation	Violations of WQO observed in July, August and Sept. 2001, during grazing season.
Data type	WQO and fecal coliform counts are numeric information.
Use of standard method	Yes
Potential Source(s) of Pollutant	Waste from livestock grazing believed to be primary source.
Alternative Enforceable Program	USFS Grazing management plan
RWQCB Recommendation	List
SWRCB Staff Recommendation	List

Region 6

Big Meadow Creek (Tributary to Lake Tahoe)

Water Body	Big Meadow Creek (Tributary to Lake Tahoe)
Stressor/Media/Beneficial Use	Pathogens/Water/Human health
Data quality assessment. Extent to which data quality requirements met.	QA procedures used
Linkage between measurement endpoint and beneficial use or standard	Yes
Utility of measure for judging if standards or uses are not attained	Measurement can be directly compared to WQO
Water Body-specific Information	Data collected in 1999-2000.
Data used to assess water quality	Violations of standard (20/100ml log mean during any 30-day period or not more than 10% of samples to exceed 40/100 ml in any 30-day period) were common (50-70% of samples) during grazing season. They were less common (0-9% of samples) during non-grazing season.
Spatial representation	Targeted in water body. Locations unknown.
Temporal representation	Data collected in 1999-2000. WQO is log mean not to exceed 20/100 ml during any 30-day period, or not more than 10% of samples to exceed 40/100 ml in any 30-day period.
Data type	WQO and fecal coliform counts are numeric information.
Use of standard method	Yes
Potential Source(s) of Pollutant	Waste from livestock grazing believed to be primary source.
Alternative Enforceable Program	USFS Grazing management plan
RWQCB Recommendation	List
SWRCB Staff Recommendation	List

Region 6

Trout Creek (Tributary to Lake Tahoe)

Water Body	Trout Creek (Tributary to Lake Tahoe)
Stressor/Media/Beneficial Use	Phosphorus/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	QA procedures used
Linkage between measurement endpoint and beneficial use or standard	Yes
Utility of measure for judging if standards or uses are not attained	Measurement can be directly compared to WQO
Water Body-specific Information	Data collected between 1980-96.
Data used to assess water quality	Annual means for 14 of 14 water years exceed the WQO (0.015 mg/L annual mean)
Spatial representation	Targeted in water body. Locations unknown.
Temporal representation	Annual means for 14 of 14 water years
Data type	WQO and water column chemistry data are numeric values
Use of standard method	Yes
Potential Source(s) of Pollutant	Sources are erosion, stormwater, atmospheric, Deposition due to wetland and riparian disturbance.
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	List

Region 6

Trout Creek (Tributary to Lake Tahoe)

Water Body	Trout Creek (Tributary to Lake Tahoe)
Stressor/Media/Beneficial Use	Nitrogen/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	QA procedures used
Linkage between measurement endpoint and beneficial use or standard	Yes
Utility of measure for judging if standards or uses are not attained	Measurement can be directly compared to WQO
Water Body-specific Information	Data collected between 1989-96.
Data used to assess water quality	Annual means for 6 of 8 water years exceed the WQO (0.19 mg/L annual mean)
Spatial representation	Targeted in water body. Locations unknown.
Temporal representation	Annual means for 6 of 8 water years
Data type	WQO and water column chemistry data are numeric values
Use of standard method	Yes
Potential Source(s) of Pollutant	Source are natural as well as anthropogenic, including atmospheric deposition, stormwater, fertilizer use, livestock grazing, septic systems, wastewater disposal to land.
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	List

Region 6

Trout Creek (Tributary to Lake Tahoe)

Water Body	Trout Creek (Tributary to Lake Tahoe)
Stressor/Media/Beneficial Use	Iron (plant nutrient)/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	QA procedures used
Linkage between measurement endpoint and beneficial use or standard	Yes
Utility of measure for judging if standards or uses are not attained	Measurement can be directly compared to WQO
Water Body-specific Information	Data collected between 1989-96.
Data used to assess water quality	Annual means for 8 of 8 water years exceed the WQO (0.03 mg/L annual mean)
Spatial representation	Targeted in water body. Locations unknown.
Temporal representation	Annual means for 8 of 8 water years
Data type	WQO and water column chemistry data are numeric values
Use of standard method	Yes
Potential Source(s) of Pollutant	Natural loading has increased due to increased erosion and stormwater runoff due to land disturbance.
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	List

Region 6

Trout Creek (Tributary to Lake Tahoe)

Water Body	Trout Creek (Tributary to Lake Tahoe)
Stressor/Media/Beneficial Use	Pathogens/Water/Human health
Data quality assessment. Extent to which data quality requirements met.	QA procedures used
Linkage between measurement endpoint and beneficial use or standard	Yes
Utility of measure for judging if standards or uses are not attained	Measurement can be directly compared to WQO
Water Body-specific Information	Data collected between June-Sept, 2001
Data used to assess water quality	Data showed frequent violations of WQOs for fecal coliform bacteria.
Spatial representation	Targeted in water body. Locations unknown.
Temporal representation	Data collected between June-Sept, 2001
Data type	Fecal coliform counts are numeric information
Use of standard method	Yes
Potential Source(s) of Pollutant	Livestock wastes are primary source.
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	List

Region 6

Tallac Creek (Tributary To Lake Tahoe)

Water Body	Tallac Creek (Tributary To Lake Tahoe)
Stressor/Media/Beneficial Use	Pathogens/Water/Human Health
Data quality assessment. Extent to which data quality requirements met.	QA procedures used
Linkage between measurement endpoint and beneficial use or standard	Yes
Utility of measure for judging if standards or uses are not attained	Measurement can be directly compared to WQO
Water Body-specific Information	Data collected in 2001
Data used to assess water quality	Data collected in 2001 from 2 sampling stations showed 4 violations of the WQO at the downstream station.
Spatial representation	2 sampling stations
Temporal representation	Data collected in 2001
Data type	Fecal coliform counts are numeric information
Use of standard method	Yes
Potential Source(s) of Pollutant	Livestock wastes are primary source.
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	List

Region 6

Ward Creek (Tributary To Lake Tahoe)

Water Body	Ward Creek (Tributary To Lake Tahoe)
Stressor/Media/Beneficial Use	Nitrogen/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	QA procedures used
Linkage between measurement endpoint and beneficial use or standard	Yes
Utility of measure for judging if standards or uses are not attained	Measurement can be directly compared to WQO
Water Body-specific Information	Data collected between 1989-1996
Data used to assess water quality	Data exceeded WQO in 7 of 8 years
Spatial representation	Targeted in water body. Locations unknown.
Temporal representation	Data collected over 8 year period
Data type	Fecal coliform counts are numeric information
Use of standard method	Yes
Potential Source(s) of Pollutant	Natural (nitrogen fixation) and anthropogenic (atmospheric, deposition, erosion, stormwater)
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	List

Region 6

Ward Creek (Tributary To Lake Tahoe)

Water Body	Ward Creek (Tributary To Lake Tahoe)
Stressor/Media/Beneficial Use	Phosphorus/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	QA procedures used
Linkage between measurement endpoint and beneficial use or standard	Yes
Utility of measure for judging if standards or uses are not attained	Measurement can be directly compared to WQO
Water Body-specific Information	Data collected between 1980-96.
Data used to assess water quality	Annual means for 15 of 17 water years exceed the WQO (0.015 mg/L annual mean)
Spatial representation	Targeted in water body. Locations unknown.
Temporal representation	Annual means for 17 water years
Data type	WQO and water column chemistry data are numeric values
Use of standard method	Yes
Potential Source(s) of Pollutant	Erosion, stormwater, atmospheric deposition
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	List

Region 6

Ward Creek (Tributary to Lake Tahoe)

Water Body	Ward Creek (Tributary to Lake Tahoe)
Stressor/Media/Beneficial Use	Iron (plant nutrient)/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	QA procedures used
Linkage between measurement endpoint and beneficial use or standard	Yes
Utility of measure for judging if standards or uses are not attained	Measurement can be directly compared to WQO
Water Body-specific Information	Data collected between 1989-96.
Data used to assess water quality	Annual means for 8 of 8 water years exceed the WQO (0.03 mg/L annual mean)
Spatial representation	Targeted in water body. Locations unknown.
Temporal representation	Annual means for 8 water years
Data type	WQO and water column chemistry data are numeric values
Use of standard method	Yes
Potential Source(s) of Pollutant	Iron is naturally present in soil, but loading has increased due to erosion from land disturbance.
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	List

Region 6

West Fork Carson River, Headwaters to Woodfords

Water Body	West Fork Carson River, Headwaters to Woodfords
Stressor/Media/Beneficial Use	Phosphorus/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	QA procedures used
Linkage between measurement endpoint and beneficial use or standard	Yes
Utility of measure for judging if standards or uses are not attained	Measurement can be directly compared to WQO
Water Body-specific Information	Data collected between 1997-2001
Data used to assess water quality	The WQO is 0.02 mg/L (annual mean of monthly means). Data collected between 1997-2001 showed the following values: 1997=0.09 mg/L; 1998=0.03 mg/L; 1999=0.02 mg/L; 2000=0.03 mg/L
Spatial representation	Targeted in water body. Locations unknown.
Temporal representation	Annual mean of monthly means
Data type	WQO and water column chemistry data are numeric values
Use of standard method	Yes
Potential Source(s) of Pollutant	Sources are erosion, stormwater, atmospheric, deposition.
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	List

Region 6

West Fork Carson River, Headwaters to Woodfords

Water Body	West Fork Carson River, Headwaters to Woodfords
Stressor/Media/Beneficial Use	Nitrogen/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	QA procedures used
Linkage between measurement endpoint and beneficial use or standard	Yes
Utility of measure for judging if standards or uses are not attained	Measurement can be directly compared to WQO
Water Body-specific Information	Data collected between 1981-2000
Data used to assess water quality	Data exceeded the objectives for total Kjeldahl nitrogen (0.13 mg/L mean of monthly means), nitrate (0.02 mg/L mean of monthly means), and total nitrogen (0.15 mg/L mean of monthly means).
Spatial representation	Targeted in water body. Locations unknown.
Temporal representation	Mean of monthly means.-
Data type	WQO and water column chemistry data are numeric values
Use of standard method	Yes
Potential Source(s) of Pollutant	Sources may be septic systems, erosion, stormwater, historic livestock grazing, and natural nitrogen fixation.
Alternative Enforceable Program	None
RWQCB Recommendation	List
SWRCB Staff Recommendation	List

Region 6

West Fork Carson River, Headwaters to Woodfords

Water Body	West Fork Carson River, Headwaters to Woodfords
Stressor/Media/Beneficial Use	Percent sodium/Water/Crop protection
Data quality assessment. Extent to which data quality requirements met.	QA procedures used
Linkage between measurement endpoint and beneficial use or standard	Yes
Utility of measure for judging if standards or uses are not attained	Measurement can be directly compared to WQO
Water Body-specific Information	Data collected in 2000
Data used to assess water quality	The WQO is 20% expressed as a mean of monthly means. Data collected in 2000 showed a mean of monthly means of 21.7%.
Spatial representation	Targeted in water body. Locations unknown.
Temporal representation	Mean of monthly means.
Data type	WQO and water column chemistry data are numeric values
Use of standard method	Yes
Potential Source(s) of Pollutant	Road salt, septic systems, natural
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	List

Region 6

West Fork Carson River, Woodfords to Paynesville

Water Body	West Fork Carson River, Woodfords to Paynesville
Stressor/Media/Beneficial Use	Percent sodium
Data quality assessment. Extent to which data quality requirements met.	QA procedures used
Linkage between measurement endpoint and beneficial use or standard	Yes
Utility of measure for judging if standards or uses are not attained	Measurement can be directly compared to WQO
Water Body-specific Information	Data collected in 2000
Data used to assess water quality	The WQO is 20% expressed as a mean of monthly means. Data collected in 2000 showed a mean of monthly means of 23%.
Spatial representation	Targeted in water body. Locations unknown.
Temporal representation	Mean of monthly means.
Data type	WQO and water column chemistry data are numeric values
Use of standard method	Yes
Potential Source(s) of Pollutant	Road salt, septic systems, natural
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	List

Region 6

West Fork Carson River, Woodfords to Paynesville

Water Body	West Fork Carson River, Woodfords to Paynesville
Stressor/Media/Beneficial Use	Nitrogen
Data quality assessment. Extent to which data quality requirements met.	QA procedures used
Linkage between measurement endpoint and beneficial use or standard	Yes
Utility of measure for judging if standards or uses are not attained	Measurement can be directly compared to WQO
Water Body-specific Information	Data collected between 1981-2000
Data used to assess water quality	Data exceeded the objectives for total nitrogen (0.25 mg/L mean of monthly means), and nitrate (0.03 mg/L mean of monthly means)
Spatial representation	Targeted in water body. Locations unknown.
Temporal representation	Mean of monthly means
Data type	WQO and water column chemistry data are numeric values
Use of standard method	Yes
Potential Source(s) of Pollutant	Pasture runoff, stormwater, erosion, atmospheric deposition
Alternative Enforceable Program	None
RWQCB Recommendation	List
SWRCB Staff Recommendation	List

Region 6

West Fork Carson River, Woodfords to Paynesville

Water Body	West Fork Carson River, Woodfords to Paynesville
Stressor/Media/Beneficial Use	Pathogens/Water/Human health
Data quality assessment. Extent to which data quality requirements met.	QA procedures used
Linkage between measurement endpoint and beneficial use or standard	Yes
Utility of measure for judging if standards or uses are not attained	Measurement can be directly compared to WQO
Water Body-specific Information	Data collected in 2000-2001
Data used to assess water quality	Data indicated violation of the fecal coliform WQO in four of ten months sampled. Numbers of total and fecal coliform bacteria were higher during the summer grazing season.
Spatial representation	Targeted in water body. Locations unknown.
Temporal representation	Ten months sampled.
Data type	Fecal coliform counts are numeric information
Use of standard method	Yes
Potential Source(s) of Pollutant	Partially natural sources (i.e. wildlife). Primary source is believed to be livestock waste.
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	List

Region 6

Monitor Creek

Water Body	Monitor Creek
Stressor/Media/Beneficial Use	Sulfate./Water/Drinking
Data quality assessment. Extent to which data quality requirements met.	Unknown
Linkage between measurement endpoint and beneficial use or standard	Yes
Utility of measure for judging if standards or uses are not attained	Measurement can be directly compared to WQO
Water Body-specific Information	Data collected in 1990-1991
Data used to assess water quality	Data indicated an annual mean that exceeded 100mg/L with maximum values of 700- 800 mg/L. The WQO for sulfate is 4.0 mg/L as an annual mean.
Spatial representation	Targeted in water body. Locations unknown.
Temporal representation	Annual mean
Data type	WQO and water column chemistry data are numeric values
Use of standard method	Yes
Potential Source(s) of Pollutant	Source is acid mine drainage.
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	List

Region 6

Monitor Creek

Water Body	Monitor Creek
Stressor/Media/Beneficial Use	TDS/Water/Drinking
Data quality assessment. Extent to which data quality requirements met.	Unknown
Linkage between measurement endpoint and beneficial use or standard	Yes
Utility of measure for judging if standards or uses are not attained	Measurement can be directly compared to WQO
Water Body-specific Information	Data collected in 1990-1991
Data used to assess water quality	Data indicated an annual mean that exceeded 500mg/L at 4 of 7 sampling locations, with maximum values of 1000 mg/L at locations below mine tailings. The WQO for TDS is 80 mg/L as an annual mean.
Spatial representation	Targeted in water body. Locations unknown.
Temporal representation	Annual mean
Data type	WQO and water column chemistry data are numeric values
Use of standard method	Yes
Potential Source(s) of Pollutant	Source is acid mine drainage.
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	List

Region 6

Indian Creek

Water Body	Indian Creek
Stressor/Media/Beneficial Use	Pathogens/Water/Human health
Data quality assessment. Extent to which data quality requirements met.	QA procedures used
Linkage between measurement endpoint and beneficial use or standard	Yes
Utility of measure for judging if standards or uses are not attained	Measurement can be directly compared to WQO
Water Body-specific Information	Samples collected between June 2000- May 2001
Data used to assess water quality	13 of 30 samples (43%) exceeded the WQO. The WQO requires that no more than 10% of samples exceed 40 colonies/100 ml.
Spatial representation	Targeted in water body. Locations unknown.
Temporal representation	June 2000- May 2001
Data type	WQO and water column chemistry data are numeric values
Use of standard method	Yes
Potential Source(s) of Pollutant	Fecal coliform counts were highest during grazing season.
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	List

Region 6

East Walker River above Bridgeport Reservoir

Water Body	East Walker River above Bridgeport Reservoir
Stressor/Media/Beneficial Use	Pathogens/Water/Human health
Data quality assessment. Extent to which data quality requirements met.	QA procedures used
Linkage between measurement endpoint and beneficial use or standard	Yes
Utility of measure for judging if standards or uses are not attained	Measurement can be directly compared to WQO
Water Body-specific Information	Samples collected in 2000-2001
Data used to assess water quality	At least 8 of 17 samples (47%) exceeded 40 colonies/100 ml.. The WQO requires that no more than 10% of samples exceed 40 colonies/100 ml.
Spatial representation	Targeted in water body. Locations unknown.
Temporal representation	Samples collected 2000-2001
Data type	Fecal coliform counts are numeric information
Use of standard method	Yes
Potential Source(s) of Pollutant	Fecal coliform counts were highest during grazing season.
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	List

Region 6

East Walker River below Bridgeport Reservoir

Water Body	East Walker River below Bridgeport Reservoir
Stressor/Media/Beneficial Use	Nitrogen/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	QA procedures used
Linkage between measurement endpoint and beneficial use or standard	Yes
Utility of measure for judging if standards or uses are not attained	Measurement can be directly compared to WQO
Water Body-specific Information	Samples collected from April 2000 - February 2001 by USGS.
Data used to assess water quality	The mean of 9 samples was 0.64 mg/L. This exceeds the WQO (0.50 mg/L annual mean). Three of 9 samples (33%) exceeded the 90th percentile value of 0.80 mg/L. The WQO requires that no more than 10% of samples exceed the 90th percentile value.
Spatial representation	Targeted in water body. Locations unknown.
Temporal representation	Samples collected April 2000 - February 2001
Data type	WQO and water column chemistry data are numeric values
Use of standard method	Yes
Potential Source(s) of Pollutant	Reservoir releases, stormwater, erosion
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	List

Region 6

East Walker River below Bridgeport Reservoir

Water Body	East Walker River below Bridgeport Reservoir
Stressor/Media/Beneficial Use	Phosphorus/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	QA procedures used
Linkage between measurement endpoint and beneficial use or standard	Yes
Utility of measure for judging if standards or uses are not attained	Measurement can be directly compared to WQO
Water Body-specific Information	Samples collected by USGS between April 2000-February 2001.
Data used to assess water quality	The mean of 11 samples was 0.083 mg/L. This exceeds the WQO of 0.06 mg/L (annual mean). Four of nine samples exceeded the 90th percentile value of 0.10 mg/L.
Spatial representation	Targeted in water body. Locations unknown.
Temporal representation	Annual mean
Data type	WQO and water column chemistry data are numeric values
Use of standard method	Yes
Potential Source(s) of Pollutant	Release from Bridgeport Reservoir
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	List

Region 6

Virginia Creek

Water Body	Virginia Creek
Stressor/Media/Beneficial Use	Pathogens/Water/Human health
Data quality assessment. Extent to which data quality requirements met.	QA procedures used
Linkage between measurement endpoint and beneficial use or standard	Yes
Utility of measure for judging if standards or uses are not attained	Measurement can be directly compared to WQO
Water Body-specific Information	Data collected between April 2000- June 2001
Data used to assess water quality	1 of 15 fecal coliform samples (7%) exceeded the WQO of 40/100 ml. WQO requires that no more than 10% of samples collected in any 30-day period shall exceed 40/100 ml. Standard is being met.
Spatial representation	Targeted in water body. Locations unknown.
Temporal representation	No more than 10% of samples collected in any 30-day period shall exceed 40/100 ml.
Data type	Fecal coliform counts are numeric information
Use of standard method	Yes
Potential Source(s) of Pollutant	
Alternative Enforceable Program	
RWQCB Recommendation	Do not list
SWRCB Staff Recommendation	Do not list

Region 6

Robinson Creek

Water Body	Robinson Creek
Stressor/Media/Beneficial Use	Pathogens/Water/Human health
Data quality assessment. Extent to which data quality requirements met.	QA procedures used
Linkage between measurement endpoint and beneficial use or standard	Yes
Utility of measure for judging if standards or uses are not attained	Measurement can be directly compared to WQO
Water Body-specific Information	Data collected between April 2000- June 2001.
Data used to assess water quality	At least 5 of 6 fecal coliform samples (83%) exceeded the WQO (no more than 10% of samples collected in any 30-day period shall exceed 40/100 ml)..
Spatial representation	Targeted in water body. Locations unknown.
Temporal representation	No more than 10% of samples collected in any 30-day period shall exceed 40/100 ml.
Data type	Fecal coliform counts are numeric information
Use of standard method	Yes
Potential Source(s) of Pollutant	High coliform counts coincide with months when livestock are present.
Alternative Enforceable Program	
RWQCB Recommendation	List
SWRCB Staff Recommendation	List

Region 6

Mojave River between Upper and Lower Narrows

Water Body	Mojave River between Upper and Lower Narrows
Stressor/Media/Beneficial Use	TDS/Water/Drinking
Data quality assessment. Extent to which data quality requirements met.	QA procedures used
Linkage between measurement endpoint and beneficial use or standard	Yes
Utility of measure for judging if standards or uses are not attained	Measurement can be directly compared to WQO
Water Body-specific Information	Samples collected between March 2000- June 2001.
Data used to assess water quality	5 of 5 samples collected exceeded the TDS MCL of 500 mg/L
Spatial representation	Targeted in water body. Locations unknown.
Temporal representation	Samples collected between March 2000 - June 2001.
Data type	WQO and water column chemistry data are numeric values
Use of standard method	Yes
Potential Source(s) of Pollutant	Natural (geothermal), imported water, wastewater
Alternative Enforceable Program	Unknown
RWQCB Recommendation	Delist. RWQCB staff recommended listing. Board removed listing.
SWRCB Staff Recommendation	Delist

Region 6

Mojave River between Upper and Lower Narrows

Water Body	Mojave River between Upper and Lower Narrows
Stressor/Media/Beneficial Use	Sulfate/Water/Drinking
Data quality assessment. Extent to which data quality requirements met.	QA procedures used
Linkage between measurement endpoint and beneficial use or standard	Yes
Utility of measure for judging if standards or uses are not attained	Measurement can be directly compared to WQO
Water Body-specific Information	Samples collected between March 2000-June 2001.
Data used to assess water quality	4 of 5 (80%) samples exceeded the 90th percentile value of 100 mg/L. No more than 10% of samples are to exceed the 90th percentile value.
Spatial representation	Targeted in water body. Locations unknown.
Temporal representation	Samples collected between March 2000-June 2001.
Data type	WQO and water column chemistry data are numeric values
Use of standard method	Yes
Potential Source(s) of Pollutant	Natural (geothermal), imported water, wastewater
Alternative Enforceable Program	
RWQCB Recommendation	Delist. RWQCB staff recommended listing. Board removed listing.
SWRCB Staff Recommendation	Delist

Region 6

Mojave River between Upper and Lower Narrows

Water Body	Mojave River between Upper and Lower Narrows
Stressor/Media/Beneficial Use	Chloride/Water/Aquatic life
Data quality assessment. Extent to which data quality requirements met.	QA procedures used
Linkage between measurement endpoint and beneficial use or standard	Yes
Utility of measure for judging if standards or uses are not attained	Measurement can be directly compared to WQO
Water Body-specific Information	Samples collected between March 2000-June 2001.
Data used to assess water quality	5 of 5 samples exceeded the WQOs (75 mg/L annual mean; 100 mg/L 90th percentile value)
Spatial representation	Targeted in water body. Locations unknown.
Temporal representation	Samples collected between March 2000-June 2001.
Data type	WQO and water column chemistry data are numeric values
Use of standard method	Yes
Potential Source(s) of Pollutant	Natural (geothermal), imported water, wastewater
Alternative Enforceable Program	
RWQCB Recommendation	Delist. RWQCB staff recommended listing. Board removed listing.
SWRCB Staff Recommendation	Delist

Region 6

Donner Lake

Water Body	Donner Lake
Stressor/Media/Beneficial Use	Priority Organics/Water/Human health
Data quality assessment. Extent to which data quality requirements met.	TSMP uses QAPP
Linkage between measurement endpoint and beneficial use or standard	Yes
Utility of measure for judging if standards or uses are not attained	Measurement can be directly compared to MTRL
Water Body-specific Information	Fish collected in Lake. Most recent TSMP data from 1991, 1993.
Data used to assess water quality	Two composite fish tissue samples (1991, 1993) showed PCB concentrations of 165 ppb and 102 ppb. The MTRL for PCBs is 5.3 ppb. MTRL for chlordane is 8.0 ppb. One fish tissue sample from 1991 showed a chlordane concentration of 26.2 ppb.
Spatial representation	Two composite fish tissue samples of 6-7 fish each.
Temporal representation	Data collected at various times since 1978. Most recently in 1991 and 1993.
Data type	Numerical fish tissue data
Use of standard method	Yes
Potential Source(s) of Pollutant	Unknown
Alternative Enforceable Program	
RWQCB Recommendation	Delist based on limited data used to list. No OEHHA advisory in effect. No recent data available.
SWRCB Staff Recommendation	Maintain listing. TSMP data is sufficient (two composite samples of 13 fish), and exceedances of WQO are large enough to maintain listing. PCB concentrations were 165 and 102 ppb. (MTRL is 5.3 ppb). Chlordane result was 26.2 ppb. MTLR is 8.0 ppb. RB may request TSMP to schedule monitoring before next listing cycle.

Region 6

Stampede Reservoir

Water Body	Stampede Reservoir
Stressor/Media/Beneficial Use	Pesticides (lindane)/Tissue/Human health
Data quality assessment. Extent to which data quality requirements met.	NA
Linkage between measurement endpoint and beneficial use or standard	NA
Utility of measure for judging if standards or uses are not attained	NA
Water Body-specific Information	NA
Data used to assess water quality	NA
Spatial representation	NA
Temporal representation	NA
Data type	NA
Use of standard method	NA
Potential Source(s) of Pollutant	NA
Alternative Enforceable Program	NA
RWQCB Recommendation	Delist because original listing was based on limited data. Only one data point was available during 1989 listing. WQO for lindane is 2.5 ug/kg and original sample result was 2.6 ug/kg. Place on Watch List for additional monitoring.
SWRCB Staff Recommendation	Delist because original listing was based on limited data. Only one data point was available during 1989 listing. WQO for lindane is 2.5 ug/kg and original sample result was 2.6 ug/kg. Place on Watch List for additional monitoring.

Region 6

Wendel Hot Springs, Amedee Hot Springs, Hot Creek, Fales Hot

Water Body	Wendel Hot Springs, Amedee Hot Springs, Hot Creek, Fales Hot Springs, Little Hot Creek, Little Alkali Lake, Deep Springs Lake, Keogh Hot Springs, Amaragosa River
Stressor/Media/Beneficial Use	Salinity, metals, arsenic
Data quality assessment. Extent to which data quality requirements met.	NA
Linkage between measurement endpoint and beneficial use or standard	NA
Utility of measure for judging if standards or uses are not attained	NA
Water Body-specific Information	NA
Data used to assess water quality	NA
Spatial representation	NA
Temporal representation	NA
Data type	NA
Use of standard method	NA
Potential Source(s) of Pollutant	Natural causes
Alternative Enforceable Program	
RWQCB Recommendation	Delist due to natural causes of impairments. Basin Plan amendments for 9 waters to remove MUN use have been approved by SWRCB. Use attainability analysis has been prepared by RWQCB.
SWRCB Staff Recommendation	Delist due to natural causes of impairments. Basin Plan amendments for 9 waters to remove MUN use have been approved by SWRCB. Use attainability analysis has been prepared by RWQCB.

Region 6

Upper Alkali Lake

Water Body	Upper Alkali Lake
Stressor/Media/Beneficial Use	Salinity, TDS, Chlorides/Water/Drinking
Data quality assessment. Extent to which data quality requirements met.	NA
Linkage between measurement endpoint and beneficial use or standard	NA
Utility of measure for judging if standards or uses are not attained	NA
Water Body-specific Information	NA
Data used to assess water quality	NA
Spatial representation	NA
Temporal representation	NA
Data type	NA
Use of standard method	NA
Potential Source(s) of Pollutant	Input from geothermal springs and concentration by evaporation over geologic timescale.
Alternative Enforceable Program	
RWQCB Recommendation	Delist because exceedence of standards is due to natural causes. TMDL is not applicable.
SWRCB Staff Recommendation	Delist because exceedence of standards is due to natural causes. TMDL is not applicable.

Region 6

Middle Alkali Lake

Water Body	Middle Alkali Lake
Stressor/Media/Beneficial Use	Salinity, TDS, Chlorides/Water/Drinking
Data quality assessment. Extent to which data quality requirements met.	NA
Linkage between measurement endpoint and beneficial use or standard	NA
Utility of measure for judging if standards or uses are not attained	NA
Water Body-specific Information	NA
Data used to assess water quality	NA
Spatial representation	NA
Temporal representation	NA
Data type	NA
Use of standard method	NA
Potential Source(s) of Pollutant	Input from geothermal springs and concentration by evaporation over geologic timescale.
Alternative Enforceable Program	
RWQCB Recommendation	Delist because exceedence of standards is due to natural causes. TMDL is not applicable.
SWRCB Staff Recommendation	Delist because exceedence of standards is due to natural causes. TMDL is not applicable.

Region 6

Lower Alkali Lake

Water Body	Lower Alkali Lake
Stressor/Media/Beneficial Use	Salinity, TDS, Chlorides/Water/Drinking
Data quality assessment. Extent to which data quality requirements met.	NA
Linkage between measurement endpoint and beneficial use or standard	NA
Utility of measure for judging if standards or uses are not attained	NA
Water Body-specific Information	NA
Data used to assess water quality	NA
Spatial representation	NA
Temporal representation	NA
Data type	NA
Use of standard method	NA
Potential Source(s) of Pollutant	Input from geothermal springs and concentration by evaporation over geologic timescale.
Alternative Enforceable Program	
RWQCB Recommendation	Delist because exceedence of standards is due to natural causes. TMDL is not applicable.
SWRCB Staff Recommendation	Delist because exceedence of standards is due to natural causes. TMDL is not applicable.

Region 6

Top Spring

Water Body	Top Spring
Stressor/Media/Beneficial Use	Radiation/Water/Human health
Data quality assessment. Extent to which data quality requirements met.	NA
Linkage between measurement endpoint and beneficial use or standard	NA
Utility of measure for judging if standards or uses are not attained	NA
Water Body-specific Information	NA
Data used to assess water quality	NA
Spatial representation	NA
Temporal representation	NA
Data type	NA
Use of standard method	NA
Potential Source(s) of Pollutant	<i>Natural source of radioactivity. Spring is contained within a pipe and is not used as a water supply.</i>
Alternative Enforceable Program	
RWQCB Recommendation	Delist because exceedence of standards is due to natural causes. TMDL is not applicable.
SWRCB Staff Recommendation	Delist because exceedence of standards is due to natural causes. TMDL is not applicable.

Region 6

Snow Creek

Water Body	Snow Creek
Stressor/Media/Beneficial Use	Habitat Alterations/Habitat/Aquatic life
Data quality assessment. Extent to which data quality requirements met.	NA
Linkage between measurement endpoint and beneficial use or standard	NA
Utility of measure for judging if standards or uses are not attained	NA
Water Body-specific Information	NA
Data used to assess water quality	NA
Spatial representation	NA
Temporal representation	NA
Data type	NA
Use of standard method	NA
Potential Source(s) of Pollutant	NA
Alternative Enforceable Program	
RWQCB Recommendation	Delist due to implementation of a wetland/riparian restoration program that included removal of fill material, restoration of the stream channel, revegetation, and installation of culverts to allow fish passage and reduce highway flooding.
SWRCB Staff Recommendation	Delist due to implementation of a wetland/riparian restoration program that included removal of fill material, restoration of the stream channel, revegetation, and installation of culverts to allow fish passage and reduce highway flooding.

Region 6

East Fork Carson River

Water Body	East Fork Carson River
Stressor/Media/Beneficial Use	Nutrients/Water/Aquatic life
Data quality assessment. Extent to which data quality requirements met.	QA procedures used for pH analysis
Linkage between measurement endpoint and beneficial use or standard	Nutrients can be linked to Aquatic Life.
Utility of measure for judging if standards or uses are not attained	Increases in pH can results from algal blooms, which result from high nutrient levels
Water Body-specific Information	pH data collected in Nevada, 12-13 miles downstream of state boundary.
Data used to assess water quality	24 laboratory measurements of pH taken between 1997-2001 showed no violations of the WQO for pH. 5 of 26 field measurements were slightly outside the WQO for pH. These deviations are not enough to affect beneficial uses.
Spatial representation	pH data collected in Nevada, 12-13 miles downstream of state boundary.
Temporal representation	24 laboratory measurements of pH taken between 1997-2001.
Data type	pH values are numeric
Use of standard method	yes for pH
Potential Source(s) of Pollutant	NA
Alternative Enforceable Program	NA
RWQCB Recommendation	Delist based on faulty data used in original listing, and current data that shows that no impairment of beneficial uses.
SWRCB Staff Recommendation	Delist based on faulty data used in original listing, and current data that shows that no impairment of beneficial uses.

Region 6

East Walker River

Water Body	East Walker River
Stressor/Media/Beneficial Use	Metals/Tissue/Human health
Data quality assessment. Extent to which data quality requirements met.	NA
Linkage between measurement endpoint and beneficial use or standard	NA
Utility of measure for judging if standards or uses are not attained	NA
Water Body-specific Information	NA
Data used to assess water quality	NA
Spatial representation	NA
Temporal representation	NA
Data type	NA
Use of standard method	NA
Potential Source(s) of Pollutant	NA
Alternative Enforceable Program	NA
RWQCB Recommendation	Delist because original listing was based on inappropriate use of EDLs as WQOs. EDLs are Elevated Data Levels that are the 85th and 95th percentiles of all data collected, and are not WQOs.
SWRCB Staff Recommendation	Delist because original listing was based on inappropriate use of EDLs as WQOs. EDLs are Elevated Data Levels that are the 85th and 95th percentiles of all data collected, and are not WQOs.

Region 6

Mono Lake

Water Body	Mono Lake
Stressor/Media/Beneficial Use	Salinity, TDS, Chlorides/Water/Aquatic life, Wildlife
Data quality assessment. Extent to which data quality requirements met.	NA
Linkage between measurement endpoint and beneficial use or standard	NA
Utility of measure for judging if standards or uses are not attained	NA
Water Body-specific Information	NA
Data used to assess water quality	NA
Spatial representation	NA
Temporal representation	NA
Data type	NA
Use of standard method	NA
Potential Source(s) of Pollutant	Water diversion. Natural causes.
Alternative Enforceable Program	SWRCB WR Decision 1631
RWQCB Recommendation	Delist because high concentrations of salts and trace elements are from natural sources. SWRCB Decision 1631 establishes conditions to control lake level and salt concentrations.
SWRCB Staff Recommendation	Delist because an alternative enforceable program is in place. SWRCB Decision 1631 establishes conditions to control lake level and salt concentrations. Salt concentrations are not solely due to natural causes. Fifty years of water diversions caused a 45 foot drop in lake level, which caused increases in salt concentrations above those caused by natural sources. SWRCB Decision 1631 established a restored lake level of 6391 feet to meet water quality standards.

Region 6

Grant Lake

Water Body	Grant Lake
Stressor/Media/Beneficial Use	Arsenic/Water, Tissue/Drinking, Human health
Data quality assessment. Extent to which data quality requirements met.	NA
Linkage between measurement endpoint and beneficial use or standard	NA
Utility of measure for judging if standards or uses are not attained	NA
Water Body-specific Information	NA
Data used to assess water quality	NA
Spatial representation	NA
Temporal representation	NA
Data type	NA
Use of standard method	NA
Potential Source(s) of Pollutant	Source is of volcanic origin, with no sources of industrial or agricultural discharges.
Alternative Enforceable Program	
RWQCB Recommendation	Delist due to natural causes. Beneficial uses are drinking water supply for City of Los Angeles and fish consumption. Water is blended in order to meet current drinking water standard at the tap. 1991 TSMP data showed no exceedences of fish consumption criteria.
SWRCB Staff Recommendation	Delist due to natural causes. Beneficial uses are drinking water supply for City of Los Angeles and fish consumption. Water is blended in order to meet current drinking water standard at the tap. 1991 TSMP data showed no exceedences of fish consumption criteria.

Region 6

Big Springs

Water Body	Big Springs
Stressor/Media/Beneficial Use	Arsenic/Water/Drinking
Data quality assessment. Extent to which data quality requirements met.	NA
Linkage between measurement endpoint and beneficial use or standard	NA
Utility of measure for judging if standards or uses are not attained	NA
Water Body-specific Information	NA
Data used to assess water quality	NA
Spatial representation	NA
Temporal representation	NA
Data type	NA
Use of standard method	NA
Potential Source(s) of Pollutant	Source is of volcanic origin, with no sources of industrial or agricultural discharges.
Alternative Enforceable Program	NA
RWQCB Recommendation	Delist due to natural causes. Beneficial use is drinking water supply for City of Los Angeles. Arsenic is removed from this water supply before delivery for use.
SWRCB Staff Recommendation	Delist due to natural causes. Beneficial use is drinking water supply for City of Los Angeles. Arsenic is removed from this water supply before delivery for use.

Region 6

Crowley Lake

Water Body	Crowley Lake
Stressor/Media/Beneficial Use	Arsenic/Water/Drinking
Data quality assessment. Extent to which data quality requirements met.	NA
Linkage between measurement endpoint and beneficial use or standard	NA
Utility of measure for judging if standards or uses are not attained	NA
Water Body-specific Information	NA
Data used to assess water quality	NA
Spatial representation	NA
Temporal representation	NA
Data type	NA
Use of standard method	NA
Potential Source(s) of Pollutant	Source is of volcanic origin, with no sources of industrial or agricultural discharges.
Alternative Enforceable Program	NA
RWQCB Recommendation	Delist due to natural causes. Beneficial use is drinking water supply for City of Los Angeles. Arsenic is removed from this water supply before delivery for use.
SWRCB Staff Recommendation	Delist due to natural causes. Beneficial use is drinking water supply for City of Los Angeles. Arsenic is removed from this water supply before delivery for use.

Region 6

Tinemaha Reservoir

Water Body	Tinemaha Reservoir
Stressor/Media/Beneficial Use	Arsenic/Water/Drinking
Data quality assessment. Extent to which data quality requirements met.	NA
Linkage between measurement endpoint and beneficial use or standard	NA
Utility of measure for judging if standards or uses are not attained	NA
Water Body-specific Information	NA
Data used to assess water quality	NA
Spatial representation	NA
Temporal representation	NA
Data type	NA
Use of standard method	NA
Potential Source(s) of Pollutant	Source is of volcanic origin, with no sources of industrial or agricultural discharges.
Alternative Enforceable Program	NA
RWQCB Recommendation	Delist due to natural causes. Beneficial use is drinking water supply for City of Los Angeles. Arsenic is removed from this water supply before delivery for use.
SWRCB Staff Recommendation	Delist due to natural causes. Beneficial use is drinking water supply for City of Los Angeles. Arsenic is removed from this water supply before delivery for use.

Region 6

Owens River

Water Body	Owens River
Stressor/Media/Beneficial Use	Arsenic/Water/Drinking
Data quality assessment. Extent to which data quality requirements met.	NA
Linkage between measurement endpoint and beneficial use or standard	NA
Utility of measure for judging if standards or uses are not attained	NA
Water Body-specific Information	NA
Data used to assess water quality	NA
Spatial representation	NA
Temporal representation	NA
Data type	NA
Use of standard method	NA
Potential Source(s) of Pollutant	Source is of volcanic origin, with no sources of industrial or agricultural discharges.
Alternative Enforceable Program	NA
RWQCB Recommendation	Delist due to natural causes. Beneficial use is drinking water supply for City of Los Angeles. Arsenic is removed from this water supply before delivery for use.
SWRCB Staff Recommendation	Delist due to natural causes. Beneficial use is drinking water supply for City of Los Angeles. Arsenic is removed from this water supply before delivery for use.

Region 6

Owens Lake

Water Body	Owens Lake
Stressor/Media/Beneficial Use	Salinity, TDS, Chlorides/Water/Drinking, Aquatic life
Data quality assessment. Extent to which data quality requirements met.	NA
Linkage between measurement endpoint and beneficial use or standard	NA
Utility of measure for judging if standards or uses are not attained	NA
Water Body-specific Information	NA
Data used to assess water quality	NA
Spatial representation	NA
Temporal representation	NA
Data type	NA
Use of standard method	NA
Potential Source(s) of Pollutant	Owens Lake has accumulated salts and trace elements from volcanic and geothermal sources and from concentration caused by water diversions in a closed basin over geologic time.
Alternative Enforceable Program	Windblown dust control agreement by LADWP and Great Basin Unified Air Pollution Control District.
RWQCB Recommendation	Delist due to natural sources of salts and trace elements. Except for a few inches of water used to wet the dry lakebed to reduce particulate air pollution, no water remains. Not a drinking water supply.
SWRCB Staff Recommendation	Delist due to natural sources of salts and trace elements. Except for a few inches of water used to wet the dry lakebed to reduce particulate air pollution, no water remains. Not a drinking water supply.

Region 6

Hot Creek

Water Body	Hot Creek
Stressor/Media/Beneficial Use	Metals/Water/Drinking
Data quality assessment. Extent to which data quality requirements met.	NA
Linkage between measurement endpoint and beneficial use or standard	NA
Utility of measure for judging if standards or uses are not attained	NA
Water Body-specific Information	NA
Data used to assess water quality	NA
Spatial representation	NA
Temporal representation	NA
Data type	NA
Use of standard method	NA
Potential Source(s) of Pollutant	Metals (arsenic and others) come from natural geothermal and volcanic sources.
Alternative Enforceable Program	NA
RWQCB Recommendation	Delist due to natural sources of metals.
SWRCB Staff Recommendation	Delist due to natural sources of metals.

Region 6

Mojave River

Water Body	Mojave River
Stressor/Media/Beneficial Use	Priority Organics/Water/Human health
Data quality assessment. Extent to which data quality requirements met.	QA procedures used
Linkage between measurement endpoint and beneficial use or standard	NA
Utility of measure for judging if standards or uses are not attained	NA
Water Body-specific Information	NA
Data used to assess water quality	NA
Spatial representation	NA
Temporal representation	NA
Data type	NA
Use of standard method	NA
Potential Source(s) of Pollutant	"Barstow Slug" of subsurface pollutants
Alternative Enforceable Program	No
RWQCB Recommendation	Delist because pollutants were present in groundwater portion of this intermittent stream, and listings are limited to surface waters. Also a 1991 USGS study showed that priority pollutants are no longer present in concentrations of concern in the area affected by the groundwater plume.
SWRCB Staff Recommendation	Delist because pollutants were present in groundwater portion of this intermittent stream, and listings are limited to surface waters. Also a 1991 USGS study showed that priority pollutants are no longer present in concentrations of concern in the area affected by the groundwater plume.

Region 6

Searles Lake

Water Body	Searles Lake
Stressor/Media/Beneficial Use	Salinity, TDS, Chlorides/Water/Drinking
Data quality assessment. Extent to which data quality requirements met.	NA
Linkage between measurement endpoint and beneficial use or standard	NA
Utility of measure for judging if standards or uses are not attained	NA
Water Body-specific Information	NA
Data used to assess water quality	NA
Spatial representation	NA
Temporal representation	NA
Data type	NA
Use of standard method	NA
Potential Source(s) of Pollutant	Some natural sources, possible discharges of brine from IMCC.
Alternative Enforceable Program	
RWQCB Recommendation	Delist because impairment resulting from salinity/TDS/chlorides is from natural sources, and the lake is supporting aquatic life uses to the extent possible under extreme environmental conditions.
SWRCB Staff Recommendation	Insufficient information to Delist. No monitoring data provided to show that discharges of brine from IMCC do not elevate brine concentration above already high natural levels. Factsheet states that, Most of the surface water currently on the lakebed is brine extracted from beneath the lakebed by IMCC and returned to the lakebed following the extraction of minerals. Insufficient information to show that waterfowl deaths are caused solely by petroleum hydrocarbons and not affected by elevated brine levels.

Region 6

Eagle Lake

Water Body	Eagle Lake
Stressor/Media/Beneficial Use	Nitrogen, Phosphorus
Data quality assessment. Extent to which data quality requirements met.	NA
Linkage between measurement endpoint and beneficial use or standard	NA
Utility of measure for judging if standards or uses are not attained	NA
Water Body-specific Information	NA
Data used to assess water quality	NA
Spatial representation	NA
Temporal representation	NA
Data type	NA
Use of standard method	NA
Potential Source(s) of Pollutant	NA
Alternative Enforceable Program	NA
RWQCB Recommendation	Change listing from low dissolved oxygen to separate listings for nitrogen and phosphorus.
SWRCB Staff Recommendation	Change listing from low dissolved oxygen to separate listings for nitrogen and phosphorus.

Region 6

Lake Tahoe

Water Body	Lake Tahoe
Stressor/Media/Beneficial Use	Nitrogen, Phosphorus/Water/Aquatic life
Data quality assessment. Extent to which data quality requirements met.	NA
Linkage between measurement endpoint and beneficial use or standard	NA
Utility of measure for judging if standards or uses are not attained	NA
Water Body-specific Information	NA
Data used to assess water quality	NA
Spatial representation	NA
Temporal representation	NA
Data type	NA
Use of standard method	NA
Potential Source(s) of Pollutant	Stormwater runoff, erosion, atmospheric deposition
Alternative Enforceable Program	NA
RWQCB Recommendation	Clarify previous listing for nutrients. Replace nutrient listing with separate listings for nitrogen and phosphorus.
SWRCB Staff Recommendation	Clarify previous listing for nutrients. Replace nutrient listing with separate listings for nitrogen and phosphorus.

Region 6

Monitor Creek

Water Body	Monitor Creek
Stressor/Media/Beneficial Use	Iron, silver, aluminum, manganese/Water/Aquatic life
Data quality assessment. Extent to which data quality requirements met.	NA
Linkage between measurement endpoint and beneficial use or standard	NA
Utility of measure for judging if standards or uses are not attained	NA
Water Body-specific Information	NA
Data used to assess water quality	NA
Spatial representation	NA
Temporal representation	NA
Data type	NA
Use of standard method	NA
Potential Source(s) of Pollutant	Acid mine drainage. Specific metals identified during a Section 205(j)-funded study of the chemistry and biology of Monitor Creek.
Alternative Enforceable Program	NA
RWQCB Recommendation	Clarify metals listing. Replace metals listing with listings for 4 specific metals- iron, silver, aluminum, manganese.
SWRCB Staff Recommendation	Clarify metals listing. Replace metals listing with listings for 4 specific metals - iron, silver, aluminum, manganese.

Water Bodies Proposed for the Watch List by Region 6

Cold Stream	Sediment
Donner Creek	Sediment
Donner Lake	Boat Fuel Constituents Pathogens
Eagle Lake	Mercury
Emerson Creek	Sediment
Lake Tahoe	Boat fuel constituents Iron Lead in sediment Mercury in sediment Pesticides (40 different compounds)
Lassen Creek	Sediment
Lily Lake	Nutrients
Little Truckee River	Sediment
Long Valley Creek	Sediment
Martis Creek	Nutrients
Pine Creek	Nutrients
Raider Creek	Sediment
Squaw Creek Meadow Wetlands	Pesticides
Stampede Reservoir	Chlordane, lindane
Summit Creek	Petroleum products
Susan River d/s of Paiute Creek	Mercury

Susan River u/s of Susanville	Nickel PCBs
Tahoe Keys Sailing Lagoon	Mercury Nickel
Taylor Creek	PCBs Toxaphene
Truckee River	Pesticides (8 different compounds)
Upper Angora Lake	Chloride TDS
	Pesticides (16 different compounds)

Reference List for Region 6

Staff Report

California Regional Water Quality Control Board. Lahontan Region. 2001. Staff Report on Recommended Changes to Lahontan Region's Section 303(d) List of Impaired Surface Water Bodies. November, 2001.

Watch List References

Allen, B.C. and J.E. Reuter, 2001. Changes in MTBE and BTEX Concentrations in Lake Tahoe, California-Nevada Following Implementation of a Ban on Selected 2-Stroke Marine Engines. University of California Davis Tahoe Research Group Annual Report. Available on the Internet: <http://trg.ucdavis.edu/research/annualreport/contents/lake/article8.html>

Associated Press., 1997. "Pollution at Donner Lake Linked to Motorboat Use." San Francisco Chronicle, October 7, 1997.

Brown and Root Environmental, 1996. Draft Final Site Inspection Report, Aurora Canyon Millsite, Bakersfield District [USBLM], California.

California Department of Water Resources, 2001. Correspondence from Jerry Boles to Tom Suk of Regional Board staff regarding mercury sampling at Eagle Lake, May 24, 2001.

California Office of Health Hazard Assessment, 2001. Public Health Goals for Chemicals in Drinking Water.

California Office of Health Hazard Assessment, 2001. Email correspondence between Margy Gassel and Judith Unsicker of Regional Board staff regarding mercury in Susan River TSMP samples.

California Regional Water Quality Control Board, Central Valley Region, 2000. A Compilation of Water Quality Goals.

California Regional Water Quality Control Board, Lahontan Region, 1995. Water Quality Control Plan for the Lahontan Region.

California Regional Water Quality Control Board, Lahontan Region, 1998. Cleanup and Abatement Order No. 6-98-19, Molycorp, Inc. Mountain Pass Mine and Mill, San Bernardino County.

California Regional Water Quality Control Board, Lahontan Region, 2000. Use Attainability Analysis for Nine "Naturally Impaired" Waters of the Lahontan Region.

California Regional Water Quality Control Board, Lahontan Region, 2001. Water quality monitoring data for the Mojave River.

California State Water Resources Control Board, 1999. 1998 California 303(d) List and Priority Schedule, Approved by USEPA 12-May-99.

California State Water Resources Control Board, 1999. 1998 California Water Quality Assessment Report. August 1999 Staff Report.

CH2M-Hill, 1996. Truckee River Loading Study, 205(j) Program. Final Report prepared for the Lahontan Regional Water Quality Control Board.

CH2M-Hill, 1997. Compilation of water quality data for the Truckee River collected by the Tahoe Truckee Sanitation Agency.

Colasurda, C., 2000. Mammoth's perilous magma- no short answers to earth-shaking questions at Long Valley Caldera. California Wild, Fall 2000. Available on the Internet: <http://www.calacademy.org/calwild/fall2000/mammoth_lake.html>

Datta, S. and 4 other authors, 1998. Evidence for Atmospheric Transport and Deposition for Polychlorinated biphenyls to the Lake Tahoe Basin, California-Nevada. Available on the Internet: www.nal.usda.gov/ttic/tektran/data/000009/25/0000092538.html

DeLong, J., 1999. "Tahoe gas pollution plunging." Reno Gazette-Journal, November 23, 1999.

Heyvaert, A.C. and 3 other authors, 2001. Atmospheric Lead and Mercury Deposition at Lake Tahoe. University of California Davis Tahoe Research Group Annual Report, available on the Internet: <<http://trg.ucdavis.edu/research/annualreport/contents/lake/article11.html>>

Lico, M.B. and N. Pennington, 1999. Concentrations and Distributions of Manmade Organic Compounds in the Lake Tahoe Basin, Nevada and California, 1997-99. U.S. Geological Survey Water-Resources Investigations Report 99-4218. Markleeville Public Utility District, data from Discharger Self Monitoring Files (Lahontan Regional Board, South Lake Tahoe Office).

Maxwell, C.R., 2000. A Watershed Management Approach to Assessment of Water Quality and Development of Revised Water Quality Standards for the Ground Waters of the Mojave River Floodplain. Paper presented at National Water Quality Monitoring Council Conference, April 25-27, 2000, Austin TX.

McConnell, L.L. and 3 other authors, 1998. Wet Deposition of Current-Use Pesticides in the Sierra Nevada Mountain Range. Available on the Internet: www.nal.usda.gov/ttic/tektran/data/000008/48/0000084801.html

Murphy, D.M. and C.M. Knopp, editors, 2000. Lake Tahoe Watershed Assessment. Gen. Tech. Rep. PSW-GTR-176, USDA Forest Service, Pacific Southwest Research Station, Albany, CA, Vols. I and II.

Nevada Division of Environmental Protection, Bureau of Water Quality Planning. Grab/Surface Water Samples, Provisional Records, and watershed descriptions for Surface Water Monitoring Network. Available on the Internet: <http://ndep.state.nv.us/bwqp/mon_w5.htm>

Olde, D., 2000. "Questions about Illness Reporting at Donner Lake." Sierra Sun, September 28, 2000.

Palmdale Water District, 1998. 1998 Annual Water Quality Consumer Confidence Report.

Palmdale Water District, 2001. Water News, Spring 2001. Available on the Internet: <<http://www.palmdalewater.org/TOC/Newsletter/Archive/spring01.htm>>

Silva, A., 1999. "Firm claims 2,620 spills." San Bernardino County Sun, February 6, 1999.

South Tahoe Public Utility District, data from Discharger Self Monitoring Files (Lahontan Regional Board, South Lake Tahoe Office).

Tahoe Regional Planning Agency, 1999. Annual Water Quality Report.

Tahoe-Truckee Sanitation Agency, data from Discharger Self Monitoring Files (Lahontan Regional Board, South Lake Tahoe Office).

Thompson, M. 2001. "Weather halts Walker River cleanup." Reno Gazette-Journal, January 19, 2001.

Topozone.com, <http://www.topozone.com>. [Searches of this webpage were used to determine latitudes and longitudes of most water bodies for use in Fact Sheets.]

U.S. Environmental Protection Agency, 1997. Establishing Site Specific Aquatic Life Criteria Equal to Natural Background. Memorandum dated November 5, 1997 from Tudor T. Davies, Director, Office of Science and Technology, USEPA Office of Water.

U.S. Geological Survey, 1999. U.S. Geological Survey Volcano Hazards Program, Long Valley Observatory: Carbon Dioxide and Helium Discharge from Mammoth Mountain. Available on the Internet: <<http://lvo.wr.usgs.gov/CO2.html>>

U.S. Geological Survey, Water Quality Samples for California. UGS 10356500 Susan R. @ Susanville CA (NWIS database).

Vance, L. 2000. Report on the Upper Walker River Water Quality Study, 1999. Prepared for Mono County Resource Conservation District.

Vance, L., 2001. Upper Walker River study data collected in 2000.

White, P. 2001. "Anglers "invade" Heenan Lake on fishing opener." Reno Gazette-Journal, September 5, 2001.

White, P., 2001. "Oil spill on Walker River will hurt fish, aquatic life." Reno Gazette-Journal, January 31, 2001.

References (Listings, Delistings and Changes)

Bourelle, A. 1999. Regulations may force cattle out. *Tahoe Daily Tribune*, November 23, 1999.

Brown and Root Environmental, 1996. *Draft Final Site Inspection Report, Aurora Canyon Millsite, Bakersfield District, California*. Contract No. 1422-N651-C4-3049, January 19, 1996.

California Department of Fish and Game, 1995. Endangered Species Act Prelisting Proposal,

California Department of Fish and Game, 1997. *A Fisheries Management Plan for Crowley Lake and Tributaries, Mono County, California*

California Department of Water Resources, 1960. *Water Quality Investigation, Surprise Valley*.

California Department of Water Resources, 1963. *Northeastern Counties Ground Water Investigation*, Volume I, Bulletin No. 98.

California Department of Water Resources, 1970. Arsenic in Wells in Northeastern California. Memorandum from Bruce Wormald dated December 11, 1970.

California Department of Water Resources, 1993. Dams Within the Jurisdiction of the State of California. Bulletin 17. Available on the Internet: <http://elab.cs.berkeley.edu/kopec/b17/html/home.html>.

California Office of Environmental Health Hazard Assessment, 1999. Fish consumption advisories statewide and General Information. Available on the Internet: <http://www.oehha.ca.gov/general/99fish.html>.

California Office of Health Hazard Assessment, 2001. *Public Health Goals for Chemicals in Drinking Water: Uranium, 2001*.

California Office of Health Hazard Assessment, 2001. Public Health Goal for Tetrachloroethylene in Drinking Water, August 2001. Available on the Internet at: <http://www.oehha.ca.gov/water/phg/pdf/PDEAug2001.pdf>

California Regional Water Quality Control Board, 1998. Letter from Ranjit S. Gill to Ralf Koehne, U.S. Forest Service, Plumas National Forest. Request for Water Quality Information on "Top Spring" for Use in Development of Total Maximum Daily Loads.

California Regional Water Quality Control Board, Central Valley Region, 2000. *A Compilation of Water Quality Goals, 2000*.

California Regional Water Quality Control Board, Lahontan Region 2001. Internal Memo from John Steude and Alan Miller to Judith Unsicker, *Summary of water quality analysis for potential CWA listing of the lower [sic] of the West Fork of the Carson River, Alpine County.*

California Regional Water Quality Control Board, Lahontan Region and U.S. Forest Service, Lake Tahoe Basin Management Unit, 2000-2001. Unpublished fecal coliform data for the Upper Truckee River.

California Regional Water Quality Control Board, Lahontan Region and U.S. Forest Service, Lake Tahoe Basin Management Unit, 2000-2001. Unpublished fecal coliform data for Tallac Creek

California Regional Water Quality Control Board, Lahontan Region, 1983. *West Fork Carson River and Indian Creek Watersheds Water Quality Control Plan Update: 1983.*

California Regional Water Quality Control Board, Lahontan Region, 1994. Water Body Fact Sheet for "Eagle Lake (2)."

California Regional Water Quality Control Board, Lahontan Region, 1995. *Draft Functional Equivalent Document and Staff Report for Proposed Amendments to the Water Quality Control Plan for the Lahontan Region: Appendix C. Use Attainability Analysis for Owens Lake, Inyo County, California.* September 1995.

California Regional Water Quality Control Board, Lahontan Region, 1995. *Water Quality Control Plan for the Lahontan Region.*

California Regional Water Quality Control Board, Lahontan Region, 2000. *Use Attainability Analysis for Nine "Naturally Impaired" Waters of the Lahontan Region,* April 2000.

California Regional Water Quality Control Board, Lahontan Region, 2000. *Staff Report/Draft Environmental Document for Proposed Amendments to the Water Quality Control Plan for the Lahontan Region (Basin Plan), State Clearinghouse Number 98092052,* April 2000.

California Regional Water Quality Control Board, Lahontan Region, 2000. *Analysis of the Beneficial Uses REC-1, REC-2, SAL, and WILD with Respect to Searles Dry Lake, IMC Chemicals, Inc., Trona, San Bernardino County, and Response to IMCC Comments made during the July 2000 Regional Board meeting.*

California Regional Water Quality Control Board, Lahontan Region, 2000. Amended Cleanup and Abatement Order No. 6-00-64A1, WDID Nos.: 6B368020001, 6B368905004, and 6B368905005, Requiring IMC Chemicals and the U.S. Department of the Interior, Bureau of Land Management, To Clean Up and Abate the Effects of Waste Discharges to Searles Lake From the Trona, Argus, and Westend Facilities, San Bernardino County.

California Regional Water Quality Control Board, Lahontan Region, 2000. Amended Cease and Desist Order No. 6-00-61A1, WDID: 6B368020001/6B368905004-Consideration of an Amended Cease and Desist Order-IMC Chemicals, Inc. and the U.S. Department of Interior, Bureau of Land Management, Trona and Argus Operations, Searles Lake.

California Regional Water Quality Control Board, Lahontan Region, 2000. Email from

California Regional Water Quality Control Board, Lahontan Region, 2001. *Staff Report on Recommended Changes to Lahontan Region's Section 303(d) List of Impaired Surface Water Bodies.*

California Regional Water Quality Control Board, Lahontan Region, 2001. Email from Jason Churchill to Judith Unsicker, Monitor Creek 303(d) Listing, October 12, 2001.

California Regional Water Quality Control Board, Lahontan Region, and U.S. Forest Service, Lake Tahoe Basin Management Unit, 2000-2001. Unpublished fecal coliform data for Big Meadow Creek.

California Regional Water Quality Control Board, Lahontan Region, 2000-2001. Unpublished fecal coliform data for Trout Creek

California Regional Water Quality Control Board, Lahontan Region, 2001. Letter dated

California Regional Water Quality Control Board, Lahontan Region. Mojave River and D Street data.

California State Water Resources Control Board, 1988. Resolution 88-63, Sources of Drinking Water Policy.

California State Water Resources Control Board, 1991. *California Inland Surface Waters Plan: Water Quality Control Plan for Inland Surface Waters of California,* 91-12 WQ, April 1991.

California State Water Resources Control Board, 1994. Decision 1631, "Decision and Order Amending Water Right Licenses to Establish Fishery Protection Flows in Streams Tributary to

- California State Water Resources Control Board, 1995. *Toxic Substances Monitoring Program (TSMP), Freshwater Bioaccumulation Monitoring Program, Data Base Description*. Revised September 1995.
- California State Water Resources Control Board, 1998. Order WR 98-05 In the Matter of Stream and Waterfowl Habitat Restoration Plans and Grant Lake Operations and Management Plan Submitted by the Los Angeles Department of Water and Power Pursuant to the Requirements of Water Right Decision 1631 (Water Rights Licenses 10191 and 10192, Applications 8042 and 8043).
- California State Water Resources Control Board, 2001. Toxic Substances Monitoring Program database printout for Walker River watershed, March 2001.
- California State Water Resources Control Board, Toxic Substances Monitoring Program database.
- CEPIS, no date. Ground-Water Pollution, In: Seminar Publication: Protection of public water supplies from ground-water contamination, Environmental Protection Agency. Available on the Internet: <<http://www.cepis.ops-oms.org/muwww/fulltext/repind46/ground/ground.html>>
- Cone, M. 1998. "L.A. Strikes Deal with Owens Valley to End Dust Woes." *Los Angeles Times*,
- Datta, S. and 4 other authors, 1998. *Evidence for Atmospheric Transport and Deposition for Polychlorinated Biphenyls to the Lake Tahoe Basin, California-Nevada*. Available on the Internet: <http://www.nal.usda.gov/ttic/tektran/data/000009/25/0000092538.html>
- Erlach, Robert, Lahontan Regional Board staff, personal communication, October 2001.
- February 23, 2001, from Lauri Kemper, Chief, Lake Tahoe Watershed Unit, to Maribeth Gustafson, Forest Supervisor, Lake Tahoe Basin Management Unit, "Summary of Fecal Coliform Statistics on Meiss Grazing Allotment—1999 and 2000 Seasons, and Recommendations for 2001 Season."
- Great Basin Unified Air Pollution Control District, 1997. *Owens Valley PM₁₀ Planning Area, Demonstration of Attainment, State Implementation Plan* (Executive Summary).
- Hinrich, R.L., 1986. Summaries of telephone calls regarding samples at Laufman Ranger Station. (California Dept. of Health Services, Office of Drinking Water, Redding).
- Honeywell, P.D., 2001. Email from Paul Honeywell of U.S. Geological Survey to Kim Gorman of Regional Board staff, dated 3/13/01, "Re: Bridgeport Data." Email explains error codes
- Honeywell, P.D., 2001. Email from Paul Honeywell, U.S. Geological Survey to Kim Gorman of Regional Board staff, dated 3/13/01 "Re: Bridgeport Data." Email explains error codes
- Jones & Stokes Associates, Inc., 1993. *Draft Environmental Impact Report for the Review of the*
- July 16, 1998.
- Koehne, R., 1998. Memo to Ranjit S. Gill and Peter Fischer, Top Springs Water Reports. U.S.D.A. Forest Service, Plumas National Forest, March 31, 1998.
- Letter to Joyce Coakley, Lassen National forest from Richard L. Elliott, California Department of Fish and Game, dated March 30, 1995.
- Liu, M.S., J.E. Reuter, and C.R. Goldman, 2001. *Seasonal Significance of Atmospheric Deposition of Phosphorus and the Sources of Deposition for Lake Tahoe, CA-NV*. Abstract of paper presented at meeting of American Society of Limnology and Oceanography, Albuquerque NM, February 2001.
- Los Angeles Department of Water and Power, 2001. *The Los Angeles Department of Water and Power Water Quality Report for 2000*.
- Los Angeles Department of Water and Power, unpublished water quality data.
- MacDonald, C.D. and A. Lutz, 2000. Staff Report on Recommendation to Remove Pine Creek from the 303(d) List, California Regional Water Quality Control Board, Lahontan Region, April 14, 2000.
- March 1995.
- Maxwell, C.R. 2000. A Watershed Management Approach to Assessment of Water Quality and Development of Revised Water Quality Standards for the Ground Waters of the Mojave River Floodplain. Paper presented at National Water Quality Monitoring Council Conference, April 25-27, 2000, Austin TX.

Menon, A.S., 2001. *Shellfish Safety: Bacterial Indicators on [sic] Shellfish Water Quality*. *Canadian Shellfish Quality Resource*. Available on the Internet: <<http://www.shellfishquality.ca/indicators.htm>>.

Mono Basin Water Rights of the City of Los Angeles. Prepared for California State Water Resources Control Board. May, 1993.

Mono Lake and to Protect Public Trust Resources At Mono Lake and In the Mono Lake Basin,”

Murphy, D.M., and C.M. Knopp, editors, 2000. *Lake Tahoe Watershed Assessment*. Gen. Tech. Rep. PSW-GTR-176, USDA Forest Service, Pacific Southwest Research Station, Albany, CA, Vols. I and II.

National Academy of Sciences, 1987. *The Mono Basin Ecosystem: Effects of Changing Lake Level*.

Nevada Division of Environmental Protection, Bureau of Water Quality Planning, 1998. Nevada's 1998 303(d) List. Available on the Internet: <http://ndep.state.nv.us/bwqp/riv303d98.pdf>.

Nevada Division of Environmental Protection, Bureau of Water Quality Planning. State of Nevada Surface Water Monitoring Network, Walker River Basin, 1997-98 data for East Fork at Stateline. Available on the Internet: http://ndep.state.nv.us/bwqp/mon_w5.htm.

Nevada Division of Environmental Protection, Bureau of Water Quality Planning, 2001. State of Nevada Surface Water Monitoring Network, Carson River Basin. Available on the Internet: <http://ndep.state.nv.us/bwqp/C9.html>.

Nevada Division of Water Planning, no date. *The Flood of 1997, Final Report*. Available on the Internet: <http://www.state.nv.us/cnr/ndwp/flood-97/floodana.htm>

North Mono County Resource Conservation District, 2000. *Report on the Upper Walker River Water Quality Study, 1999*.

Patterson, D.W. and S.L. Jacobson, 1984. *1983 Surprise Valley Ground Water Recharge Field Study Report*. U.S. Soil Conservation Service, Red Bluff, CA.

Peter J. Fischer to Judith Unsicker, “top springs,” February 22, 2000.

Rowe, T.G., 1998. *Loads and Yields of Sediment and Nutrients for Selected Watersheds in the Lake Tahoe Basin, California and Nevada*. U.S. Geological Survey, paper presented at Water Quality Monitoring Council 1998 Conference. Available on the Internet: <http://204.87.241.11/98proceedings/Papers/50-ROWE.html>.

Rowe, T.G., 2001. Loads and Yields of Suspended Sediment for Selected Watersheds in the Lake Tahoe Basin, California and Nevada. *Proceedings of the Seventh Federal Interagency Sedimentation Conference*, March 25 to 29, 2001, Reno Nevada.

Rowe, T.G., and K.K. Allander, 2000. *Surface- and Ground-Water Characteristics in the Upper Truckee River and Trout Creek Watersheds, South Lake Tahoe, California and Nevada, July-December 1996*. U.S. Geological Survey Water-Resources Investigations Report 00-4001. Available on the Internet: <<http://water.usgs.gov/pubs/wri/wri004001/>>

September 20, 1994.

South Tahoe Public Utility District, 2000-2001. Monitoring Data for Heavenly Valley Creek (in Regional Board files).

South Tahoe Public Utility District. Unpublished water quality data.

Tahoe Regional Planning Agency, 1996. *Draft 1996 Evaluation Report: Environmental Threshold Carrying Capacities and the Regional Plan Package for the Lake Tahoe Region*, December 1996.

Tahoe Regional Planning Agency, 1998. *Environmental Improvement Program for the Lake Tahoe Region*. Draft for Initial Adoption

Tahoe Regional Planning Agency, 1999. *Annual Water Quality Report*.

U.S. Department of the Interior, Fish and Wildlife Service, 1995. 5 CFR Part 17: Endangered and Threatened Wildlife and Plants; 90-Day Finding for a Petition to List the Eagle Lake Rainbow Trout and Designate Critical Habitat.

U.S. Environmental Protection Agency, 1997. Establishing Site Specific Aquatic Life Criteria Equal to Natural Background. Memorandum dated November 5, 1997 from Tudor T. Davies, Director, Office of Science and Technology, USEPA Office of Water.

U.S. Environmental Protection Agency, 2001. EPA to Implement 10ppb [sic] Standard for Arsenic in Drinking Water. USEPA Office of Water, EPA 815-F-01-010, October 2001. Available on the Internet: <http://www.epa.gov/safewater/ars/ars-oct-factsheet.html>

U.S. Forest Service, Lake Tahoe Basin Management Unit, 1998. *Heavenly Ski Resort 1997 Environmental Monitoring Report*.

U.S. Forest Service, Lake Tahoe Basin Management Unit, 1999. *Heavenly Ski Resort 1998 Environmental Monitoring Report*.

U.S. Forest Service, Lake Tahoe Basin Management Unit, 2001. Wildlife/Range Management. Available on the Internet: www.r5.fs.fed.us/ltbmu/management/wildlife/range

U.S. Geological Survey, 1976. *Sources of Arsenic in Streams Tributary to Lake Crowley, California*, Water-Resources Investigations 76-36.

U.S. Geological Survey, 2001. Unpublished water quality data provided via FTP.

U.S. Geological Survey, 2001. Unpublished water quality data.

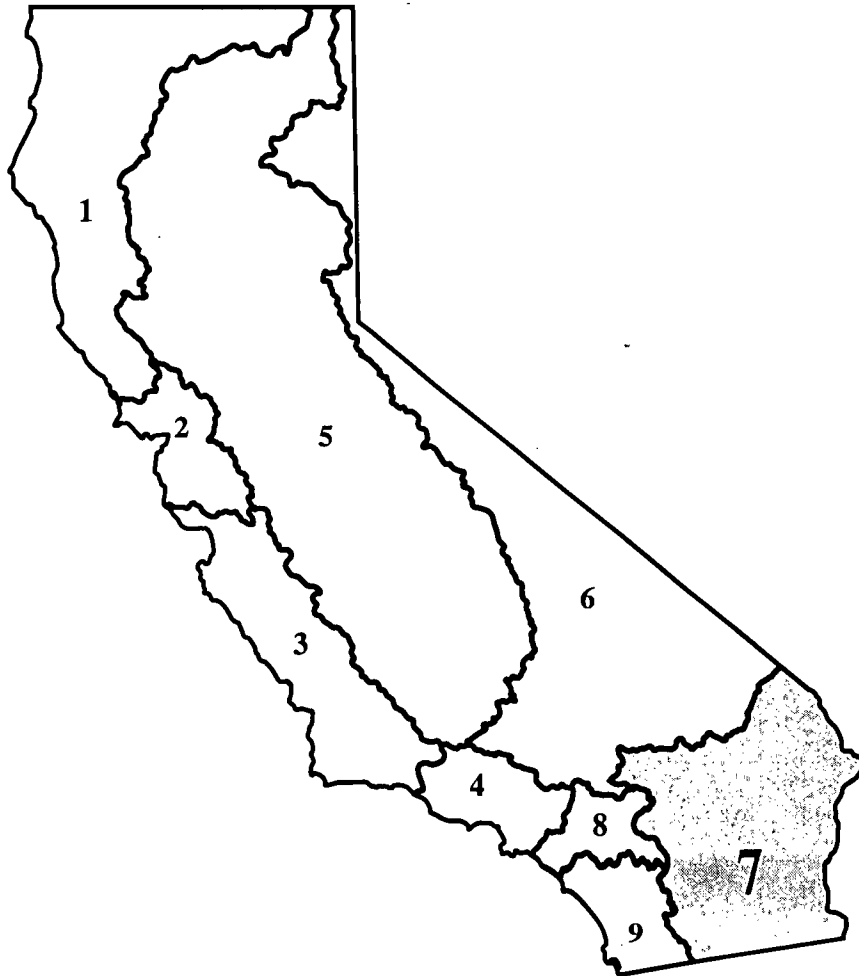
U.S. Geological Survey, 2001. Water Quality Samples for California, USGS 10336610 Upper Truckee River at South Lake Tahoe Calif. NWIS Database; <<http://www.usgs.gov/ca/nwis>>

USDA Forest Service, Eagle Lake Ranger District, Lassen National Forest, 1995. Decision Notice and Finding of No Significant Impact for : Pine Creek Riparian and Fish Passage Improvement Project, June 9, 1995.

Vinyard, G.L., and R.W. Watts, 1992. *Wasteload Allocation Study, Monitor Creek, East Fork Carson River Hydrologic Unit*. Aquatic Ecology Laboratory, University of Nevada, Reno.

Zonge, L. and S. Swanson, 1996. Changes in Streambanks in the Sierra Nevada Mountains: Perspectives from a Dry and a Wet Year. *Restoration Ecology* 4(2): 192-199.

Regional Water Quality Control Board
COLORADO RIVER BASIN REGION (7)



SECTION 303 (d) LIST PROPOSALS

Region 7 Summary of Recommendations

Water Body	Pollutant/Medium /Beneficial Use	RWQCB Recommendation	SWRCB Recommendation
New River	Chloroform/Water/MUN	List	List
New River	Toluene/Water/MUN	List	List
New River	p-Cymene/Water/MUN	List	List
New River	1,2,4-trimethylbenzene/Water/MUN	List	List
New River	m,p,-Xylenes/Water/MUN	List	List
New River	o-Xylenes/Water/MUN	List	List
New River	p-DCB/Water/MUN	List	List
New River	Trash/Water/WARM;WILD,R EC1; REC11	List	List
New River	Dissolved oxygen (Dissolved Oxygen)Water/WARM;REC1 ; REC2	List for dissolved organic matter	List for Dissolved Oxygen. The standard violated is Dissolved Oxygen. The source is dissolved organic material
New River	Nutrients/water/aquatic life	Delist	Maintain Listing. No data available on which to base delisting. Staff report states that, RWQCB has no data showing that...nutrients are...violating water quality standards in the New River, however the River carries large amounts of nitrogen and phosphate which are causing eutrophic conditions [and] fish die-offs in the [Salton] Sea.. Water quality conditions in the New River will need to be incorporated into TMDL for Salton Sea, so retain listing.

Water Body	Pollutant/Medium /Beneficial Use	RWQCB Recommendation	SWRCB Recommendation
Coachella Valley Stormwater Channel	Change listing from bacteria to pathogens	Clarification	Change pollutant description.
New River	Change listing from bacteria to pathogens	Clarification	Change pollutant description.
Palo Verde Outfall Drain	Change listing from bacteria to pathogens	Clarification	Change pollutant description.

Region 7

New River

Water Body	New River
Stressor/Media/Beneficial Use	Chloroform/Water/MUN
Data quality assessment. Extent to which data quality requirements met.	QA used by RWQCB staff
Linkage between measurement endpoint and beneficial use or standard	Results compared directly to standards
Utility of measure for judging if standards or uses are not attained	Basin Plan quantitative and qualitative standards from Minute Number 264 of the Mexican-American Treaty
Water Body-specific Information	Data collected 6 times per year from 1996-2001
Data used to assess water quality	Violations of WQO
Spatial representation	Monitoring performed by RWQCB at US-Mexico border.
Temporal representation	1996-2001
Data type	Numeric data
Use of standard method	Standard lab method
Potential Source(s) of Pollutant	Untreated and improperly treated industrial waste discharges from Mexico.
Alternative Enforceable Program	Mexican-American Water Treaty
RWQCB Recommendation	List
SWRCB Staff Recommendation	List

Region 7

New River

Water Body	New River
Stressor/Media/Beneficial Use	Toluene/Water/MUN
Data quality assessment. Extent to which data quality requirements met.	QA used by RWQCB staff
Linkage between measurement endpoint and beneficial use or standard	Results compared directly to standards
Utility of measure for judging if standards or uses are not attained	Basin Plan quantitative and qualitative standards from Minute Number 264 of the Mexican-American Treaty
Water Body-specific Information	Data collected approximately monthly from 1995-2001
Data used to assess water quality	Violations of WQO
Spatial representation	Monitoring performed by RWQCB at US-Mexico border.
Temporal representation	1995-2001
Data type	Numeric data
Use of standard method	Standard lab method
Potential Source(s) of Pollutant	Untreated and improperly treated industrial waste discharges from Mexico.
Alternative Enforceable Program	Mexican-American Water Treaty
RWQCB Recommendation	List
SWRCB Staff Recommendation	List

Region 7

New River

Water Body	New River
Stressor/Media/Beneficial Use	p-Cymene/Water/MUN
Data quality assessment. Extent to which data quality requirements met.	QA used by RWQCB staff
Linkage between measurement endpoint and beneficial use or standard	Results compared directly to standards
Utility of measure for judging if standards or uses are not attained	Basin Plan quantitative and qualitative standards from Minute Number 264 of the Mexican-American Water Treaty
Water Body-specific Information	Data collected 1 to 6 times per year from 1995 to 2001
Data used to assess water quality	Violations of WQO
Spatial representation	Monitoring performed by RWQCB at US-Mexico border.
Temporal representation	1995-2001
Data type	Numeric data
Use of standard method	Standard lab method
Potential Source(s) of Pollutant	Untreated and improperly treated industrial waste discharges from Mexico.
Alternative Enforceable Program	Mexican-American Water Treaty
RWQCB Recommendation	List
SWRCB Staff Recommendation	List

Region 7

New River

Water Body	New River
Stressor/Media/Beneficial Use	1,2,4-trimethylbenzene/Water/MUN
Data quality assessment. Extent to which data quality requirements met.	QA used by RWQCB staff
Linkage between measurement endpoint and beneficial use or standard	Results compared directly to standards
Utility of measure for judging if standards or uses are not attained	Basin Plan quantitative and qualitative standards from Minute Number 264 of the Mexican-American Water Treaty
Water Body-specific Information	Data collected 1 to 4 times per year from 1998-2001
Data used to assess water quality	Violations of WQO
Spatial representation	Monitoring performed by RWQCB at US-Mexico border.
Temporal representation	1998-2001
Data type	Numeric data
Use of standard method	Standard lab method
Potential Source(s) of Pollutant	Untreated and improperly treated industrial waste discharges from Mexico.
Alternative Enforceable Program	Mexican-American Water Treaty
RWQCB Recommendation	List
SWRCB Staff Recommendation	List

Region 7

New River

Water Body	New River
Stressor/Media/Beneficial Use	m,p,-Xylenes/Water/MUN
Data quality assessment. Extent to which data quality requirements met.	QA used by RWQCB staff
Linkage between measurement endpoint and beneficial use or standard	Results compared directly to standards
Utility of measure for judging if standards or uses are not attained	Basin Plan quantitative and qualitative standards from Minute Number 264 of the Mexican-American Water Treaty
Water Body-specific Information	Data collected 2 to 12 times per year from 1995-2001
Data used to assess water quality	Violations of WQO
Spatial representation	Monitoring performed by RWQCB at US-Mexico border.
Temporal representation	1995-2001
Data type	Numeric data
Use of standard method	Standard lab method
Potential Source(s) of Pollutant	Untreated and improperly treated industrial waste discharges from Mexico.
Alternative Enforceable Program	Mexican-American Water Treaty
RWQCB Recommendation	List
SWRCB Staff Recommendation	List

Region 7

New River

Water Body	New River
Stressor/Media/Beneficial Use	o-Xylenes/Water/MUN
Data quality assessment. Extent to which data quality requirements met.	QA used by RWQCB staff
Linkage between measurement endpoint and beneficial use or standard	Results compared directly to standards
Utility of measure for judging if standards or uses are not attained	Basin Plan quantitative and qualitative standards from Minute Number 264 of the Mexican-American Water Treaty
Water Body-specific Information	Data collected 2 to 11 times per year from 1996 - 2001
Data used to assess water quality	Violations of WQO
Spatial representation	Monitoring performed by RWQCB at US-Mexico border.
Temporal representation	1996-2001
Data type	Numeric data
Use of standard method	Standard lab method
Potential Source(s) of Pollutant	Untreated and improperly treated industrial waste discharges from Mexico.
Alternative Enforceable Program	Mexican-American Water Treaty
RWQCB Recommendation	List
SWRCB Staff Recommendation	List

Region 7

New River

Water Body	New River
Stressor/Media/Beneficial Use	p-DCB/Water/MUN
Data quality assessment. Extent to which data quality requirements met.	QA used by RWQCB staff
Linkage between measurement endpoint and beneficial use or standard	Results compared directly to standards
Utility of measure for judging if standards or uses are not attained	Basin Plan quantitative and qualitative standards from Minute Number 264 of the Mexican-American Water Treaty
Water Body-specific Information	Data collected 5 to 12 times per year from 1995-2001
Data used to assess water quality	Violations of WQO
Spatial representation	Monitoring performed by RWQCB at US-Mexico border.
Temporal representation	1995-2001
Data type	Numeric data
Use of standard method	Standard lab method
Potential Source(s) of Pollutant	Untreated and improperly treated industrial waste discharges from Mexico.
Alternative Enforceable Program	Mexican-American Water Treaty
RWQCB Recommendation	List
SWRCB Staff Recommendation	List

Region 7

New River

Water Body	New River
Stressor/Media/Beneficial Use	Trash/Water/WARM;WILD,REC1; REC11
Data quality assessment. Extent to which data quality requirements met.	Numerous observations by RWQCB staff of trash in river. Quarterly removal of approximately 200 cubic yards of trash by county.
Linkage between measurement endpoint and beneficial use or standard	Direct observations of trash accumulation in River. Linked to aesthetics-related beneficial use.
Utility of measure for judging if standards or uses are not attained	Observed violation of US-Mexico treaty. BUs directly impacted.
Water Body-specific Information	Numerous observations by RWQCB staff of trash in river. Quarterly removal of approximately 200 cubic yards of trash by county.
Data used to assess water quality	Numerous observations by RWQCB staff of trash in river. Quarterly removal of approximately 200 cubic yards of trash by county.
Spatial representation	Observations made at US/Mexico border and a few miles north.
Temporal representation	Monthly 8-hour and quarterly 24-hour observations made.
Data type	Observations, trash removal
Use of standard method	N/A
Potential Source(s) of Pollutant	Anthropogenic sources
Alternative Enforceable Program	Mexican-American Water Treaty
RWQCB Recommendation	List
SWRCB Staff Recommendation	List

Region 7

New River

Water Body	New River
Stressor/Media/Beneficial Use	Dissolved oxygen (Dissolved Oxygen)Water/WARM;REC1; REC2
Data quality assessment. Extent to which data quality requirements met.	QA used by RWQCB staff
Linkage between measurement endpoint and beneficial use or standard	Results compared directly to WQO
Utility of measure for judging if standards or uses are not attained	Basin Plan numeric WQO used
Water Body-specific Information	Data collected monthly from 1996-2001
Data used to assess water quality	Violations of WQO
Spatial representation	Monitoring performed by RWQCB.
Temporal representation	Monthly for over 5 years
Data type	Numeric data
Use of standard method	Standard lab method
Potential Source(s) of Pollutant	5-20 million gallons per day of raw sewage from Mexico discharged to New River.
Alternative Enforceable Program	Mexican-American Water Treaty
RWQCB Recommendation	List for dissolved organic matter
SWRCB Staff Recommendation	List for Dissolved Oxygen. The standard violated is Dissolved Oxygen. The source is dissolved organic material

Region 7

New River

Water Body	New River
Stressor/Media/Beneficial Use	Nutrients/water/aquatic life
Data quality assessment. Extent to which data quality requirements met.	No data available
Linkage between measurement endpoint and beneficial use or standard	No data available
Utility of measure for judging if standards or uses are not attained	No data available
Water Body-specific Information	No data available
Data used to assess water quality	No data available
Spatial representation	No data available
Temporal representation	No data available
Data type	No data available
Use of standard method	No data available
Potential Source(s) of Pollutant	Phosphates from Mexico and Imperial Valley
Alternative Enforceable Program	Mexican-American Water Treaty
RWQCB Recommendation	Delist
SWRCB Staff Recommendation	Maintain Listing. No data available on which to base delisting. Staff report states that, RWQCB has no data showing that...nutrients are...violating water quality standards in the New River, however the River carries large amounts of nitrogen and phosphate which are causing eutrophic conditions [and] fish die-offs in the [Salton] Sea.. Water quality conditions in the New River will need to be incorporated into TMDL for Salton Sea, so retain listing.

Region 7

Coachella Valley Stormwater Channel

Water Body	Coachella Valley Stormwater Channel
Stressor/Media/Beneficial Use	Change listing from bacteria to pathogens
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	5-20 million gallons per day of raw sewage from Mexico discharged to New River.
Alternative Enforceable Program	Mexican-American Water Treaty
RWQCB Recommendation	Clarification
SWRCB Staff Recommendation	Change pollutant description.

Region 7

New River

Water Body	New River
Stressor/Media/Beneficial Use	Change listing from bacteria to pathogens
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	5-20 million gallons per day of raw sewage from Mexico discharged to New River.
Alternative Enforceable Program	Mexican-American Water Treaty
RWQCB Recommendation	Clarification
SWRCB Staff Recommendation	Change pollutant description.

Region 7

Palo Verde Outfall Drain

Water Body	Palo Verde Outfall Drain
Stressor/Media/Beneficial Use	Change listing from bacteria to pathogens
Data quality assessment. Extent to which data quality requirements met.	N/A
Linkage between measurement endpoint and beneficial use or standard	N/A
Utility of measure for judging if standards or uses are not attained	N/A
Water Body-specific Information	N/A
Data used to assess water quality	N/A
Spatial representation	N/A
Temporal representation	N/A
Data type	N/A
Use of standard method	N/A
Potential Source(s) of Pollutant	5-20 million gallons per day of raw sewage from Mexico discharged to New River.
Alternative Enforceable Program	Mexican-American Water Treaty
RWQCB Recommendation	Clarification
SWRCB Staff Recommendation	Change pollutant description.

Reference List for Region 7

Staff Report

California Regional Water Quality Control Board. Colorado River Basin Region. 2001. Staff Report on the Proposed Update of Clean Water Act 303(d) List of Impaired Water Bodies within the Colorado River Basin Region. October 16, 2001.

Public Input

In a letter dated February 28, 2001, the Regional Board staff solicited information from the public for updating its 303(d) List (see Attachment Two). The following agencies and persons submitted data in response to the letter:

U.S. Bureau of Reclamation (USBOR). Fax and E-mails with water quality data on the Colorado River above Imperial Dam and on the Brawley Wetlands Projects.

US Geological Survey. A hard copy from the USGS "Water Resources Data, Arizona, Water Year 1999" regarding water quality data on the Colorado River and tributaries to the Colorado River.

California Department of Pesticide Regulation. Letter referring the Regional Board staff to the Department's Internet Databases that include water quality data on the region's surface waters.

US Department of Agriculture, Forest Service. Letter reporting that Department is updating its water quality records

Big Bear Regional Wastewater Agency . Letter reporting water quality data on Big Bear Lake.

Metropolitan Water District of Southern California . Letter reporting water quality data on Lake Havasu.

George Bernath at EarthLink. E-mail reporting water quality data on the Piute Spring.

Regional Water Quality Control Board

SANTA ANA REGION (8)



SECTION 303 (d) LIST PROPOSALS

Region 8 Summary of Recommendations

Water Body	Pollutant/Medium /Beneficial Use	RWQCB Recommendation	SWRCB Recommendation
Santa Ana Delhi Channel	Fecal coliform/Water/MUN, REC 1, REC2	List for total and fecal coliform	List for total and fecal coliform
Pelican Point Creek	Total and Fecal coliform/Water/MUN, REC 1, REC2	List for total and fecal coliform	List for total and fecal coliform
Pelican Point Middle Creek	Total and Fecal coliform/Water/MUN, REC 1, REC2	List for total and fecal coliform	List for total and fecal coliform
Pelican Hill Waterfall	Total and Fecal coliform/Water/MUN, REC 1, REC2	List for total and fecal coliform	List for total and fecal coliform
Buck Gully Creek	Total and Fecal coliform/Water/Beneficial uses not established in the Basin Plan for this water body.	List for total and fecal coliform	Exclude from list. RWQCB should consider adoption of beneficial uses and water quality standards for this water body.
Los Trancos Creek	Total and Fecal coliform/Water/Beneficial uses not established in the Basin Plan for this water body.	List for total and fecal coliform	Exclude from list. RWQCB should consider adoption of beneficial uses and water quality standards for this water body.
Muddy Creek	Total and Fecal coliform/Water/Beneficial uses not established in the Basin Plan for this water body.	List for total and fecal coliform	Exclude from list. RWQCB should consider adoption of beneficial uses and water quality standards for this water body.
Seal Beach, San Gabriel River Mouth to Main St. Pier	Bacteria (wet season)/Water/MUN, REC 1, REC 2	List for total and fecal coliform	List for total and fecal coliform

Water Body	Pollutant/Medium /Beneficial Use	RWQCB Recommendation	SWRCB Recommendation
Huntington State Beach-from Newland Avenue to Santa Ana River	Bacteria (wet season)/Water/MUN, REC 1, REC 2	List for total and fecal coliform	List for total and fecal coliform
Newport Beach, 1000 feet down coast of Santa Ana River	Bacteria (wet season)/Water/MUN, REC 1, REC 2	List for total and fecal coliform	List for total and fecal coliform
Canyon Lake-East Bay	Sediment/sediment/WARM/REC 1, REC 2	List for impairment of REC 1, REC 2, and WARM beneficial uses.	Do not list for sedimentation. More recent data from UCR 2001 study indicates sedimentation rates not as large as estimated by earlier study. UCR analysis indicates that algae are the largest source of particulates. Canyon Lake is already listed for nutrients and studies for TMDL are underway.
San Diego Creek, Reach 1	Nutrients/Water/Aquatic Life	Delist because TMDL has been incorporated into Basin plan, and has been approved by USEPA.	Delist because TMDL has been incorporated into Basin plan, and has been approved by USEPA. Place on TMDLs Completed List.
San Diego Creek, Reach 1	Siltation/Water/Aquatic Life	Delist because TMDL has been incorporated into Basin plan, and has been approved by USEPA	Delist because TMDL has been incorporated into Basin plan, and has been approved by USEPA. Place on TMDLs Completed List.
San Diego Creek, Reach 2	Nutrients/Water/Aquatic Life	Delist because TMDL has been incorporated into Basin plan, and has been approved by USEPA	Delist because TMDL has been incorporated into Basin plan, and has been approved by USEPA. Place on TMDLs Completed List.
San Diego Creek, Reach 2	Siltation/Water/Aquatic Life	Delist because TMDL has been incorporated into Basin plan, and has been approved by USEPA	Delist because TMDL has been incorporated into Basin plan, and has been approved by USEPA. Place on TMDLs Completed List.

Water Body	Pollutant/Medium /Beneficial Use	RWQCB Recommendation	SWRCB Recommendation
Upper Newport Bay	Nutrients/Water/Aquatic Life	Delist because TMDL has been incorporated into Basin plan, and has been approved by USEPA	Delist because TMDL has been incorporated into Basin plan, and has been approved by USEPA. Place on TMDLs Completed List.
Upper Newport Bay	Siltation/Water/Aquatic Life	Delist because TMDL has been incorporated into Basin plan, and has been approved by USEPA	Delist because TMDL has been incorporated into Basin plan, and has been approved by USEPA. Place on TMDLs Completed List.
Upper Newport Bay	Fecal coliform/Water/MUN, REC 1, REC 2	Delist because TMDL has been incorporated into Basin plan, and has been approved by USEPA	Delist because TMDL has been incorporated into Basin plan, and has been approved by USEPA. Place on TMDLs Completed List.
Lower Newport Bay	Nutrients/Water/Aquatic Life	Delist because TMDL has been incorporated into Basin plan, and has been approved by USEPA	Delist because TMDL has been incorporated into Basin plan, and has been approved by USEPA. Place on TMDLs Completed List.
Lower Newport Bay	Siltation/Water/Aquatic Life	Delist because TMDL has been incorporated into Basin plan, and has been approved by USEPA	Delist because TMDL has been incorporated into Basin plan, and has been approved by USEPA. Place on TMDLs Completed List.
Lower Newport Bay	Fecal coliform/Water/MUN, REC 1, REC 2	Delist because TMDL has been incorporated into Basin plan, and has been approved by USEPA	Delist because TMDL has been incorporated into Basin plan, and has been approved by USEPA. Place on TMDLs Completed List.
Santa Ana River, Reach 3	Total Dissolved Solids/water	Delist because recent data indicate WQO is being met.	Delist because recent data indicate WQO is being met.
Santa Ana River, Reach 3	Nitrogen/Water/Aquatic Life	Delist because recent data indicate WQO is being met.	Delist because recent data indicate WQO is being met.

Water Body	Pollutant/Medium /Beneficial Use	RWQCB Recommendation	SWRCB Recommendation
Anaheim Bay	Reviewed data from Coastal Fish Contamination Program (CFCP), Orange County PFRD/tissue and water/Fish Consumption, Human Health	More monitoring needed. Water Quality assessment underway.	Watch List. More monitoring needed. Water Quality assessment underway. Already listed for pesticides.
Bolsa Chica	Orange County PFRD data for metals, beach postings/Water/Human health	More monitoring needed.	Watch List. More monitoring needed.
Huntington Harbor	Orange County PFRD data for metals, State Mussel Watch Program data for pesticides, organics/water and tissue/Fish consumption	More monitoring needed.	Watch List. More monitoring needed.
Newport Bay	Reviewed data from Coastal Fish Contamination Program. Included data for DDT, Mercury and endosulfans/tissue/Fish consumption	More monitoring needed.	No action. Newport Bay is already listed for pesticides
Little Corona Beach	Bacteria/Water/MUN, REC 1, REC 2	Insufficient data to make a determination. Place on high priority for monitoring.	Watch List. Insufficient data to make a determination.
Ocean Waters	Reviewed data from Coastal Fish Contamination Program/tissue/Fish consumption	Insufficient data to make a determination. More monitoring needed.	Watch List. Insufficient data to make a determination.
Cucamonga Creek	Reviewed water quality data from Orange County Water District/Water/various B.U.s	Insufficient data to make a determination. More monitoring needed.	Watch List. Insufficient data to make a determination.
Chino Creek	Reviewed water quality data from Orange County Water District/Water/various B.U.s	Insufficient data to make a determination. More monitoring needed.	Watch List. Insufficient data to make a determination.

Water Body	Pollutant/Medium /Beneficial Use	RWQCB Recommendation	SWRCB Recommendation
Mill Creek (Prado Area)	Reviewed water quality data from Orange County Water District/Water/various B.U.s	Insufficient data to make a determination. More monitoring needed.	Watch List. Insufficient data to make a determination.
San Diego Creek, Reach 1	Fecal coliform/Water/MUN, REC 1, REC2	List for total and fecal coliform	List for total and fecal coliform
Santa Ana River (Reaches 4 and 5)	Reviewed water quality data from Orange County Water District/Water/various B.U.s	Insufficient data to make a determination. More monitoring needed.	Watch List. Insufficient data to make a determination.
Temescal Creek	Reviewed water quality data from Orange County Water District/Water/various B.U.s	Insufficient data to make a determination. More monitoring needed.	Watch List. Insufficient data to make a determination.
San Jacinto River North Fork (Reach 7)	Reviewed water quality data from Lake Hemet Municipal Water District/Water/Various B.U.s	Insufficient data to make a determination. More monitoring needed.	Watch List. Insufficient data to make a determination.
San Jacinto River South Fork (Reach 7)	Reviewed water quality data from Lake Hemet Municipal Water District/Water/Various B.U.s	Insufficient data to make a determination. More monitoring needed.	Watch List. Insufficient data to make a determination.
Strawberry Creek	Reviewed water quality data from Lake Hemet Municipal Water District/Water/Various B.U.s	Insufficient data to make a determination. More monitoring needed.	Watch List. Insufficient data to make a determination.

Region 8

Santa Ana Delhi Channel

Water Body	Santa Ana Delhi Channel
Stressor/Media/Beneficial Use	Fecal coliform/Water/MUN, REC 1, REC2
Data quality assessment. Extent to which data quality requirements met.	QA used by county health agency
Linkage between measurement endpoint and beneficial use or standard	3 WQOs for total coliform (MUN) and fecal coliform (REC 1, REC 2)
Utility of measure for judging if standards or uses are not attained	Measurement can be compared to numerical standard directly.
Water Body-specific Information	Data age = 1-4 Years.
Data used to assess water quality	11/11 exceedances of total coliform WQO. 22/22 exceedances of total and fecal WQOs.
Spatial representation	Targeted in waterbody. Locations unknown.
Temporal representation	1997-2001
Data type	3 WQOs for total and fecal coliform for MUN, REC 1, REC 2
Use of standard method	Standard bacteriological methods
Potential Source(s) of Pollutant	Unknown
Alternative Enforceable Program	None
RWQCB Recommendation	List for total and fecal coliform
SWRCB Staff Recommendation	List for total and fecal coliform

Region 8

Pelican Point Creek

Water Body	Pelican Point Creek
Stressor/Media/Beneficial Use	Total and Fecal coliform/Water/MUN, REC 1, REC2
Data quality assessment. Extent to which data quality requirements met.	QA used by county health agency
Linkage between measurement endpoint and beneficial use or standard	3 WQOs for total coliform (MUN) and fecal coliform (REC 1, REC 2)
Utility of measure for judging if standards or uses are not attained	Measurement can be compared to numerical standard directly.
Water Body-specific Information	Data age = 1-4 Years.
Data used to assess water quality	225/230 exceedances of total coliform WQO. 31/55 exceedances of fecal coliform WQO for REC 2. 48/56 exceedances of fecal coliform WQO for REC 1.
Spatial representation	Targeted in waterbody. Locations unknown.
Temporal representation	1997-2001
Data type	3 WQOs for total and fecal coliform for MUN, REC 1, REC 2
Use of standard method	Standard bacteriological methods
Potential Source(s) of Pollutant	Unknown
Alternative Enforceable Program	None
RWQCB Recommendation	List for total and fecal coliform
SWRCB Staff Recommendation	List for total and fecal coliform

Region 8

Pelican Point Middle Creek

Water Body	Pelican Point Middle Creek
Stressor/Media/Beneficial Use	Total and Fecal coliform/Water/MUN, REC 1, REC2
Data quality assessment. Extent to which data quality requirements met.	QA used by county health agency
Linkage between measurement endpoint and beneficial use or standard	3 WQOs for total coliform (MUN) and fecal coliform (REC 1, REC 2)
Utility of measure for judging if standards or uses are not attained	Measurement can be compared to numerical standard directly.
Water Body-specific Information	Data age = 1-4 Years.
Data used to assess water quality	126/133 exceedances of total coliform WQO . 12/50 exceedances of fecal coliform WQO for REC 1. 11/50 exceedances of fecal coliform WQO for REC 2.
Spatial representation	Targeted in waterbody. Locations unknown.
Temporal representation	1997-2001
Data type	3 WQOs for total and fecal coliform for MUN, REC 1, REC 2
Use of standard method	Standard bacteriological methods
Potential Source(s) of Pollutant	Unknown
Alternative Enforceable Program	None
RWQCB Recommendation	List for total and fecal coliform
SWRCB Staff Recommendation	List for total and fecal coliform

Region 8

Pelican Hill Waterfall

Water Body	Pelican Hill Waterfall
Stressor/Media/Beneficial Use	Total and Fecal coliform/Water/MUN, REC 1, REC2
Data quality assessment. Extent to which data quality requirements met.	QA used by county health agency
Linkage between measurement endpoint and beneficial use or standard	3 WQOs for total coliform (MUN) and fecal coliform (REC 1, REC 2)
Utility of measure for judging if standards or uses are not attained	Measurement can be compared to numerical standard directly.
Water Body-specific Information	Data age = 1-4 Years.
Data used to assess water quality	14/64 exceedances of fecal coliform WQO for REC 2. 208/220 exceedances of total coliform WQO. 11/56 exceedances of fecal coliform WQO for REC 1.
Spatial representation	Targeted in waterbody. Locations unknown.
Temporal representation	1997-2001
Data type	3 WQOs for total and fecal coliform for MUN, REC 1, REC 2
Use of standard method	Standard bacteriological methods
Potential Source(s) of Pollutant	Unknown
Alternative Enforceable Program	None
RWQCB Recommendation	List for total and fecal coliform
SWRCB Staff Recommendation	List for total and fecal coliform

Region 8

Buck Gully Creek

Water Body	Buck Gully Creek
Stressor/Media/Beneficial Use	Total and Fecal coliform/Water/Beneficial uses not established in the Basin Plan for this water body.
Data quality assessment. Extent to which data quality requirements met.	QA used by county health agency
Linkage between measurement endpoint and beneficial use or standard	No water quality standards established in the Basin Plan specifically for this water body.
Utility of measure for judging if standards or uses are not attained	Measurement can be compared to numerical guidelines or standards established for other water bodies.
Water Body-specific Information	Data age = 1-4 Years.
Data used to assess water quality	Total coliform violated in 230/239 samples for guidelines related to MUN. Violations of fecal coliform in 18/56 samples for guidelines related to REC 2 and 13/56 samples for guidelines related to REC 1.
Spatial representation	All samples collected from creek, unknown # of sites, 239 samples
Temporal representation	1997-2001
Data type	Numerical data
Use of standard method	Standard bacteriological methods
Potential Source(s) of Pollutant	Unknown
Alternative Enforceable Program	None
RWQCB Recommendation	List for total and fecal coliform
SWRCB Staff Recommendation	Exclude from list. RWQCB should consider adoption of beneficial uses and water quality standards for this water body.

Region 8

Los Trancos Creek

Water Body	Los Trancos Creek
Stressor/Media/Beneficial Use	Total and Fecal coliform/Water/Beneficial uses not established in the Basin Plan for this water body.
Data quality assessment. Extent to which data quality requirements met.	QA used by county health agency
Linkage between measurement endpoint and beneficial use or standard	No water quality standards established in the Basin Plan specifically for this water body.
Utility of measure for judging if standards or uses are not attained	Measurement can be compared to numerical guidelines or standards established for other water bodies.
Water Body-specific Information	Data age = 1-4 Years.
Data used to assess water quality	Over 450 violations of guidelines for total and fecal coliform.
Spatial representation	All samples collected from creek, at least 4 sample sites, approx. 500 samples
Temporal representation	1997-2001
Data type	Numerical data
Use of standard method	Standard bacteriological methods
Potential Source(s) of Pollutant	Unknown
Alternative Enforceable Program	None
RWQCB Recommendation	List for total and fecal coliform
SWRCB Staff Recommendation	Exclude from list. RWQCB should consider adoption of beneficial uses and water quality standards for this water body.

Region 8

Muddy Creek

Water Body	Muddy Creek
Stressor/Media/Beneficial Use	Total and Fecal coliform/Water/Beneficial uses not established in the Basin Plan for this water body.
Data quality assessment. Extent to which data quality requirements met.	QA used by county health agency
Linkage between measurement endpoint and beneficial use or standard	No water quality standards established in the Basin Plan specifically for this water body.
Utility of measure for judging if standards or uses are not attained	Measurement can be compared to numerical guidelines or standards established for other water bodies.
Water Body-specific Information	Data age = 1-4 Years.
Data used to assess water quality	77/110 samples exceeded the total coliform guideline related to MUN. 16/53 samples exceeded the fecal coliform guideline related to REC 2. 11/54 samples exceeded the fecal coliform guideline related to REC 1.
Spatial representation	Samples collected in creek or creek mouth.
Temporal representation	1997-2001
Data type	Numerical data
Use of standard method	Standard bacteriological methods
Potential Source(s) of Pollutant	Unknown
Alternative Enforceable Program	None
RWQCB Recommendation	List for total and fecal coliform
SWRCB Staff Recommendation	Exclude from list. RWQCB should consider adoption of beneficial uses and water quality standards for this water body.

Region 8

Seal Beach, San Gabriel River Mouth to Main St. Pier

Water Body	Seal Beach, San Gabriel River Mouth to Main St. Pier
Stressor/Media/Beneficial Use	Bacteria (wet season)/Water/MUN, REC 1, REC 2
Data quality assessment. Extent to which data quality requirements met.	QA used by county health agency
Linkage between measurement endpoint and beneficial use or standard	No water quality standards established in the Basin Plan specifically for this water body.
Utility of measure for judging if standards or uses are not attained	Measurement can be compared to numerical standard directly.
Water Body-specific Information	Breakwater posted 2 times in 3 years. 1st St. Beach posted 1 time in 3 years.
Data used to assess water quality	Breakwater posted 2 times in 3 years. 1st St. Beach posted 1 time in 3 years.
Spatial representation	Targeted in waterbody. Locations unknown.
Temporal representation	1997-2001
Data type	3 WQOs for total and fecal coliform for MUN, REC 1, REC 2
Use of standard method	Standard bacteriological methods
Potential Source(s) of Pollutant	Unknown
Alternative Enforceable Program	None
RWQCB Recommendation	List for total and fecal coliform
SWRCB Staff Recommendation	List for total and fecal coliform

Region 8

Huntington State Beach-from Newland Avenue to Santa Ana River

Water Body	Huntington State Beach-from Newland Avenue to Santa Ana River
Stressor/Media/Beneficial Use	Bacteria (wet season)/Water/MUN, REC 1, REC 2
Data quality assessment. Extent to which data quality requirements met.	QA used by county health agency
Linkage between measurement endpoint and beneficial use or standard	Beach Postings are based on exceedances of Ocean Water Contact Sports Standard for bacteria.
Utility of measure for judging if standards or uses are not attained	Measurement can be compared to numerical standard directly.
Water Body-specific Information	Data age = 1-4 Years.
Data used to assess water quality	13 seven-day beach postings in 3 years.
Spatial representation	13 locations.
Temporal representation	1997-2001
Data type	Ocean water contact sports standard for bacteria.
Use of standard method	Standard bacteriological methods
Potential Source(s) of Pollutant	Unknown
Alternative Enforceable Program	None
RWQCB Recommendation	List for total and fecal coliform
SWRCB Staff Recommendation	List for total and fecal coliform

Region 8

Newport Beach, 1000 feet down coast of Santa Ana River

Water Body	Newport Beach, 1000 feet down coast of Santa Ana River
Stressor/Media/Beneficial Use	Bacteria (wet season)/Water/MUN, REC 1, REC 2
Data quality assessment. Extent to which data quality requirements met.	QA used by county health agency
Linkage between measurement endpoint and beneficial use or standard	3 WQOs for total coliform (MUN) and fecal coliform (REC 1, REC 2)
Utility of measure for judging if standards or uses are not attained	Measurement can be compared to numerical standard directly.
Water Body-specific Information	Data age = 1-4 Years.
Data used to assess water quality	1 seven-day beach posting in 3 years, and numerous postings between 2-6 days.
Spatial representation	Various locations along beach.
Temporal representation	1997-2001
Data type	Ocean water contact sports standard for bacteria.
Use of standard method	Standard bacteriological methods
Potential Source(s) of Pollutant	Unknown
Alternative Enforceable Program	None
RWQCB Recommendation	List for total and fecal coliform
SWRCB Staff Recommendation	List for total and fecal coliform

Region 8

Canyon Lake-East Bay

Water Body	Canyon Lake-East Bay
Stressor/Media/Beneficial Use	Sediment/sediment/WARM/REC 1, REC 2
Data quality assessment. Extent to which data quality requirements met.	Suitt and Assoc. Report :QA used only for 1986 data, using standard geological methods for estimating water depth and sediment depth. 1997 information collected by non-standard method (fishfinder used by local resident) with no QA. UC Riverside 2nd Quarterly Report, 2001: QA used.
Linkage between measurement endpoint and beneficial use or standard	Unknown
Utility of measure for judging if standards or uses are not attained	Unknown
Water Body-specific Information	Water depth, water elevation and lake bottom elevation data collected in 1986. Water depth collected in 1997. Sediment traps used in 2001 study by UCR.
Data used to assess water quality	Unknown for data reported in Suitt and Assoc., due to use of non-standard method for collecting data used to estimate sediment accumulation. Sediment trap results from UCR 2001 quarterly report provide more quantitative information.
Spatial representation	5 sample locations
Temporal representation	Calculations from Suitt and Assoc. 1986 and 1997. Study by UC Riverside in 2001.
Data type	Estimates of sedimentation rate.
Use of standard method	Suitt and Assoc. report: 1986 data only. UCR Report: quantitative sedimentation rates.
Potential Source(s) of Pollutant	Unknown
Alternative Enforceable Program	Unknown
RWQCB Recommendation	List for impairment of REC 1, REC 2, and WARM beneficial uses.
SWRCB Staff Recommendation	Do not list for sedimentation. More recent data from UCR 2001 study indicates sedimentation rates not as large as estimated by earlier study. UCR analysis indicates that algae are the largest source of particulates. Canyon Lake is already listed for nutrients and studies for TMDL are underway.

Region 8

San Diego Creek, Reach 1

Water Body	San Diego Creek, Reach 1
Stressor/Media/Beneficial Use	Nutrients/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	NA
Linkage between measurement endpoint and beneficial use or standard	NA
Utility of measure for judging if standards or uses are not attained	NA
Water Body-specific Information	NA
Data used to assess water quality	NA
Spatial representation	NA
Temporal representation	NA
Data type	NA
Use of standard method	NA
Potential Source(s) of Pollutant	NA
Alternative Enforceable Program	NA
RWQCB Recommendation	Delist because TMDL has been incorporated into Basin plan, and has been approved by USEPA.
SWRCB Staff Recommendation	Delist because TMDL has been incorporated into Basin plan, and has been approved by USEPA. Place on TMDLs Completed List.

Region 8

San Diego Creek, Reach 1

Water Body	San Diego Creek, Reach 1
Stressor/Media/Beneficial Use	Siltation/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	NA
Linkage between measurement endpoint and beneficial use or standard	NA
Utility of measure for judging if standards or uses are not attained	NA
Water Body-specific Information	NA
Data used to assess water quality	NA
Spatial representation	NA
Temporal representation	NA
Data type	NA
Use of standard method	NA
Potential Source(s) of Pollutant	NA
Alternative Enforceable Program	NA
RWQCB Recommendation	Delist because TMDL has been incorporated into Basin plan, and has been approved by USEPA
SWRCB Staff Recommendation	Delist because TMDL has been incorporated into Basin plan, and has been approved by USEPA. Place on TMDLs Completed List.

Region 8

San Diego Creek, Reach 2

Water Body	San Diego Creek, Reach 2
Stressor/Media/Beneficial Use	Nutrients/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	NA
Linkage between measurement endpoint and beneficial use or standard	NA
Utility of measure for judging if standards or uses are not attained	NA
Water Body-specific Information	NA
Data used to assess water quality	NA
Spatial representation	NA
Temporal representation	NA
Data type	NA
Use of standard method	NA
Potential Source(s) of Pollutant	NA
Alternative Enforceable Program	NA
RWQCB Recommendation	Delist because TMDL has been incorporated into Basin plan, and has been approved by USEPA
SWRCB Staff Recommendation	Delist because TMDL has been incorporated into Basin plan, and has been approved by USEPA. Place on TMDLs Completed List.

Region 8

San Diego Creek, Reach 2

Water Body	San Diego Creek, Reach 2
Stressor/Media/Beneficial Use	Siltation/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	NA
Linkage between measurement endpoint and beneficial use or standard	NA
Utility of measure for judging if standards or uses are not attained	NA
Water Body-specific Information	NA
Data used to assess water quality	NA
Spatial representation	NA
Temporal representation	NA
Data type.	NA
Use of standard method	NA
Potential Source(s) of Pollutant	NA
Alternative Enforceable Program	NA
RWQCB Recommendation	Delist because TMDL has been incorporated into Basin plan, and has been approved by USEPA
SWRCB Staff Recommendation	Delist because TMDL has been incorporated into Basin plan, and has been approved by USEPA. Place on TMDLs Completed List.

Region 8

Upper Newport Bay

Water Body	Upper Newport Bay
Stressor/Media/Beneficial Use	Nutrients/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	NA
Linkage between measurement endpoint and beneficial use or standard	NA
Utility of measure for judging if standards or uses are not attained	NA
Water Body-specific Information	NA
Data used to assess water quality	NA
Spatial representation	NA
Temporal representation	NA
Data type	NA
Use of standard method	NA
Potential Source(s) of Pollutant	NA
Alternative Enforceable Program	NA
RWQCB Recommendation	Delist because TMDL has been incorporated into Basin plan, and has been approved by USEPA
SWRCB Staff Recommendation	Delist because TMDL has been incorporated into Basin plan, and has been approved by USEPA. Place on TMDLs Completed List.

Region 8

Upper Newport Bay

Water Body	Upper Newport Bay
Stressor/Media/Beneficial Use	Siltation/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	NA
Linkage between measurement endpoint and beneficial use or standard	NA
Utility of measure for judging if standards or uses are not attained	NA
Water Body-specific Information	NA
Data used to assess water quality	NA
Spatial representation	NA
Temporal representation	NA
Data type	NA
Use of standard method	NA
Potential Source(s) of Pollutant	NA
Alternative Enforceable Program	NA
RWQCB Recommendation	Delist because TMDL has been incorporated into Basin plan, and has been approved by USEPA
SWRCB Staff Recommendation	Delist because TMDL has been incorporated into Basin plan, and has been approved by USEPA. Place on TMDLs Completed List.

Region 8

San Diego Creek, Reach 1

Water Body	San Diego Creek, Reach 1
Stressor/Media/Beneficial Use	Fecal coliform/Water/MUN, REC 1, REC2
Data quality assessment. Extent to which data quality requirements met.	QA used by county health agency
Linkage between measurement endpoint and beneficial use or standard	3 WQOs for total coliform (MUN) and fecal coliform (REC 1, REC 2)
Utility of measure for judging if standards or uses are not attained	Measurement can be compared to numerical standard directly.
Water Body-specific Information	Data age = 1-4 Years
Data used to assess water quality	22/22 exceedances of total and fecal coliform WQOs.
Spatial representation	Targeted in waterbody. Locations unknown.
Temporal representation	1997-2001
Data type	3 WQOs for total and fecal coliform for MUN, REC 1, REC 2
Use of standard method	Standard bacteriological methods
Potential Source(s) of Pollutant	Unknown
Alternative Enforceable Program	None
RWQCB Recommendation	List for total and fecal coliform
SWRCB Staff Recommendation	List for total and fecal coliform

Region 8

Upper Newport Bay

Water Body	Upper Newport Bay
Stressor/Media/Beneficial Use	Fecal coliform/Water/MUN, REC 1, REC 2
Data quality assessment. Extent to which data quality requirements met.	NA
Linkage between measurement endpoint and beneficial use or standard	NA
Utility of measure for judging if standards or uses are not attained	NA
Water Body-specific Information	NA
Data used to assess water quality	NA
Spatial representation	NA
Temporal representation	NA
Data type	NA
Use of standard method	NA
Potential Source(s) of Pollutant	NA
Alternative Enforceable Program	NA
RWQCB Recommendation	Delist because TMDL has been incorporated into Basin plan, and has been approved by USEPA
SWRCB Staff Recommendation	Delist because TMDL has been incorporated into Basin plan, and has been approved by USEPA. Place on TMDLs Completed List.

Region 8

Lower Newport Bay

Water Body	Lower Newport Bay
Stressor/Media/Beneficial Use	Nutrients/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	NA
Linkage between measurement endpoint and beneficial use or standard	NA
Utility of measure for judging if standards or uses are not attained	NA
Water Body-specific Information	NA
Data used to assess water quality	NA
Spatial representation	NA
Temporal representation	NA
Data type	NA
Use of standard method	NA
Potential Source(s) of Pollutant	NA
Alternative Enforceable Program	NA
RWQCB Recommendation	Delist because TMDL has been incorporated into Basin plan, and has been approved by USEPA
SWRCB Staff Recommendation	Delist because TMDL has been incorporated into Basin plan, and has been approved by USEPA. Place on TMDLs Completed List.

Region 8

Lower Newport Bay

Water Body	Lower Newport Bay
Stressor/Media/Beneficial Use	Siltation/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	NA
Linkage between measurement endpoint and beneficial use or standard	NA
Utility of measure for judging if standards or uses are not attained	NA
Water Body-specific Information	NA
Data used to assess water quality	NA
Spatial representation	NA
Temporal representation	NA
Data type	NA
Use of standard method	NA
Potential Source(s) of Pollutant	NA
Alternative Enforceable Program	NA
RWQCB Recommendation	Delist because TMDL has been incorporated into Basin plan, and has been approved by USEPA
SWRCB Staff Recommendation	Delist because TMDL has been incorporated into Basin plan, and has been approved by USEPA. Place on TMDLs Completed List.

Region 8

Lower Newport Bay

Water Body	Lower Newport Bay
Stressor/Media/Beneficial Use	Fecal coliform/Water/MUN, REC 1, REC 2
Data quality assessment. Extent to which data quality requirements met.	NA
Linkage between measurement endpoint and beneficial use or standard	NA
Utility of measure for judging if standards or uses are not attained	NA
Water Body-specific Information	NA
Data used to assess water quality	NA
Spatial representation	NA
Temporal representation	NA
Data type	NA
Use of standard method	NA
Potential Source(s) of Pollutant	NA
Alternative Enforceable Program	NA
RWQCB Recommendation	Delist because TMDL has been incorporated into Basin plan, and has been approved by USEPA
SWRCB Staff Recommendation	Delist because TMDL has been incorporated into Basin plan, and has been approved by USEPA. Place on TMDLs Completed List.

Region 8

Santa Ana River, Reach 3

Water Body	Santa Ana River, Reach 3
Stressor/Media/Beneficial Use	Total Dissolved Solids/water
Data quality assessment. Extent to which data quality requirements met.	QA used by Regional Board
Linkage between measurement endpoint and beneficial use or standard	WQO is 700 mg/L
Utility of measure for judging if standards or uses are not attained	Measurement can be compared to numerical standard directly
Water Body-specific Information	Data age = 1-4 Years.
Data used to assess water quality	17/18 samples did not exceed WQO (700 mg/L)
Spatial representation	Targeted in waterbody. Locations unknown.
Temporal representation	1997-2001
Data type	Data values are numeric
Use of standard method	Standard analytical methods
Potential Source(s) of Pollutant	None
Alternative Enforceable Program	None
RWQCB Recommendation	Delist because recent data indicate WQO is being met.
SWRCB Staff Recommendation	Delist because recent data indicate WQO is being met.

Region 8

Santa Ana River, Reach 3

Water Body	Santa Ana River, Reach 3
Stressor/Media/Beneficial Use	Nitrogen/Water/Aquatic Life
Data quality assessment. Extent to which data quality requirements met.	QA used by Regional Board
Linkage between measurement endpoint and beneficial use or standard	WQO is 10 mg/L
Utility of measure for judging if standards or uses are not attained	Measurement can be compared to numerical standard directly
Water Body-specific Information	Data age = 1-4 Years.
Data used to assess water quality	54/55 samples did not exceed the WQO (10 mg/L)
Spatial representation	Targeted in waterbody. Locations unknown.
Temporal representation	1997-2001
Data type	Data values are numeric
Use of standard method	Standard analytical methods
Potential Source(s) of Pollutant	None
Alternative Enforceable Program	None
RWQCB Recommendation	Delist because recent data indicate WQO is being met.
SWRCB Staff Recommendation	Delist because recent data indicate WQO is being met.

Region 8

Anaheim Bay

Water Body	Anaheim Bay
Stressor/Media/Beneficial Use	Reviewed data from Coastal Fish Contamination Program (CFCP), Orange County PFRD/tissue and water/Fish Consumption, Human Health
Data quality assessment. Extent to which data quality requirements met.	QA used by CFCP, county
Linkage between measurement endpoint and beneficial use or standard	MTRLs from CFCP. WQOs for bacteria
Utility of measure for judging if standards or uses are not attained	Measurement can be compared to numerical standard directly
Water Body-specific Information	Data age = 1-4 Years.
Data used to assess water quality	No exceedances for metals, endosulfans, 4 exceedances for pesticides
Spatial representation	Targeted in waterbody. Locations unknown.
Temporal representation	1997-2001
Data type	MTRLs, WQOs are numeric
Use of standard method	Standard analytical methods
Potential Source(s) of Pollutant	Unknown
Alternative Enforceable Program	None
RWQCB Recommendation	More monitoring needed. Water Quality assessment underway.
SWRCB Staff Recommendation	Watch List. More monitoring needed. Water Quality assessment underway. Already listed for pesticides.

Region 8

Bolsa Chica

Water Body	Bolsa Chica
Stressor/Media/Beneficial Use	Orange County PFRD data for metals, beach postings/Water/Human health
Data quality assessment. Extent to which data quality requirements met.	QA used for metals analyses by county
Linkage between measurement endpoint and beneficial use or standard	WQOs for metals
Utility of measure for judging if standards or uses are not attained	Measurement can be compared to numerical standard directly
Water Body-specific Information	Does not meet minimum requirement of 10 samples for water chemistry data
Data used to assess water quality	Does not meet minimum requirement of 10 samples for water chemistry data
Spatial representation	Does not meet minimum requirement of 10 samples for water chemistry data
Temporal representation	Does not meet minimum requirement of 10 samples for water chemistry data
Data type	Data values are numeric
Use of standard method	Standard analytical methods
Potential Source(s) of Pollutant	Unknown
Alternative Enforceable Program	None
RWQCB Recommendation	More monitoring needed.
SWRCB Staff Recommendation	Watch List. More monitoring needed.

Region 8

Huntington Harbor

Water Body	Huntington Harbor
Stressor/Media/Beneficial Use	Orange County PFRD data for metals, State Mussel Watch Program data for pesticides, organics/water and tissue/Fish consumption
Data quality assessment. Extent to which data quality requirements met.	QA used by county, Mussel Watch.
Linkage between measurement endpoint and beneficial use or standard	MTRLS, WQOs
Utility of measure for judging if standards or uses are not attained	Measurement can be compared to numerical standard directly
Water Body-specific Information	Data age = 1-4 Years.
Data used to assess water quality	Does not meet minimum requirement of 10 samples for water chemistry data (metals). No exceedances for SMW data except dieldrin. Huntington Harbor already listed for pesticides.
Spatial representation	Targeted in waterbody. Locations unknown.
Temporal representation	1997-2001
Data type	MTRLS, WQOs are numeric
Use of standard method	Standard analytical methods
Potential Source(s) of Pollutant	Unknown
Alternative Enforceable Program	None
RWQCB Recommendation	More monitoring needed.
SWRCB Staff Recommendation	Watch List. More monitoring needed.

Region 8

Newport Bay

Water Body	Newport Bay
Stressor/Media/Beneficial Use	Reviewed data from Coastal Fish Contamination Program. Included data for DDT, Mercury and endosulfans/tissue/Fish consumption
Data quality assessment. Extent to which data quality requirements met.	QA used by CFCP
Linkage between measurement endpoint and beneficial use or standard	MTRLs.
Utility of measure for judging if standards or uses are not attained	Measurement can be compared to numerical standard directly
Water Body-specific Information	Data age = 1-4 Years.
Data used to assess water quality	No exceedances for mercury, endosulfan. 11/19 fish tissue samples exceeded MTRL for DDT. Already listed for pesticides.
Spatial representation	5 sampling locations
Temporal representation	1997-2001
Data type	MTRLs are numeric
Use of standard method	Standard analytical methods
Potential Source(s) of Pollutant	Unknown
Alternative Enforceable Program	None
RWQCB Recommendation	More monitoring needed.
SWRCB Staff Recommendation	No action. Newport Bay is already listed for pesticides

Region 8

Little Corona Beach

Water Body	Little Corona Beach
Stressor/Media/Beneficial Use	Bacteria/Water/MUN, REC 1, REC 2
Data quality assessment. Extent to which data quality requirements met.	QA used by county health agency
Linkage between measurement endpoint and beneficial use or standard	3 WQOs for total coliform (MUN) and fecal coliform (REC 1, REC 2)
Utility of measure for judging if standards or uses are not attained	Measurement can be compared to numerical standard directly
Water Body-specific Information	Insufficient data to make a determination
Data used to assess water quality	Insufficient data to make a determination
Spatial representation	Insufficient data to make a determination
Temporal representation	1997-2001
Data type	3 WQOs for total and fecal coliform for MUN, REC 1, REC 2
Use of standard method	Standard bacteriological methods
Potential Source(s) of Pollutant	Unknown
Alternative Enforceable Program	None
RWQCB Recommendation	Insufficient data to make a determination. Place on high priority for monitoring.
SWRCB Staff Recommendation	Watch List. Insufficient data to make a determination.

Region 8

Ocean Waters

Water Body	Ocean Waters
Stressor/Media/Beneficial Use	Reviewed data from Coastal Fish Contamination Program/tissue/Fish consumption
Data quality assessment. Extent to which data quality requirements met.	QA used by CFCP
Linkage between measurement endpoint and beneficial use or standard	MTRLs.
Utility of measure for judging if standards or uses are not attained	Measurement can be compared to numerical standard directly
Water Body-specific Information	Insufficient data to make a determination
Data used to assess water quality	Insufficient data to make a determination
Spatial representation	Insufficient data to make a determination
Temporal representation	1997-2001
Data type	MTRLs are numeric
Use of standard method	Standard analytical methods
Potential Source(s) of Pollutant	Unknown
Alternative Enforceable Program	None
RWQCB Recommendation	Insufficient data to make a determination. More monitoring needed.
SWRCB Staff Recommendation	Watch List. Insufficient data to make a determination.

Region 8

Cucamonga Creek

Water Body	Cucamonga Creek
Stressor/Media/Beneficial Use	Reviewed water quality data from Orange County Water District/Water/various B.U.s
Data quality assessment. Extent to which data quality requirements met.	QA used by county
Linkage between measurement endpoint and beneficial use or standard	WQOs
Utility of measure for judging if standards or uses are not attained	Measurement can be compared to numerical standard directly
Water Body-specific Information	Insufficient data to make a determination
Data used to assess water quality	Insufficient data to make a determination
Spatial representation	Insufficient data to make a determination
Temporal representation	1997-2001
Data type	Data are numeric values
Use of standard method	Standard analytical methods
Potential Source(s) of Pollutant	Unknown
Alternative Enforceable Program	None
RWQCB Recommendation	Insufficient data to make a determination. More monitoring needed.
SWRCB Staff Recommendation	Watch List. Insufficient data to make a determination.

Region 8

Chino Creek

Water Body	Chino Creek
Stressor/Media/Beneficial Use	Reviewed water quality data from Orange County Water District/Water/various B.U.s
Data quality assessment. Extent to which data quality requirements met.	QA used by county
Linkage between measurement endpoint and beneficial use or standard	WQOs
Utility of measure for judging if standards or uses are not attained	Measurement can be compared to numerical standard directly
Water Body-specific Information	Insufficient data to make a determination
Data used to assess water quality	Insufficient data to make a determination
Spatial representation	Insufficient data to make a determination
Temporal representation	1997-2001
Data type	Data are numeric values
Use of standard method	Standard analytical methods
Potential Source(s) of Pollutant	Unknown
Alternative Enforceable Program	None
RWQCB Recommendation	Insufficient data to make a determination. More monitoring needed.
SWRCB Staff Recommendation	Watch List. Insufficient data to make a determination.

Region 8

Mill Creek (Prado Area)

Water Body	Mill Creek (Prado Area)
Stressor/Media/Beneficial Use	Reviewed water quality data from Orange County Water District/Water/various B.U.s
Data quality assessment. Extent to which data quality requirements met.	QA used by county
Linkage between measurement endpoint and beneficial use or standard	WQOs
Utility of measure for judging if standards or uses are not attained	Measurement can be compared to numerical standard directly
Water Body-specific Information	Insufficient data to make a determination
Data used to assess water quality	Insufficient data to make a determination
Spatial representation	Insufficient data to make a determination
Temporal representation	1997-2001
Data type	Data are numeric values
Use of standard method	Standard analytical methods
Potential Source(s) of Pollutant	Unknown
Alternative Enforceable Program	None
RWQCB Recommendation	Insufficient data to make a determination. More monitoring needed.
SWRCB Staff Recommendation	Watch List. Insufficient data to make a determination.

Region 8

Santa Ana River (Reaches 4 and 5)

Water Body	Santa Ana River (Reaches 4 and 5)
Stressor/Media/Beneficial Use	Reviewed water quality data from Orange County Water District/Water/various B.U.s
Data quality assessment. Extent to which data quality requirements met.	QA used by county
Linkage between measurement endpoint and beneficial use or standard	WQOs
Utility of measure for judging if standards or uses are not attained	Measurement can be compared to numerical standard directly
Water Body-specific Information	Insufficient data to make a determination
Data used to assess water quality	Insufficient data to make a determination
Spatial representation	Insufficient data to make a determination
Temporal representation	1997-2001
Data type	Data are numeric values
Use of standard method	Standard analytical methods
Potential Source(s) of Pollutant	Unknown
Alternative Enforceable Program	None
RWQCB Recommendation	Insufficient data to make a determination. More monitoring needed.
SWRCB Staff Recommendation	Watch List. Insufficient data to make a determination.

Region 8

Temescal Creek

Water Body	Temescal Creek
Stressor/Media/Beneficial Use	Reviewed water quality data from Orange County Water District/Water/various B.U.s
Data quality assessment. Extent to which data quality requirements met.	QA used by county
Linkage between measurement endpoint and beneficial use or standard	WQOs
Utility of measure for judging if standards or uses are not attained	Measurement can be compared to numerical standard directly
Water Body-specific Information	Insufficient data to make a determination
Data used to assess water quality	Insufficient data to make a determination
Spatial representation	Insufficient data to make a determination
Temporal representation	1997-2001
Data type	Data are numeric values
Use of standard method	Standard analytical methods
Potential Source(s) of Pollutant	Unknown
Alternative Enforceable Program	None
RWQCB Recommendation	Insufficient data to make a determination. More monitoring needed.
SWRCB Staff Recommendation	Watch List. Insufficient data to make a determination.

Region 8

San Jacinto River North Fork (Reach 7)

Water Body	San Jacinto River North Fork (Reach 7)
Stressor/Media/Beneficial Use	Reviewed water quality data from Lake Hemet Municipal Water District/Water/Various B.U.s
Data quality assessment. Extent to which data quality requirements met.	QA used by water district
Linkage between measurement endpoint and beneficial use or standard	WQOs
Utility of measure for judging if standards or uses are not attained	Measurement can be compared to numerical standard directly
Water Body-specific Information	Insufficient data to make a determination
Data used to assess water quality	Insufficient data to make a determination
Spatial representation	Insufficient data to make a determination
Temporal representation	1997-2001
Data type	Data are numeric values
Use of standard method	Standard analytical methods
Potential Source(s) of Pollutant	Unknown
Alternative Enforceable Program	None
RWQCB Recommendation	Insufficient data to make a determination. More monitoring needed.
SWRCB Staff Recommendation	Watch List. Insufficient data to make a determination.

Region 8

San Jacinto River South Fork (Reach 7)

Water Body	San Jacinto River South Fork (Reach 7)
Stressor/Media/Beneficial Use	Reviewed water quality data from Lake Hemet Municipal Water District/Water/Various B.U.s
Data quality assessment. Extent to which data quality requirements met.	QA used by water district
Linkage between measurement endpoint and beneficial use or standard	WQOs
Utility of measure for judging if standards or uses are not attained	Measurement can be compared to numerical standard directly
Water Body-specific Information	Insufficient data to make a determination
Data used to assess water quality	Insufficient data to make a determination
Spatial representation	Insufficient data to make a determination
Temporal representation	1997-2001
Data type	Data are numeric values
Use of standard method	Standard analytical methods
Potential Source(s) of Pollutant	Unknown
Alternative Enforceable Program	None
RWQCB Recommendation	Insufficient data to make a determination. More monitoring needed.
SWRCB Staff Recommendation	Watch List. Insufficient data to make a determination.

Region 8

Strawberry Creek

Water Body	Strawberry Creek
Stressor/Media/Beneficial Use	Reviewed water quality data from Lake Hemet Municipal Water District/Water/Various B.U.s
Data quality assessment. Extent to which data quality requirements met.	QA used by water district
Linkage between measurement endpoint and beneficial use or standard	WQOs
Utility of measure for judging if standards or uses are not attained	Measurement can be compared to numerical standard directly
Water Body-specific Information	Insufficient data to make a determination
Data used to assess water quality	Insufficient data to make a determination
Spatial representation	Insufficient data to make a determination
Temporal representation	1997-2001
Data type	Data are numeric values
Use of standard method	Standard analytical methods
Potential Source(s) of Pollutant	Unknown
Alternative Enforceable Program	None
RWQCB Recommendation	Insufficient data to make a determination. More monitoring needed.
SWRCB Staff Recommendation	Watch List. Insufficient data to make a determination.

Reference List for Region 8

Staff Report

California Regional Water Quality Control Board. Santa Ana Region. 2001. Staff Report on the Update of the Clean Water Act Section 303(d) List of Impaired Waterbodies within the Santa Ana Region. December 19, 2001.

Data Sources

Big Bear Lake Municipal Water District, Water Column Chemistry, Big Bear Lake, 2000. Wet & Dry.

Big Bear Lake Municipal Water District, Water Column Chemistry, Boulder Creek, 2000. Wet & Dry.

Big Bear Lake Municipal Water District, Water Column Chemistry, Grout Creek, 2000. Wet & Dry.

Big Bear Lake Municipal Water District, Water Column Chemistry, Knickerbocker Creek, 2000. Wet & Dry.

Big Bear Lake Municipal Water District, Water Column Chemistry, Metcalf Creek, 2000. Wet & Dry.

Big Bear Lake Municipal Water District, Water Column Chemistry, Rathbun Creek, 2000. Wet & Dry.

City of Canyon Lake, Sediment, Canyon Lake, 1986-1997. Season not applicable.

Lake Hemet Municipal Water District, Water Column Chemistry, San Jacinto Creek, 1998-2001. Wet Only.

Lake Hemet Municipal Water District, Water Column Chemistry, Strawberry Creek, 1998-2001. Wet Only.

NPDES/WDR discharger monitoring data, Water Column Chemistry, Varies throughout the Region, 1998-2000. Wet & Dry.

Orange County Health Care Agency, Water Column Chemistry, Buck Gully Creek, 1997-2001. Wet & Dry.

Orange County Health Care Agency, Water Column Chemistry, Huntington Beach State Park, Wet & Dry.

Orange County Health Care Agency, The Irvine Company, Water Column Chemistry, Los Trancos Creek, 1997-2001. Wet & Dry.

Orange County Health Care Agency, The Irvine Company, Water Column Chemistry, Muddy Creek, 1997-2001. Wet & Dry.

Orange County Health Care Agency, Water Column Chemistry, Newport Beaches, 1999-2001. Wet Only.

Orange County Health Care Agency, Water Column Chemistry, Pelican Point Creek, 1997-2001. Wet & Dry.

Orange County Health Care Agency, Water Column Chemistry, Pelican Point Middle Creek, 1997-2001. Wet & Dry.

Orange County Health Care Agency, Water Column Chemistry, Pelican Hill Waterfall, 1997-2001. Wet & Dry.

Orange County Health Care Agency, RWQCB 8 Nov 24, 1998 Newport Bay TMDL Problem Statement, Water Column Chemistry, Santa Ana Delhi Channel, 1997,1998. Wet & Dry.

Orange County Health Care Agency, Water Column Chemistry, Seal Beach, 1999-2001. Wet & Dry.

Orange County Public Facilities Resource Dept, Water Column Chemistry, Anaheim Bay, 1999, 2000. Wet & Dry.

Orange County Public Facilities Resource Dept, Water Column Chemistry, Bolsa Chica, 1999, 2000. Wet & Dry.

Orange County Public Facilities Resource Dept, Water Column Chemistry, Huntington Harbour, 1999, 2000. Wet & Dry.

Orange County Water District, Water Column Chemistry, Cucamonga Creek, 1998,2000,2001. Wet Only

Orange County Water District, Water Column Chemistry, Chino Creek, 1997-2000. Wet & Dry.

Orange County Water District, Water Column Chemistry, *Mill Creek*, 1997-2000. Wet & Dry.

Orange County Water District, RWQCB 8 Monitoring data, Water Column Chemistry, Santa Ana River Reaches 2, 3, 4, 5, 1997-2000. Wet & Dry.

Orange County Water District, Water Column Chemistry, Temescal Creek, 1997-2000. Dry Only

RWQCB 8 Nov 24, 1998 Newport Bay TMDL Problem Statement, Water Column Chemistry, San Diego Creek, 1997,1998. Wet & Dry.

State Water Resources Control Board, Coastal Fish Contamination Program, Fish Tissue, *Anaheim Bay*, 1999, 2000. Season not applicable.

State Water Resources Control Board, Coastal Fish Contamination Program , Fish Tissue, Huntington Beach State Park, 1999, 2000. Season not applicable.

State Water Resources Control Board, Coastal Fish Contamination Program, Fish Tissue, Newport Bay, 1999, 2000. Season not applicable.

State Water Resources Control Board, Coastal Fish Contamination Program , Fish Tissue , Newport Beaches, 1999, 2000. Season not applicable.

State Water Resources Control Board, Coastal Fish Contamination Program ; Fish Tissue, Ocean Waters (oil platforms), 1999, 2000. Season not applicable.

State Water Resources Control Board, Coastal Fish Contamination Program , Fish Tissue, Seal Beach, 1999,2000. Season not applicable.

State Water Resources Control Board, Mussel Watch, Mussel Tissue , Huntington Harbour, 1998-2000. Season not applicable.

Yucaipa Valley Municipal Water District, No ambient data received only outfall data, San Timoteo Creek, Not applicable.

Regional Water Quality Control Board

SAN DIEGO REGION (9)



SECTION 303 (d) LIST PROPOSALS

Region 9 Summary of Recommendations

Water Body	Pollutant/Medium /Beneficial Use	RWQCB Recommendation	SWRCB Recommendation
San Diego River (lower)	Fecal coliform/Water/REC-1	List	List
San Diego River (lower)	Phosphorus/Water/REC-1, REC-2, WARM, COLD	List	List
San Diego River (lower)	Total dissolved solids/Water/AGR	List	List
San Luis Rey River	Chloride/Water/IND, WARM, WILD, RARE	List	List
San Luis Rey River	Total dissolved solids/Water/AGR	List	List
Santa Margarita River (upper)	Phosphorus/Water/MUN, REC-1, REC-2, WARM, COLD, WILD, RARE	List	List
Segunda Deshecha Creek	Phosphorus/Water/REC-1, REC-2, WARM, WILD	List	List
Segunda Deshecha Creek	Turbidity/Water/WARM, WILD	List	List
Tijuana Estuary	Dissolved oxygen/Water/COMM, BIOL, EST, WILD, RARE, MAR, MIGR	List	List
Pacific Ocean Shoreline (Coronado Beach)	Bacterial indicators/Water/REC-1, REC- 2	Delist	Delist, and put on Watch List to continue to keep an eye on problem.

Water Body	Pollutant/Medium /Beneficial Use	RWQCB Recommendation	SWRCB Recommendation
Pacific Ocean Shoreline (Ocean Beach)	Bacterial indicators/Water/REC-1, REC- 2	Add specific location (not new HA) to 1998 Listing	Add specific location to 1998 listing within same hydrologic area.
Pacific Ocean Shoreline (South Capistrano State Beach)	Bacterial indicators/Water/REC-1, REC- 2	Add specific location (not new HA) to 1998 Listing	Add specific location to 1998 listing within same hydrologic area.
Pacific Ocean Shoreline (San Onofre State Beach/San Mateo Creek Outlet)	Bacterial indicators/Water/REC-1, REC- 2	Add specific location (not new HA) to 1998 Listing	Add specific location to 1998 listing within same hydrologic area.
San Diego Bay Kellog Street Beach (Pueblo San Diego HU [908.00] and Sweetwater HU [909.00])	Bacterial indicators/Water/REC-1, REC- 2	Add specific location (not new HA) to 1998 Listing	Add specific location to 1998 listing within same hydrologic area.
San Diego Bay Shelter Island Shoreline Park (Pueblo San Diego 908.00 and Sweetwater)	Bacterial indicators/Water/REC-1, REC- 2	Add specific location (not new HA) to 1998 Listing	Add specific location to 1998 listing within same hydrologic area.
San Diego Bay, Coronado	Bacterial indicators/Water/REC-1, REC- 2	Add specific location (not new HA) to 1998 Listing	Add specific location to 1998 listing within same hydrologic area.
Agua Hedionda Creek	Diazinon/Water/WARM, WILD	List	List
Agua Hedionda Creek	Total dissolved solids/Water/MUN, AGR	List	List
Aliso Creek	Enterococci/Water/REC-1	List	List
Aliso Creek	E. coli/Water/REC-1	List	List
Aliso Creek	Fecal coliform/Water/REC-1	List	List
Aliso Creek	Phosphorus/Water/WARM, WILD	List	List

Summary of Recommendations 9-2

Water Body	Pollutant/Medium /Beneficial Use	RWQCB Recommendation	SWRCB Recommendation
Aliso Creek	Toxicity/Water/WARM, WILD	List	List
Cloverdale Creek	Phosphorus/Water/MUN, REC-1, REC-2, WARM, COLD, WILD, RARE	List	List
Cloverdale Creek	Total dissolved solids/Water/MUN, AGR	List	List
Dana Point Harbor	Bacterial indicators total/fecal coliform, enterococci)/Water/REC-1, SHELL	List	List
Dana Point Harbor	Dissolved copper/Water and sediment/WILD, RARE, MAR, MIGR, SPWN	List	List
Felicita Creek	Total dissolved solids/Water/MUN, AGR	List	List
Forrester Creek	Fecal coliform/Water/REC-1	List	List
Forrester Creek	pH/Water/WARM, COLD, WILD	List	List
Forrester Creek	Total dissolved solids/Water/MUN	List	List
Green Valley Creek	Sulfate/Water/MUN	List	List
Kit Carson Creek	Total dissolved solids/Water/AGR	List	List
Lake Hodges (Hodges Reservoir)	Color/Water/MUN, REC-2	List	List

Water Body	Pollutant/Medium /Beneficial Use	RWQCB Recommendation	SWRCB Recommendation
Lake Hodges (Hodges Reservoir)	Nitrogen/Water/WARM, COLD, WILD, RARE, MUN, IND, PROC, AGR, REC-1, REC-2	List	List
Lake Hodges (Hodges Reservoir)	Phosphorus/Water/WARM, COLD, WILD, RARE, MUN, IND, PROC, AGR, REC-1, REC-2	List	List
Lake Hodges (Hodges Reservoir)	Total dissolved solids/Water/AGR	List	List
Lake Sutherland (Sutherland Reservoir)	Color/Water/MUN, REC-2	List	List
Murrieta Creek	Phosphorus/Water/REC-1, REC-2, WARM, COLD	List	List
Pacific Ocean Shoreline (Torrey Pines State Beach/Miramar Reservoir)	Bacterial indicators/Water/REC-1, REC- 2	List	List
Pine Valley Creek (Upper)	Enterococci/Water/REC-1	List	List
Prima Deshecha Creek	Phosphorus/Water/REC-1, REC-2, WARM, WILD	List	List
Prima Deshecha Creek	turbidity/Water/WARM, WILD	List	List
Sandia Creek	Total dissolved solids/Water/MUN, AGR	List	List
San Diego Bay (Switzer Creek)	Degraded benthos/sediment/BIOL, EST, WILD, RARE, MAR, MIGR, SHELL	List	List

Summary of Recommendations 9-4

Water Body	Pollutant/Medium /Beneficial Use	RWQCB Recommendation	SWRCB Recommendation
San Diego Bay (Switzer Creek)	Toxicity/sediment/BIOL, EST, WILD, RARE, MAR, MIGR, SHELL	List	List
San Diego River (lower)	Dissolved oxygen/Water/WARM, COLD, WILD	List	List

Region 9

Agua Hedionda Creek

Water Body	Agua Hedionda Creek
Stressor/Media/Beneficial Use	Diazinon/Water/WARM, WILD
Data quality assessment. Extent to which data quality requirements met.	NPDES permit monitoring
Linkage between measurement endpoint and beneficial use or standard	Pollutant can have a direct impact on beneficial uses.
Utility of measure for judging if standards or uses are not attained	CDFG, USEPA Criteria (Continuous and Maximum Concentrations) used
Water Body-specific Information	Data age = 1-3 years.
Data used to assess water quality	4/6 (67%) violations > 0.09 ug/L, average = 0.217 ug/L, in wet months
Spatial representation	One site Only
Temporal representation	Months of November, January, March, and February sampled
Data type	Numerical data
Use of standard method	
Potential Source(s) of Pollutant	Urban and agricultural runoff
Alternative Enforceable Program	Unknown
RWQCB Recommendation	List
SWRCB Staff Recommendation	List

Region 9

Agua Hedionda Creek

Water Body	Agua Hedionda Creek
Stressor/Media/Beneficial Use	Total dissolved solids/Water/MUN, AGR
Data quality assessment. Extent to which data quality requirements met.	NPDES permit monitoring
Linkage between measurement endpoint and beneficial use or standard	Pollutant can have a direct impact on beneficial uses.
Utility of measure for judging if standards or uses are not attained	WQO (Basin Plan) (500 mg/L) used
Water Body-specific Information	Data age = 1-3 years.
Data used to assess water quality	City of San Diego sampling showed exceedance of the Basin Plan objective for more than 10% of the time during a one-year period. At station AH1 from June 1998 to March 1999, 4 of 4 samples (100%) exceeded the objective, with a mean of 1268.0 mg/L and a median of 1251.5 mg/L. From January 2000 to March 2000, 1 of 3 samples (33%) exceeded the objective, with a mean of 684.3 mg/L and a median of 362.0 mg/L. One other station also demonstrated a TDS concentration to exceed the objective in June of 1998. The concentration at AHC-SA was 1372 mg/L. All non-detects were treated as 0.0 mg/L for statistical purposes. Regional Board TDS sampling in June of 1998 also show Agua Hedionda Creek to have concentrations above the Basin Plan objective. The concentration at Sycamore Avenue was 1372 mg/L, at El Camino Real the concentration was 1716 mg/L and 1624 mg/L.
Spatial representation	Two sample sites (top and bottom of reach)
Temporal representation	November 1998 to March 2000
Data type	Numerical data
Use of standard method	
Potential Source(s) of Pollutant	Anthropogenic sources, imported water, evaporation, and natural salt sources. Also, urban runoff, agriculture runoff, other point sources, and nonpoint sources.
Alternative Enforceable Program	Unknown
RWQCB Recommendation	List
SWRCB Staff Recommendation	List

Region 9

Aliso Creek

Water Body	Aliso Creek
Stressor/Media/Beneficial Use	Enterococci/Water/REC-I
Data quality assessment. Extent to which data quality requirements met.	205(j) Planning Study used
Linkage between measurement endpoint and beneficial use or standard	Pollutant can have a direct impact on beneficial uses.
Utility of measure for judging if standards or uses are not attained	WQO (Basin Plan) (>108 colonies/100 mL), for lightly/moderately used areas
Water Body-specific Information	Data age = 2 years.
Data used to assess water quality	Aliso Creek Water Quality Planning Study (6-8/99), dry weather: Cooks Corner (44% exceedences [>108 coliform forming units/100 mL]), downstream of English Canyon Creek (33%), downstream of Dairy Fork Creek (78%), downstream of Sulphur Creek (44%) and at Pacific Coast Highway (33%). (6-8/99) tributaries, dry weather: English Canyon Creek (56%), Dairy Fork Creek (78%), Aliso Hills Channel (100%), Sulphur Creek (33%) and Wood Canyon Creek (22%).
Spatial representation	9 samples at each of 10 stations (Aliso Creek and tributaries combined) entire reach sampled
Temporal representation	Sampling occurred in dry weather from June-August 1999.
Data type	Numerical data
Use of standard method	
Potential Source(s) of Pollutant	Urban runoff, other point sources and nonpoint sources
Alternative Enforceable Program	Unknown
RWQCB Recommendation	List
SWRCB Staff Recommendation	List

Region 9

Aliso Creek

Water Body	Aliso Creek
Stressor/Media/Beneficial Use	E. coli/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	205(j) Planning Study used
Linkage between measurement endpoint and beneficial use or standard	Pollutant can have a direct impact on beneficial uses.
Utility of measure for judging if standards or uses are not attained	WQO (Basin Plan) (>406 colonies/100 mL)), for lightly/moderately used areas
Water Body-specific Information	Data age = 2 years.
Data used to assess water quality	Aliso Creek Water Quality Planning Study (6-8/99), dry weather: Cooks Corner (22% exceedences [>406 colonies/100 mL]), downstream of English Canyon Creek (56%), downstream of Dairy Fork Creek (89%), and downstream of Sulphur Creek (33%). (6-8/99) tributaries, dry weather: English Canyon Creek (44%), Dairy Fork Creek (78%), Aliso Hills Channel (67%), Sulphur Creek (22%) and Wood Canyon Creek (33%).
Spatial representation	9 samples at each of the 10 stations (Aliso Creek and tributaries combined) entire reach sampled
Temporal representation	Sampling from June-August 1999.
Data type	Numerical data
Use of standard method	
Potential Source(s) of Pollutant	Urban runoff, other point sources and nonpoint sources
Alternative Enforceable Program	Unknown
RWQCB Recommendation	List
SWRCB Staff Recommendation	List

Region 9

Aliso Creek

Water Body	Aliso Creek
Stressor/Media/Beneficial Use	Fecal coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	205(j) Planning Study used
Linkage between measurement endpoint and beneficial use or standard	Pollutant can have a direct impact on beneficial uses.
Utility of measure for judging if standards or uses are not attained	WQO (Basin Plan) (for 5 samples or more, any 30-day period, log mean not >200 colonies/100 mL; no more than 10% total samples >400 colonies/100 mL) used
Water Body-specific Information	Data age = 3 years.
Data used to assess water quality	Aliso Creek Water Quality Planning Study (10/98): 4 locations w/log mean concentrations >>WQO for 30-day log mean objective (200 colonies/100 mL). Locations: downstream of English Canyon Creek (1074 Most Probable Number (MPN)/100 mL), downstream of Dairy Fork Creek (4308 MPN/100 mL), downstream of Sulphur Creek (1410 MPN/100 mL) and at Pacific Coast Highway (3178 MPN/100 mL). (5 samples in a 30-day period)
Spatial representation	5 samples; lower 1 mile of Creek sampled
Temporal representation	Samples collected in a 30-day period in October 1998.
Data type	Numerical data
Use of standard method	
Potential Source(s) of Pollutant	Urban runoff, other point sources and nonpoint sources
Alternative Enforceable Program	Unknown
RWQCB Recommendation	List
SWRCB Staff Recommendation	List

Region 9

Aliso Creek

Water Body	Aliso Creek
Stressor/Media/Beneficial Use	Phosphorus/Water/WARM, WILD
Data quality assessment. Extent to which data quality requirements met.	NPDES permit monitoring
Linkage between measurement endpoint and beneficial use or standard	Pollutant can have a direct impact on beneficial uses.
Utility of measure for judging if standards or uses are not attained	WQO (Basin Plan), narrative objective, also (biostimulatory objective = 0.1 mg/L) not to be exceeded >10% of the time
Water Body-specific Information	Data age = 1-4 years.
Data used to assess water quality	Orange County NPDES Annual Progress Report (7/97 and 7/00): (data converted from PO4 to equivalent phosphorus value). 7/97-6/98: 5/5 (100%) > WQO, mean = 0.23 mg/L. 9/98-8/99: 20/22 (91%) > WQO, mean=0.26 mg/L. 10/99-6/00: 13/13 (100%) > WQO, mean=0.304 mg/L
Spatial representation	40 samples; data good for lower 4 miles of the creek
Temporal representation	Over 4 years (1997-2000).
Data type	Numerical data
Use of standard method	
Potential Source(s) of Pollutant	Urban runoff, other point sources and nonpoint sources
Alternative Enforceable Program	Unknown
RWQCB Recommendation	List
SWRCB Staff Recommendation	List

Region 9

Aliso Creek

Water Body	Aliso Creek
Stressor/Media/Beneficial Use	Toxicity/Water/WARM, WILD
Data quality assessment. Extent to which data quality requirements met.	2-5(j) Planning Study used
Linkage between measurement endpoint and beneficial use or standard	Pollutant can have a direct impact on beneficial uses.
Utility of measure for judging if standards or uses are not attained	WQO (Basin Plan) (narrative objective) used
Water Body-specific Information	Data age = 2-3 years.
Data used to assess water quality	Aliso Creek Water Quality Planning Study: 9/98--no toxicity (low flow); 11/98 and 01/99--toxicity to juvenile fathead minnows and Ceriodaphnia dubia (flood events). For 11/20 toxicity tests, survival rates for both species <70%; for 10/11 of these survival <50%. Average survival rate (juvenile fathead minnows) = 79%. Average survival rate (Ceriodaphnia dubia) =22%.
Spatial representation	20 samples, 5 stations over entire reach (7.2 miles) covered
Temporal representation	Samples collected from 1998-1999.
Data type	Numerical data
Use of standard method	
Potential Source(s) of Pollutant	Organophosphate pesticides are a significant component of the aquatic toxicity in storm samples. Organophosphate pesticides are found in urban and agricultural run-off.
Alternative Enforceable Program	Unknown
RWQCB Recommendation	List
SWRCB Staff Recommendation	List

Region 9

Cloverdale Creek

Water Body	Cloverdale Creek
Stressor/Media/Beneficial Use	Phosphorus/Water/MUN, REC-1, REC-2, WARM, COLD, WILD, RARE
Data quality assessment. Extent to which data quality requirements met.	City of San Diego WQ Laboratory
Linkage between measurement endpoint and beneficial use or standard	Pollutant can have a direct impact on beneficial uses.
Utility of measure for judging if standards or uses are not attained	WQO (Basin Plan), narrative objective, also (biostimulatory objective = 0.1 mg/L) not to be exceeded >10% of the time
Water Body-specific Information	Data age = 2 years.
Data used to assess water quality	Sampling by the City of San Diego at station CDC4 showed the Basin Plan objective for phosphorus to be exceeded for more than 10% of the time during the year. Eight of 8 samples exceeded the objective, with an average concentration was 0.45 mg/L and a median concentration was 0.34 mg/L.
Spatial representation	One sample site, 1/2 mile of Creek
Temporal representation	Samples collected April 1999-March 2000.
Data type	Numerical data
Use of standard method	NPDES procedures
Potential Source(s) of Pollutant	Urban runoff, other point sources and nonpoint sources
Alternative Enforceable Program	Unknown
RWQCB Recommendation	List
SWRCB Staff Recommendation	List

Region 9

Cloverdale Creek

Water Body	Cloverdale Creek
Stressor/Media/Beneficial Use	Total dissolved solids/Water/MUN, AGR
Data quality assessment. Extent to which data quality requirements met.	City of San Diego WQ Laboratory
Linkage between measurement endpoint and beneficial use or standard	Pollutant can have a direct impact on beneficial uses.
Utility of measure for judging if standards or uses are not attained	WQO (Basin Plan) (500 mg/L) used
Water Body-specific Information	Data age = 1-2 years.
Data used to assess water quality	Sampling by the City of San Diego at station CDC4 showed the Basin Plan objective for TDS to be exceeded for more than 10% of the time during the year. Eight of 8 samples exceeded the objective, with an average concentration of 1443.4 mg/L and a median concentration of 1500.0 mg/L.
Spatial representation	One sample site, 1/2 mile of Creek
Temporal representation	Samples collected April 1999-March 2000.
Data type	Numerical data
Use of standard method	NPDES procedures
Potential Source(s) of Pollutant	Anthropogenic sources, imported water, evaporation, and natural salt sources. Also, urban runoff, agriculture runoff, other point sources, and nonpoint sources.
Alternative Enforceable Program	Unknown
RWQCB Recommendation	List
SWRCB Staff Recommendation	List

Region 9

Dana Point Harbor

Water Body	Dana Point Harbor
Stressor/Media/Beneficial Use	Bacterial indicators total/fecal coliform, enterococci)/Water/REC-1, SHELL
Data quality assessment. Extent to which data quality requirements met.	Orange County Environmental Health Care Agency
Linkage between measurement endpoint and beneficial use or standard	Pollutant can have a direct impact on beneficial uses.
Utility of measure for judging if standards or uses are not attained	WQO (Basin Plan/Ocean Plan), via beach closures used. See #3 (column) entry for Pacific Ocean Shoreline (Ocean Beach)
Water Body-specific Information	Data age = 1 yr.
Data used to assess water quality	54 days of Beach Closures and/or General Advisories or beach closures suggested that REC-1 standards were exceeded.
Spatial representation	sampled within 400 yards (0.2 miles) of discharge point
Temporal representation	probable
Data type	Numerical data
Use of standard method	
Potential Source(s) of Pollutant	Sewage spills/leaks, urban runoff, other point sources, nonpoint sources, and domestic/wild animals.
Alternative Enforceable Program	Unknown
RWQCB Recommendation	List
SWRCB Staff Recommendation	List

Region 9

Dana Point Harbor

Water Body	Dana Point Harbor
Stressor/Media/Beneficial Use	Dissolved copper/Water and sediment/WILD, RARE, MAR, MIGR, SPWN
Data quality assessment. Extent to which data quality requirements met.	Orange County NPDES permit monitoring
Linkage between measurement endpoint and beneficial use or standard	Pollutant can have a direct impact on beneficial uses.
Utility of measure for judging if standards or uses are not attained	Water: CTR criteria used. Sediment: Effects Range Low, Effects Range Median (ERM)
Water Body-specific Information	Data age = 1-10 years.
Data used to assess water quality	Water data: 15/45 (33%) samples > CMC but data are suspect. Sediment data: 200-2001: 25/25 (100%) > ERL, 14/25 (56%) > ERM; all years ('99-'01): 37/62 (60%) > ERL, 18/62 (29%) > ERM. Summary: Limited direct evidence of elevated dissolved copper concentrations in Dana Point Harbor. One storm event resulted in all the direct evidence of exceedances and there is limited evidence that the data may not be valid due to analytical errors at the contracted laboratory. However, during the one storm event, 100% of the samples exceeded the CMC by a large margin. Considering all three-storm events, one-third of the samples exceeded the CMC. In addition, total copper concentrations are now above the ERM at over half the stations sampled and exceed the ERL at all the stations.
Spatial representation	Five stations sampled within Harbor and just outside Harbor mouth.
Temporal representation	Two storm events sampled per year. No dry-weather, dissolved copper data was used.
Data type	Numerical data
Use of standard method	RWQCB staff found that the lab used a non-standard method and that the data should be interpreted with caution.
Potential Source(s) of Pollutant	RWQCB staff has knowledge of antifouling (Cu-containing) paint use in Dana Point Harbor.
Alternative Enforceable Program	Unknown
RWQCB Recommendation	List
SWRCB Staff Recommendation	List

Region 9

Felicita Creek

Water Body	Felicita Creek
Stressor/Media/Beneficial Use	Total dissolved solids/Water/MUN, AGR
Data quality assessment. Extent to which data quality requirements met.	City of San Diego WQ Laboratory
Linkage between measurement endpoint and beneficial use or standard	Pollutant can have a direct impact on beneficial uses.
Utility of measure for judging if standards or uses are not attained	WQO (Basin Plan) (500 mg/L) used
Water Body-specific Information	Data age = 2 years.
Data used to assess water quality	Sampling by the City of San Diego showed the Basin Plan objective to be exceeded for more than 10% of the time during a one year period. Near Quiet Hills Farm Road, from April to June 1999, 3 of 3 samples (100%) exceeded the objective, with a mean of 1343.3 mg/L and a median of 1340.0 mg/L. Near East Mission Road, from April 1999 to April 2000, 10 of 11 samples (91%) exceeded the objective, with a mean of 1088.3 mg/L and a median of 1330.0 mg/L. From January 2001 to July 2001, 10 of 10 samples (100%) exceeded the objective, with a mean of 1308.1 mg/L and a median of 1365.0 mg/L. The data indicate TDS concentrations to be increasing over this time period, but the data represent only a short temporal span.
Spatial representation	Two stations; 2 miles of Creek covered
Temporal representation	Sampling occurred between April 1999 and May 2001.
Data type	Numerical data
Use of standard method	
Potential Source(s) of Pollutant	Anthropogenic sources, imported water, evaporation, and natural salt sources. Also, urban runoff, agriculture runoff, other point sources, and nonpoint sources.
Alternative Enforceable Program	Unknown
RWQCB Recommendation	List
SWRCB Staff Recommendation	List

Region 9

Forrester Creek

Water Body	Forrester Creek
Stressor/Media/Beneficial Use	Fecal coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Padre Dam Municipal Water District Receiving Water Sampling/analysis
Linkage between measurement endpoint and beneficial use or standard	Pollutant can have a direct impact on beneficial uses.
Utility of measure for judging if standards or uses are not attained	WQO (Basin Plan): For single samples, the Basin Plan1 objective states that no more than 10% of the total samples during any 30-day period shall exceed 400 colonies/100 mL.
Water Body-specific Information	Data age = 3 yr.
Data used to assess water quality	Sampling was done by the Padre Dam Municipal Wastewater District intermittently. Data was taken once a month for October-March and twice a month for April-October. The data shows that 14 of 38 samples (37%) in both wet and dry weather had levels of fecal coliform in excess of 400 Most Probable Number (MPN)/mL.
Spatial representation	One monitoring site
Temporal representation	Samples were collected between October 1997 and September 2000.
Data type	Numerical data
Use of standard method	
Potential Source(s) of Pollutant	Urban runoff, other point sources, nonpoint sources, and sewage spills
Alternative Enforceable Program	Unknown
RWQCB Recommendation	List
SWRCB Staff Recommendation	List

Region 9

Forrester Creek

Water Body	Forrester Creek
Stressor/Media/Beneficial Use	pH/Water/WARM, COLD, WILD
Data quality assessment. Extent to which data quality requirements met.	NPDES monitoring; City spill reports
Linkage between measurement endpoint and beneficial use or standard	Pollutant can have a direct impact on beneficial uses.
Utility of measure for judging if standards or uses are not attained	WQO (Basin Plan) (6.5-8.5) used
Water Body-specific Information	Data age = 1-4 years.
Data used to assess water quality	Data collected by the City of El Cajon show that 28 of 34 pH samples (82%) exceeded the Basin Plan objective. The average pH value was 9.0 and the median value was 8.9. In addition, spill reports from the City of El Cajon ⁴ record a spill of approximately 1000 gallons of sodium hydroxide into Forrester Creek in July 2000. Measurements of pH were high before and after this reported spill. Existing regulatory actions may not be sufficient to protect Forrester Creek from high pH.
Spatial representation	Six drainage areas
Temporal representation	Samples were collected between September 1994 and January 2001.
Data type	Numerical data
Use of standard method	NPDES procedures
Potential Source(s) of Pollutant	Industrial spills, urban runoff, other point sources, nonpoint sources, lack of shade cover, light penetration, (solar) heating of the water, increased photosynthesis, leached concrete components.
Alternative Enforceable Program	Unknown
RWQCB Recommendation	List
SWRCB Staff Recommendation	List

Region 9

Forrester Creek

Water Body	Forrester Creek
Stressor/Media/Beneficial Use	Total dissolved solids/Water/MUN
Data quality assessment. Extent to which data quality requirements met.	Padre Dam Municipal Water District Receiving Water Sampling/analysis
Linkage between measurement endpoint and beneficial use or standard	Pollutant can have a direct impact on beneficial uses.
Utility of measure for judging if standards or uses are not attained	The Basin Plan1 objective for surface waters in the lower portion of hydrologic unit sub area 907.12 is 1500 mg/L. This objective is not to be exceeded more than 10% of the time during any one-year period.
Water Body-specific Information	Data age = 1-4 years.
Data used to assess water quality	Basin Plan objective was exceeded for more than 10% of the time during a one-year period from September 1997 to September 1998. 17 of 18 samples (94%) exceeded the objective, with a mean of 1667.3 mg/L and a median of 1738.0 mg/L (15.9% above the objective). From October 1998 to October 1999, 16 of 20 samples (80%) exceeded the objective, with a mean of 1647.6 mg/L and a median of 1706.0 mg/L (13.7% above the objective). From November 1999 to December 2000, 19 of 21 samples (95%) exceeded the objective, with a mean of 1589.7 mg/L and a median of 1656.0 mg/L (10.4% above the objective).
Spatial representation	One sample sight
Temporal representation	Samples were collected between September 1997 and December 2000.
Data type	Numerical data
Use of standard method	
Potential Source(s) of Pollutant	Anthropogenic sources, imported water, evaporation, and natural salt sources. Also, urban runoff, agriculture runoff, other point sources, and nonpoint sources.
Alternative Enforceable Program	Unknown
RWQCB Recommendation	List
SWRCB Staff Recommendation	List

Region 9

Green Valley Creek

Water Body	Green Valley Creek
Stressor/Media/Beneficial Use	Sulfate/Water/MUN
Data quality assessment. Extent to which data quality requirements met.	City of San Diego WQ Laboratory
Linkage between measurement endpoint and beneficial use or standard	Pollutant can have a direct impact on beneficial uses.
Utility of measure for judging if standards or uses are not attained	WQO (Basin Plan) (250 mg/L) used
Water Body-specific Information	Data age = 1-2 years.
Data used to assess water quality	Data from the City of San Diego Water Quality Lab from April 1999 to July 2001 show the Basin Plan objective to be exceeded for more than 10% of the time during a one-year period. From April 1999 to April 2000, 8 of 13 samples (62%) exceeded the objective, with a mean of 305.1 mg/L and a median of 313.0 mg/L. From January 2001 to July 2001, 6 of 10 samples (60%) exceeded the objective, with a mean of 355.7 mg/L and a median of 447.0 mg/L.
Spatial representation	Only one station
Temporal representation	Samples collected between April 1999 and July 2001. It should be noted that the majority of the sampling occurred during the months of January, February, March and April. This is generally considered to be the rainy season in San Diego.
Data type	Numerical data
Use of standard method	NPDES procedures
Potential Source(s) of Pollutant	Urban runoff, other point sources, nonpoint sources, and natural sources
Alternative Enforceable Program	Unknown
RWQCB Recommendation	List
SWRCB Staff Recommendation	List

Region 9

Kit Carson Creek

Water Body	Kit Carson Creek
Stressor/Media/Beneficial Use	Total dissolved solids/Water/AGR
Data quality assessment. Extent to which data quality requirements met.	City of San Diego WQ Laboratory
Linkage between measurement endpoint and beneficial use or standard	Pollutant can have a direct impact on beneficial uses.
Utility of measure for judging if standards or uses are not attained	WQO (Basin Plan) (500 mg/L) used
Water Body-specific Information	Data age = 3 years.
Data used to assess water quality	Data from the City of San Diego Water Quality Lab from April 1999 to May 2001 show the Basin Plan objective to be exceeded for more than 10% of the time during a one-year period. From April 1999 to April 2000, 10 of 11 samples (91%) exceeded the objective, with a mean of 990.5 mg/L and a median of 1200.0 mg/L. From January 2001 to July 2001, 10 of 10 samples (100%) exceeded the objective, with a mean of 1170.9 mg/L and a median of 1300.0 mg/L.
Spatial representation	One sampling station, 1/2 mile of Creek
Temporal representation	Samples collected between April 1999 and May 2001. It should be noted that the majority of the sampling occurred during the months of January, February, March and April. This is generally considered to be the rainy season in San Diego.
Data type	Numerical data
Use of standard method	NPDES procedures
Potential Source(s) of Pollutant	Anthropogenic sources, imported water, evaporation, and natural salt sources. Also, urban runoff, agriculture runoff, other point sources, and nonpoint sources.
Alternative Enforceable Program	Unknown
RWQCB Recommendation	List
SWRCB Staff Recommendation	List

Region 9

Lake Hodges (Hodges Reservoir)

Water Body	Lake Hodges (Hodges Reservoir)
Stressor/Media/Beneficial Use	Color/Water/MUN, REC-2
Data quality assessment. Extent to which data quality requirements met.	City of San Diego WQ Laboratory
Linkage between measurement endpoint and beneficial use or standard	Pollutant can have a direct impact on beneficial uses.
Utility of measure for judging if standards or uses are not attained	WQO (Basin Plan) (15 color units) used
Water Body-specific Information	Data age = 4 years.
Data used to assess water quality	Data from the City of San Diego Water Quality Lab from September 1997 to December 2000 show the Basin Plan objective to be exceeded for more than 10% of the time during a one-year period. From March 1998 to March 1999, 4 of 4 samples (100%) exceeded the objective, with a mean of 53.6 color units and a median of 37.3 color units. From June 1999 to June 2000, 5 of 5 samples (100%) exceeded the objective, with a mean of 65.8 color units and a median of 78.0 color units. In September and December of 2000, 2 of 2 samples (100%) exceeded the objective, with a mean and median of 64.0 color units.
Spatial representation	One station
Temporal representation	Samples collected between September 1997 and December 2000.
Data type	Numerical data
Use of standard method	
Potential Source(s) of Pollutant	Urban runoff, other point sources and nonpoint sources
Alternative Enforceable Program	Unknown
RWQCB Recommendation	List
SWRCB Staff Recommendation	List

Region 9

Lake Hodges (Hodges Reservoir)

Water Body	Lake Hodges (Hodges Reservoir)
Stressor/Media/Beneficial Use	Nitrogen/Water/WARM, COLD, WILD, RARE, MUN, IND, PROC, AGR, REC-1, REC-2
Data quality assessment. Extent to which data quality requirements met.	City of San Diego WQ Laboratory, (narrative) descriptions by SDWD
Linkage between measurement endpoint and beneficial use or standard	Pollutant can have a direct impact on beneficial uses.
Utility of measure for judging if standards or uses are not attained	Measurements are related to the Basin Plan WQO.
Water Body-specific Information	Data age = 4 years:
Data used to assess water quality	Data from the City of San Diego Water Quality Lab from July 1997-May 2001 show that 5 locations exceeded the Basin Plan objective for more than 10% of the time during a one-year period.
Spatial representation	The first sampling location is near the boat launch ramp. The rest of the sampling points are located at various depths at Station A, which is in front of the reservoir dam and outfall structure to the flume delivering water to Badger Filtration Plant.
Temporal representation	July 1997-May 2001.
Data type	Numerical data
Use of standard method	
Potential Source(s) of Pollutant	Urban runoff, local dairies, agriculture, orchards, other point sources and nonpoint sources
Alternative Enforceable Program	Unknown
RWQCB Recommendation	List
SWRCB Staff Recommendation	List

Region 9

Lake Hodges (Hodges Reservoir)

Water Body	Lake Hodges (Hodges Reservoir)
Stressor/Media/Beneficial Use	Phosphorus/Water/WARM, COLD, WILD, RARE, MUN, IND, PROC, AGR, REC-1, REC-2
Data quality assessment. Extent to which data quality requirements met.	City of San Diego WQ Laboratory, (narrative) descriptions by SDWD
Linkage between measurement endpoint and beneficial use or standard	Pollutant can have a direct impact on beneficial uses.
Utility of measure for judging if standards or uses are not attained	WQO (Basin Plan) used
Water Body-specific Information	Data age = 4 years.
Data used to assess water quality	Data from the City of San Diego Water Quality Lab from July 1997-May 2001 show that 5 locations exceeded the Basin Plan objective for more than 10% of the time during a one-year period.
Spatial representation	The first sampling location is near the boat launch ramp. The rest of the sampling points are located at various depths at Station A, which is in front of the reservoir dam and outfall structure to the flume delivering water to Badger Filtration Plant.
Temporal representation	July 1997-May 2001.
Data type	Numerical data
Use of standard method	
Potential Source(s) of Pollutant	Urban runoff, local dairies, agriculture, orchards, other point sources and nonpoint sources
Alternative Enforceable Program	Unknown
RWQCB Recommendation	List
SWRCB Staff Recommendation	List

Region 9

Lake Hodges (Hodges Reservoir)

Water Body	Lake Hodges (Hodges Reservoir)
Stressor/Media/Beneficial Use	Total dissolved solids/Water/AGR
Data quality assessment. Extent to which data quality requirements met.	City of San Diego WQ Laboratory
Linkage between measurement endpoint and beneficial use or standard	Pollutant can have a direct impact on beneficial uses.
Utility of measure for judging if standards or uses are not attained	WQO (Basin Plan) (500 mg/L) used
Water Body-specific Information	Data age = 4 years.
Data used to assess water quality	Data from the City of San Diego Water Quality Lab from September 1998 to December 2000 show the Basin Plan objective to be exceeded for more than 10% of time during a one-year period. From September 98 to September 99, 5 of 5 samples (100%) exceeded the objective, with a mean of 653.6 mg/L and a median of 659.0 mg/L. From December 99 to December 00, 5 of 5 samples (100%) exceeded the objective, with a mean of 770.2 mg/L and a median of 754.0 mg/L.
Spatial representation	Two representative sampling stations
Temporal representation	September 1998-December 2000.
Data type	Numerical data
Use of standard method	
Potential Source(s) of Pollutant	Anthropogenic sources, imported water, evaporation, and natural salt sources. Also, urban runoff, agriculture runoff, other point sources, and nonpoint sources.
Alternative Enforceable Program	Unknown
RWQCB Recommendation	List
SWRCB Staff Recommendation	List

Region 9

Lake Sutherland (Sutherland Reservoir)

Water Body	Lake Sutherland (Sutherland Reservoir)
Stressor/Media/Beneficial Use	Color/Water/MUN, REC-2
Data quality assessment. Extent to which data quality requirements met.	City of San Diego WQ Laboratory, (narrative) descriptions by SDWD
Linkage between measurement endpoint and beneficial use or standard	Pollutant can have a direct impact on beneficial uses.
Utility of measure for judging if standards or uses are not attained	WQO (Basin Plan) (15 color units) used
Water Body-specific Information	Data age = 1-5 years.
Data used to assess water quality	Data from the City of San Diego Water Quality Lab from March 1997 to June 2000 show the Basin Plan objective to be exceeded for more than 10% of the time during a one-year period. From March 1998 to March 1999, 3 of 3 samples (100%) exceeded the objective, with a mean of 33.7 color units and a median of 34.0 color units. From June 1999 to June 2000, 5 of 5 samples exceeded the objective, with a mean of 25.2 color units and a median of 26.0 color units. From September 2000 to December 2000, 3 of 3 samples exceeded the objective, with a mean of 22.3 color units and a median of 28.0 color units. In addition, staff at the San Diego Water Department have noticed a persistent odor problem as well as excessive algae growth at the reservoir. ³ Odor, color, and excessive algae growth in the reservoir are typically due to excessive nutrients (nitrogen and phosphorous). However, actual concentrations of nitrogen and phosphorous do not currently exceed Basin Plan objectives. This may be due to the fact that the algae are using a majority of the available nutrients. Nutrient data from City of San Diego Water Quality Lab from March 1997 to July 2001 showed only 1 of 17 samples (6%) to have a detectable concentration of phosphate or nitrate.
Spatial representation	3 to 5 samples were used, indicative of entire reservoir
Temporal representation	March 1997 to July 2001.
Data type	Numerical data
Use of standard method	
Potential Source(s) of Pollutant	Excessive algae growth, urban runoff, other point sources, and nonpoint sources
Alternative Enforceable Program	Unknown
RWQCB Recommendation	List
SWRCB Staff Recommendation	List

Region 9

Murrieta Creek

Water Body	Murrieta Creek
Stressor/Media/Beneficial Use	Phosphorus/Water/REC-1, REC-2, WARM, COLD
Data quality assessment. Extent to which data quality requirements met.	Final WQ Studies and Proposed Watershed Monitoring Program Report, SDRWQCB Monitoring data
Linkage between measurement endpoint and beneficial use or standard	Pollutant can have a direct impact on beneficial uses.
Utility of measure for judging if standards or uses are not attained	WQO (Basin Plan) (biostimulatory objective = 0.1 mg/L) used
Water Body-specific Information	Data age = 2 year.
Data used to assess water quality	12/97-11/98: 4/5 (80%) exceedences, mean=0.28 mg/mL; 02 and 05/99: 2/2 (100%) violations, mean=0.21 mg/mL
Spatial representation	Samples at start and finish of reach
Temporal representation	Sampling from November 1997 to May 1999.
Data type	Numerical data
Use of standard method	
Potential Source(s) of Pollutant	Urban runoff, other point sources and nonpoint sources
Alternative Enforceable Program	Unknown
RWQCB Recommendation	List
SWRCB Staff Recommendation	List

Region 9

Pacific Ocean Shoreline (Torrey Pines State Beach/Miramar Reservoir)

Water Body	Pacific Ocean Shoreline (Torrey Pines State Beach/Miramar Reservoir)
Stressor/Media/Beneficial Use	Bacterial indicators/Water/REC-1, REC-2
Data quality assessment. Extent to which data quality requirements met.	San Diego County Department of Environmental Health
Linkage between measurement endpoint and beneficial use or standard	Pollutant can have a direct impact on beneficial uses.
Utility of measure for judging if standards or uses are not attained	See #3 entry for Pacific Ocean Shoreline (Ocean Beach)
Water Body-specific Information	Data age = 1 yr.
Data used to assess water quality	32 days of Beach Closures and/or General Advisories or beach closures suggested that REC-1 standards were exceeded.
Spatial representation	Sampled within 400 yards (0.2 miles) of discharge point
Temporal representation	32 days of closures/advisories.
Data type	Numerical data
Use of standard method	
Potential Source(s) of Pollutant	Sewage spills/leaks, urban runoff, other point sources, nonpoint sources, and domestic/wild animals.
Alternative Enforceable Program	Unknown
RWQCB Recommendation	List
SWRCB Staff Recommendation	List

Region 9

Pine Valley Creek (Upper)

Water Body	Pine Valley Creek (Upper)
Stressor/Media/Beneficial Use	Enterococci/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	SR: USDA Forest Service, FS: City of San Diego Water Dept.
Linkage between measurement endpoint and beneficial use or standard	Pollutant can have a direct impact on beneficial uses.
Utility of measure for judging if standards or uses are not attained	WQO (Basin Plan) (108 colonies/100 mL) for lightly-moderately used areas.
Water Body-specific Information	Data age = 3 years.
Data used to assess water quality	6/11 (55%) violations of Basin Plan objective, log mean = 223 coliform-forming units
Spatial representation	five sampling locations along Creek
Temporal representation	Unknown
Data type	Numerical data
Use of standard method	
Potential Source(s) of Pollutant	From horse stables, cattle grazing in and near the creek, and human encampments
Alternative Enforceable Program	Unknown
RWQCB Recommendation	List
SWRCB Staff Recommendation	List

Region 9

Prima Deshecha Creek

Water Body	Prima Deshecha Creek
Stressor/Media/Beneficial Use	Phosphorus/Water/REC-1, REC-2, WARM, WILD
Data quality assessment. Extent to which data quality requirements met.	NPDES permit monitoring
Linkage between measurement endpoint and beneficial use or standard	Pollutant can have a direct impact on beneficial uses.
Utility of measure for judging if standards or uses are not attained	WQO (Basin Plan) (biostimulatory substance index = 0.1 mg/L) used
Water Body-specific Information	Data age = 1-4 years.
Data used to assess water quality	7/97-6/98: 13/16 (81%) exceedences, mean=1.01 mg/mL; 8/98-7/99: 24/29 (83%) exceedences, mean=0.69 mg/mL; 10/99-6/00: 9/9 (100%) exceedences, mean=1.37 mg/mL, all from wet months.
Spatial representation	One sample site
Temporal representation	July 1997 to June 2000 during wet weather months.
Data type	Numerical data
Use of standard method	
Potential Source(s) of Pollutant	Urban runoff, other point sources and nonpoint sources
Alternative Enforceable Program	Unknown
RWQCB Recommendation	List
SWRCB Staff Recommendation	List

Region 9

Prima Deshecha Creek

Water Body	Prima Deshecha Creek
Stressor/Media/Beneficial Use	turbidity/Water/WARM, WILD
Data quality assessment. Extent to which data quality requirements met.	NPDES permit monitoring
Linkage between measurement endpoint and beneficial use or standard	Pollutant can have a direct impact on beneficial uses.
Utility of measure for judging if standards or uses are not attained	WQO (Basin Plan) (20 Nephelometric Turbidity Units [NTU]) used
Water Body-specific Information	Data age = 4 years.
Data used to assess water quality	7/97-6/98: 14/16 (88%) exceedences, mean=553.3 NTU; 8/98-7/99: 18/29 (62%) exceedences, mean=268.3 NTU; 10/99-6/00: 9/9 (100%) exceedences, mean=962.4 NTU, all from wet months
Spatial representation	One sample site
Temporal representation	Sampling from July 1997 to June 2000.
Data type	Numerical data
Use of standard method	
Potential Source(s) of Pollutant	Channelization, increased water velocity, undercutting of banks; increased turbidity; current/historic construction
Alternative Enforceable Program	Unknown
RWQCB Recommendation	List
SWRCB Staff Recommendation	List

Region 9

Sandia Creek

Water Body	Sandia Creek
Stressor/Media/Beneficial Use	Total dissolved solids/Water/MUN, AGR
Data quality assessment. Extent to which data quality requirements met.	WQ Studies and Proposed Watershed Monitoring Program Report, SDRWQCB Monitoring data
Linkage between measurement endpoint and beneficial use or standard	Pollutant can have a direct impact on beneficial uses.
Utility of measure for judging if standards or uses are not attained	WQO (Basin Plan) (750 mg/L) used
Water Body-specific Information	Data age = 1-4 years.
Data used to assess water quality	11/11 (100%) violations of WQO, average = 917.7 mg/L
Spatial representation	Two samples, One at top and One at bottom of reach
Temporal representation	Unknown
Data type	Numerical data
Use of standard method	
Potential Source(s) of Pollutant	Anthropogenic sources, imported water, evaporation, and natural salt sources. Also, urban runoff, agriculture runoff, other point sources, and nonpoint sources.
Alternative Enforceable Program	Unknown
RWQCB Recommendation	List
SWRCB Staff Recommendation	List

Region 9

San Diego Bay (Switzer Creek)

Water Body	San Diego Bay (Switzer Creek)
Stressor/Media/Beneficial Use	Degraded benthos/sediment/BIOL, EST, WILD, RARE, MAR, MIGR, SHELL
Data quality assessment. Extent to which data quality requirements met.	BPTCP; 1998 Addendum
Linkage between measurement endpoint and beneficial use or standard	Pollutant can have a direct impact on beneficial uses.
Utility of measure for judging if standards or uses are not attained	Narrative Basin Plan objective used. Indicator organisms, species diversity, population density, growth anomalies, bioassays, and other information used.
Water Body-specific Information	Data age = 5 years.
Data used to assess water quality	RBI = 0.02 (75 samples); Chemical concentrations >4 times the ERM and 5.9 times the PEL
Spatial representation	1 Core, sampled 3 times compared against 75 cores from all of SD Bay; sampled at outlet of the Creek
Temporal representation	Unknown
Data type	Numerical data
Use of standard method	BPTCP methods used
Potential Source(s) of Pollutant	Elevated concentrations of chlordane, lindane, polynuclear aromatic hydrocarbons (PAHs), and polychlorinated biphenyls (PCBs), current/historic shipyard activity, historic PAH and garbage dumping, urban runoff, other point sources, and nonpoint sources.
Alternative Enforceable Program	Unknown
RWQCB Recommendation	List
SWRCB Staff Recommendation	List

Region 9

San Diego Bay (Switzer Creek)

Water Body	San Diego Bay (Switzer Creek)
Stressor/Media/Beneficial Use	Toxicity/sediment/BIOL, EST, WILD, RARE, MAR, MIGR, SHELL
Data quality assessment. Extent to which data quality requirements met.	BPTCP; 1998 Addendum
Linkage between measurement endpoint and beneficial use or standard	Pollutant can have a direct impact on beneficial uses.
Utility of measure for judging if standards or uses are not attained	toxicity tests used narrative Basin Plan objective
Water Body-specific Information	Data age = 5 years.
Data used to assess water quality	<48% amphipod survival
Spatial representation	1 sample, 5 replicates; sampled at outlet of the Creek
Temporal representation	Unknown
Data type	Numerical data
Use of standard method	BPTCP methods used
Potential Source(s) of Pollutant	Elevated concentrations of chlordane, lindane, polynuclear aromatic hydrocarbons (PAHs), and polychlorinated biphenyls (PCBs), current/historic shipyard activity, historic PAH and garbage dumping, urban runoff, other point sources, and nonpoint sources.
Alternative Enforceable Program	Unknown
RWQCB Recommendation	List
SWRCB Staff Recommendation	List

Region 9

San Diego River (lower)

Water Body	San Diego River (lower)
Stressor/Media/Beneficial Use	Dissolved oxygen/Water/WARM, COLD, WILD
Data quality assessment. Extent to which data quality requirements met.	Padre Dam Municipal Water District Receiving Water Sampling/analysis
Linkage between measurement endpoint and beneficial use or standard	Pollutant can have a direct impact on beneficial uses.
Utility of measure for judging if standards or uses are not attained	WQO (Basin Plan) (6.0 mg/L) used; annual mean concentration not to be <7 mg/L more than 10% of the time
Water Body-specific Information	Data age = 4 years.
Data used to assess water quality	Sampling in September 1997 and from April to December 2000 by the Padre Dam Municipal Wastewater District showed dissolved oxygen concentrations to be below the Basin Plan Objective of 6.0 mg/L in 76 of 84 samples (90%). Concentrations below the objective were measured at all 5 sampling points along the river. The average measured concentration was 4.87 mg/L and the median concentration was 4.48 mg/L. In addition, during the year 2000, all 5 stations were below the annual Basin Plan Objective of 7.0 mg/L for more than 10% of the time.
Spatial representation	20 miles of River sampled
Temporal representation	Sampling completed between September 1997 and December 2000.
Data type	Numerical data
Use of standard method	
Potential Source(s) of Pollutant	Bacterial loading, subsequent decomposition of organic matter, urban runoff, other point sources, and nonpoint sources.
Alternative Enforceable Program	Unknown
RWQCB Recommendation	List
SWRCB Staff Recommendation	List

Region 9

San Diego River (lower)

Water Body	San Diego River (lower)
Stressor/Media/Beneficial Use	Fecal coliform/Water/REC-1
Data quality assessment. Extent to which data quality requirements met.	Padre Dam Municipal Water District Receiving Water Sampling/analysis
Linkage between measurement endpoint and beneficial use or standard	Pollutant can have a direct impact on beneficial uses.
Utility of measure for judging if standards or uses are not attained	WQO (Basin Plan): For single samples, the Basin Plan1 objective states that no more than 10% of the total samples during any 30-day period shall exceed 400 colonies/100 mL.
Water Body-specific Information	Data age = 1 yr.
Data used to assess water quality	Sampling was done by the Padre Dam Municipal Wastewater District intermittently from November 1998 to September 2000. Data was taken once a month for October-March and twice a month for April-October. The data shows that 11 of 18 samples (61%) in both wet and dry weather had levels of fecal coliform in excess of 400 Most Probable Number (MPN)/mL.
Spatial representation	6 miles of River sampled
Temporal representation	Sampling completed between November 1998 and September 2000.
Data type	Numerical data
Use of standard method	
Potential Source(s) of Pollutant	Urban runoff, other point sources, nonpoint sources, and sewage.
Alternative Enforceable Program	Unknown
RWQCB Recommendation	List
SWRCB Staff Recommendation	List

Region 9

San Diego River (lower)

Water Body	San Diego River (lower)
Stressor/Media/Beneficial Use	Phosphorus/Water/REC-1, REC-2, WARM, COLD
Data quality assessment. Extent to which data quality requirements met.	Padre Dam Municipal Water District Receiving Water Sampling/analysis
Linkage between measurement endpoint and beneficial use or standard	Pollutant can have a direct impact on beneficial uses.
Utility of measure for judging if standards or uses are not attained	WQO (Basin Plan) (biostimulatory substances objective) (0.1 mg/L) used
Water Body-specific Information	Data age = 4 years.
Data used to assess water quality	Sampling in September 1997 and from April to December 2000 by the Padre Dam Municipal Wastewater District showed phosphorus concentrations to exceed the Basin Plan Objective for more than 10% of the time during a one-year period. Table of data, averages, etc. available.
Spatial representation	5 sample sites (20 miles of River)
Temporal representation	September 1997 to December 2000.
Data type	Numerical data
Use of standard method	
Potential Source(s) of Pollutant	Urban runoff, other point sources, and nonpoint sources.
Alternative Enforceable Program	Unknown
RWQCB Recommendation	List
SWRCB Staff Recommendation	List

Region 9

San Diego River (lower)

Water Body	San Diego River (lower)
Stressor/Media/Beneficial Use	Total dissolved solids/Water/AGR
Data quality assessment. Extent to which data quality requirements met.	Padre Dam Municipal Water District Receiving Water Sampling/analysis
Linkage between measurement endpoint and beneficial use or standard	Pollutant can have a direct impact on beneficial uses.
Utility of measure for judging if standards or uses are not attained	WQO (Basin Plan) (1500 mg/L) used; This objective is not to be exceeded more than 10% of the time during any one-year period.
Water Body-specific Information	Data age = 4 years.
Data used to assess water quality	Sampling between September 1997 and December 2000 by the Padre Dam Municipal Water District shows three locations along the San Diego River to exceed the Basin Plan TDS objective for more than 10% of the time during a one-year period. See the table below for the averages, medians and frequency of exceedances for three locations along the San Diego River. All 3 locations show a seasonal and an increasing trend over the 3 years reviewed.
Spatial representation	Three sample sites (15 miles of River)
Temporal representation	September 1997 to December 2000.
Data type	Numerical data
Use of standard method	
Potential Source(s) of Pollutant	Anthropogenic sources, imported water, evaporation, and natural salt sources. Also, urban runoff, agriculture runoff, other point sources, and nonpoint sources.
Alternative Enforceable Program	Unknown
RWQCB Recommendation	List
SWRCB Staff Recommendation	List

Region 9

San Luis Rey River

Water Body	San Luis Rey River
Stressor/Media/Beneficial Use	Chloride/Water/IND, WARM, WILD, RARE
Data quality assessment. Extent to which data quality requirements met.	City of Oceanside Water Utilities Laboratory
Linkage between measurement endpoint and beneficial use or standard	Pollutant can have a direct impact on beneficial uses.
Utility of measure for judging if standards or uses are not attained	WQO (Basin Plan) (250 mg/L) used
Water Body-specific Information	Data age = 4 years.
Data used to assess water quality	Bonsall Bridge: 11/97-06/98: 1/3 (33%) exceedences, mean=281.0 mg/L; 09/98-09/99: 3/3 (100%) exceedences, mean=321.0 mg/mL; 12/99-11/00: 4/5 (80%) exceedences, mean=314.0 mg/mL. Douglas Bridge: 11/97-09/98: 2/4 (50%) exceedences, mean=272.5 mg/L; 03/99-09/99: 2/2 (100%) exceedences, mean=310.5 mg/mL; 04/00-11/00: 3/4 (75%) exceedences, mean=312.5 mg/mL. Benet Road: 11/97-09/98: 2/4 (50%) exceedences, mean=401.5 mg/L; 03 and 12/99: 2/2 (100%) exceedences, mean=444.5 mg/mL; 04/00-11/00: 4/4 (100%) exceedences, mean=410.0 mg/mL
Spatial representation	Lower 13 miles of River, nearest City of Oceanside, was sampled at three locations.
Temporal representation	November 1997 to November 2000.
Data type	Numerical data
Use of standard method	
Potential Source(s) of Pollutant	Urban runoff, other point sources and nonpoint sources
Alternative Enforceable Program	Unknown
RWQCB Recommendation	List
SWRCB Staff Recommendation	List

Region 9

San Luis Rey River

Water Body	San Luis Rey River
Stressor/Media/Beneficial Use	Total dissolved solids/Water/AGR
Data quality assessment. Extent to which data quality requirements met.	City of Oceanside Water Utilities Laboratory
Linkage between measurement endpoint and beneficial use or standard	Pollutant can have a direct impact on beneficial uses.
Utility of measure for judging if standards or uses are not attained	WQO (Basin Plan) (500 mg/L) used
Water Body-specific Information	Data age = 1-4 years.
Data used to assess water quality	City of Oceanside sampling: Bonsall Bridge: 11/97-06/98: 3/3 (100%) exceedences, mean=1577 mg/L; 09/98-09/99: 3/3 (100%) exceedences, mean=1512.7 mg/mL; 12/99-11/00: 5/5 (100%) exceedences, mean=1694 mg/mL. Douglas Bridge: 11/97-09/98: 4/4 (100%) exceedences, mean=1328 mg/L; 03/99-09/99: 2/2 (100%) exceedences, mean=1466 mg/mL; 04/00-11/00: 4/4 (100%) exceedences, mean=1613 mg/mL. Benet Road: 11/97-09/98: 4/4 (100%) exceedences, mean=1572 mg/L; 03/99-12/99: 2/2 (100%) exceedences, mean=1695 mg/mL; 04/00-11/00: 4/4 (100%) exceedences, mean=1835 mg/mL. RWQCB sampling: samples of 395 and 850 mg/L.
Spatial representation	Lower 13 miles of River, nearest City of Oceanside, was sampled at three locations. Two additional samples were also taken another 4 miles upstream.
Temporal representation	November 1997 to November 2000.
Data type	Numerical data
Use of standard method	NPDES procedures
Potential Source(s) of Pollutant	Anthropogenic sources, imported water, evaporation, and natural salt sources. Also, urban runoff, agriculture runoff, other point sources, and nonpoint sources.
Alternative Enforceable Program	Unknown
RWQCB Recommendation	List
SWRCB Staff Recommendation	List

Region 9

Santa Margarita River (upper)

Water Body	Santa Margarita River (upper)
Stressor/Media/Beneficial Use	Phosphorus/Water/MUN, REC-1, REC-2, WARM, COLD, WILD, RARE
Data quality assessment. Extent to which data quality requirements met.	Final WQ Studies and Proposed Watershed Monitoring Program Report, SDRWQCB Monitoring data, RCWD Annual Receiving Water Monitoring Report (2000)
Linkage between measurement endpoint and beneficial use or standard	Pollutant can have a direct impact on beneficial uses.
Utility of measure for judging if standards or uses are not attained	WQO (Basin Plan) (biostimulatory substance index = 0.1 mg/L) used
Water Body-specific Information	Data age = 4 years.
Data used to assess water quality	Camp Pendleton sampling: (near Temecula) 12/97-11/98: 4/5 (80%) violations, average = 0.24 mg/L; 02and05/99: 1/2 (50%) violations, mean=0.17 mg/mL. (near Fallbrook) 12/97-11/98: 4/5 (80%) violations, mean=0.25 mg/m; 02and05/99: 1/2 (50%) violations, mean = 0.12 mg/mL. RWQCB sampling: 1/1 (100%) and 1/1 (100%); 0.62 mg/L (at Willow Glen Road). RCWD sampling: 1/8 (13%) > WQO, (near Willow Glen Road) 1/8 (13%) violations, mean = 0.029 mg/L; (near De Luz Road) 1/6 (17%) violations, mean = 0.043 mg/L
Spatial representation	32 total samples at 4 stations along segment
Temporal representation	December 1997 to November 1998.
Data type	Numerical data
Use of standard method	
Potential Source(s) of Pollutant	Urban runoff, other point sources and nonpoint sources
Alternative Enforceable Program	Unknown
RWQCB Recommendation	List
SWRCB Staff Recommendation	List

Region 9

Segunda Deshecha Creek

Water Body	Segunda Deshecha Creek
Stressor/Media/Beneficial Use	Phosphorus/Water/REC-1, REC-2, WARM, WILD
Data quality assessment. Extent to which data quality requirements met.	NPDES permit monitoring
Linkage between measurement endpoint and beneficial use or standard	Pollutant can have a direct impact on beneficial uses.
Utility of measure for judging if standards or uses are not attained	WQO (Basin Plan) (biostimulatory substance index = 0.1 mg/L) used
Water Body-specific Information	Data age = 4 years.
Data used to assess water quality	7/97-6/98: 13/16 (81%) exceedences, mean=0.73 mg/mL; 8/98-7/99: 15/20 (75%) exceedences, mean=0.25 mg/mL; 10/99-6/00: 6/7 (86%) exceedences, mean=0.37 mg/mL, all from wet months
Spatial representation	One sample site
Temporal representation	July 1997 to June 1998. -
Data type	Numerical data
Use of standard method	
Potential Source(s) of Pollutant	Urban runoff, other point sources and nonpoint sources
Alternative Enforceable Program	Unknown
RWQCB Recommendation	List
SWRCB Staff Recommendation	List

Region 9

Segunda Deshecha Creek

Water Body	Segunda Deshecha Creek
Stressor/Media/Beneficial Use	Turbidity/Water/WARM, WILD
Data quality assessment. Extent to which data quality requirements met.	NPDES permit monitoring
Linkage between measurement endpoint and beneficial use or standard	Pollutant can have a direct impact on beneficial uses.
Utility of measure for judging if standards or uses are not attained	WQO (Basin Plan) (20 Nephelometric Turbidity Units [NTU]) used
Water Body-specific Information	Data age = 1-4 years.
Data used to assess water quality	7/97-6/98: 9/16 (56%) exceedences, mean=295.2 NTU; 8/98-7/99: 10/20 (50%) exceedences, mean=43.4 NTU; 10/99-6/00: 2/7 (100%) exceedences, mean=14.0 NTU, all from wet months
Spatial representation	One sample site
Temporal representation	July 1997 to June 2000. -
Data type	Numerical data
Use of standard method	
Potential Source(s) of Pollutant	Channelization, increased water velocity, undercutting of banks; increased turbidity, current/historic construction
Alternative Enforceable Program	Unknown
RWQCB Recommendation	List
SWRCB Staff Recommendation	List

Region 9

Tijuana Estuary

Water Body	Tijuana Estuary
Stressor/Media/Beneficial Use	Dissolved oxygen/Water/COMM, BIOL, EST, WILD, RARE, MAR, MIGR
Data quality assessment. Extent to which data quality requirements met.	Tijuana Estuary monitoring
Linkage between measurement endpoint and beneficial use or standard	Pollutant can have a direct impact on beneficial uses.
Utility of measure for judging if standards or uses are not attained	Basin Plan objective, dissolved oxygen concentration: 5.0 mg/L, any waterbody designated with MAR beneficial use. In addition, Basin Plan sets an annual objective of 7mg/L that shall not be exceeded more than 10% of the time during a one-year period.
Water Body-specific Information	Data age = 3-4 years.
Data used to assess water quality	Staff Report: 1/2 hr. Interval monitoring consistently below minimum Basin Plan Objective. Fact Sheet: typically dropped below 3 mg/L (10pm-8am), January-May 1998
Spatial representation	One sample station used. RWQCB staff found it to be representative of entire estuary.
Temporal representation	Sampled every 30 minutes for two years.
Data type	Numerical data
Use of standard method	
Potential Source(s) of Pollutant	Massive bacterial loading from raw sewage flows cause oxygen depletion, decaying organic matter, urban runoff, other point sources, and nonpoint sources.
Alternative Enforceable Program	Unknown
RWQCB Recommendation	List
SWRCB Staff Recommendation	List

Region 9

Pacific Ocean Shoreline (Coronado Beach)

Water Body	Pacific Ocean Shoreline (Coronado Beach)
Stressor/Media/Beneficial Use	Bacterial indicators/Water/REC-1, REC-2
Data quality assessment. Extent to which data quality requirements met.	City of Coronado
Linkage between measurement endpoint and beneficial use or standard	Pollutant can have a direct impact on beneficial uses.
Utility of measure for judging if standards or uses are not attained	Closures a measure of impacts on beneficial use. Listing recommendation: >10 days/year beach closures or advisories.
Water Body-specific Information	Data age = 2 years.
Data used to assess water quality	Cease-and-Desist Orders 97-69 and 98-74 issued to City of Coronado. City implemented wet/dry weather diversion systems and ultra-violet (UV) treatment to reduce sewage discharge problems. City began semi-annual WDRs reporting based on weekly monitoring at four Coronado Beach sites. Surf Zone C (1/13/00-1/2/01): 7/153 (5%) possible exceedences. Surf Zone A (5/26/99-12/28/00): 7/249 (3%) possible exceedences. Central Beach (11/1/99-1/2/01): 7/183 (4%) possible exceedences. Ave. del Sol (4/3/00-1/2/01): 6/120 (5%) possible exceedences. Total: 27/705 (4%) possible exceedences.
Spatial representation	Four sample sites covering the extent of the to-be-delisted area.
Temporal representation	Weekly samples.
Data type	Numerical data
Use of standard method	
Potential Source(s) of Pollutant	Sewage spills/leaks, urban runoff, other point sources, nonpoint sources, and domestic/wild animals.
Alternative Enforceable Program	Cease-and-Desist Orders led to WDRs and appropriate steps to reduce pollution. City has taken appropriate initial steps. Delisting may encourage further action.
RWQCB Recommendation	Delist
SWRCB Staff Recommendation	Delist, and put on Watch List to continue to keep an eye on problem.

Region 9

Pacific Ocean Shoreline (Ocean Beach)

Water Body	Pacific Ocean Shoreline (Ocean Beach)
Stressor/Media/Beneficial Use	Bacterial indicators/Water/REC-1, REC-2
Data quality assessment. Extent to which data quality requirements met.	San Diego County Department of Environmental Health
Linkage between measurement endpoint and beneficial use or standard	Pollutant can have a direct impact on beneficial uses.
Utility of measure for judging if standards or uses are not attained	Closures a measure of impacts on beneficial use. Listing recommendation: >10 days/year beach closures or advisories.
Water Body-specific Information	Data age = 1 yr.
Data used to assess water quality	13 days of Beach Closures and/or General Advisories, which suggests that REC-1 standards were exceeded.
Spatial representation	Sampled within 400 yards (0.2 miles) of discharge point
Temporal representation	13 days of Beach Closures/Advisories.
Data type	Numerical data
Use of standard method	
Potential Source(s) of Pollutant	Sewage spills/leaks, urban runoff, other point sources, nonpoint sources, and domestic/wild animals.
Alternative Enforceable Program	Unknown
RWQCB Recommendation	Add specific location (not new HA) to 1998 Listing
SWRCB Staff Recommendation	Add specific location to 1998 listing within same hydrologic area.

Region 9

Pacific Ocean Shoreline (South Capistrano State Beach)

Water Body	Pacific Ocean Shoreline (South Capistrano State Beach)
Stressor/Media/Beneficial Use	Bacterial indicators/Water/REC-1, REC-2
Data quality assessment. Extent to which data quality requirements met.	Orange County Environmental Health Care Agency
Linkage between measurement endpoint and beneficial use or standard	Pollutant can have a direct impact on beneficial uses.
Utility of measure for judging if standards or uses are not attained	Closures a measure of impacts on beneficial use. Listing recommendation: >10 days/year beach closures or advisories.
Water Body-specific Information	Data age = 1 yr.
Data used to assess water quality	41 days of Beach Closures and/or General Advisories, which suggests that REC-1 standards were exceeded.
Spatial representation	Sampled within 400 yards (0.2 miles) of discharge point
Temporal representation	41 days of Beach Closures/Advisories.
Data type	Numerical data
Use of standard method	
Potential Source(s) of Pollutant	Sewage spills/leaks, urban runoff, other point sources, nonpoint sources, and domestic/wild animals.
Alternative Enforceable Program	Unknown
RWQCB Recommendation	Add specific location (not new HA) to 1998 Listing
SWRCB Staff Recommendation	Add specific location to 1998 listing within same hydrologic area.

Region 9

Pacific Ocean Shoreline (San Onofre State Beach/San Mateo Creek)

Water Body	Pacific Ocean Shoreline (San Onofre State Beach/San Mateo Creek Outlet)
Stressor/Media/Beneficial Use	Bacterial indicators/Water/REC-1, REC-2
Data quality assessment. Extent to which data quality requirements met.	San Diego County Department of Environmental Health
Linkage between measurement endpoint and beneficial use or standard	Pollutant can have a direct impact on beneficial uses.
Utility of measure for judging if standards or uses are not attained	Closures a measure of impacts on beneficial use. Listing recommendation: >10 days/year beach closures or advisories.
Water Body-specific Information	Data age = 1 yr.
Data used to assess water quality	15 days of Beach Closures and/or General Advisories, which suggests that REC-1 standards were exceeded.
Spatial representation	Sampled within 400 yards (0.2 miles) of discharge point
Temporal representation	15 days of Beach Closures/Advisories.
Data type	Numerical data
Use of standard method	
Potential Source(s) of Pollutant	Sewage spills/leaks, urban runoff, other point sources, nonpoint sources, and domestic/wild animals.
Alternative Enforceable Program	Unknown
RWQCB Recommendation	Add specific location (not new HA) to 1998 Listing
SWRCB Staff Recommendation	Add specific location to 1998 listing within same hydrologic area.

Region 9

San Diego Bay Kellog Street Beach (Pueblo San Diego HU [908.00])

Water Body	San Diego Bay Kellog Street Beach (Pueblo San Diego HU [908.00] and Sweetwater HU [909.00])
Stressor/Media/Beneficial Use	Bacterial indicators/Water/REC-1, REC-2
Data quality assessment. Extent to which data quality requirements met.	San Diego County Department of Environmental Health
Linkage between measurement endpoint and beneficial use or standard	Pollutant can have a direct impact on beneficial uses.
Utility of measure for judging if standards or uses are not attained	Closures a measure of impacts on beneficial use. Listing recommendation: >10 days/year beach closures or advisories.
Water Body-specific Information	Data age = 1 yr.
Data used to assess water quality	13 days of Beach Closures and/or General Advisories, which suggests that REC-1 standards were exceeded.
Spatial representation	Sampled within 400 yards (0.2 miles) of discharge point
Temporal representation	13 days of Beach Closures/Advisories.
Data type	Numerical data
Use of standard method	
Potential Source(s) of Pollutant	Sewage spills/leaks, urban runoff, other point sources, nonpoint sources, and domestic/wild animals.
Alternative Enforceable Program	Unknown
RWQCB Recommendation	Add specific location (not new HA) to 1998 Listing
SWRCB Staff Recommendation	Add specific location to 1998 listing within same hydrologic area.

Region 9

San Diego Bay Shelter Island Shoreline Park (Pueblo San Diego)

Water Body	San Diego Bay Shelter Island Shoreline Park (Pueblo San Diego 908.00 and Sweetwater)
Stressor/Media/Beneficial Use	Bacterial indicators/Water/REC-1, REC-2
Data quality assessment. Extent to which data quality requirements met.	San Diego County Department of Environmental Health
Linkage between measurement endpoint and beneficial use or standard	Pollutant can have a direct impact on beneficial uses.
Utility of measure for judging if standards or uses are not attained	Closures a measure of impacts on beneficial use. Listing recommendation: >10 days/year beach closures or advisories.
Water Body-specific Information	Data age = 1 yr.
Data used to assess water quality	24 days of Beach Closures and/or General Advisories, which suggests that REC-1 standards were exceeded.
Spatial representation	Sampled within 400 yards (0.2 miles) of discharge point
Temporal representation	24 days of Beach Closures/Advisories.
Data type	Numerical data
Use of standard method	
Potential Source(s) of Pollutant	Sewage spills/leaks, urban runoff, other point sources, nonpoint sources, and domestic/wild animals.
Alternative Enforceable Program	Unknown
RWQCB Recommendation	Add specific location (not new HA) to 1998 Listing
SWRCB Staff Recommendation	Add specific location to 1998 listing within same hydrologic area.

Region 9

San Diego Bay, Coronado

Water Body	San Diego Bay, Coronado
Stressor/Media/Beneficial Use	Bacterial indicators/Water/REC-1, REC-2
Data quality assessment. Extent to which data quality requirements met.	San Diego County Department of Environmental Health
Linkage between measurement endpoint and beneficial use or standard	Pollutant can have a direct impact on beneficial uses.
Utility of measure for judging if standards or uses are not attained	Closures a measure of impacts on beneficial use. Listing recommendation: >10 days/year beach closures or advisories.
Water Body-specific Information	Data age = 1 yr.
Data used to assess water quality	17 days of Beach Closures and/or General Advisories, which suggests that REC-1 standards were exceeded.
Spatial representation	Sampled within 400 yards (0.2 miles) of discharge point
Temporal representation	17 days of Beach Closures/Advisories.
Data type	Numerical data
Use of standard method	
Potential Source(s) of Pollutant	Sewage spills/leaks, urban runoff, other point sources, nonpoint sources, and domestic/wild animals.
Alternative Enforceable Program	Unknown
RWQCB Recommendation	Add specific location (not new HA) to 1998 Listing
SWRCB Staff Recommendation	Add specific location to 1998 listing within same hydrologic area.

Water Bodies Proposed for the Watch List by Region 9

Agua Hedionda Creek

Benthic community degradation
Eutrophication
Incised channel

Agua Hedionda Lagoon

Caulerpa taxifolia
Copper (dissolved)
Selenium

Aliso Creek

Chlordane
Dieldrin
Heptachlorepoide
PCB

Alvarado Creek

Benthic community degradation
Eutrophication
Sedimentation/Siltation
Trash

Beach and Bay Shorelines displaying a
Permanent Health Risk sign

Unknown constituents that may
effect human health

Boulder Creek

Exotic vegetation (Tamarisk sp.)
Hydromodification (scour from
reservoir release)

Buena Vista Creek

Benthic community degradation
Eutrophication

Chocolate Creek

Eutrophication
Sedimentation/Siltation

Chollas Creek

Total chlordane
Total PCB
Trash
Turbidity

Cloverdale Creek

Eutrophication
Sedimentation/Siltation

Cottonwood Creek

Diazinon
Eutrophication
Exotic vegetation (Tamarisk sp.)
Hydromodification (scour from
reservoir release)

Deluz Creek

Sulfate
Total dissolved solids

Delzura Creek

Erosion
Eutrophication
Incised channel
Sedimentation/Siltation

Encinitas Creek

Diazinon
Eutrophication
Malathion

Escondido Creek

Benthic community degradation
Diazinon
Eutrophication
Sulfate
Total dissolved solids

Fallbrook Creek

Iron
Manganese
Phosphorus

Famosa Slough

Dieldrin
Total chlordane
Total DDT
Total PCB

Forrester Creek

Eutrophication
Trash

Green Valley Creek

Benthic community degradation
Eutrophication
Phosphorus
Sedimentation/Siltation
Trash

Hatfield Creek

Eutrophication
Incised channel

King Creek	Eutrophication
Laguna Lakes	Bacterial indicators
Lake Hodges	MTBE
Loma Alta Creek	Benthic community degradation Eutrophication
Los Penasquitos Creek	Sedimentation/Siltation
Lower Otay Reservoir	Color Odor
Miramar Reservoir	Bromodichloromethane Chlorodibromomethane Chloroform Total dissolved solids
Murray Reservoir	Bromodichloromethane Chloride Chloroform Dibromochloromethane Phosphorus Sodium Sulfate
Murrieta Creek	Iron Manganese Total dissolved solids
Oceanside Harbor	Copper (dissolved)
Oso Creek	Chloride Phosphorus Sulfate Total dissolved solids Turbidity
Pacific Ocean Shoreline (Emerald Bay)	Bacterial indicators
Padre Barona Creek	Eutrophication Incised channel

Prima Deshecha Channel

Cadmium

Nickel

Proctor Valley Creek

Trash

Rainbow Creek

Sediment toxicity

Sulfate

Total dissolved solids

Trash

Reidy Creek

Nitrogen

Phosphorus

Rose Creek

Sedimentation/Siltation

San Diego Bay at Mouth of Switzer Creek

Chlordane

Lindane

PAH

San Diego Bay at America's Cup Harbor

Copper (dissolved)

San Diego Bay at B Street Pier

Chlordane

Lindane

PAH

San Diego Bay at Harbor Island (East Basin)

Arsenic

Cadmium

Copper (dissolved)

San Diego Bay at Harbor Island (West Basin)

Copper (dissolved)

San Diego Bay at Laurel Street

Arsenic

Cadmium

Copper (dissolved)

San Diego Bay at Marriott Marina

Copper (dissolved)

San Diego Bay at North Island Aircraft Platform

Arsenic

Cadmium

Copper (dissolved)

San Diego Bay at Shelter Island Yacht Harbor

Arsenic
Cadmium

San Diego Bay at South Bay Power Plant

Chlorine
Thermal warming
Turbidity

San Diego River

Benthic community degradation
Benzene
Chlordane
Eutrophication
Exotic vegetation (Water Hyacinth, Arundo sp., Tamarisk sp.)
Methyl tertiary-butyl ether (MTBE)
Trash

San Juan Creek

Erosion
Incised channel
PCB
Sedimentation/Siltation

San Luis Rey River

Calcium
Eutrophication
Magnesium
Phosphorus

San Marcos Lake

Dissolved oxygen

San Mateo Creek

Introduced (non-native) amphibian species: bullfrogs
Introduced (non-native) fish species: black bullhead, bluegill, channel catfish, green sunfish, largemouth bass, mosquito fish
Introduced (non-native) invertebrate species: non-native crayfish
Introduced (non-native) plant species: saltcedar, other exotic vegetation
Total dissolved solids

Sandia Creek

Lead
Sulfate

Santa Margarita River (entire and tributaries)

Sedimentation/Siltation

Santa Margarita River (Lower)

Iron
Manganese
Sulfate
Total dissolved solids

Santa Margarita River (Upper)

Iron
Manganese
Sulfate
Total dissolved solids

Santa Maria Creek

Bacterial indicators
Exotic vegetation (Tamarisk sp.)

Santa Ysabel Creek

Exotic vegetation (Arundo sp. and
Tamarisk sp.)

Scove Creek

Bacterial indicators
Incised channel
Nutrients

Sorrento (Carroll Canyon) Valley Creek

Eutrophication

Sycamore Canyon Creek

Eutrophication
Exotic vegetation (Arundo donax)
Phosphorus
Trash

Tecolote Creek

Sedimentation/Siltation

Tijuana River Estuary

Turbidity

Reference List for Region 9

Staff Report

California Regional Water Quality Control Board. San Diego Region. 2002. Final Draft Clean Water Act Section 303(d) List of Impaired Waters, 2002 Update. February 13, 2002

Technical References

Ad Hoc Workgroup, 1997. 1998 Clean Water Act (CWA) Section 303(d) Listing Guidelines for California. Workgroup Summary Document published August 11, 1997. State Water Resources Control Board.

Federal Register, May 2000. California Toxics Rule. 40CFR Part 131, Federal Register May 18, 2000, pages 3162-31719.

Haile, Robert W., John S. Witte, Mark Gold, Ron Cressey, Charles McGee, Robert C. Millikan, Alice Glasser, Nina Harawa, Carolyn Ervin, Patricia Harmon, Janice Harper, John Dermand, James Alamillo, Kevin Barrett, Mitchell Nides, and Guang-yu Wang, 1999. "The Health Effects of Swimming in Ocean Water Contaminated by Storm Drain Runoff." *Epidemiology* 10:355-363.

Marshack, J. B., 2000. A Compilation of Water Quality Goals, California Environmental Protection Agency, Regional Water Quality Control Board Central Valley Region.

Metcalf and Eddy, 1991. *Wastewater Engineering: Treatment, Disposal and Reuse*, 3rd Edition, McGraw-Hill, Inc., 1334 pages.

SDRWQCB, 1994. Water Quality Control Plan for the San Diego Basin (9), California Regional Water Quality Control Board, San Diego Region.

State of California, 2001. California Code of Regulations, TITLE 17, Section 7958. Bacteriological Standards

State of California, 2001. California Code of Regulations, TITLE 22. Social Security Division 4. Environmental Health Chapter 15. Domestic Water Quality and Monitoring Regulations, Articles 4 and 16.

State of California, 2000. Regulations and Guidance for Beaches. Appendices-- Draft Guidance for Salt- and Fresh Water Beaches, Department of Health Services.

SWRCB, 1968. Resolution Number 68-16 "Statement of Policy with Respect to Maintaining High Quality of Waters in California, State Water Resources Control Board.

SWRCB, 1996. General File 77-0118.02, File:1, 08/95 – 12/96. California Regional Water Quality Control Board, San Diego Region.

SWRCB, 1997. Water Quality Control Plan for Ocean Waters of California, State Water Resources Control Board.

SWRCB, 2000. Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California, State Water Resources Control Board.

USEPA, 1997. National Clarifying Guidance For 1998 State and Territory Clean Water Act Section 303(d) Listing Decisions, United States Environmental Protection Agency.