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CALIFORNIA



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January 30, 2006

Ms. Tam Doduc, Board Chair
State Water Resources Control Board
1001 I Street, Sacramento, CA 95814

Attention Selica Potter, Acting Clerk to the Board

COMMENTS ON THE PROPOSED 2006 303(d) LIST OF WATER QUALITY LIMITED SEGMENTS AND STAFF REPORT

Dear Ms. Doduc:

The City of Los Angeles, Bureau of Sanitation (Bureau) appreciates the opportunity to comment on the State Water Resources Control Board's (SWRCB) proposed 2006 Clean Water Act (CWA) §303(d) List of Water Quality Limited Segments and staff report. It is our understanding that the 2006 List consists of the 2002 List combined with new listings and de-listings proposed by the SWRCB staff in conjunction with Regional Water Quality Control Board staff. The Bureau has previously submitted comments at a SWRCB workshop and hearing on the CWA §303(d) 2002 List and appreciates SWRCB staff response to our past requests and the changes made.

The Bureau commends the effort that SWRCB staff has undertaken to collect and review all readily available environmental data and information and evaluate a portion of these data utilizing the newly adopted SWRCB Listing Policy.

The Bureau generally supports the State's 2006 CWA §303(d) List. However, after reviewing the 2002 List and proposed changes for the 2006 List, the Bureau is requesting changes to the process and format, and re-evaluation of some of the listing decisions (see Appendix for detailed comment).

The Bureau requests:

1. That the SWRCB compile one List. The format of this draft staff report is confusing as to the overall changes to the 2002 List and the proposed 2006 List. A simple table that identifies by region the 2002 CWA 303(d) listings and includes all the proposed changes



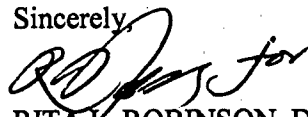
- each with a status indicator (e.g. 'Do Not Delist', 'No Change') would provide clarity as to these changes and as to what listings were evaluated under the State Listing Policy.
2. That the SWRCB evaluate the remaining unexamined Water Quality Limited Segments identified in the attached Appendix under the new Listing Policy so that the 2006 List is completely consistent with this Policy and current environmental conditions in order to clearly identify which waterbodies are impaired (see Table 1). Every fact sheet should be updated biennially and include the data plots.
 3. That the SWRCB use a primary line of evidence in conjunction with a Total Maximum Daily Load (TMDL) to satisfy Section 2.2 or Section 3.11 of the Listing Policy. Referencing a TMDL does not provide the necessary information to evaluate the original listing or the 2006 listing decision. Without the supporting data included in the Report, stakeholders cannot verify if the conditions for placement in the water quality limited segments category have been met or if water quality standards have been attained.

The Bureau believes these changes will result in a better process for developing future lists and result in more accurate listings. Accurate listings will focus scarce public resources on impaired waters to effectively improve water quality and our environment.

The Bureau appreciates and thanks the SWRCB and its staff for the effort they have put forth in preparing both the 303(d) List and implementing the new Listing Policy. It is our intention that the attached comments and supporting data will assist the SWRCB to further refine the CWA §303(d) format, process and listing decisions to the benefit of all of the State's inhabitants.

If you should have any additional questions or comments, please contact Mr. H.R. (Omar) Moghaddam of my staff at (310) 648-5423.

Sincerely,



RITA L. ROBINSON, Director
Bureau of Sanitation

RLR:HRM:GD:JM

Enclosures

cc: Letter Only ALL
Members, SWRCB
Celeste Cantu, State Water Resources Control Board, Executive Officer
Jonathan Bishop, Los Angeles Regional Water Quality Control Board
Daniel Hackney, Mayor's Office
Chris Westhoff, City Attorney
Ana Mae Yutan, City Administrative Office
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Gus Dembegiotes, Bureau of Sanitation/RAD
Jim Marchese, Bureau of Sanitation/RAD
RAD Central File/Water Quality Section

The Bureau requests:

1. ONE LIST. The preparation of one list would make it clear which listings were evaluated under the State listing policy. The format of this draft staff report is confusing as to the overall changes to the 2002 List and the proposed 2006 List. A simple table that identifies by region the 2002 CWA 303(d) listings and includes all the proposed changes would provide clarity.

The Bureau requests that one list be prepared for the proposed 2006 List and included in the staff report. This 2006 List to be organized by Region and waterbody and overlaid onto the 2002 List by including a column that would identify all the change status designators such a 'List', 'Delist', 'Do Not List', 'Do Not Delist', and the addition of a 'No Change' designator.

2. REVIEW OF UNEXAMINED WATER QUALITY LIMITED SEGMENTS: To ensure an accurate 2006 List that is completely consistent with the 2004 State Listing Policy and clearly identifies impaired waterbodies in California, the SWRCB should review and revise the remaining unexamined Water Quality Limited Segments under the new Listing Policy. Until adoption of the 2004 State Listing Policy, there had been no standardized procedure for listing waterbodies on the 303(d) List (federal or state). Due to the absence of a standardized procedure, the Bureau agrees with SWRCB staff that many of the waterbody/pollutant combinations were improperly listed on the 1998 and 2002 Lists which are now being carried forward onto the 2006 List. Faulty listings may be caused by judgment errors, such as choosing an insufficiently small data set or absence of data, accepting data whose origin was from samples collected and analyzed using improper analytical methods or without approved quality assurance/quality control procedures, data collected outside of a waterbody segment, use of unapproved criteria or guidelines, or evidence that natural sources have caused or contributed to the impairment. In order to avoid similar problems in the future, we believe that the SWRCB should take this opportunity to completely evaluate all previous listings by the application of *listing criteria* in the State's 2004 Listing Policy. The 2006 List would then be able to serve as a benchmark for all subsequent listing processes conducted by the State.

We recognize that assessing all of the listings not identified with a change in listing status in the 2006 Draft List places a burden on the SWRCB and RWQCBs. In the alternative, we would support an application process, whereby an interested party can request that an existing listing be reassessed under the provisions of the new Listing Policy if it has not been subject to the new Policy previously. This application process is different from the delisting provisions of the Policy. Under the Policy, an interested party can request a delisting if it meets the delisting factors, which are set at a higher threshold than the listing factors. Before being subject to the higher level of review for delisting, every listing should first be verified to make sure that it meets the listing thresholds as identified in the adopted Listing Policy. If a water body could not be listed under the provisions of the new Listing Policy, the listing should not be on the 2006 303(d) List.

The Bureau requests that all listed waterbody/pollutants combinations be examined under the listing criteria of 2004 State Listing Policy. As an alternative the Bureau requests that the waterbody/pollutant segments identified in the Appendix be reviewed under the listing requirements in the 2004 Listing Policy (see Appendix Table 1).

3. PREPARE AND UPDATE FACT SHEETS FOR ALL IMPAIRED WATERS LISTINGS. Fact sheets are critical because they provide the rationale for placing waterbodies on or off the 303(d) list. If the Fact Sheets are not present for a listing the State cannot: 1) validate the previous impairment decision, 2) adjust for changes in the development of new water quality criteria, 3) adjust to changes in environmental and receiving water conditions, 4) adjust to the application of the use attainability analysis or site specific objective. These fact sheets will be part of the TMDL development and implementation process and a component of scientific studies conducted to determine impairment.

The Bureau requests that these fact sheets be prepared and included in the 2006 report. Fact sheets should be developed for all listings not just for changes on the list. These fact sheets should be updated biennially, so that stakeholders can be better informed on the reasons for a listing decision and review of water quality trends.

4. THE USE A PRIMARY LINE OF EVIDENCE IN CONJUNCTION WITH THE TMDL: A primary line of evidence used in conjunction with a TMDL will satisfy Section 2.2 or Section 3.11 of the Listing Policy. Referencing a TMDL does not provide information to evaluate the original listing or the 2006 listing decision. The use of a TMDL in a single line of evidence does not satisfy Section 2.2 of the Listing Policy or Section 3.11. Without the supporting data included in the Report, stakeholders cannot verify if the conditions for placement in the water quality limited segments category have been met or if water quality standards have been attained.

For example in the Burbank Western Channel the State fact sheet did not consider the data analyzed as a part of the Los Angeles River Metals TMDL. The data in the TMDL includes the analysis of 96 samples from the Burbank Western Channel (extending through December 2003); the State fact sheet lists only six sample events. Using the TMDL data analysis results from 96 samples, and including the six samples on the State fact sheet, would result in only 3 exceedances in 102 samples. This low number of exceedances does not meet the frequency requirements of the Listing Policy to list zinc for the Burbank Western Channel.

As shown in this example, referencing a TMDL will not identify current environmental conditions that may indicate attainment of water quality standards or lack of data to support the original listing. It is clear in Section 2.2 of the listing policy that data in support of impairment must be present to make a listing decision and states that:

*‘Water segments shall be placed in this category if the conditions for placement in the water quality limited segments category (section 3) are met **and** . . . a TMDL has been developed and approved by USEPA and the*

approved implementation plan is expected to result in full attainment of the standard within a specified time frame.’

Without the data included in the Report, the conditions for placement in the water quality limited segments category (section 3) **have not** been met in several cases. The section 3 listing factors which are missing to evaluate a listing by referencing a TMDL are: Numeric water quality objectives, Health Advisories, Bioaccumulation, Water/ Sediment Toxicity, Adverse Biological Response, Nuisance and Trends.

The Bureau requests that a primary line of evidence used in conjunction with a TMDL will satisfy Section 2.2 or Section 3.11 of the Listing Policy. Without the supporting data included in the Report, stakeholders cannot verify if the conditions for placement in the water quality limited segments category have been met or if water quality standards have been attained. (see Appendix Table 2).

5. AREAS OF CHANGE. The Area of Change should be clearly demarcated using both narrative and graphic descriptions and included in the Report. Also in Region 4 several of these Areas of Change have Beneficial Uses that are incorrectly identified.

The Bureau requests that the descriptions include readily identifiable geographical markers and graphic or photographic overlays. Additionally, the beneficial uses need to be revised so that they are consistent with the Region 4 Basin Plan.

6. IMPAIRED WATER LISTINGS FOR POTENTIAL MUN: There are a number of listings based on the impairment of the MUN Beneficial Use. These impairment determinations are incorrect due to the removal of the beneficial use MUN and the associated (drinking water) criteria for all waterbodies identified as potential MUN (asterisked MUN) beneficial use in the Basin Plan.

The Bureau requests that these listings be evaluated (see Appendix Table 3).

7. BENEFICIAL USES ASSIGNED BY THE SWRCB BUT NOT DESIGNATED IN THE REGION 4 BASIN PLAN: The SWRCB may have assigned beneficial uses to waterbodies outside of the Basin Plan amendment process or inadvertently applied incorrect beneficial uses. In the SWRCB’s staff report, it states that “[i]f beneficial uses were not identified for a water body in the Basin Plans and the uses existed in the water body, then waters were assessed using the existing beneficial uses of water.” (Staff Report, Volume I, September 2005, page 6.) The designation of existing or potential beneficial uses for waterbodies is to be done in accordance with Federal and State law governing the adoption of water quality standards. As such, the designation (and de-designation) of beneficial uses requires a Basin Plan Amendment, which includes a public review process.

The Bureau requests that these listing be evaluated using the Basin plan designated uses and the 2004 State Listing Policy (see Appendix Table 4).

8. **IMPAIRED WATER LISTINGS WITHOUT BENEFICIAL USE LISTINGS IDENTIFIED BY THE STATE.** The previous §303(d) list from 2002 did not associate beneficial uses with the pollutants for most waterbodies. The 2006 fact sheets do not always identify the beneficial use that is being impacted, which triggers the need for a listing of impairment. The identification of the beneficial use being impacted is required as part of the water quality standard.

The Bureau requests that the SWRCB and RWQCBs associate each impairment on the 2006 §303(d) summary list with a beneficial use (see Appendix Table 5).

9. **POLLUTANT IDENTIFICATION AND CHEMICAL CATEGORY LISTINGS:** The Bureau supports the SWRCB in recommending that a number of waterbody listings for conditions be deleted from the 303(d) list. Waters listed for algae or beach closure are inappropriate because these are waterbody conditions and not pollutants as required by 40 CFR §130.7(b)(4) or the 2004 Listing Policy. For the 2006 List, the SWRCB may have missed some of the previous listings.

The Bureau also supports the SWRCB in moving away from listings based on a Category of Pollutants. Pollutants should be identified as stated in 40CFR §130.7(b)(4): “The list required under §§ 130.7(b)(1) and 130.7(b)(2) of this section...shall identify the pollutants causing or expected to cause violations of the applicable water quality standards....” However, there are listings carried over from the 2002 listing.

The Bureau requests that waterbodies listed for a condition be evaluated and if appropriate removed from the list until further data indicates impairment due to pollution or toxicity. The Bureau requests that Category pollutants such as Chema, PAH's, and Bacterial Measurements be reviewed and listed for the appropriate indicators or pollutants. The Bureau also requests that listings for enteric virus be evaluated under the Listing Policy as there are no criteria to evaluate impairment (see Appendix Table 6).

10. **METALS LISTINGS:** The Bureau supports the SWRCB in only using dissolved metals data to determine impairment. It is difficult to determine from the report which listings were evaluated using Total Metal or Dissolved Metal data. In the past, the assessment of receiving water quality for the Los Angeles Region frequently compared total recoverable metal concentrations to dissolved objectives or translated dissolved water quality objectives to total recoverable receiving water targets to make decisions about impairment. Both of these approaches are inconsistent with State Policy.

The Bureau requests that the metals data used in the report be identified as Total Metals or Dissolved Metals data.

11. **LISTINGS FOR TROPHIC STATUS:** Criteria are not available to determine impairment for trophic conditions (eutrophic, mesotrophic and oligotrophic waterbodies). Research is required to define which waterbodies go under which category. These trophic categories were developed for coastal waters and closed waterbodies such as lakes and reservoirs.

Also, they are used to mean different things; some use them simply to indicate the relative level of nutrient concentrations, others use them (particularly the “eutrophic” adjective) as shorthand for the effects of severe nutrient enrichment (e.g., low DO, high organic detritus levels, fish kills, pH exceedances, etc.). These terms are used without explanation. Often a water body gets a “eutrophic” listing simply because it receives anthropogenic sources of nitrogen and phosphorus, with no demonstration of actual impairment of beneficial uses.

The Bureau requests that the eutrophic listing be evaluated as it does not meet the requirements of the Listing Policy Section 2 and Section 6.1.3 (see Appendix Table 7).

12. ENCLOSED STORM DRAINS. The 2006 303(d) list has misidentified and listed storm drains as Impaired Waters of the State. Enclosed stormwater conveyance drains are not swimmable/fishable surface waterbodies and “Waters of the United States.” Enclosed stormwater conveyance drains do not have designated beneficial uses in the Basin Plan, and therefore, no criteria apply to waters within the drain itself and as such, should not be listed as impaired. Furthermore, the Los Angeles County Municipal NPDES Stormwater Permit (Order 01-182) covers discharges from the drain, along with the Standard Urban Storm Water Mitigation Plans and the County’s Storm Water Quality Management Program, all of which have been approved by our Regional Board. Identifying enclosed drains as waterbodies subject to a §305(b) evaluation and §303(d) listing is a confusing precedent, which extends the Clean Water Act beyond its intended scope.

The Bureau requests that the listings for storm water conveyance pipes be evaluated for consistency with the Clean Water Act (see Appendix Table 8).

13. SEASONAL VARIATION: As a note of caution - many of the new listings in Region 4 rely mainly on data collected during storm events. In general, storm events in Region 4 are brief and the data collected represents pollutant issues associated with dry weather deposition. Storm water data in the Los Angeles area does not identify detrimental conditions to aquatic life or human health in these channels during these brief episodes. Thus, the data is not representative of daily conditions in Southern California waterbodies and is not an appropriate measure to determine if these waterbodies are impaired. The Listing Policy contains clear guidance regarding the temporal representation of data and how it should be used to evaluate listing decisions. Most importantly, data “[s]amples should be representative of the critical timing that the pollutant is expected to impact the water body.” (Listing Policy 2004 Staff Report, page 23.) Data samples during episodic storm events do not represent critical timing for impacts to Southern California waterbodies. The Bureau has reviewed the SWRCB’s proposed listings and have identified several proposed listings that are based on the SWRCB’s reliance on stormwater event data. (see Appendix Table 9).
14. TMDL DEVELOPMENT SCHEDULE: Many of the TMDL listings in Region 4 are subject to a Consent Decree. Table 9 of the staff report does not identify if the TMDL completion dates are dates that are part of the Consent Decree or dates open to the discretion of the SWRCB. Furthermore, some of the 303(d) listings subject to the

Consent Decree may be removed from the 303(d) List due to the SWRCB's assessment for the 2006 List. In these cases, the SWRCB should identify how it will address the requirements of the Consent Decree. Current understanding is that a TMDL (which is a quasi-legislative activity under the purview of the State) will be developed for all Consent Decree listings even if the listing is faulty or water quality standards have been attained. In the Los Angeles Region, this is a significant problem.

The Bureau requests that Volume 1 Staff report TABLE 9 identify the 303(d) listings that are subject to Consent Decree timelines to assist all stakeholders in evaluating the proposed schedule. Additionally, the Bureau requests a reply on how the SWRCB will address 303(d) listings subject to the Consent Decree that may be removed due to the SWRCB's assessment of the 2006 List and how this will relate to the requirements of the Consent Decree (see Appendix Table 10).

15. DATA MANAGEMENT: The current process for a data records review is problematic. In anticipation of the 303(d) Listing process, the Bureau requested copies of all data submitted to the SWRCB for Region 4 that was to be considered as part of the 2004 Listing Process. Much of the data and information received by the Bureau was in the form of printed spreadsheets that had been reduced in size to fit on a letter sized page. In many instances, the headings were cut off, and were thus unreadable. From the recordkeeping perspective, the RWQCBs and the SWRCB should consider posting all information that was used in previous listings and the 2006 Listing on the SWRCB's website. By providing public access to this information, the public can view all lines of evidence used in the decision-making process which provides transparency to the 303(d) listing process. In particular, some of the old listings carried over from the 1996, 1998 and 2002 lists do not identify the reports and information used to make the original listing decision. We appreciate the SWRCB's efforts to correct some of these early faulty listings in the 2006 Listing process. However, we believe that a more thorough review of all earlier listings is warranted. By providing the reports and information used to make these early listing decisions on the SWRCB's website, members of the public can review the listings that are of concern to them.

The Bureau requests that an updated records repository system be prepared to retain legible and accurate records of data required to make the listing decisions and that this system be made available to public.

16. MAPPING: The staff report indicates that the high and medium priority data sets contained data that was identifiable, presumably including the location for the data samples. (Staff Report, page 5.) Thus, the data used for the 2006 Listing analysis should have sample locations identified and geocoded.

The Bureau requests that maps be produced to identify the sample locations for the data for each pollutant/waterbody combination.

17. TYPOGRAPHICAL ERRORS AND CONTRADICTION LANGUAGE:

- i. Staff report page 5 – Contents of the fact sheet 3rd sentence: If data ~~and~~ were reviewed for a water body-pollutant combination not currently on the section 303(d) list, it was considered for listing (using the ~~delisting~~ listing factors in section 3 of the Listing Policy). Conversely, if data ~~and~~ were reviewed for a water body pollutant combination currently on the section 303(d) list, it was considered for delisting (using the delisting factors in section 4 of the Listing Policy).
- ii. Ballona Creek Estuary Do Not Delist Listing – Incongruent language. Listed for DDT, paragraph 3 contradicts impairment determination. Pg 224.

18. DETAILED COMMENT ON SPECIFIC LISTINGS: In addition to the previous comments on listings provided in Table 1-8 the Bureau has identified incomplete, incongruent or inaccurate listings and delistings based on the report and data provided by the State and the 2004 State Listing Policy. More detailed comments on these listings are provided in the Appendix Table 11.

Ballona Creek pH - Water

Table 1. Data Summary Information

Waterbody Name	Ballona Creek	Region	4
Hydrologic Unit	405.13	Total Waterbody Size	6.5 Miles
Pollutant/Stressor	pH	Size Affected	6.5 Miles
		Extent of Impairment	Entire Reach

Table 2. Summary of pH for Ballona Creek

Dates of Sampling	11/10/1997 - 3/9/2005
Number of Samples	86
Number of Detected Samples	86
Minimum Detected Value	6.07 pH Units
Maximum Detected Value	9.77 pH Units
Median Detected Value	7.78 pH Units
Hardness	N/A
pH	N/A
WER	N/A
Temperature	N/A

Beneficial Uses for Ballona Creek

§ MUN § REC2 § WILD
§ RECI § WARM

Applicable Water Quality Objectives

8.5 pH Units Basin Plan Maximum
6.5 pH Units Basin Plan Minimum

Out of 86 Samples:

# Exceed	% Exceed	List	Delist
18	20.9%	Yes	No
1	1.2%	No	Yes

Triggering Water Quality Objective for Listing

The Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994 contains water quality criteria for waterbodies in the Los Angeles Region. The Basin Plan requires a pH range between 6.5 to 8.5. In Ballona Creek, 18 of 86 samples were above this range, which is 20.9% of the sample events. Under the state's listing policy, a waterbody is considered to be impaired for pH if there are 15 values above the required range.

Triggering Water Quality Objective for Delisting

Not eligible for delisting.

References

Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994

Raw Data

Ballona Creek
pH - Water

5283	S01	Ballona Creek	Conventional	pH	=	7.36	pH Unit	08-Apr-99	Good	Water	Composite			14			2002 Regional W	SWRCB	4-56-4-81_2002_303d_data_4-66_Ba
5338	S01	Ballona Creek	Conventional	pH	=	6.59	pH Unit	12-Apr-99	Good	Water	Composite			14			2002 Regional W	SWRCB	4-56-4-81_2002_303d_data_4-66_Ba
5465	S01	Ballona Creek	Conventional	pH	=	7.7	pH Unit	08-Nov-99	Good	Water	Composite			14			2002 Regional W	SWRCB	4-56-4-81_2002_303d_data_4-66_Ba
8815	S01	Ballona Creek	Conventional	pH	=	8.66	pH Unit	10-Oct-02	Good	Water	Composite	Dry	SM 4500H B				LADPW Monitori	SWRCB	4-40_LACDPW_2002-2003_Append
8945	S01	Ballona Creek	Conventional	pH	=	8.84	pH Unit	08-Nov-02	Good	Water	Composite	Wet	SM 4500H B				LADPW Monitori	SWRCB	4-40_LACDPW_2002-2003_Append
9077	S01	Ballona Creek	Conventional	pH	=	7.86	pH Unit	16-Dec-02	Good	Water	Composite	Wet	SM 4500H B				LADPW Monitori	SWRCB	4-40_LACDPW_2002-2003_Append
9208	S01	Ballona Creek	Conventional	pH	=	7.7	pH Unit	11-Feb-03	Good	Water	Composite	Wet	SM 4500H B				LADPW Monitori	SWRCB	4-40_LACDPW_2002-2003_Append
9339	S01	Ballona Creek	Conventional	pH	=	7.87	pH Unit	15-Mar-03	Good	Water	Composite	Dry	SM 4500H B				LADPW Monitori	SWRCB	4-40_LACDPW_2002-2003_Append
9468	S01	Ballona Creek	Conventional	pH	=	8.18	pH Unit	30-Apr-03	Good	Water	Composite	Dry	SM 4500H B				LADPW Monitori	SWRCB	4-40_LACDPW_2002-2003_Append
5678	S01	Ballona Creek	Conventional	pH	=	7.62		04-Jan-01		Water	Composite	Wet	A150.1				LACSD	LACSD	LACSD/2000-01.xls/Table B-1
8478	S01	Ballona Creek	Conventional	pH	=	6.07		26-Oct-04		Water		Wet					LACSD	LACSD	LACSD/Storm_2_10-26-04.xls/BC (
8424	S01	Ballona Creek	Conventional	pH	=	7.11		17-Oct-04		Water		Wet					LACSD	LACSD	LACSD/Storm_1_10-17-04.xls/BC (
5754	S01	Ballona Creek	Conventional	pH	=	7.01		17-Jan-01		Water	Composite	Wet	A150.1				LACSD	LACSD	LACSD/2000-01.xls/Table B-1
5830	S01	Ballona Creek	Conventional	pH	=	6.62		25-Jan-01		Water	Composite	Wet	A150.1				LACSD	LACSD	LACSD/2000-01.xls/Table B-1
5906	S01	Ballona Creek	Conventional	pH	=	6.87		30-Jan-01		Water	Composite	Wet	A150.1				LACSD	LACSD	LACSD/2000-01.xls/Table B-1
5982	S01	Ballona Creek	Conventional	pH	=	6.96		15-Feb-01		Water	Composite	Wet	A150.1				LACSD	LACSD	LACSD/2000-01.xls/Table B-1
6053	S01	Ballona Creek	Conventional	pH	=	7.12		20-Feb-01		Water	Composite	Wet	A150.1				LACSD	LACSD	LACSD/2000-01.xls/Table B-1
6124	S01	Ballona Creek	Conventional	pH	=	7.36		28-Feb-01		Water	Composite	Wet	A150.1				LACSD	LACSD	LACSD/2000-01.xls/Table B-1
6199	S01	Ballona Creek	Conventional	pH	=	7.4		07-Mar-01		Water	Composite	Wet	A150.1				LACSD	LACSD	LACSD/2000-01.xls/Table B-1
6574	S01	Ballona Creek	Conventional	pH	=	6.57		20-Dec-01		Water	Composite	Wet	A150.1				LACSD	LACSD	LACSD/01-02.xls/Table B-1 S1
6653	S01	Ballona Creek	Conventional	pH	=	6.92		28-Jan-02		Water	Composite	Wet	A150.1				LACSD	LACSD	LACSD/01-02.xls/Table B-1 S1
6425	S01	Ballona Creek	Conventional	pH	=	7.18		29-Nov-01		Water	Composite	Wet	A150.1				LACSD	LACSD	LACSD/01-02.xls/Table B-1 S1
6499	S01	Ballona Creek	Conventional	pH	=	7.44		03-Dec-01		Water	Composite	Wet	A150.1				LACSD	LACSD	LACSD/01-02.xls/Table B-1 S1
6271	S01	Ballona Creek	Conventional	pH	=	7.45		12-Nov-01		Water	Composite	Wet	A150.1				LACSD	LACSD	LACSD/01-02.xls/Table B-1 S1
6346	S01	Ballona Creek	Conventional	pH	=	7.84		24-Nov-01		Water	Composite	Wet	A150.1				LACSD	LACSD	LACSD/01-02.xls/Table B-1 S1
7735	S01	Ballona Creek	Conventional	pH	=	8.65		28-Oct-03		Water	Composite	Dry	SM4500H B				LACSD	LACSD	LACSD/03-04.xls/Ballona S01
7890	S01	Ballona Creek	Conventional	pH	=	8.53		31-Oct-03		Water	Composite	Wet	SM4500H B				LACSD	LACSD	LACSD/03-04.xls/Ballona S01
8045	S01	Ballona Creek	Conventional	pH	=	6.91		25-Dec-03		Water	Composite	Wet	SM4500H B				LACSD	LACSD	LACSD/03-04.xls/Ballona S01
8200	S01	Ballona Creek	Conventional	pH	=	6.61		01-Jan-04		Water	Composite	Wet	SM4500H B				LACSD	LACSD	LACSD/03-04.xls/Ballona S01
8355	S01	Ballona Creek	Conventional	pH	=	7.29		13-Jan-04		Water	Composite	Dry	SM4500H B				LACSD	LACSD	LACSD/03-04.xls/Ballona S01
8586	S01	Ballona Creek	Conventional	pH	=	7.09		05-Dec-04		Water		Wet					LACSD	LACSD	LACSD/Storm_3_12-05-04.xls/BC (
7115	S01	Ballona Creek	Conventional	pH	=	7.86		16-Dec-02		Water	Composite	Wet	SM4500H B				LACSD	LACSD	LACSD/02-03.xls/Ballona S01
7270	S01	Ballona Creek	Conventional	pH	=	7.7		11-Feb-03		Water	Composite	Wet	SM4500H B				LACSD	LACSD	LACSD/02-03.xls/Ballona S01
7425	S01	Ballona Creek	Conventional	pH	=	7.87		15-Mar-03		Water	Composite	Wet	SM4500H B				LACSD	LACSD	LACSD/02-03.xls/Ballona S01
7580	S01	Ballona Creek	Conventional	pH	=	8.18		30-Apr-03		Water	Composite	Dry	SM4500H B				LACSD	LACSD	LACSD/02-03.xls/Ballona S01
8687	S01	Ballona Creek	Conventional	pH	=	8.36		09-Mar-05		Water		Dry					LACSD	LACSD	LACSD/Dry_2_03-17-05.xls/BC (S01

Raw Data

Ballona Creek
pH - Water

Record#	SiteID	Waterbody	Classification	Const	NumOf	Results	Units	SampleDate	DataQual	Matrix	SampleType	Sample	AnalyticalMet	MDL	SampleComment	ProjectID	ProjectName	DataSource	FilenameSpreadsheet	TableName
736	BC119	Ballona Creek	Conventional	pH	=	8.6	pH Unit	26-Aug-00	Good	Water							2002 Regional W SWRCB	4-56-4-81_2002_303d data 4-66 Ba		
8530	S01	Ballona Creek	Conventional	pH	=	8.12		16-Nov-04		Water		Dry			Dry Weather Sar		LACSD	LACSD	LACSD/Dry_1_11-02-04.xls/BC (S0	LACSDBallonaCreek_Data_303d
5534	S01	Ballona Creek	Conventional	pH	=	7.69		12-Oct-00		Water	Composite	Wet	A150.1		Storm Number 0		LACSD	LACSD	LACSD/2000-01.xls/Table B-1	LACSDBallonaCreek_Data_303d
675	Ballona Cree	Ballona Creek	Conventional	pH	=	7.47	pH Unit	25-Mar-03	Good	Water	FieldMeasure		probe			01SW4001	SWAMP	SWAMP	SWAMP_303d_Query_031005	
661	Ballona Cree	Ballona Creek	Conventional	pH	=	8.42	pH Unit	23-Feb-04	Good	Water	FieldMeasure		probe			01SW4001	SWAMP	SWAMP	SWAMP_303d_Query_031005	
814	BC122	Ballona Creek	Conventional	pH	=	7.8	pH Unit	09-Jan-01	Good	Water							2002 Regional W SWRCB	4-56-4-81_2002_303d data 4-66 Ba		
834	BC122	Ballona Creek	Conventional	pH	=	8.2	pH Unit	07-Apr-01	Good	Water							2002 Regional W SWRCB	4-56-4-81_2002_303d data 4-66 Ba		
839	BC30	Ballona Creek	Conventional	pH	=	8	pH Unit	06-Nov-99	Good	Water							2002 Regional W SWRCB	4-56-4-81_2002_303d data 4-66 Ba		
840	BC30	Ballona Creek	Conventional	pH	=	9.3	pH Unit	05-Feb-00	Good	Water							2002 Regional W SWRCB	4-56-4-81_2002_303d data 4-66 Ba		
841	BC30	Ballona Creek	Conventional	pH	=	8.5	pH Unit	06-May-00	Good	Water							2002 Regional W SWRCB	4-56-4-81_2002_303d data 4-66 Ba		
647	Ballona Cree	Ballona Creek	Conventional	pH	=	8.52	pH Unit	06-Mar-03	Good	Water	FieldMeasure		probe			01SW4001	SWAMP	SWAMP	SWAMP_303d_Query_031005	
701	Ballona Cree	Ballona Creek	Conventional	pH	=	8.7	pH Unit	06-Mar-03	Good	Water	FieldMeasure		probe			01SW4001	SWAMP	SWAMP	SWAMP_303d_Query_031005	
715	Ballona Cree	Ballona Creek	Conventional	pH	=	8.74	pH Unit	23-Feb-04	Good	Water	FieldMeasure		probe			01SW4001	SWAMP	SWAMP	SWAMP_303d_Query_031005	
687	Ballona Cree	Ballona Creek	Conventional	pH	=	9.77	pH Unit	23-Feb-04	Good	Water	FieldMeasure		probe			01SW4001	SWAMP	SWAMP	SWAMP_303d_Query_031005	
755	BC119	Ballona Creek	Conventional	pH	=	8.7	pH Unit	09-Jan-01	Good	Water					Flow from pipe w		2002 Regional W SWRCB	4-56-4-81_2002_303d data 4-66 Ba		
775	BC119	Ballona Creek	Conventional	pH	=	7.7	pH Unit	07-Apr-01	Good	Water							2002 Regional W SWRCB	4-56-4-81_2002_303d data 4-66 Ba		
857	BC30	Ballona Creek	Conventional	pH	=	9.1	pH Unit	26-Aug-00	Good	Water							2002 Regional W SWRCB	4-56-4-81_2002_303d data 4-66 Ba		
881	BC40	Ballona Creek	Conventional	pH	=	8.4	pH Unit	06-Nov-99	Good	Water							2002 Regional W SWRCB	4-56-4-81_2002_303d data 4-66 Ba		
882	BC40	Ballona Creek	Conventional	pH	=	9.5	pH Unit	05-Feb-00	Good	Water							2002 Regional W SWRCB	4-56-4-81_2002_303d data 4-66 Ba		
883	BC40	Ballona Creek	Conventional	pH	=	8.9	pH Unit	06-May-00	Good	Water							2002 Regional W SWRCB	4-56-4-81_2002_303d data 4-66 Ba		
899	BC40	Ballona Creek	Conventional	pH	=	9.1	pH Unit	26-Aug-00	Good	Water							2002 Regional W SWRCB	4-56-4-81_2002_303d data 4-66 Ba		
937	BC5	Ballona Creek	Conventional	pH	=	8	pH Unit	06-Nov-99	Good	Water							2002 Regional W SWRCB	4-56-4-81_2002_303d data 4-66 Ba		
943	BC5	Ballona Creek	Conventional	pH	=	7.8	pH Unit	05-Feb-00	Good	Water							2002 Regional W SWRCB	4-56-4-81_2002_303d data 4-66 Ba		
945	BC5	Ballona Creek	Conventional	pH	=	7.9	pH Unit	06-May-00	Good	Water							2002 Regional W SWRCB	4-56-4-81_2002_303d data 4-66 Ba		
962	BC5	Ballona Creek	Conventional	pH	=	7.8	pH Unit	26-Aug-00	Good	Water							2002 Regional W SWRCB	4-56-4-81_2002_303d data 4-66 Ba		
5605	S01	Ballona Creek	Conventional	pH	=	7.87		31-Oct-00		Water	Composite	Wet	A150.1		Storm Number 0		LACSD	LACSD	LACSD/2000-01.xls/Table B-1	LACSDBallonaCreek_Data_303d
6805	S01	Ballona Creek	Conventional	pH	=	8.66		10-Oct-02		Water	Composite	Dry	SM4500H B		Event Number 0		LACSD	LACSD	LACSD/02-03.xls/Ballona S01	LACSDBallonaCreek_Data_303d
8635	S01	Ballona Creek	Conventional	pH	=	6.62		11-Jan-05		Water		Wet			Storm 6 for Mass		LACSD	LACSD	LACSD/Storm_6_ME_01-07-05.xls/	LACSDBallonaCreek_Data_303d
6960	S01	Ballona Creek	Conventional	pH	=	8.84		08-Nov-02		Water	Composite	Wet	SM4500H B		Event Number 0		LACSD	LACSD	LACSD/02-03.xls/Ballona S01	LACSDBallonaCreek_Data_303d
3061	S01	Ballona Creek	Conventional	pH	=	7.03	pH Unit	10-Nov-97	Good	Water	Composite			14			2002 Regional W SWRCB	4-56-4-81_2002_303d data 4-66 Ba		
3137	S01	Ballona Creek	Conventional	pH	=	6.84	pH Unit	13-Nov-97	Good	Water	Composite			14			2002 Regional W SWRCB	4-56-4-81_2002_303d data 4-66 Ba		
3292	S01	Ballona Creek	Conventional	pH	=	6.54	pH Unit	05-Dec-97	Good	Water	Composite			14			2002 Regional W SWRCB	4-56-4-81_2002_303d data 4-66 Ba		
3625	S01	Ballona Creek	Conventional	pH	=	6.75	pH Unit	09-Jan-98	Good	Water	Composite			14			2002 Regional W SWRCB	4-56-4-81_2002_303d data 4-66 Ba		
3792	S01	Ballona Creek	Conventional	pH	=	8.13	pH Unit	15-Jan-98	Good	Water	Composite			14			2002 Regional W SWRCB	4-56-4-81_2002_303d data 4-66 Ba		
3961	S01	Ballona Creek	Conventional	pH	=	7.12	pH Unit	25-Mar-98	Good	Water	Composite			14			2002 Regional W SWRCB	4-56-4-81_2002_303d data 4-66 Ba		
4126	S01	Ballona Creek	Conventional	pH	=	8.46	pH Unit	13-Oct-98	Good	Water	Composite			14			2002 Regional W SWRCB	4-56-4-81_2002_303d data 4-66 Ba		
4289	S01	Ballona Creek	Conventional	pH	=	7.53	pH Unit	08-Nov-98	Good	Water	Composite			14			2002 Regional W SWRCB	4-56-4-81_2002_303d data 4-66 Ba		
4457	S01	Ballona Creek	Conventional	pH	=	8.08	pH Unit	28-Nov-98	Good	Water	Composite			14			2002 Regional W SWRCB	4-56-4-81_2002_303d data 4-66 Ba		
4625	S01	Ballona Creek	Conventional	pH	=	7.68	pH Unit	01-Dec-98	Good	Water	Composite			14			2002 Regional W SWRCB	4-56-4-81_2002_303d data 4-66 Ba		
4764	S01	Ballona Creek	Conventional	pH	=	7.76	pH Unit	06-Dec-98	Good	Water	Composite			14			2002 Regional W SWRCB	4-56-4-81_2002_303d data 4-66 Ba		
4817	S01	Ballona Creek	Conventional	pH	=	8.75	pH Unit	12-Jan-99	Good	Water	Composite			14			2002 Regional W SWRCB	4-56-4-81_2002_303d data 4-66 Ba		
4865	S01	Ballona Creek	Conventional	pH	=	7.87	pH Unit	20-Jan-99	Good	Water	Composite			14			2002 Regional W SWRCB	4-56-4-81_2002_303d data 4-66 Ba		
4907	S01	Ballona Creek	Conventional	pH	=	7.26	pH Unit	25-Jan-99	Good	Water	Composite			14			2002 Regional W SWRCB	4-56-4-81_2002_303d data 4-66 Ba		
4954	S01	Ballona Creek	Conventional	pH	=	7.12	pH Unit	31-Jan-99	Good	Water	Composite			14			2002 Regional W SWRCB	4-56-4-81_2002_303d data 4-66 Ba		
5002	S01	Ballona Creek	Conventional	pH	=	7.68	pH Unit	06-Feb-99	Good	Water	Composite			14			2002 Regional W SWRCB	4-56-4-81_2002_303d data 4-66 Ba		
5048	S01	Ballona Creek	Conventional	pH	=	7.23	pH Unit	09-Feb-99	Good	Water	Composite			14			2002 Regional W SWRCB	4-56-4-81_2002_303d data 4-66 Ba		
5090	S01	Ballona Creek	Conventional	pH	=	8.32	pH Unit	08-Mar-99	Good	Water	Composite			14			2002 Regional W SWRCB	4-56-4-81_2002_303d data 4-66 Ba		
5132	S01	Ballona Creek	Conventional	pH	=	7.06	pH Unit	15-Mar-99	Good	Water	Composite			14			2002 Regional W SWRCB	4-56-4-81_2002_303d data 4-66 Ba		
5183	S01	Ballona Creek	Conventional	pH	=	7.47	pH Unit	22-Mar-99	Good	Water	Composite			14			2002 Regional W SWRCB	4-56-4-81_2002_303d data 4-66 Ba		
5232	S01	Ballona Creek	Conventional	pH	=	6.63	pH Unit	25-Mar-99	Good	Water	Composite			14			2002 Regional W SWRCB	4-56-4-81_2002_303d data 4-66 Ba		

Ballona Creek Fecal Coliform - Water

Table 1. Data Summary Information

Waterbody Name	Ballona Creek	Region	4
Hydrologic Unit	405.13	Total Waterbody Size	6.5 Miles
Pollutant/Stressor	Fecal Coliform	Size Affected	6.5 Miles
		Extent of Impairment	Entire Reach

Table 2. Summary of Fecal Coliform for Ballona Creek

Dates of Sampling	7/6/1995 - 3/9/2005	Minimum Detected Value	0.5 MPN/100mL
Number of Samples	132	Maximum Detected Value	1600000 MPN/100mL
Number of Detected Samples	124	Median Detected Value	1450 MPN/100mL
Hardness			N/A
pH			N/A
WER			N/A
Temperature			N/A

Data Sources

LACSD

Beneficial Uses for Ballona Creek

§ MUN § REC2 § WILD
§ REC1 § WARM

Applicable Water Quality Objectives	Out of 132 Samples:	# Exceed	% Exceed	List	Delist
200 MPN/100mL Basin Plan REC1 Freshwater 30-Day Minimum 5 sample		102/131	77.9%	Yes	No
400 MPN/100mL Basin Plan REC1 Freshwater Single sample		84	63.6%	Yes	No
2000 MPN/100mL Basin Plan REC2 30-Day Log Mean Minimum 4 sample		56	42.4%	Yes	No
4000 MPN/100mL Basin Plan REC2 30-Day Maximum 10% samples		48	36.4%	Yes	No

Triggering Water Quality Objective for Listing

The Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994 contains water quality criteria for waterbodies in the Los Angeles Region. The most conservative applicable water quality criterion for fecal coliform is 200 MPN/100mL for the Basin Plan REC1 Freshwater 30-Day Minimum 5 samples objective. In Ballona Creek, the criterion was exceeded in 102 of 131 samples, which is 77.9% of the sample events. Under the state's listing policy, a waterbody is considered to be impaired for fecal coliform if there are 22 or more exceedances out of the 131 samples.

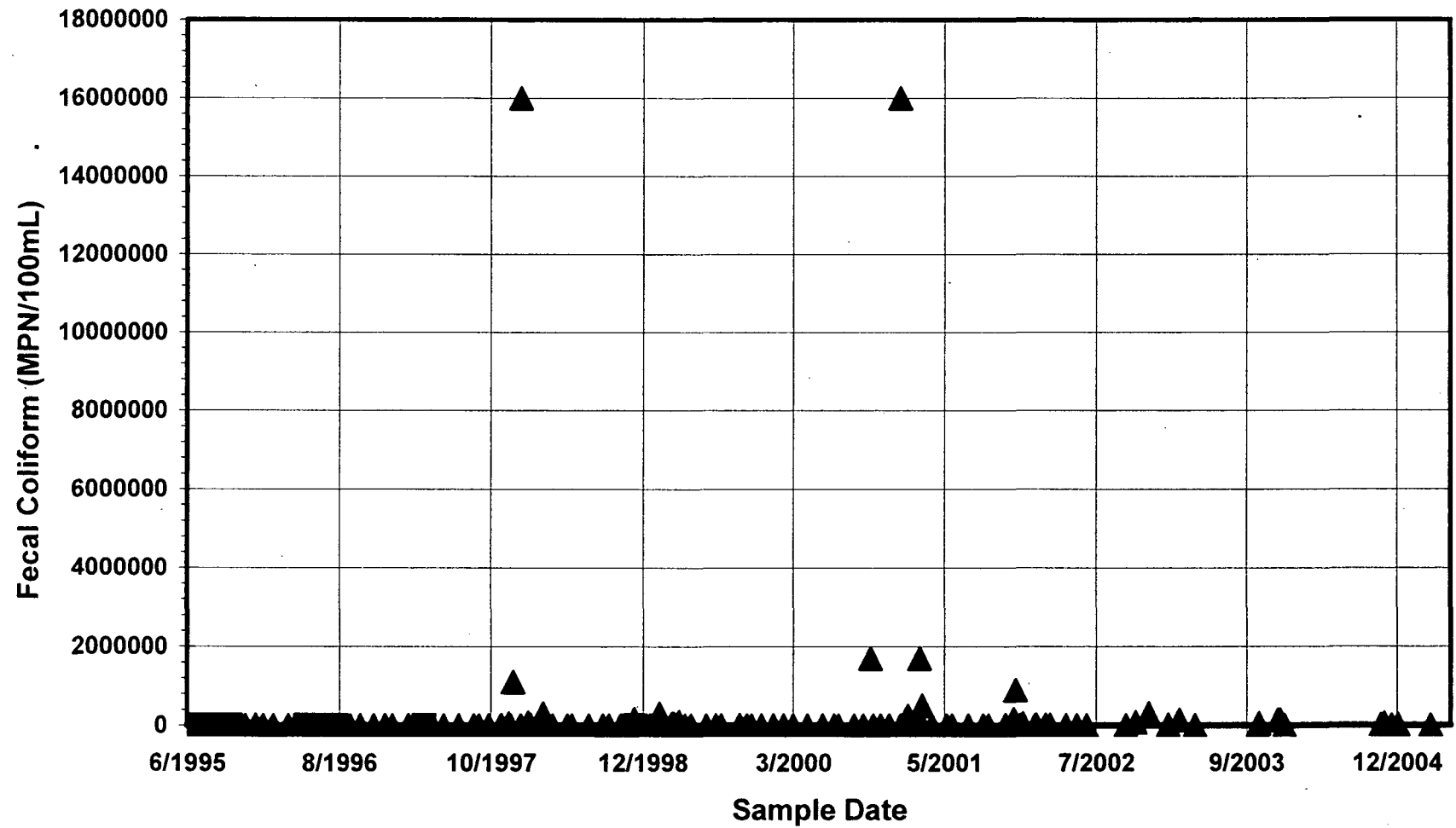
Triggering Water Quality Objective for Delisting

Not eligible for delisting.

References

Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994




Water Data Summary for Ballona Creek – Basin Plan REC1 Freshwater 30-Day Minimum 5 samples Objective



Raw Data

Ballona Creek
Fecal Coliform - Water

Record#	SiteID	Waterbody	Classification	Constituent	Num	Qual	Result	Units	SampleDate	DataQuality	Matrix	SampleType	SampleID	AnalyticalMethod	MDL	SampleComments	ProjectName	DataSource	FileameSpread	TableName
9607	Station 12	Ballona Creek	Bacteriological	Fecal Coliform	=		170	MPN/100mL	16-Jul-97	Good	Water	Dry					The Marine Envi	SWRCB	4-86 MdR Beac	
9627	Station 12	Ballona Creek	Bacteriological	Fecal Coliform	>		16000	MPN/100mL	14-Nov-97	Good	Water	Wet					The Marine Envi	SWRCB	4-86 MdR Beac	
9857	Station 12	Ballona Creek	Bacteriological	Fecal Coliform	=		2400	MPN/100mL	13-Sep-01	Good	Water	Dry					The Marine Envi	SWRCB	4-86 MdR Beac	
9862	Station 12	Ballona Creek	Bacteriological	Fecal Coliform	>		16000	MPN/100mL	31-Oct-01	Good	Water	Dry					The Marine Envi	SWRCB	4-86 MdR Beac	
9867	Station 12	Ballona Creek	Bacteriological	Fecal Coliform	=		2800	MPN/100mL	28-Nov-01	Good	Water	Dry					The Marine Envi	SWRCB	4-86 MdR Beac	
9632	Station 12	Ballona Creek	Bacteriological	Fecal Coliform	=		800	MPN/100mL	10-Dec-97	Good	Water	Wet					The Marine Envi	SWRCB	4-86 MdR Beac	
9511	Station 12	Ballona Creek	Bacteriological	Fecal Coliform	>		16000	MPN/100mL	14-Dec-95	Good	Water	Wet					The Marine Envi	SWRCB	4-86 MdR Beac	
9516	Station 12	Ballona Creek	Bacteriological	Fecal Coliform	=		70	MPN/100mL	04-Jan-96	Good	Water	Dry					The Marine Envi	SWRCB	4-86 MdR Beac	
9522	Station 12	Ballona Creek	Bacteriological	Fecal Coliform	=		2000	MPN/100mL	01-Feb-96	Good	Water	Wet					The Marine Envi	SWRCB	4-86 MdR Beac	
9687	Station 12	Ballona Creek	Bacteriological	Fecal Coliform	=		270	MPN/100mL	19-Nov-98	Good	Water	Dry					The Marine Envi	SWRCB	4-86 MdR Beac	
9692	Station 12	Ballona Creek	Bacteriological	Fecal Coliform	=		16000	MPN/100mL	01-Dec-98	Good	Water	Wet					The Marine Envi	SWRCB	4-86 MdR Beac	
9697	Station 12	Ballona Creek	Bacteriological	Fecal Coliform	=		1700	MPN/100mL	14-Jan-99	Good	Water	Dry					The Marine Envi	SWRCB	4-86 MdR Beac	
9702	Station 12	Ballona Creek	Bacteriological	Fecal Coliform	=		700	MPN/100mL	25-Feb-99	Good	Water	Dry					The Marine Envi	SWRCB	4-86 MdR Beac	
9506	Station 12	Ballona Creek	Bacteriological	Fecal Coliform	=		330	MPN/100mL	16-Nov-95	Good	Water	Dry					The Marine Envi	SWRCB	4-86 MdR Beac	
9527	Station 12	Ballona Creek	Bacteriological	Fecal Coliform	=		2400	MPN/100mL	14-Mar-96	Good	Water	Wet					The Marine Envi	SWRCB	4-86 MdR Beac	
9532	Station 12	Ballona Creek	Bacteriological	Fecal Coliform	=		20	MPN/100mL	04-Apr-96	Good	Water	Dry					The Marine Envi	SWRCB	4-86 MdR Beac	
9567	Station 12	Ballona Creek	Bacteriological	Fecal Coliform	=		40	MPN/100mL	15-Nov-96	Good	Water	Dry					The Marine Envi	SWRCB	4-86 MdR Beac	
9572	Station 12	Ballona Creek	Bacteriological	Fecal Coliform	=		5000	MPN/100mL	18-Dec-96	Good	Water	Dry					The Marine Envi	SWRCB	4-86 MdR Beac	
9852	Station 12	Ballona Creek	Bacteriological	Fecal Coliform	=		1100	MPN/100mL	29-Aug-01	Good	Water	Dry					The Marine Envi	SWRCB	4-86 MdR Beac	
9597	Station 12	Ballona Creek	Bacteriological	Fecal Coliform	=		1300	MPN/100mL	01-May-97	Good	Water	Dry					The Marine Envi	SWRCB	4-86 MdR Beac	
9872	Station 12	Ballona Creek	Bacteriological	Fecal Coliform	=		300	MPN/100mL	12-Dec-01	Good	Water	Dry					The Marine Envi	SWRCB	4-86 MdR Beac	
9577	Station 12	Ballona Creek	Bacteriological	Fecal Coliform	=		2200	MPN/100mL	08-Jan-97	Good	Water	Dry					The Marine Envi	SWRCB	4-86 MdR Beac	
9617	Station 12	Ballona Creek	Bacteriological	Fecal Coliform	=		2400	MPN/100mL	12-Sep-97	Good	Water	Dry					The Marine Envi	SWRCB	4-86 MdR Beac	
9622	Station 12	Ballona Creek	Bacteriological	Fecal Coliform	=		1300	MPN/100mL	10-Oct-97	Good	Water	Dry					The Marine Envi	SWRCB	4-86 MdR Beac	
9739	Station 12	Ballona Creek	Bacteriological	Fecal Coliform	=		16000	MPN/100mL	29-Sep-99	Good	Water	Dry					The Marine Envi	SWRCB	4-86 MdR Beac	
9707	Station 12	Ballona Creek	Bacteriological	Fecal Coliform	=		16000	MPN/100mL	17-Mar-99	Good	Water	Wet					The Marine Envi	SWRCB	4-86 MdR Beac	
9789	Station 12	Ballona Creek	Bacteriological	Fecal Coliform	=		500	MPN/100mL	10-Jul-00	Good	Water	Dry					The Marine Envi	SWRCB	4-86 MdR Beac	
9602	Station 12	Ballona Creek	Bacteriological	Fecal Coliform	=		70	MPN/100mL	02-Jun-97	Good	Water	Dry					The Marine Envi	SWRCB	4-86 MdR Beac	
9612	Station 12	Ballona Creek	Bacteriological	Fecal Coliform	=		140	MPN/100mL	28-Aug-97	Good	Water	Dry					The Marine Envi	SWRCB	4-86 MdR Beac	
9642	Station 12	Ballona Creek	Bacteriological	Fecal Coliform	>		16000	MPN/100mL	05-Feb-98	Good	Water	Wet					The Marine Envi	SWRCB	4-86 MdR Beac	
9717	Station 12	Ballona Creek	Bacteriological	Fecal Coliform	=		130	MPN/100mL	10-May-99	Good	Water	Dry					The Marine Envi	SWRCB	4-86 MdR Beac	
9722	Station 12	Ballona Creek	Bacteriological	Fecal Coliform	=		170	MPN/100mL	23-Jun-99	Good	Water	Dry					The Marine Envi	SWRCB	4-86 MdR Beac	
9729	Station 12	Ballona Creek	Bacteriological	Fecal Coliform	=		50	MPN/100mL	21-Jul-99	Good	Water	Dry					The Marine Envi	SWRCB	4-86 MdR Beac	
9734	Station 12	Ballona Creek	Bacteriological	Fecal Coliform	=		50	MPN/100mL	06-Aug-99	Good	Water	Dry					The Marine Envi	SWRCB	4-86 MdR Beac	
9744	Station 12	Ballona Creek	Bacteriological	Fecal Coliform	=		340	MPN/100mL	20-Oct-99	Good	Water	Dry					The Marine Envi	SWRCB	4-86 MdR Beac	
9749	Station 12	Ballona Creek	Bacteriological	Fecal Coliform	=		420	MPN/100mL	03-Nov-99	Good	Water	Dry					The Marine Envi	SWRCB	4-86 MdR Beac	
9754	Station 12	Ballona Creek	Bacteriological	Fecal Coliform	=		900	MPN/100mL	02-Dec-99	Good	Water	Dry					The Marine Envi	SWRCB	4-86 MdR Beac	
9759	Station 12	Ballona Creek	Bacteriological	Fecal Coliform	=		1100	MPN/100mL	05-Jan-00	Good	Water	Dry					The Marine Envi	SWRCB	4-86 MdR Beac	
9764	Station 12	Ballona Creek	Bacteriological	Fecal Coliform	=		1700	MPN/100mL	04-Feb-00	Good	Water	Wet - Tra					The Marine Envi	SWRCB	4-86 MdR Beac	
9774	Station 12	Ballona Creek	Bacteriological	Fecal Coliform	=		1700	MPN/100mL	12-Apr-00	Good	Water	Dry					The Marine Envi	SWRCB	4-86 MdR Beac	
9779	Station 12	Ballona Creek	Bacteriological	Fecal Coliform	=		700	MPN/100mL	25-May-00	Good	Water	Dry					The Marine Envi	SWRCB	4-86 MdR Beac	
9784	Station 12	Ballona Creek	Bacteriological	Fecal Coliform	=		1400	MPN/100mL	27-Jun-00	Good	Water	Dry					The Marine Envi	SWRCB	4-86 MdR Beac	
9809	Station 12	Ballona Creek	Bacteriological	Fecal Coliform	=		300	MPN/100mL	10-Nov-00	Good	Water	Dry					The Marine Envi	SWRCB	4-86 MdR Beac	
9814	Station 12	Ballona Creek	Bacteriological	Fecal Coliform	=		40	MPN/100mL	04-Dec-00	Good	Water	Dry					The Marine Envi	SWRCB	4-86 MdR Beac	
9819	Station 12	Ballona Creek	Bacteriological	Fecal Coliform	=		1100	MPN/100mL	05-Jan-01	Good	Water	Wet - Tra					The Marine Envi	SWRCB	4-86 MdR Beac	
9822	Station 12	Ballona Creek	Bacteriological	Fecal Coliform	=		5000	MPN/100mL	15-Feb-01	Good	Water	Wet					The Marine Envi	SWRCB	4-86 MdR Beac	
9842	Station 12	Ballona Creek	Bacteriological	Fecal Coliform	=		40	MPN/100mL	01-Jun-01	Good	Water	Dry					The Marine Envi	SWRCB	4-86 MdR Beac	
9847	Station 12	Ballona Creek	Bacteriological	Fecal Coliform	=		270	MPN/100mL	18-Jul-01	Good	Water	Dry					The Marine Envi	SWRCB	4-86 MdR Beac	
9637	Station 12	Ballona Creek	Bacteriological	Fecal Coliform	=		1700	MPN/100mL	08-Jan-98	Good	Water	Wet - Tra					The Marine Envi	SWRCB	4-86 MdR Beac	
9502	Station 12	Ballona Creek	Bacteriological	Fecal Coliform	<		20	MPN/100mL	05-Oct-95	Good	Water	Dry					The Marine Envi	SWRCB	4-86 MdR Beac	
9677	Station 12	Ballona Creek	Bacteriological	Fecal Coliform	=		300	MPN/100mL	17-Sep-98	Good	Water	Dry					The Marine Envi	SWRCB	4-86 MdR Beac	
9682	Station 12	Ballona Creek	Bacteriological	Fecal Coliform	=		20	MPN/100mL	21-Oct-98	Good	Water	Dry					The Marine Envi	SWRCB	4-86 MdR Beac	
9652	Station 12	Ballona Creek	Bacteriological	Fecal Coliform	=		80	MPN/100mL	09-Apr-98	Good	Water	Dry					The Marine Envi	SWRCB	4-86 MdR Beac	

-
-  BurbankWesternChannel_AmmoniaAsN_Water
 -  BurbankWesternChannel_AmmoniaAsN_Water
 -  QueriedRecords_AmmoniaAsN_Water

Burbank Western Channel Ammonia as N - Water

Table 1. Data Summary Information

Waterbody Name	Burbank Western Channel	Region	4
Hydrologic Unit	405.21	Total Waterbody Size	13 Miles
Pollutant/Stressor	Ammonia as N	Size Affected	13 Miles
		Extent of Impairment	Entire Reach

Table 2. Summary of Ammonia as N for Burbank Western Channel

Dates of Sampling	8/15/1997 - 2/2/2004	Minimum Detected Value	0.09 mg/L
Number of Samples	76	Maximum Detected Value	138 mg/L
Number of Detected Samples	66	Median Detected Value	1 mg/L
Hardness			N/A
pH - actual and/or default values			7.8
WER			N/A
Temperature - actual and/or default values			20 °C

Data Sources

Cadmium, Hardness, and Nitrogen in the Burbank Western Channel

Beneficial Uses for Burbank Western Channel

§ MUN § REC2 § WILD
§ REC1 § WARM

Applicable Water Quality Objectives	Out of 76 Samples:	# Exceed	% Exceed	List	Delist
2.2349 mg/L Basin Plan Freshwater Not SPWN Inland 30-Day Average	30/75	40%	Yes	No	
5.5873 mg/L Basin Plan Freshwater Not SPWN Inland 4-Day Average	28/66	42.4%	Yes	No	
12.139 mg/L Basin Plan Freshwater Not COLD or MIGR	22	28.9%	Yes	No	

Triggering Water Quality Objective for Listing

The Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994 contains water quality criteria for waterbodies in the Los Angeles Region. The most conservative applicable water quality criterion for ammonia as n is 2.235 mg/L for the Basin Plan Freshwater Not SPWN Inland 30-Day Average objective. In Burbank Western Channel, the criterion was exceeded in 30 of 75 samples, which is 40% of the sample events. Under the state's listing policy, a waterbody is considered to be impaired for ammonia as n if there are 7 or more exceedances out of the 75 samples.

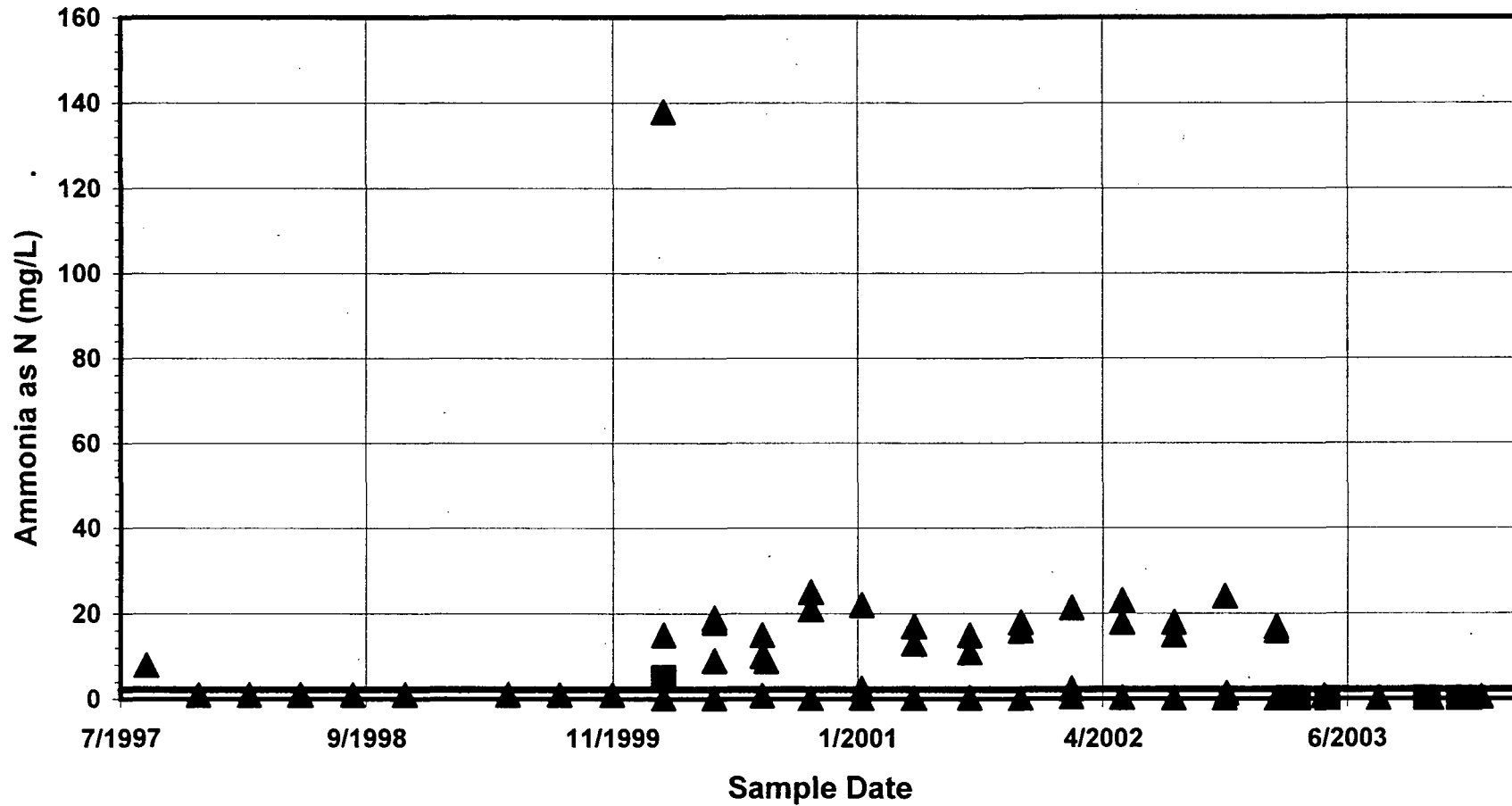
Triggering Water Quality Objective for Delisting

Not eligible for delisting.

References

Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994










Water Data Summary for Burbank Western Channel – Basin Plan Freshwater Not SPWN Inland 30-Day Average Objective



Raw Data

Burbank Western Channel
Ammonia as N - Water

272	R5	Burbank Western Channel	Nutrient	Ammonia as N	=	15	mg/L	06-Aug-02	Good	Water				0.001	SA=Sampler	Cadmium, Hard	SWRCB	4-400_Cadmium and Nitrogen Data for 303d list	
277	R5	Burbank Western Channel	Nutrient	Ammonia as N	=	24	mg/L	05-Nov-02	Good	Water				0.002	JC=Sampler	Cadmium, Hard	SWRCB	4-400_Cadmium and Nitrogen Data for 303d list	
282	R5	Burbank Western Channel	Nutrient	Ammonia as N	=	16	mg/L	04-Feb-03	Good	Water				0.0005	JC=Sampler	Cadmium, Hard	SWRCB	4-400_Cadmium and Nitrogen Data for 303d list	
289	R5	Burbank Western Channel	Nutrient	Ammonia as N	=	0.1	mg/L	06-May-03	Good	Water				0.00002	PG=Sampler	Cadmium, Hard	SWRCB	4-400_Cadmium and Nitrogen Data for 303d list	
296	R5	Burbank Western Channel	Nutrient	Ammonia as N	=	0.3	mg/L	05-Aug-03	Good	Water				0.00002	JC=Sampler	Cadmium, Hard	SWRCB	4-400_Cadmium and Nitrogen Data for 303d list	
303	R5	Burbank Western Channel	Nutrient	Ammonia as N	=	0.2	mg/L	06-Nov-03	Good	Water				0.00002	JJ=Sampler	Cadmium, Hard	SWRCB	4-400_Cadmium and Nitrogen Data for 303d list	
2140	TS03	Burbank Western Channel	Nutrient	Ammonia as N	=	1.34	mg/L	08-Nov-02	Good	Water	Composite	Wet	EPA 350.3				LADPW Monitor	SWRCB	4-40_LACDPW_2002-2003_Appendix B.pdf
2370	TS03	Burbank Western Channel	Nutrient	Ammonia as N	=	0.216	mg/L	11-Feb-03	Good	Water	Composite	Wet	EPA 350.3				LADPW Monitor	SWRCB	4-40_LACDPW_2002-2003_Appendix B.pdf
2501	TS03	Burbank Western Channel	Nutrient	Ammonia as N	<	0.1	mg/L	25-Feb-03	Good	Water	Composite	Dry	EPA 350.3				LADPW Monitor	SWRCB	4-40_LACDPW_2002-2003_Appendix B.pdf
2636	TS03	Burbank Western Channel	Nutrient	Ammonia as N	<	0.1	mg/L	15-Mar-03	Good	Water	Composite	Dry	EPA 350.3				LADPW Monitor	SWRCB	4-40_LACDPW_2002-2003_Appendix B.pdf
2765	TS03	Burbank Western Channel	Nutrient	Ammonia as N	=	0.807	mg/L	30-Apr-03	Good	Water	Composite	Dry	EPA 350.3				LADPW Monitor	SWRCB	4-40_LACDPW_2002-2003_Appendix B.pdf
760	TS03	Burbank Western Channel	Nutrient	Ammonia as N	<	0.1	mg/L	25-Feb-03		Water	Composite	Wet	EPA350.3	0.1	Event Number 0:	LACSD	LACSD	LACSD/02-03.xls/Burbank TS03	LACSDBurbankChannel_Data_303d
915	TS03	Burbank Western Channel	Nutrient	Ammonia as N	<	0.1	mg/L	15-Mar-03		Water	Composite	Wet	EPA350.3	0.1	Event Number 0:	LACSD	LACSD	LACSD/02-03.xls/Burbank TS03	LACSDBurbankChannel_Data_303d
605	TS03	Burbank Western Channel	Nutrient	Ammonia as N	=	0.216	mg/L	11-Feb-03		Water	Composite	Wet	EPA350.3	0.1	Event Number 0:	LACSD	LACSD	LACSD/02-03.xls/Burbank TS03	LACSDBurbankChannel_Data_303d
1070	TS03	Burbank Western Channel	Nutrient	Ammonia as N	=	0.807	mg/L	30-Apr-03		Water	Composite	Dry	EPA350.3	0.1	Event Number 0:	LACSD	LACSD	LACSD/02-03.xls/Burbank TS03	LACSDBurbankChannel_Data_303d
329	TS03	Burbank Western Channel	Nutrient	Ammonia as N	=	1.34	mg/L	08-Nov-02		Water	Composite	Wet	EPA350.3	0.1	Event Number 0:	LACSD	LACSD	LACSD/02-03.xls/Burbank TS03	LACSDBurbankChannel_Data_303d
1380	TS03	Burbank Western Channel	Nutrient	Ammonia as N	<	0.1	mg/L	31-Oct-03		Water	Composite	Wet	EPA350.3	0.1	Event Number 0:	LACSD	LACSD	LACSD/03-04.xls/Burbank TS03	LACSDBurbankChannel_Data_303d
1535	TS03	Burbank Western Channel	Nutrient	Ammonia as N	<	0.1	mg/L	25-Dec-03		Water	Composite	Wet	EPA350.3	0.1	Event Number 0:	LACSD	LACSD	LACSD/03-04.xls/Burbank TS03	LACSDBurbankChannel_Data_303d
1690	TS03	Burbank Western Channel	Nutrient	Ammonia as N	<	0.1	mg/L	01-Jan-04		Water	Composite	Wet	EPA350.3	0.1	Event Number 0:	LACSD	LACSD	LACSD/03-04.xls/Burbank TS03	LACSDBurbankChannel_Data_303d
1225	TS03	Burbank Western Channel	Nutrient	Ammonia as N	<	0.1	mg/L	28-Oct-03		Water	Composite	Dry	EPA350.3	0.1	Event Number 0:	LACSD	LACSD	LACSD/03-04.xls/Burbank TS03	LACSDBurbankChannel_Data_303d
1845	TS03	Burbank Western Channel	Nutrient	Ammonia as N	=	0.21475	mg/L	13-Jan-04		Water	Composite	Dry	EPA350.3	0.1	Event Number 0:	LACSD	LACSD	LACSD/03-04.xls/Burbank TS03	LACSDBurbankChannel_Data_303d
2000	TS03	Burbank Western Channel	Nutrient	Ammonia as N	=	0.52618	mg/L	02-Feb-04		Water	Composite	Wet	EPA350.3	0.1	Event Number 0:	LACSD	LACSD	LACSD/03-04.xls/Burbank TS03	LACSDBurbankChannel_Data_303d

	CabrilloBeachOuter_Enterococcus
	CabrilloBeachOuter_Enterococcus
	CabrilloBeachOuter_FecalColiform
	CabrilloBeachOuter_FecalColiform
	CabrilloBeachOuter_TotalColiform
	CabrilloBeachOuter_TotalColiform
	QueriedRecords_Enterococcus
	QueriedRecords_FecalColiform
	QueriedRecords_TotalColiform

Cabrillo Beach (Outer) Enterococcus - Water

Table 1. Data Summary Information

Waterbody Name	Cabrillo Beach (Outer)	Region	4
Hydrologic Unit	405.12	Total Waterbody Size	0.58 Miles
Pollutant/ Stressor	Enterococcus	Size Affected	0.58 Miles
		Extent of Impairment	Entire Reach

Table 2. Summary of Enterococcus for Cabrillo Beach (Outer)

Dates of Sampling	1/2/1997 - 4/29/2003	Minimum Detected Value	1 MPN/100mL
Number of Samples	397	Maximum Detected Value	4200 MPN/100mL
Number of Detected Samples	397	Median Detected Value	5 MPN/100mL
Hardness			N/A
pH			N/A
WER			N/A
Temperature			N/A

Data Sources

Raw Bacteria Data from LACSD

Beneficial Uses for Cabrillo Beach (Outer)

§ NAV § REC2 § MAR § MIGR § SHELL
 § REC1 § COMM § WILD § SPWN

Applicable Water Quality Objectives	Out of 397 Samples:	# Exceed	% Exceed	List	Delist
35 MPN/100mL Basin Plan REC1 Marine 30-Day Minimum 5 samples		2	0.5%	No	Yes
104 MPN/100mL Basin Plan REC1 Marine Single sample		22	5.5%	No	Yes

Triggering Water Quality Objective for Listing

No objectives were exceeded.

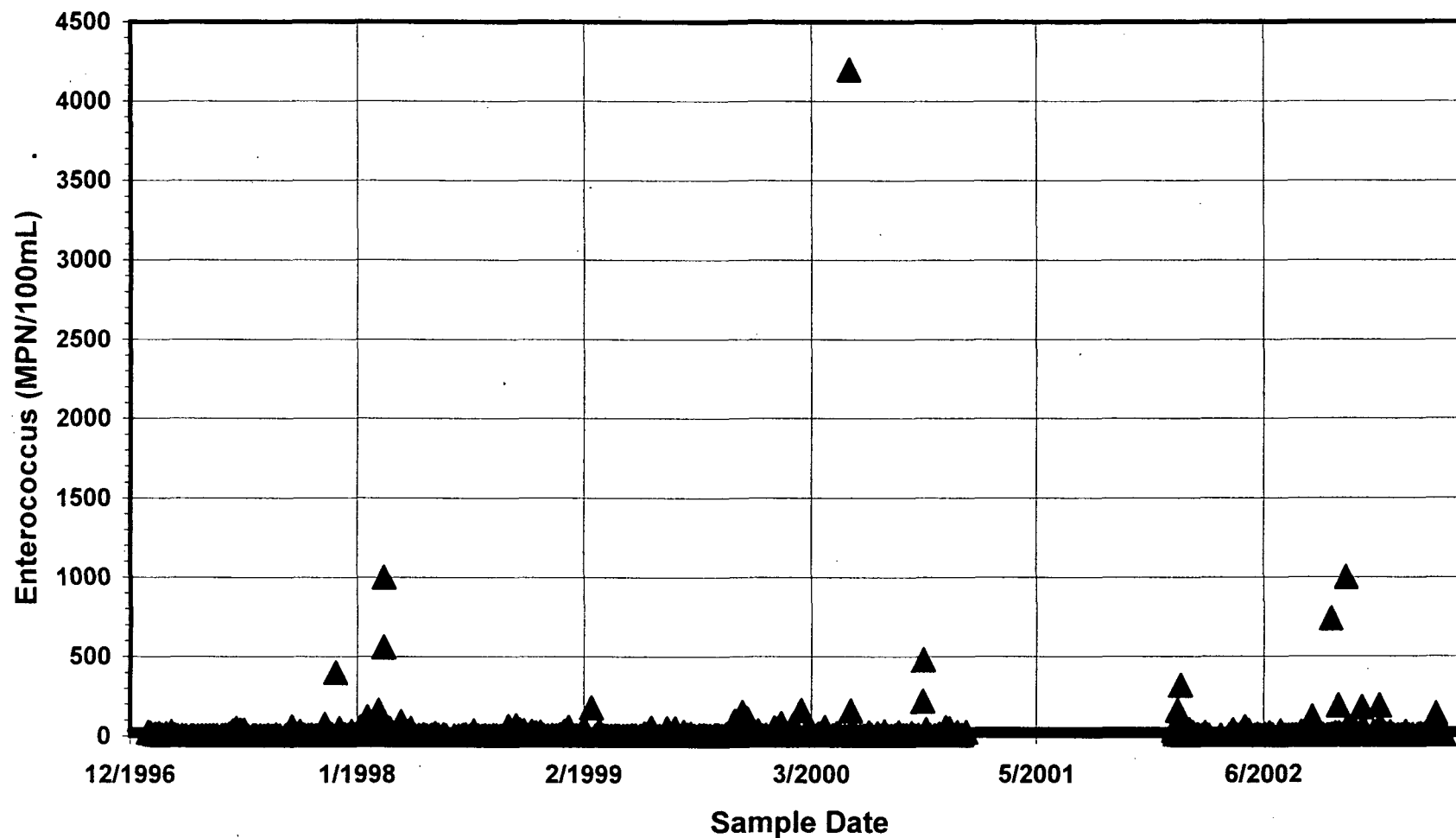
Triggering Water Quality Objective for Delisting

The Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994 contains water quality criteria for waterbodies in the Los Angeles Region. The most conservative applicable water quality criterion for enterococcus is 35 MPN/100mL for the Basin Plan REC1 Marine 30-Day Minimum 5 samples objective. In Cabrillo Beach (Outer), the criterion was exceeded in 2 of 397 samples, which is 0.5% of the sample events. Under the state's listing policy, a waterbody is eligible for delisting for enterococcus if there are 65 or fewer exceedances out of the 397 samples.

References

Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994

Water Data Summary for Cabrillo Beach (Outer) – Basin Plan REC1 Marine 30-Day Minimum 5 samples Objective



Cabrillo Beach (Outer) Total Coliform - Water

Table 1. Data Summary Information

Waterbody Name	Cabrillo Beach (Outer)	Region	4
Hydrologic Unit	405.12	Total Waterbody Size	0.58 Miles
Pollutant/Stressor	Total Coliform	Size Affected	0.58 Miles
		Extent/Impairment	Entire Reach

Table 2. Summary of Total Coliform for Cabrillo Beach (Outer)

Dates of Sampling	1/1/1997 - 4/29/2003	Minimum Detected Value	1 MPN/100mL
Number of Samples	1920	Maximum Detected Value	19000 MPN/100mL
Number of Detected Samples	1920	Median Detected Value	17 MPN/100mL
Hardness			N/A
pH			N/A
WER			N/A
Temperature			N/A

Data Sources

Raw Bacteria Data from LACSD

Beneficial Uses for Cabrillo Beach (Outer)

§ NAV § REC2 § MAR § MIGR § SHELL
 § REC1 § COMM § WILD § SPWN

Applicable Water Quality Objectives	Out of 1920 Samples:	# Exceed	% Exceed	List	Delist
70 MPN/100mL Basin Plan SHELL 30-Day Median		321	16.7%	Yes	No
230 MPN/100mL Basin Plan SHELL 30-Day Max 10% 5-tube decimal dilu		90	4.7%	No	Yes
330 MPN/100mL Basin Plan SHELL 30-Day Max 10% 3-tube decimal dilu		62	3.2%	No	Yes
1000 MPN/100mL Basin Plan REC1 Marine 30-Day Minimum 5 samples		0	0%	No	Yes
1000 MPN/100mL Basin Plan REC1 Marine Ratio Single sample		20	1%	No	Yes
10000 MPN/100mL Basin Plan REC1 Marine Single sample		1	0.1%	No	Yes

Triggering Water Quality Objective for Listing

The Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994 contains water quality criteria for waterbodies in the Los Angeles Region. The most conservative applicable water quality criterion for total coliform is 70 MPN/100mL for the Basin Plan SHELL 30-Day Median objective. In Cabrillo Beach (Outer), the criterion was exceeded in 321 of 1920 samples, which is 16.7% of the sample events. Under the state's listing policy, a waterbody is considered to be impaired for total coliform if there are 319 or more exceedances out of the 1920 samples.

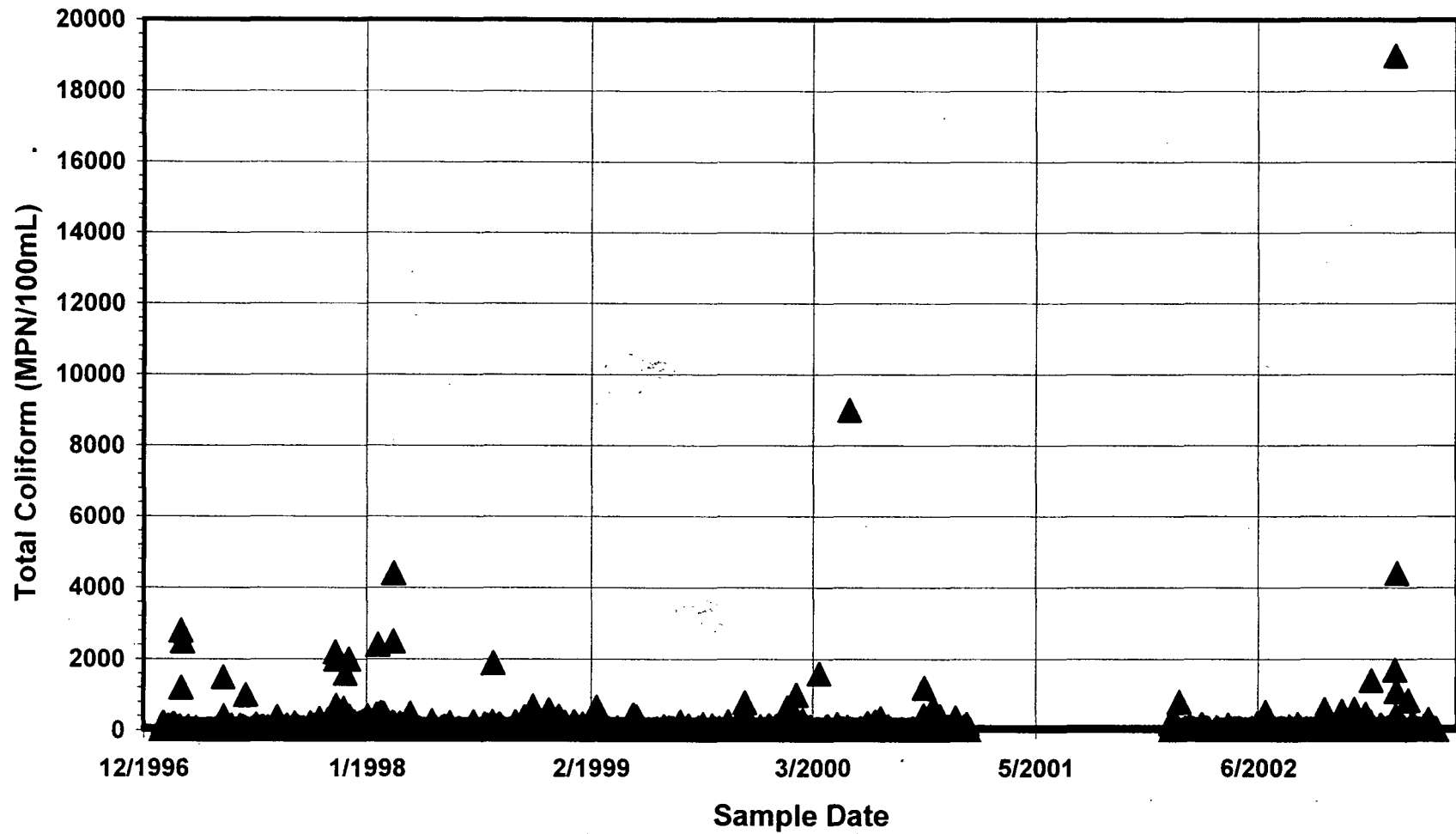
Triggering Water Quality Objective for Delisting

Not eligible for delisting.

References

Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994

Water Data Summary for Cabrillo Beach (Outer) – Basin Plan SHELL 30-Day Median Objective



Cabrillo Beach (Outer) Fecal Coliform - Water

Table 1. Data Summary Information

Waterbody Name	Cabrillo Beach (Outer)	Region	4
Hydrologic Unit	405.12	Total Waterbody Size	0.58 Miles
Pollutant/Stressor	Fecal Coliform	Size Affected	0.58 Miles
		Extent of Impairment	Entire Reach

Table 2. Summary of Fecal Coliform for Cabrillo Beach (Outer)

Dates of Sampling	1/1/1997 - 4/29/2003	Minimum Detected Value	1 MPN/100mL
Number of Samples	365	Maximum Detected Value	11000 MPN/100mL
Number of Detected Samples	365	Median Detected Value	7 MPN/100mL
Hardness			N/A
pH			N/A
WER			N/A
Temperature			N/A

Data Sources

Raw Bacteria Data from LACSD

Beneficial Uses for Cabrillo Beach (Outer)

§ NAV § REC2 § MAR § MIGR § SHELL
 § REC1 § COMM § WILD § SPWN

Applicable Water Quality Objectives	Out of 365 Samples:	# Exceed	% Exceed	List	Delist
200 MPN/100mL Basin Plan REC1 Marine 30-Day Minimum 5 samples		0	0%	No	Yes
400 MPN/100mL Basin Plan REC1 Marine Single sample		7	1.9%	No	Yes
2000 MPN/100mL Basin Plan REC2 30-Day Log Mean Minimum 4 sample		1	0.3%	No	Yes
4000 MPN/100mL Basin Plan REC2 30-Day Maximum 10% samples		1	0.3%	No	Yes

Triggering Water Quality Objective for Listing

No objectives were exceeded.

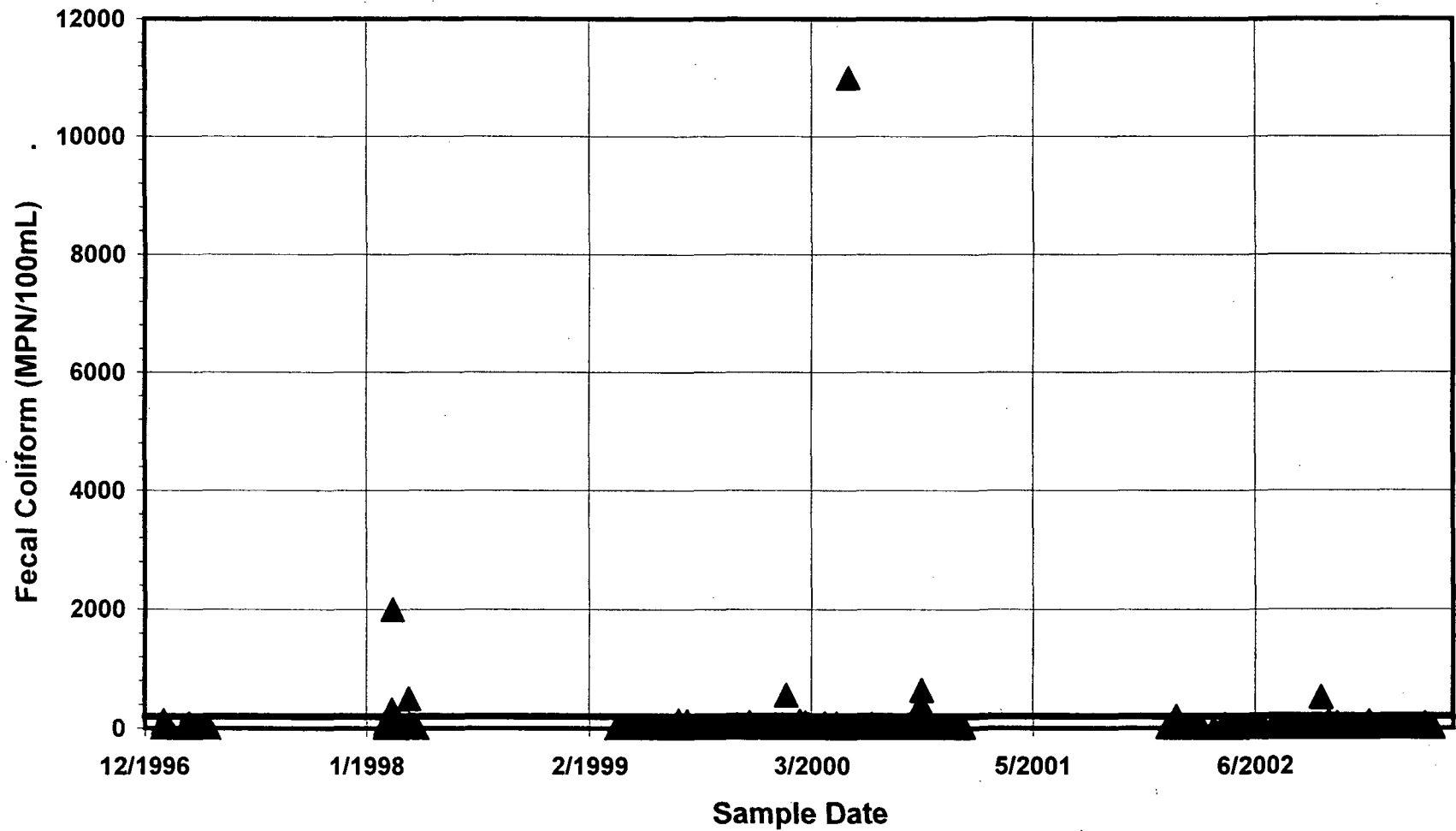
Triggering Water Quality Objective for Delisting




The Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994 contains water quality criteria for waterbodies in the Los Angeles Region. The most conservative applicable water quality criterion for fecal coliform is 200 MPN/100mL for the Basin Plan REC1 Marine 30-Day Minimum 5 samples objective. In Cabrillo Beach (Outer), the criterion was exceeded in 0 of 365 samples, which is 0% of the sample events. Under the state's listing policy, a waterbody is eligible for delisting for fecal coliform if there are 60 or fewer exceedances out of the 365 samples.

References

Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994

Water Data Summary for Cabrillo Beach (Outer) – Basin Plan REC1 Marine 30-Day Minimum 5 samples Objective



	CabrilloMarina_PCBs_Total_Sediment
	CabrilloMarina_PCBs_Total_Sediment
	QueriedRecords_PCBs_Total_Sediment

Cabrillo Marina PCBs (Total) - Sediment

Table 1. Data Summary Information

Waterbody Name	Cabrillo Marina	Region	4
Hydrologic Unit	405.12	Total Waterbody Size	Not available
Pollutant/Stressor	PCBs (Total)	Size Affected	Not available
		Extent of Impairment	Entire Reach

Table 2. Summary of PCBs (Total) for Cabrillo Marina

Dates of Sampling	5/6/1995 - 5/24/1996	Minimum Detected Value	0.029 µg/g
Number of Samples	5	Maximum Detected Value	0.407 µg/g
Number of Detected Samples	5	Median Detected Value	0.14 µg/g
Hardness			N/A
pH			N/A
WER			N/A
Temperature			N/A

Data Sources

LA Contaminated Sediments Task Force Database

Beneficial Uses for Cabrillo Marina

§ IND § REC1 § COMM § RARE
§ NAV § REC2 § MAR § SHELL

Applicable Water Quality Objectives	Out of 5 Samples:	# Exceed	% Exceed	List	Delist
0.4 µg/g		N/A	N/A	No	No

Triggering Water Quality Objective for Listing

No objectives were exceeded.

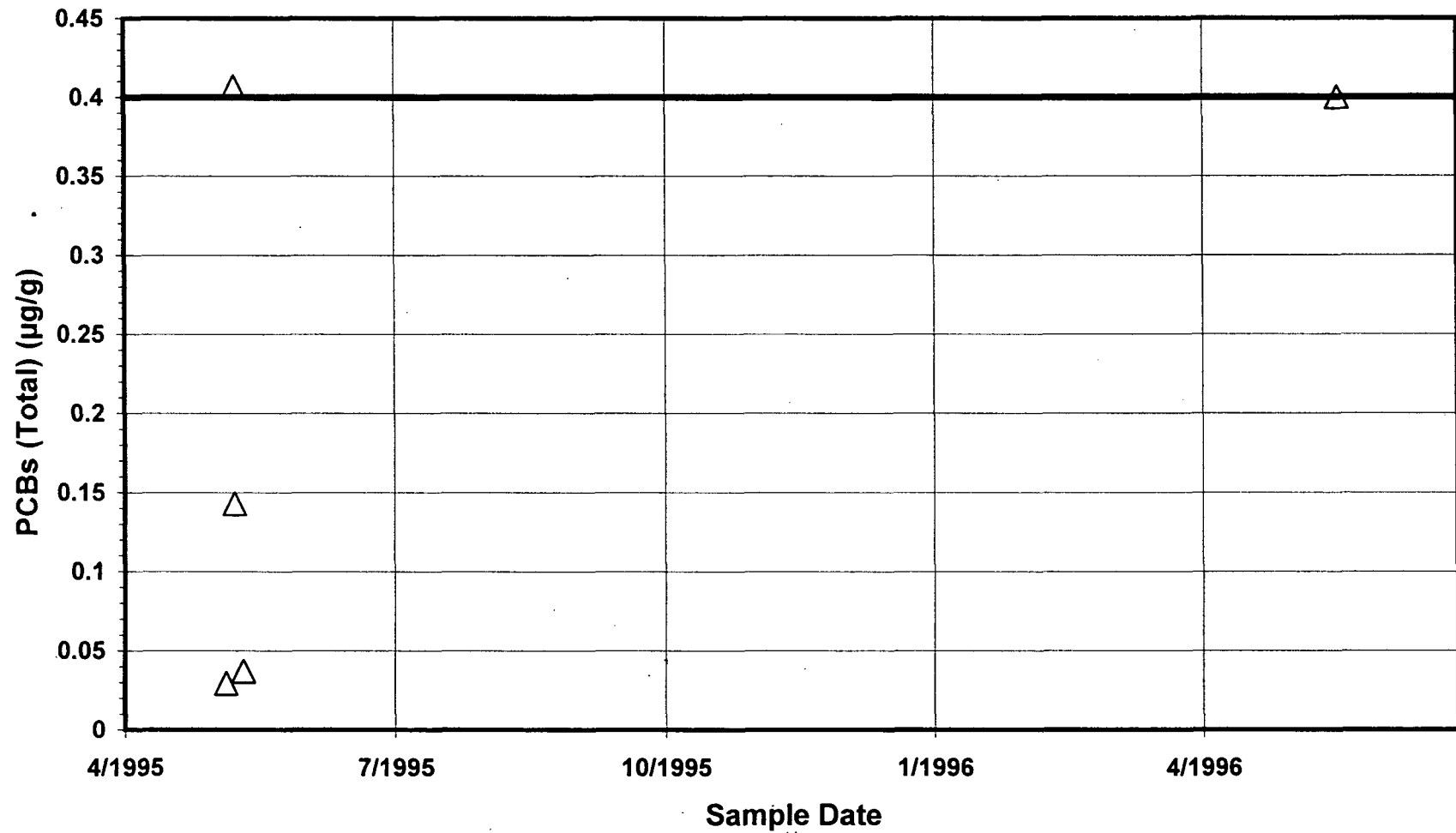
Triggering Water Quality Objective for Delisting

Not eligible for delisting.

References

None

Sediment Data Summary for Cabrillo Marina – No Objectives



Raw Data

Cabrillo Marina
PCBs (Total) - Sediment

RecordID	SiteID	Waterbody	Classific	Constituent	Num	Result	Units	SampleDate	DataQual	Matrix	SampleType	Sample	Fractio	AnalyticalMe	MDL	ProjectID	ProjectName	DataSource	FilenameSpreadsheet	Count
55	51-A	Cabrillo Marina	PCB	PCBs (Total)	=	0.4	µg/g	24-May-96	Good	Sediment	Composite, core	Dry		EPA8080	0.025	106	LA Contamii SWRCB	LA consed taskforce LACSTF 2 LAconsed CSTF SQD Ver2.0.mdl	1	
984	Berth 35	Cabrillo Marina	PCB	PCBs (Total)	=	0.0294	µg/g	06-May-95	Good	Sediment	Composite, core	Dry		EPA8080		50	LA Contamii SWRCB	LA consed taskforce LACSTF 2 LAconsed CSTF SQD Ver2.0.mdl	1	
1069	CORE-1	Cabrillo Marina	PCB	PCBs (Total)	=	0.407	µg/g	09-May-95	Good	Sediment	Core	Dry		EPA8080		1	LA Contamii SWRCB	LA consed taskforce LACSTF 2 LAconsed CSTF SQD Ver2.0.mdl	1	
1149	CORE-2	Cabrillo Marina	PCB	PCBs (Total)	=	0.143	µg/g	09-May-95	Good	Sediment	Core	Dry		EPA8080		1	LA Contamii SWRCB	LA consed taskforce LACSTF 2 LAconsed CSTF SQD Ver2.0.mdl	1	
1466	CORE-6	Cabrillo Marina	PCB	PCBs (Total)	=	0.0372	µg/g	12-May-95	Good	Sediment	Core	Dry		EPA8080		1	LA Contamii SWRCB	LA consed taskforce LACSTF 2 LAconsed CSTF SQD Ver2.0.mdl	1	

Cabrillo Beach (Inner) LA Harbor Area Total Coliform - Water

Table 1. Data Summary Information

Waterbody Name	Cabrillo Beach (Inner) LA Harbor Area	Region	4
Hydrologic Unit	405.12	Total Waterbody Size	0.56 Miles
Pollutant/Stressor	Total Coliform	Size Affected	0.56 Miles
		Extent of Impairment	Entire Reach

Table 2. Summary of Total Coliform for Cabrillo Beach (Inner) LA Harbor Area

Dates of Sampling	1/1/1996 - 4/29/2003	Minimum Detected Value	1 MPN/100mL
Number of Samples	2993	Maximum Detected Value	240000 MPN/100mL
Number of Detected Samples	2993	Median Detected Value	70 MPN/100mL
Hardness			N/A
pH			N/A
WER			N/A
Temperature			N/A

Data Sources

Raw Bacteria Data from Cabrillo Beach

Beneficial Uses for Cabrillo Beach (Inner) LA Harbor Area

§ NAV § REC2 § MAR § MIGR § SHELL
 § REC1 § COMM § WILD § SPWN

Applicable Water Quality Objectives	Out of 2993 Samples:	# Exceed	% Exceed	List	Delist
70 MPN/100mL Basin Plan SHELL 30-Day Median		1484	49.6%	Yes	No
230 MPN/100mL Basin Plan SHELL 30-Day Max 10% 5-tube decimal dilu		705	23.6%	Yes	No
330 MPN/100mL Basin Plan SHELL 30-Day Max 10% 3-tube decimal dilu		572	19.1%	Yes	No
1000 MPN/100mL Basin Plan REC1 Marine 30-Day Minimum 5 samples		40	1.3%	No	Yes
1000 MPN/100mL Basin Plan REC1 Marine Ratio Single sample		222	7.4%	No	Yes
10000 MPN/100mL Basin Plan REC1 Marine Single sample		35	1.2%	No	Yes

Triggering Water Quality Objective for Listing

The Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994 contains water quality criteria for waterbodies in the Los Angeles Region. The most conservative applicable water quality criterion for total coliform is 70 MPN/100mL for the Basin Plan SHELL 30-Day Median objective. In Cabrillo Beach (Inner) LA Harbor Area, the criterion was exceeded in 1484 of 2993 samples, which is 49.6% of the sample events. Under the state's listing policy, a waterbody is considered to be impaired for total coliform if there are 497 or more exceedances out of the 2993 samples.

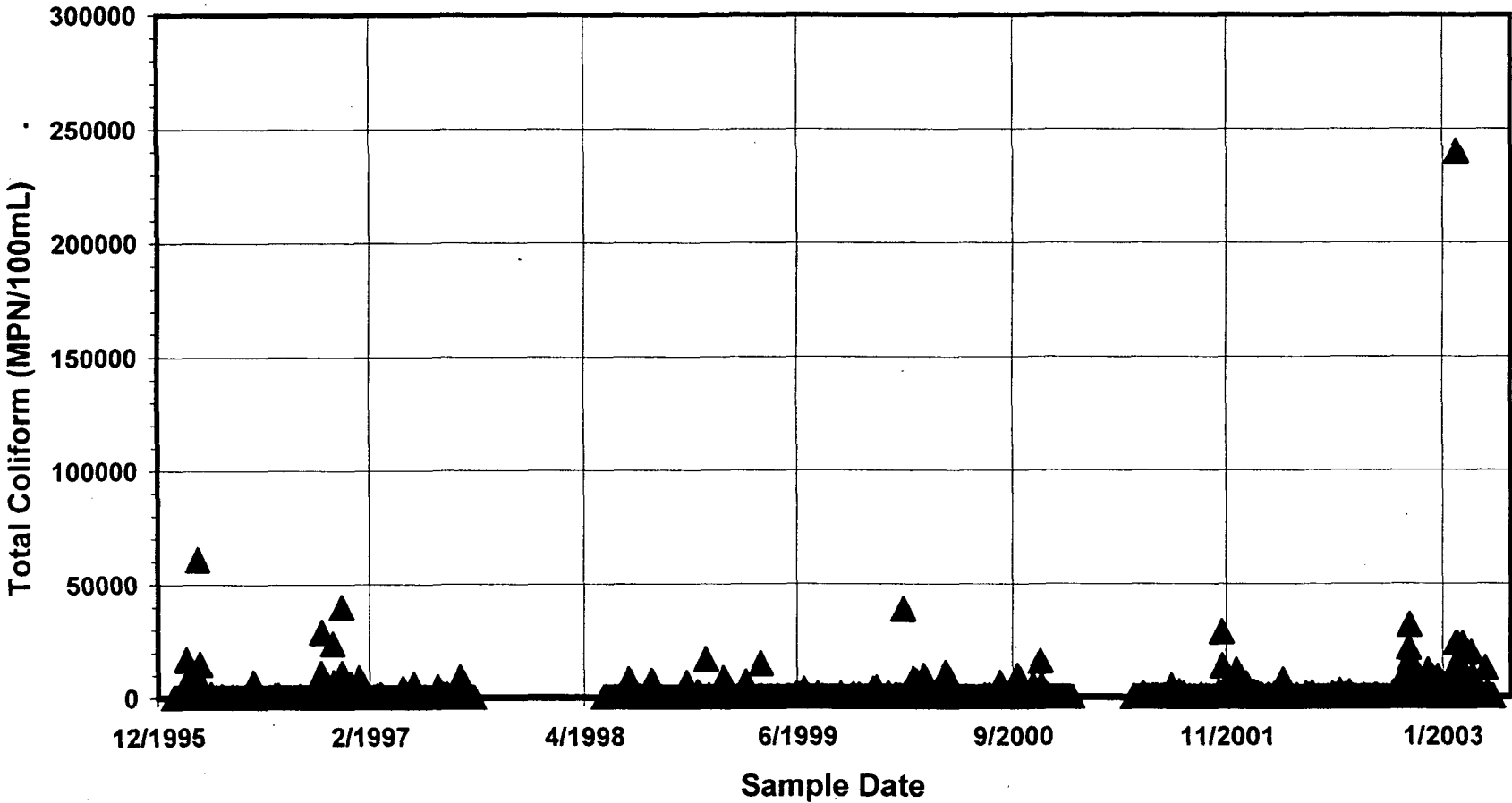
Triggering Water Quality Objective for Delisting










Not eligible for delisting.

References

Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994

Water Data Summary for Cabrillo Beach (Inner) LA Harbor Area – Basin Plan SHELL 30-Day Median Objective



	DockweilerBeach_Enterococcus
	DockweilerBeach_Enterococcus
	DockweilerBeach_FecalColiform
	DockweilerBeach_FecalColiform
	DockweilerBeach_TotalColiform
	DockweilerBeach_TotalColiform
	QueriedRecords_Enterococcus
	QueriedRecords_FecalColiform
	QueriedRecords_TotalColiform

Dockweiler Beach Enterococcus - Water

Table 1. Data Summary Information

Waterbody Name	Dockweiler Beach	Region	4
Hydrologic Unit	405.12	Total Waterbody Size	4.6 Miles
Pollutant/Stressor	Enterococcus	Size Affected	4.6 Miles
		Extent of Impairment	Entire Reach

Table 2. Summary of Enterococcus for Dockweiler Beach

Dates of Sampling	1/3/2000 - 4/28/2003	Minimum Detected Value	1 MPN/100mL
Number of Samples	815	Maximum Detected Value	24192 MPN/100mL
Number of Detected Samples	815	Median Detected Value	10 MPN/100mL
Hardness			N/A
pH			N/A
WER			N/A
Temperature			N/A

Data Sources

Heal The Bay

Beneficial Uses for Dockweiler Beach

§ IND § REC1 § COMM § WILD
§ NAV § REC2 § MAR § SPWN

Applicable Water Quality Objectives	Out of 815 Samples:	# Exceed	% Exceed	List	Delist
35 MPN/100mL Basin Plan REC1 Marine 30-Day Minimum 5 samples		115	14.1%	No	Yes
104 MPN/100mL Basin Plan REC1 Marine Single sample		79	9.7%	No	Yes

Triggering Water Quality Objective for Listing

No objectives were exceeded.

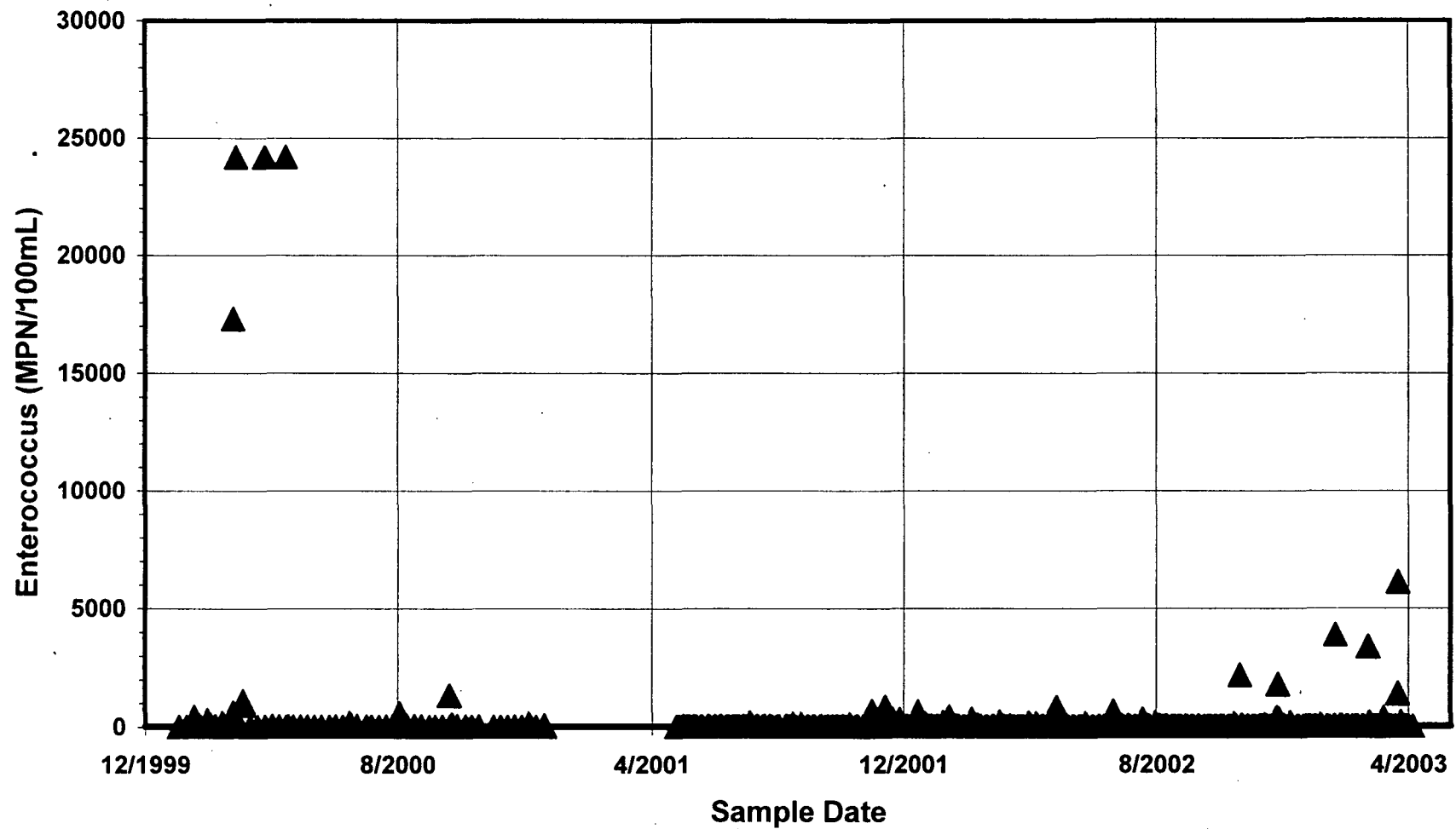
Triggering Water Quality Objective for Delisting

The Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994 contains water quality criteria for waterbodies in the Los Angeles Region. The most conservative applicable water quality criterion for enterococcus is 35 MPN/100mL for the Basin Plan REC1 Marine 30-Day Minimum 5 samples objective. In Dockweiler Beach, the criterion was exceeded in 115 of 815 samples, which is 14.1% of the sample events. Under the state's listing policy, a waterbody is eligible for delisting for enterococcus if there are 135 or fewer exceedances out of the 815 samples.

References

Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994

Water Data Summary for Dockweiler Beach – Basin Plan REC1 Marine 30-Day Minimum 5 samples Objective



Dockweiler Beach Fecal Coliform - Water

Table 1. Data Summary Information

Waterbody Name	Dockweiler Beach	Region	4
Hydrologic Unit	405.12	Total Waterbody Size	4.6 Miles
Pollutant/Issue for	Fecal Coliform	Size Affected	4.6 Miles
		Extent of Impairment	Entire Reach

Table 2. Summary of Fecal Coliform for Dockweiler Beach

Dates of Sampling	1/3/2000 - 4/28/2003	Minimum Detected Value	1 MPN/100mL
Number of Samples	2671	Maximum Detected Value	29000 MPN/100mL
Number of Detected Samples	2671	Median Detected Value	10 MPN/100mL
Hardness			N/A
pH			N/A
WER			N/A
Temperature			N/A

Data Sources

Heal The Bay

Beneficial Uses for Dockweiler Beach

§ IND § REC1 § COMM § WILD
 § NAV § REC2 § MAR § SPWN

Applicable Water Quality Objectives	Out of 2671 Samples:	# Exceed	% Exceed	List	Delist
200 MPN/100mL Basin Plan REC1 Marine 30-Day Minimum 5 samples	3	0.1%	No	Yes	
400 MPN/100mL Basin Plan REC1 Marine Single sample	78	2.9%	No	Yes	
2000 MPN/100mL Basin Plan REC2 30-Day Log Mean Minimum 4 sample	13	0.5%	No	Yes	
4000 MPN/100mL Basin Plan REC2 30-Day Maximum 10% samples	9	0.3%	No	Yes	

Triggering Water Quality Objective for Listing

No objectives were exceeded.

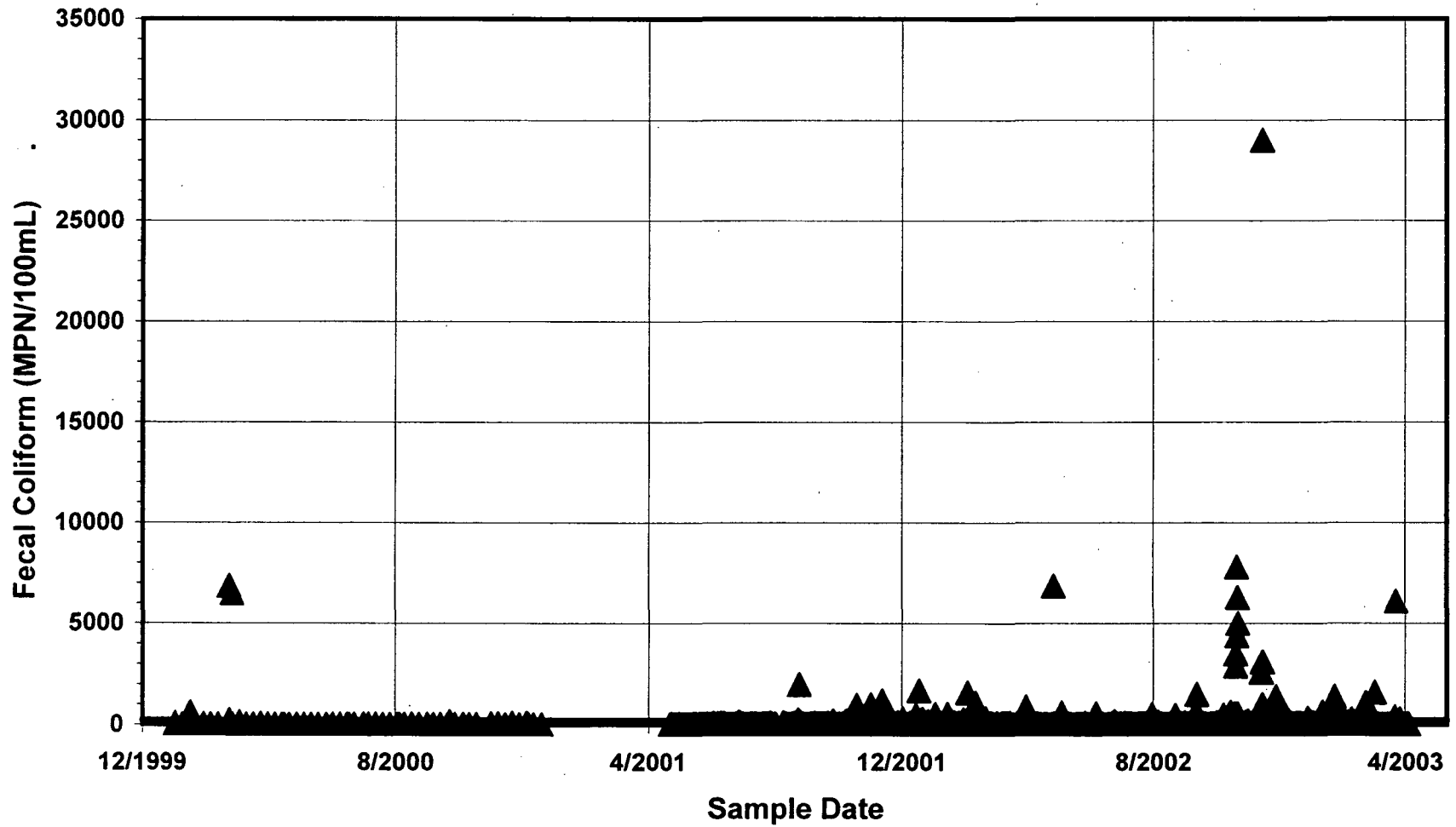
Triggering Water Quality Objective for Delisting

The Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994 contains water quality criteria for waterbodies in the Los Angeles Region. The most conservative applicable water quality criterion for fecal coliform is 200 MPN/100mL for the Basin Plan REC1 Marine 30-Day Minimum 5 samples objective. In Dockweiler Beach, the criterion was exceeded in 3 of 2671 samples, which is 0.1% of the sample events. Under the state's listing policy, a waterbody is eligible for delisting for fecal coliform if there are 443 or fewer exceedances out of the 2671 samples.

References

Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994

Water Data Summary for Dockweiler Beach – Basin Plan REC1 Marine 30-Day Minimum 5 samples Objective



Dockweiler Beach Total Coliform - Water

Table 1. Data Summary Information

Watershed Name	Dockweiler Beach	Region	4
Hydrologic Unit	405.12	Total Watershed Size	4.6 Miles
Pollutant/Stressor	Total Coliform	Size Affected	4.6 Miles
		Extent of Impairment	Entire Reach

Table 2. Summary of Total Coliform for Dockweiler Beach

Dates of Sampling	1/2/1996 - 4/28/2003	Minimum Detected Value	4 MPN/100mL
Number of Samples	3283	Maximum Detected Value	650000 MPN/100mL
Number of Detected Samples	3283	Median Detected Value	41 MPN/100mL
Hardness			N/A
pH			N/A
WER			N/A
Temperature			N/A

Data Sources

Heal The Bay

Beneficial Uses for Dockweiler Beach

§ IND § REC1 § COMM § WILD
 § NAV § REC2 § MAR § SPWN

Applicable Water Quality Objectives	Out of 3283 Samples:	# Exceed	% Exceed	List	Delist
1000 MPN/100mL Basin Plan REC1 Marine Ratio Single sample		326	9.9%	No	No
1000 MPN/100mL Basin Plan REC1 Marine 30-Day Minimum 5 samples		30/3251	0.9%	No	No
10000 MPN/100mL Basin Plan REC1 Marine Single sample		102	3.1%	No	No

Triggering Water Quality Objective for Listing

No objectives were exceeded.

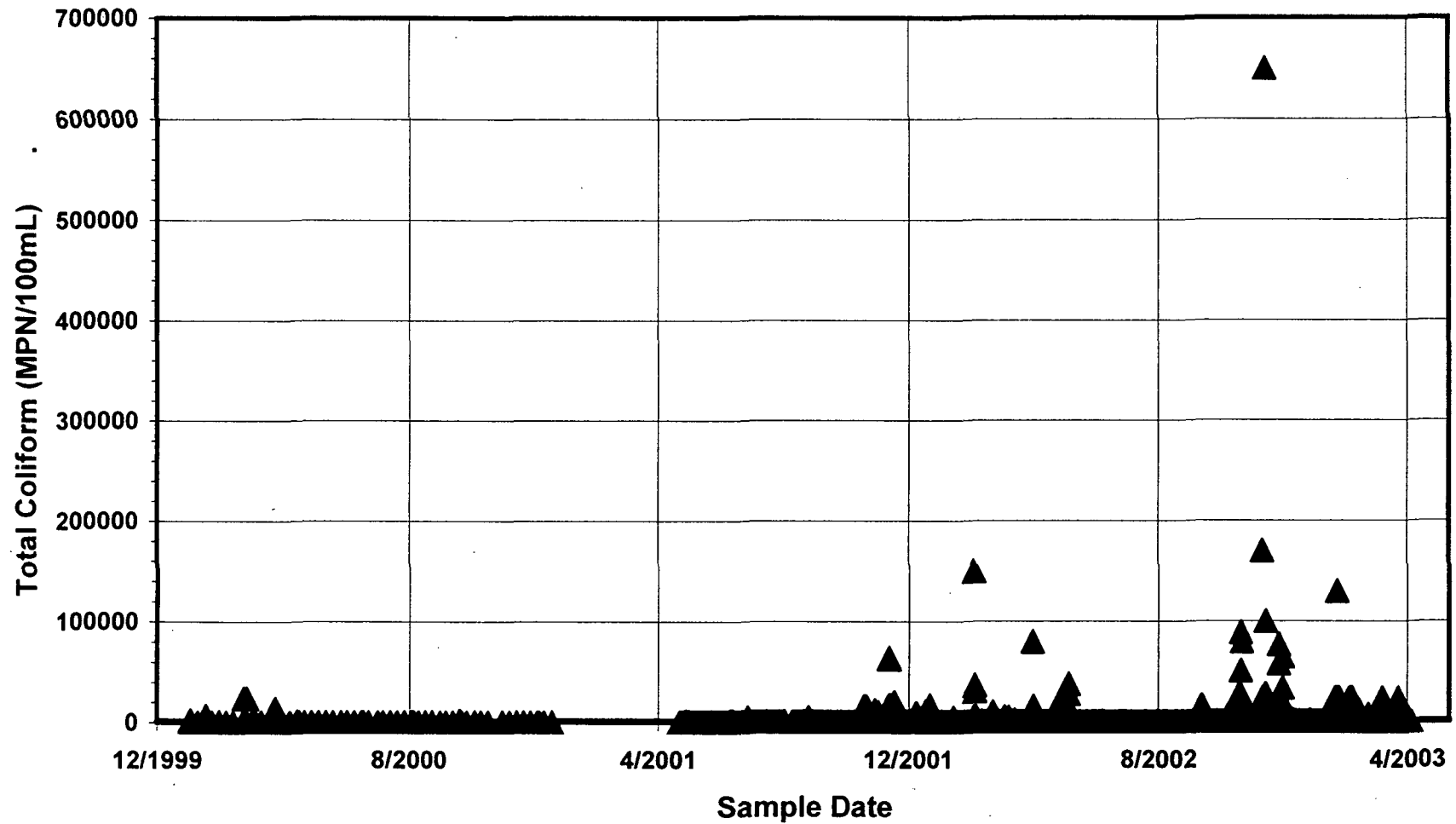
Triggering Water Quality Objective for Delisting

Not eligible for delisting.

References

Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994

Water Data Summary for Dockweiler Beach – Basin Plan REC1 Marine 30-Day Minimum 5 samples Objective



Dominguez Channel (above Vermont)

E. Coli - Water

Table 1. Data Summary Information

Waterbody Name	Dominguez Channel (above Vermont)	Region	4
Hydrologic Unit	405.12	Total Waterbody Size	6.7 Miles
Pollutant/Stressor	E. Coli	Size Affected	6.7 Miles
		Extent of Impairment	Entire Reach

Table 2. Summary of E. Coli for Dominguez Channel (above Vermont)

Dates of Sampling	6/17/2002 - 6/18/2002	Minimum Detected Value	5 MPN/100mL
Number of Samples	36	Maximum Detected Value	262000 MPN/100mL
Number of Detected Samples	36	Median Detected Value	502.5 MPN/100mL
Hardness			N/A
pH			N/A
WER			N/A
Temperature			N/A

Data Sources

Dominguez Channel Bacteria TMDL Study

Beneficial Uses for Dominguez Channel (above Vermont)

§ MUN § REC2 § WILD
 § REC1 § WARM § RARE

Applicable Water Quality Objectives	Out of 36 Samples:	# Exceed	% Exceed	List	Delist
126 MPN/100mL Basin Plan REC1 Freshwater 30-Day Minimum 5 sample	26	72.2%	Yes	No	
235 MPN/100mL Basin Plan REC1 Freshwater Single sample	24	66.7%	Yes	No	

Triggering Water Quality Objective for Listing

The Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994 contains water quality criteria for waterbodies in the Los Angeles Region. The most conservative applicable water quality criterion for e. coli is 126 MPN/100mL for the Basin Plan REC1 Freshwater 30-Day Minimum 5 samples objective. In Dominguez Channel (above Vermont), the criterion was exceeded in 26 of 36 samples, which is 72.2% of the sample events. Under the state's listing policy, a waterbody is considered to be impaired for e. coli if there are 6 or more exceedances out of the 36 samples.

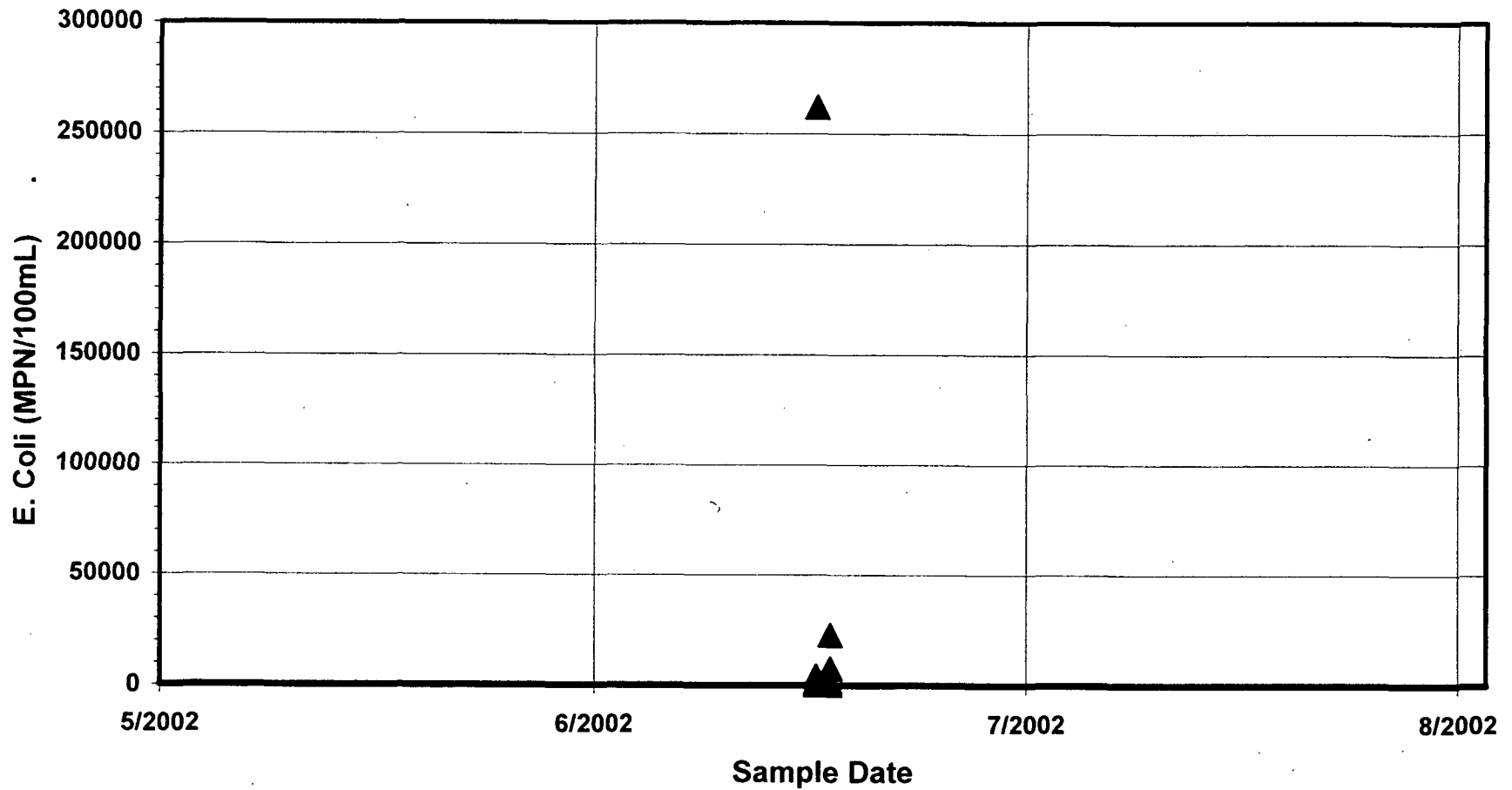
Triggering Water Quality Objective for Delisting

Not eligible for delisting.

References

Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994

Water Data Summary for Dominguez Channel (above Vermont) – Basin Plan REC1 Freshwater 30-Day Minimum 5 samples Objective



Dominguez Channel (above Vermont) Dissolved Zinc - Water

Table 1. Data Summary Information

Waterbody Name	Dominguez Channel (above Vermont)	Region	4
Hydrologic Unit	405.12	Total Waterbody Size	6.7 Miles
Pollutant/Stressor	Zinc	Size Affected	6.7 Miles
		Extent of Impairment	Entire Reach

Table 2. Summary of Zinc for Dominguez Channel (above Vermont)

Dates of Sampling	10/12/2000 - 3/9/2005	Minimum Detected Value	4.58 µg/L
Number of Samples	73	Maximum Detected Value	1450 µg/L
Number of Detected Samples	64	Median Detected Value	27.75 µg/L
Hardness - actual and/or default values			36.5-354 mg/L
pH			N/A
WER			1
Temperature			N/A

Data Sources

LACSD

Beneficial Uses for Dominguez Channel (above Vermont)

§ MUN § REC2 § WILD
§ REC1 § WARM § RARE

Applicable Water Quality Objectives	Out of 73 Samples:	# Exceed	% Exceed	List	Delist
50-340 µg/L CTR Aquatic Life Freshwater Acute (CMC)		6	8.2%	No	Yes
50-340 µg/L CTR Aquatic Life Freshwater Chronic (CCC)		6	8.2%	No	Yes

Triggering Water Quality Objective for Listing

No objectives were exceeded.

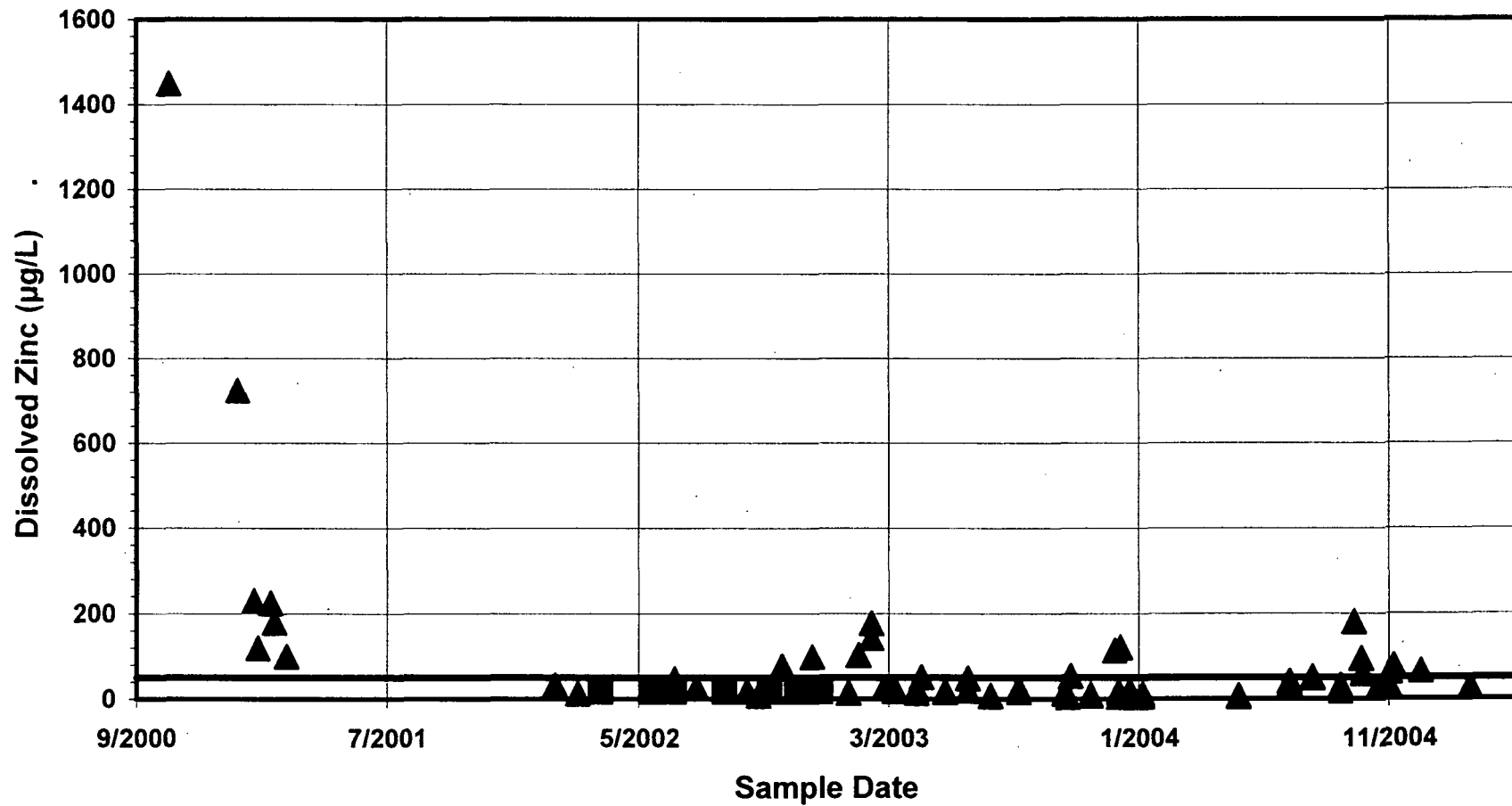
Triggering Water Quality Objective for Delisting

The California Toxics Rule contains water quality criteria for waterbodies in California. The most conservative applicable water quality criterion for dissolved zinc is 50 µg/L for the CTR Aquatic Life Freshwater Acute (CMC) objective. In Dominguez Channel (above Vermont), the criterion was exceeded in 6 of 73 samples, which is 8.2% of the sample events. Under the state's listing policy, a waterbody is eligible for delisting for dissolved zinc if there are 6 or fewer exceedances out of the 73 samples.

References

California Toxics Rule

Water Data Summary for Dominguez Channel (above Vermont) – CTR Aquatic Life Freshwater Acute (CMC) Objective



Dominguez Channel (Above Vermont)
Dissolved Zinc - Water

Record#	SiteID	Waterbody	Classifc	Constit	Min/Max	Result	Units	SampleDate	DataQc	Matrix	SampleType	SampleEnv	Fraction	Analytical	MDL	SampleComments	ProjectName	DataSou	Filename	Spreadsheet	Hardness	pH	Temp	TableName
365	EI Segundo Blvd	Dominguez Channel (above Vermont)	Metal	Zinc	<	17.2	µg/L	29-Aug-02	Good	Water			Dissolved		17.2		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (DC 2002)					
272	EI Segundo Blvd	Dominguez Channel (above Vermont)	Metal	Zinc	<	17.2	µg/L	28-Mar-02	Good	Water			Dissolved		17.2		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (DC 2002)					
325	EI Segundo Blvd	Dominguez Channel (above Vermont)	Metal	Zinc	=	47	µg/L	27-Jun-02	Good	Water			Dissolved		17.2		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (DC 2002)					
419	EI Segundo Blvd	Dominguez Channel (above Vermont)	Metal	Zinc	<	17.2	µg/L	26-Nov-02	Good	Water			Dissolved		17.2		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (DC 2002)					
439	EI Segundo Blvd	Dominguez Channel (above Vermont)	Metal	Zinc	<	17.2	µg/L	26-Dec-02	Good	Water			Dissolved		17.2		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (DC 2002)					
460	EI Segundo Blvd	Dominguez Channel (above Vermont)	Metal	Zinc	=	14	µg/L	30-Jan-03	Good	Water			Dissolved		6		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (DC 2003)					
483	EI Segundo Blvd	Dominguez Channel (above Vermont)	Metal	Zinc	=	178	µg/L	27-Feb-03	Good	Water			Dissolved		6		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (DC 2003)					
504	EI Segundo Blvd	Dominguez Channel (above Vermont)	Metal	Zinc	=	18.2	µg/L	27-Mar-03	Good	Water			Dissolved		6		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (DC 2003)					
523	EI Segundo Blvd	Dominguez Channel (above Vermont)	Metal	Zinc	=	14	µg/L	24-Apr-03	Good	Water			Dissolved		6		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (DC 2003)					
543	EI Segundo Blvd	Dominguez Channel (above Vermont)	Metal	Zinc	=	18.4	µg/L	29-May-03	Good	Water			Dissolved		6		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (DC 2003)					
560	EI Segundo Blvd	Dominguez Channel (above Vermont)	Metal	Zinc	=	49.2	µg/L	26-Jun-03	Good	Water			Dissolved		6		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (DC 2003)					
580	EI Segundo Blvd	Dominguez Channel (above Vermont)	Metal	Zinc	=	7	µg/L	24-Jul-03	Good	Water			Dissolved		2		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (DC 2003)					
599	EI Segundo Blvd	Dominguez Channel (above Vermont)	Metal	Zinc	=	17	µg/L	28-Aug-03	Good	Water			Dissolved		2		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (DC 2003)					
639	EI Segundo Blvd	Dominguez Channel (above Vermont)	Metal	Zinc	=	13.2	µg/L	23-Oct-03	Good	Water			Dissolved		2		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (DC 2003)					
660	EI Segundo Blvd	Dominguez Channel (above Vermont)	Metal	Zinc	=	8.3	µg/L	25-Nov-03	Good	Water			Dissolved		2		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (DC 2003)					
682	EI Segundo Blvd	Dominguez Channel (above Vermont)	Metal	Zinc	=	4.6	µg/L	30-Dec-03	Good	Water			Dissolved		2		WPD	WPD	Revised compilation of LARBCDC 2002-2 87.7					
704	EI Segundo Blvd	Dominguez Channel (above Vermont)	Metal	Zinc	=	5	µg/L	29-Jan-04	Good	Water			Dissolved		2		WPD	WPD	Revised compilation of LARBCDC 2002-2 129					
724	EI Segundo Blvd	Dominguez Channel (above Vermont)	Metal	Zinc	=	6.1	µg/L	27-May-04	Good	Water			Dissolved		2	Original site code = DC-M-ELS	WPD	WPD	Revised compilation of LARBCDC 2002-2 89					
749	EI Segundo Blvd	Dominguez Channel (above Vermont)	Metal	Zinc	=	42	µg/L	29-Jul-04	Good	Water			Dissolved		4	Original site code = DC-M-ELS	WPD	WPD	Revised compilation of LARBCDC 2002-2 123					
771	EI Segundo Blvd	Dominguez Channel (above Vermont)	Metal	Zinc	=	49	µg/L	26-Aug-04	Good	Water			Dissolved		4	Original site code = DC-M-ELS	WPD	WPD	Revised compilation of LARBCDC 2002-2 168					
795	EI Segundo Blvd	Dominguez Channel (above Vermont)	Metal	Zinc	=	32	µg/L	30-Sep-04	Good	Water			Dissolved		4	Original site code = DC-M-ELS	WPD	WPD	Revised compilation of LARBCDC 2002-2 188					
821	EI Segundo Blvd	Dominguez Channel (above Vermont)	Metal	Zinc	=	60	µg/L	28-Oct-04	Good	Water			Dissolved		4	Original site code = DC-M-ELS	WPD	WPD	Revised compilation of LARBCDC 2002-2 36.5					
847	EI Segundo Blvd	Dominguez Channel (above Vermont)	Metal	Zinc	=	63	µg/L	30-Nov-04	Good	Water			Dissolved		4	Original site code = DC-M-ELS	WPD	WPD	Revised compilation of LARBCDC 2002-2 186					
2112	S28	Dominguez Channel (above Vermont)	Metal	Zinc	=	8.32	µg/L	10-Oct-02		Water	Composite	Dry	Dissolved	EPA200.8	50	Event Number 0203-01	LACSD	LACSD	LACSD/02-03.xls/Dominguez S28					LACSDDominguezChannel_AV_Data_303d
2268	S28	Dominguez Channel (above Vermont)	Metal	Zinc	=	77.3	µg/L	08-Nov-02		Water	Composite	Wet	Dissolved	EPA200.8	50	Event Number 0203-01	LACSD	LACSD	LACSD/02-03.xls/Dominguez S28					LACSDDominguezChannel_AV_Data_303d
2422	S28	Dominguez Channel (above Vermont)	Metal	Zinc	=	99	µg/L	16-Dec-02		Water	Composite	Wet	Dissolved	EPA200.8	50	Event Number 0203-02	LACSD	LACSD	LACSD/02-03.xls/Dominguez S28					LACSDDominguezChannel_AV_Data_303d
2578	S28	Dominguez Channel (above Vermont)	Metal	Zinc	=	103	µg/L	11-Feb-03		Water	Composite	Wet	Dissolved	EPA200.8	50	Event Number 0203-03	LACSD	LACSD	LACSD/02-03.xls/Dominguez S28					LACSDDominguezChannel_AV_Data_303d
3821	S28	Dominguez Channel (above Vermont)	Metal	Zinc	=	27.5	µg/L	16-Nov-04		Water		Dry	Dissolved			Dry Weather Sampling No. 1 -	LACSD	LACSD	LACSD/Dry_1_11-02-04.xls/DC (S28)					LACSDDominguezChannel_AV_Data_303d
3766	S28	Dominguez Channel (above Vermont)	Metal	Zinc	=	95.1	µg/L	26-Oct-04		Water		Wet	Dissolved			Storm 2 - October 26, 2004	LACSD	LACSD	LACSD/Storm_2_10-26-04.xls/DC (S28)					LACSDDominguezChannel_AV_Data_303d
3876	S28	Dominguez Channel (above Vermont)	Metal	Zinc	=	78.4	µg/L	05-Dec-04		Water		Wet	Dissolved			Storm 3 - December 5, 2004	LACSD	LACSD	LACSD/Storm_3_12-05-04.xls/DC (S28)					LACSDDominguezChannel_AV_Data_303d
2733	S28	Dominguez Channel (above Vermont)	Metal	Zinc	=	27	µg/L	15-Mar-03		Water	Composite	Wet	Dissolved	EPA200.8	50	Event Number 0203-05	LACSD	LACSD	LACSD/02-03.xls/Dominguez S28					LACSDDominguezChannel_AV_Data_303d
2887	S28	Dominguez Channel (above Vermont)	Metal	Zinc	=	52	µg/L	30-Apr-03		Water	Composite	Dry	Dissolved	EPA200.8	50	Event Number 0203-02	LACSD	LACSD	LACSD/02-03.xls/Dominguez S28					LACSDDominguezChannel_AV_Data_303d
4791	Western Ave	Dominguez Channel (above Vermont)	Metal	Zinc	=	32	µg/L	31-Jan-02	Good	Water			Dissolved		10		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (DC 2002)					
4807	Western Ave	Dominguez Channel (above Vermont)	Metal	Zinc	=	13	µg/L	28-Feb-02	Good	Water			Dissolved		10		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (DC 2002)					
4862	Western Ave	Dominguez Channel (above Vermont)	Metal	Zinc	<	17.2	µg/L	30-May-02	Good	Water			Dissolved		17.2		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (DC 2002)					
4878	Western Ave	Dominguez Channel (above Vermont)	Metal	Zinc	<	17.2	µg/L	27-Jun-02	Good	Water			Dissolved		17.2		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (DC 2002)					
4899	Western Ave	Dominguez Channel (above Vermont)	Metal	Zinc	=	26.8	µg/L	25-Jul-02	Good	Water			Dissolved		17.2		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (DC 2002)					
4920	Western Ave	Dominguez Channel (above Vermont)	Metal	Zinc	<	17.2	µg/L	29-Aug-02	Good	Water			Dissolved		17.2		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (DC 2002)					
4938	Western Ave	Dominguez Channel (above Vermont)	Metal	Zinc	=	18	µg/L	26-Sep-02	Good	Water			Dissolved		17.2		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (DC 2002)					
4956	Western Ave	Dominguez Channel (above Vermont)	Metal	Zinc	<	17.2	µg/L	24-Oct-02	Good	Water			Dissolved		17.2		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (DC 2002)					
4974	Western Ave	Dominguez Channel (above Vermont)	Metal	Zinc	<	17.2	µg/L	26-Nov-02	Good	Water			Dissolved		17.2		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (DC 2002)					
4996	Western Ave	Dominguez Channel (above Vermont)	Metal	Zinc	=	27	µg/L	26-Dec-02	Good	Water			Dissolved		17.2		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (DC 2002)					
5040	Western Ave	Dominguez Channel (above Vermont)	Metal	Zinc	=	143	µg/L	27-Feb-03	Good	Water			Dissolved		6		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (DC 2003)					
5063	Western Ave	Dominguez Channel (above Vermont)	Metal	Zinc	=	25.8	µg/L	27-Mar-03	Good	Water			Dissolved		6		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (DC 2003)					
5085	Western Ave	Dominguez Channel (above Vermont)	Metal	Zinc	=	23.4	µg/L	24-Apr-03	Good	Water			Dissolved		6		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (DC 2003)					
5105	Western Ave	Dominguez Channel (above Vermont)	Metal	Zinc	=	16.4	µg/L	29-May-03	Good	Water			Dissolved		6		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (DC 2003)					
5125	Western Ave	Dominguez Channel (above Vermont)	Metal	Zinc	=	20.3	µg/L	26-Jun-03	Good	Water			Dissolved		6		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (DC 2003)					
5145	Western Ave	Dominguez Channel (above Vermont)	Metal	Zinc	=	8	µg/L	24-Jul-03	Good	Water			Dissolved		2		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (DC 2003)					
5166	Western Ave	Dominguez Channel (above Vermont)	Metal	Zinc	=	25	µg/L	28-Aug-03	Good	Water			Dissolved		2		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (DC 2003)					
5228	Western Ave	Dominguez Channel (above Vermont)	Metal	Zinc	=	10.2	µg/L	25-Nov-03	Good	Water			Dissolved		2		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (DC 2003)					
5250	Western Ave	Dominguez Channel (above Vermont)	Metal	Zinc	=	16.8	µg/L	30-Dec-03	Good	Water			Dissolved		2		WPD	WPD	Revised compilation of LARBCDC 2002-2 105					
5271	Western Ave	Dominguez Channel (above Vermont)	Metal	Zinc	=	12	µg/L	29-Jan-04	Good	Water			Dissolved		2		WPD	WPD	Revised compilation of LARBCDC 2002-2 132					
5292	Western Ave	Dominguez Channel (above Vermont)	Metal	Zinc	=	4.8	µg/L	27-May-04	Good	Water			Dissolved		2	Original site code = DC-M-WES	WPD	WPD	Revised compilation of LARBCDC 2002-2 96.8					
5315	Western Ave	Dominguez Channel (above Vermont)	Metal	Zinc	=	35	µg/L	29-Jul-04	Good	Water			Dissolved		4	Original site code = DC-M-WES	WPD	WPD	Revised compilation of LARBCDC 2002-2 277					
5337	Western Ave	Dominguez Channel (above Vermont)	Metal	Zinc	=	52	µg/L	26-Aug-04	Good	Water			Dissolved		4	Original site code = DC-M-WES	WPD	WPD	Revised compilation of LARBCDC 2002-2 354					
5356	Western Ave	Dominguez Channel (above Vermont)	Metal	Zinc	=	18	µg/L	30-Sep-04	Good	Water			Dissolved		4	Original site code = DC-M-WES	WPD	WPD	Revised compilation of LARBCDC 2002-2 213					
5382	Western Ave	Dominguez Channel (above Vermont)	Metal	Zinc	=	59	µg/L	28-Oct-04	Good	Water			Dissolved		4	Original site code = DC-M-WES	WPD	WPD	Revised compilation of LARBCDC 2002-2 43.5					
5403	Western Ave	Dominguez Channel (above Vermont)	Metal	Zinc	=	28	µg/L	30-Nov-04	Good	Water			Dissolved		4	Original site code = DC-M-WES	WPD	WPD	Revised compilation of LARBCDC 2002-2 212					
3717	S28	Dominguez Channel (above Vermont)	Metal	Zinc	=	181	µg/L	17-Oct-04		Water		Wet	Dissolved			Storm 1 - 10/17/2004	LACSD	LACSD	LACSD/Storm_1_10-17-04.xls/DC (S28)					LACSDDominguezChannel_AV_Data_303d
3985	S28	Dominguez Channel (above Vermont)	Metal	Zinc	=	27.4	µg/L	09-Mar-05		Water		Dry	Dissolved			Dry Weather Sampling No. 1 -	LACSD	LACSD	LACSD/Dry_2_03-17-05.xls/DC (S28)					LACSDDominguezChannel_AV_Data_303d
3043	S28	Dominguez Channel (above Vermont)	Metal	Zinc	=	4.58	µg/L	28-Oct-03		Water	Composite	Dry	Dissolved	EPA200.8	50	Event Number 0304-01	LACSD	LACSD	LACSD/03-04.xls/Dominguez S28					LACSDDominguezChannel_AV_Data_303d
3198	S28	Dominguez Channel (above Vermont)	Metal	Zinc	=	54.3	µg/L	31-Oct-03		Water	Composite	Wet	Dissolved	EPA200.8	50	Event Number 0304-01	LACSD	LACSD	LACSD/03-04.xls/Dominguez S28					LACSDDominguezChannel_AV_Data_303d
3352	S28	Dominguez Channel (above Vermont)	Metal	Zinc	=	114	µg/L	25-Dec-03		Water	Composite	Wet	Dissolved	EPA200.8	50	Event Number 0304-02	LACSD	LACSD	LACSD/03-04.xls/Dominguez S28					LACSDDominguezChannel_AV_Data_303d
3508	S28	Dominguez Channel (above Vermont)	Metal	Zinc	=	121	µg/L	01-Jan-04		Water	Composite	Wet	Dissolved	EPA200.8	50	Event Number 0304-03	LACSD	LACSD	LACSD/03-04.xls/Dominguez S28					LACSDDominguezChannel_AV_Data_303d
3662	S28	Dominguez Channel (above Vermont)	M																					

Raw Data

Dominguez Channel (Above Vermont)
Dissolved Zinc - Water

1512	S23	Dominguez Channel (above Vermont)	Metal	Zinc	=	120	µg/L	30-Jan-01	Water	Composite	Wet	Dissolved	A289.1	50	Storm Number 0001-07	LACSD	LACSD	LACSD/2000-01.xls/Table B-8
1655	S23	Dominguez Channel (above Vermont)	Metal	Zinc	=	180	µg/L	20-Feb-01	Water	Composite	Wet	Dissolved	A289.1	50	Storm Number 0001-09	LACSD	LACSD	LACSD/2000-01.xls/Table B-8
1586	S23	Dominguez Channel (above Vermont)	Metal	Zinc	=	225	µg/L	15-Feb-01	Water	Composite	Wet	Dissolved	A289.1	50	Storm Number 0001-08	LACSD	LACSD	LACSD/2000-01.xls/Table B-8
1437	S23	Dominguez Channel (above Vermont)	Metal	Zinc	=	230	µg/L	25-Jan-01	Water	Composite	Wet	Dissolved	A289.1	50	Storm Number 0001-06	LACSD	LACSD	LACSD/2000-01.xls/Table B-8
1298	S23	Dominguez Channel (above Vermont)	Metal	Zinc	=	724	µg/L	04-Jan-01	Water	Composite	Wet	Dissolved	A289.1	50	Storm Number 0001-04	LACSD	LACSD	LACSD/2000-01.xls/Table B-8
1087	S23	Dominguez Channel (above Vermont)	Metal	Zinc	=	1450	µg/L	12-Oct-00	Water	Composite	Wet	Dissolved	A289.1	50	Storm Number 0001-01	LACSD	LACSD	LACSD/2000-01.xls/Table B-8
3930	S28	Dominguez Channel (above Vermont)	Metal	Zinc	=	65.6	µg/L	07-Jan-05	Water	Composite	Wet	Dissolved			Storm 6 for Mass Emission - Jan	LACSD	LACSD	LACSD/Storm_6_ME_01-07-05.xls/DC (S28)

LACSDDominguezChannel_AV_Data_303d
LACSDDominguezChannel_AV_Data_303d
LACSDDominguezChannel_AV_Data_303d
LACSDDominguezChannel_AV_Data_303d
LACSDDominguezChannel_AV_Data_303d
LACSDDominguezChannel_AV_Data_303d
LACSDDominguezChannel_AV_Data_303d
LACSDDominguezChannel_AV_Data_303d

(unlined portion below Vermont)

**Dominguez Channel (Estuary to Vermont)
Total Lead - Sediment**

Table 1. Data Summary Information

Waterbody Name	Dominguez Channel (Estuary to Vermont)	Region	4
		Total Waterbody Size	8.3 Miles
Hydrologic Unit	405.12	Size Affected	8.3 Miles
Pollutant/Stressor	Lead	Extent of Impairment	Entire Reach

Table 2. Summary of Lead for Dominguez Channel (Estuary to Vermont)

Dates of Sampling	1/1/1994 - 10/12/2002	Minimum Detected Value	0.001 µg/g
Number of Samples	108	Maximum Detected Value	630 µg/g
Number of Detected Samples	106	Median Detected Value	59.5 µg/g
Hardness			N/A
pH			N/A
WER			N/A
Temperature			N/A

Data Sources

Dischargers (refineries) NPDES monitoring data

Beneficial Uses for Dominguez Channel (Estuary to Vermont)

§ NAV § REC2 § EST § WILD § MIGR
 § REC1 § COMM § MAR § RARE § SPWN

Applicable Water Quality Objectives	Out of 108 Samples:	# Exceed	% Exceed	List	Delist
128 µg/g		N/A	N/A	Yes	No

Triggering Water Quality Objective for Listing

The contains water quality criteria for waterbodies in California. The most conservative applicable water quality criterion for total lead is 128 µg/g for the objective. In Dominguez Channel (Estuary to Vermont), the criterion was exceeded in 28 of 108 samples, which is 25.9% of the sample events. Under the state's listing policy, a waterbody is considered to be impaired for total lead if there are 10 or more exceedances out of the 108 samples.

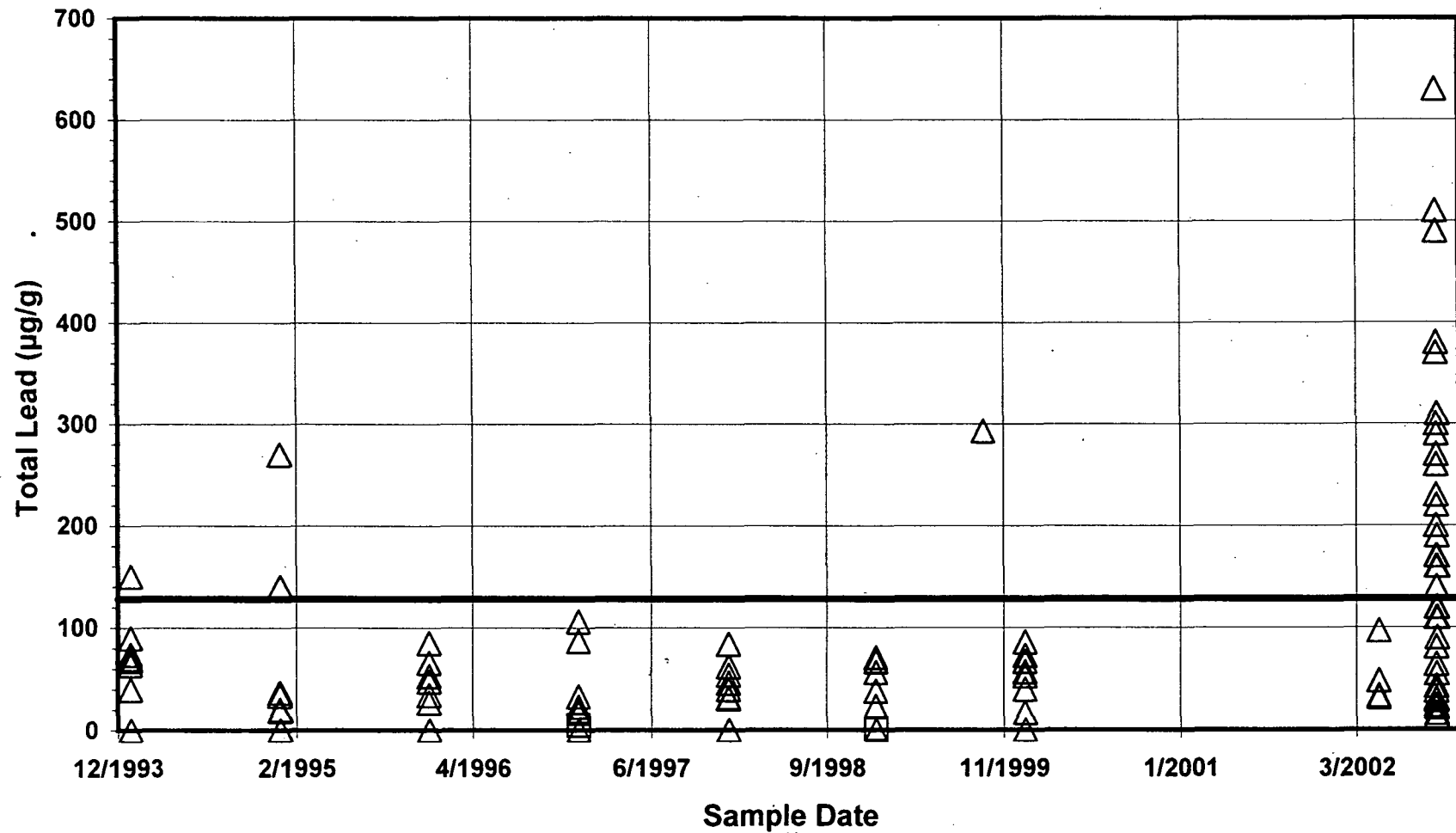
Triggering Water Quality Objective for Delisting

Not eligible for delisting.

References

None

Sediment Data Summary for Dominguez Channel (Estuary to Vermont) – No Objectives



Dominguez Channel (above Vermont) Fecal Coliform - Water

Table 1. Data Summary Information

Waterbody Name	Dominguez Channel (above Vermont)	Region	4
Hydrologic Unit	405.12	Total Waterbody Size	6.7 Miles
Pollutant/Stressor	Fecal Coliform	Size Affected	6.7 Miles
		Extent of Impairment	Entire Reach

Table 2. Summary of Fecal Coliform for Dominguez Channel (above Vermont)

Dates of Sampling	1/30/2001 - 3/9/2005	Minimum Detected Value	80 MPN/100mL
Number of Samples	59	Maximum Detected Value	4550000 MPN/100mL
Number of Detected Samples	59	Median Detected Value	3350 MPN/100mL
Hardness			N/A
pH			N/A
WER			N/A
Temperature			N/A

Data Sources

LACSD

Beneficial Uses for Dominguez Channel (above Vermont)

§ MUN § REC2 § WILD
§ REC1 § WARM § RARE

Applicable Water Quality Objectives	Out of 59 Samples:	# Exceed	% Exceed	List	Delist
200 MPN/100mL Basin Plan REC1 Freshwater 30-Day Minimum	5 sample	54	91.5%	Yes	No
400 MPN/100mL Basin Plan REC1 Freshwater Single sample		48	81.4%	Yes	No
2000 MPN/100mL Basin Plan REC2 30-Day Log Mean Minimum	4 sample	36	61%	Yes	No
4000 MPN/100mL Basin Plan REC2 30-Day Maximum	10% samples	29	49.2%	Yes	No

Triggering Water Quality Objective for Listing

The Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994 contains water quality criteria for waterbodies in the Los Angeles Region. The most conservative applicable water quality criterion for fecal coliform is 200 MPN/100mL for the Basin Plan REC1 Freshwater 30-Day Minimum 5 samples objective. In Dominguez Channel (above Vermont), the criterion was exceeded in 54 of 59 samples, which is 91.5% of the sample events. Under the state's listing policy, a waterbody is considered to be impaired for fecal coliform if there are 10 or more exceedances out of the 59 samples.

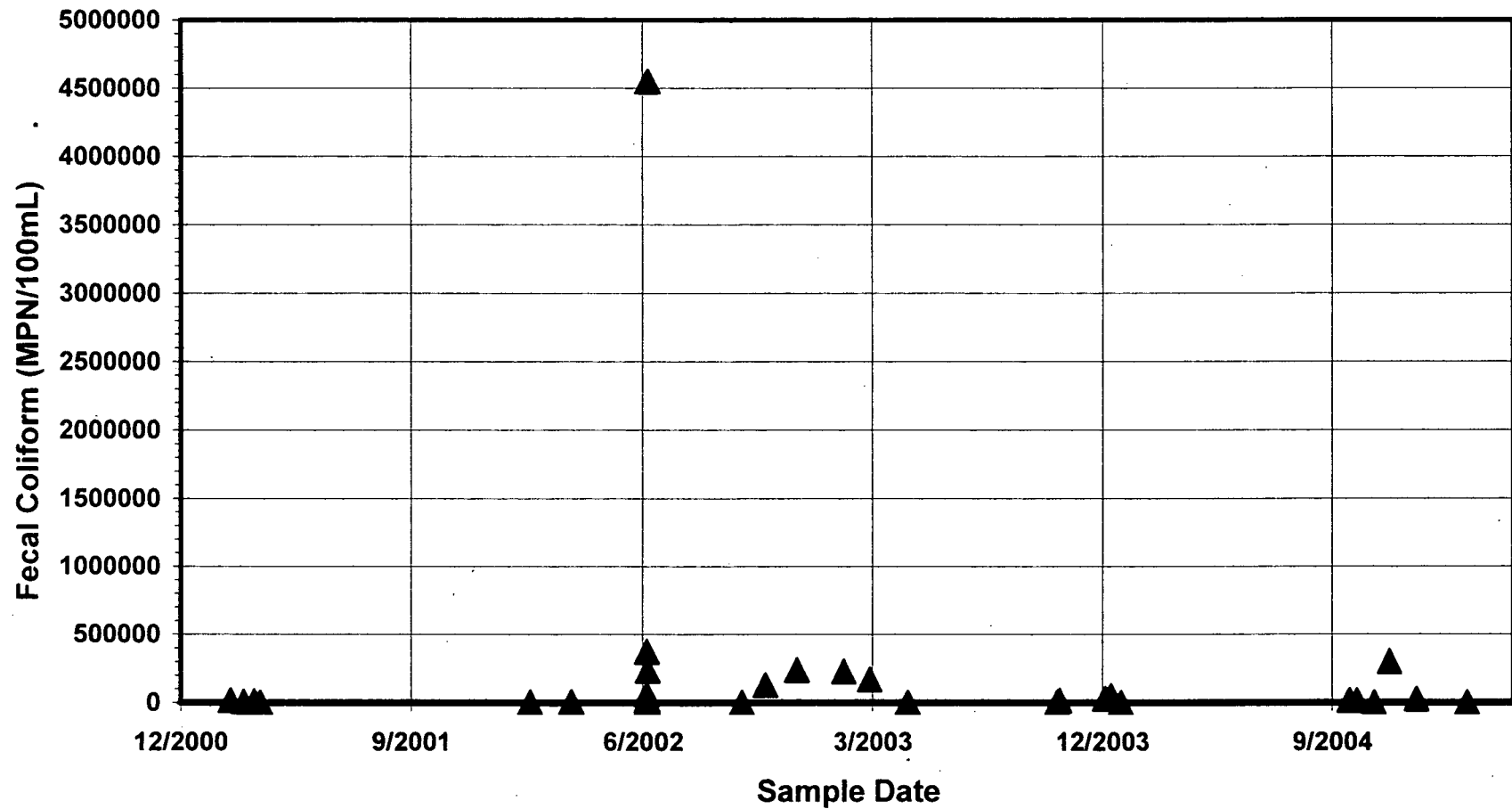
Triggering Water Quality Objective for Delisting

Not eligible for delisting.

References

Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994

Water Data Summary for Dominguez Channel (above Vermont) – Basin Plan REC1 Freshwater 30-Day Minimum 5 samples Objective



Dominguez Channel (Estuary to Vermont)

E. Coli - Water

Table 1. Data Summary Information

Waterbody Name	Dominguez Channel (Estuary to Vermont)	Region	4
		Total Waterbody Size	8.3 Miles
Hydrologic Unit	405.12	Size Affected	8.3 Miles
Pollutant/Stressor	E. Coli	Extent of Impairment	Entire Reach

Table 2. Summary of E. Coli for Dominguez Channel (Estuary to Vermont)

Dates of Sampling	6/18/2002 - 6/18/2002	Minimum Detected Value	40 MPN/100mL
Number of Samples	14	Maximum Detected Value	38730 MPN/100mL
Number of Detected Samples	14	Median Detected Value	423 MPN/100mL
Hardness			N/A
pH			N/A
WER			N/A
Temperature			N/A

Data Sources

Dominguez Channel Bacteria TMDL Study

Beneficial Uses for Dominguez Channel (Estuary to Vermont)

§ NAV § REC2 § EST § WILD § MIGR
 § REC1 § COMM § MAR § RARE § SPWN

Applicable Water Quality Objectives	Out of 14 Samples:	# Exceed	% Exceed	List	Delist
126 MPN/100mL Basin Plan REC1 Freshwater 30-Day Minimum 5 sample	10	71.4%	Yes	No	
235 MPN/100mL Basin Plan REC1 Freshwater Single sample	8	57.1%	Yes	No	

Triggering Water Quality Objective for Listing

The Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994 contains water quality criteria for waterbodies in the Los Angeles Region. The most conservative applicable water quality criterion for e. coli is 126 MPN/100mL for the Basin Plan REC1 Freshwater 30-Day Minimum 5 samples objective. In Dominguez Channel (Estuary to Vermont), the criterion was exceeded in 10 of 14 samples, which is 71.4% of the sample events. Under the state's listing policy, a waterbody is considered to be impaired for e. coli if there are 5 or more exceedances out of the 14 samples.

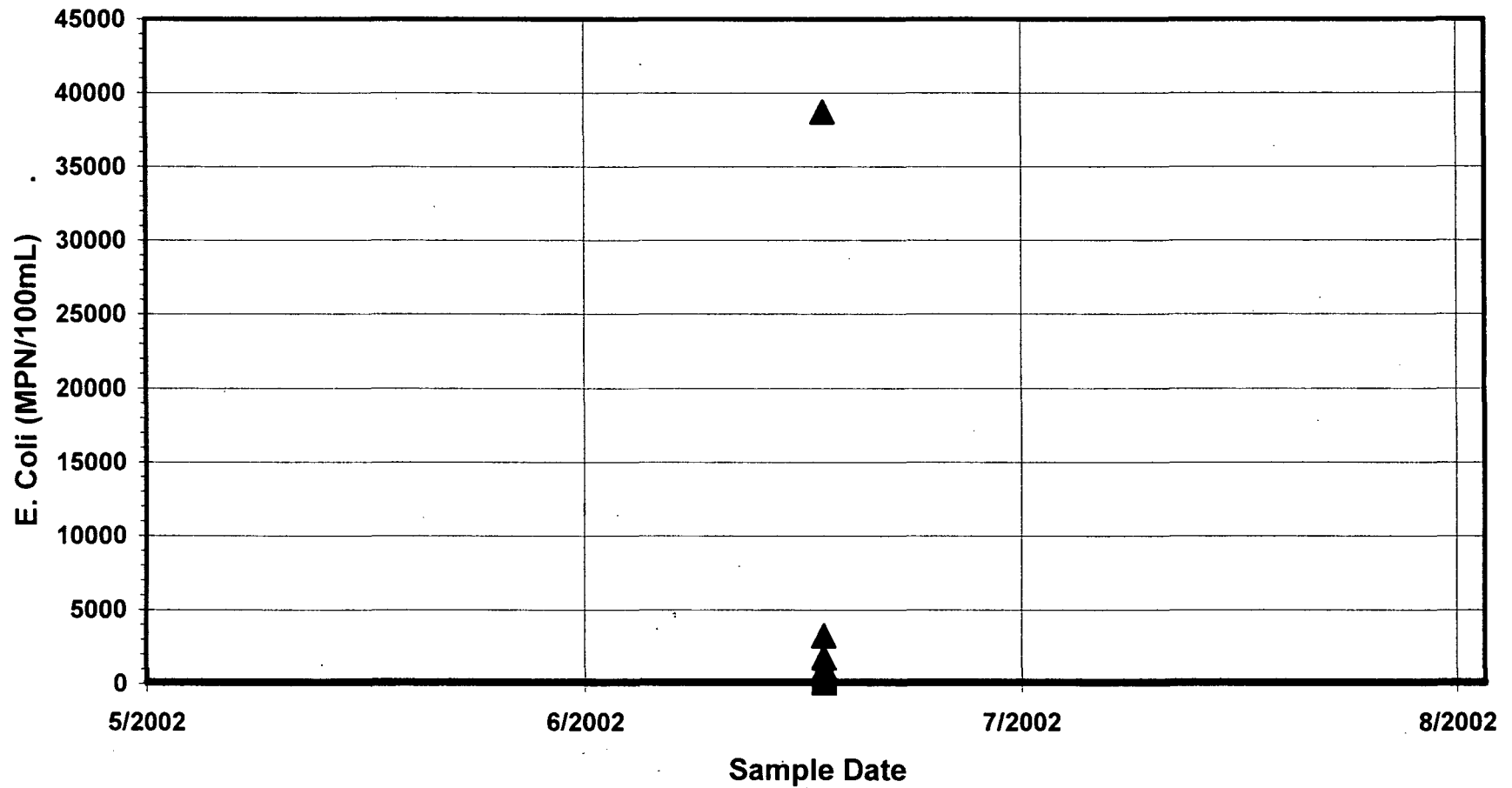
Triggering Water Quality Objective for Delisting

Not eligible for delisting.

References

Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994

Water Data Summary for Dominguez Channel (Estuary to Vermont) – Basin Plan REC1 Freshwater 30-Day Minimum 5 samples Objective



Raw Data

Dominguez Channel (Estuary to Vermont)
E. Coli - Water

Record#	Site#	Waterbody	Classification	Constituent	Unit	Result	Units	SampleDate	QAQual	Matrix	Subfraction	AnalyticalMetho	MDL	ProjectID	ProjectName	DataSource	Filename	Spreadsheet	Count
1	26	Dominguez Channel (Estuary to Vermont)	Bacteriological	E. Coli	=	1076	MPN/100mL	18-Jun-02	Good	Water	whole water	Colilert 18			Dominguez Channel Bacteria TMDL Study	SWRCB	4-27_Dominguez draft report (Text-tables).pdf		1
8	27	Dominguez Channel (Estuary to Vermont)	Bacteriological	E. Coli	=	1785	MPN/100mL	18-Jun-02	Good	Water	whole water	Colilert 18			Dominguez Channel Bacteria TMDL Study	SWRCB	4-27_Dominguez draft report (Text-tables).pdf		1
13	28	Dominguez Channel (Estuary to Vermont)	Bacteriological	E. Coli	=	3255	MPN/100mL	18-Jun-02	Good	Water	whole water	Colilert 18			Dominguez Channel Bacteria TMDL Study	SWRCB	4-27_Dominguez draft report (Text-tables).pdf		1
20	29	Dominguez Channel (Estuary to Vermont)	Bacteriological	E. Coli	=	38730	MPN/100mL	18-Jun-02	Good	Water	whole water	Colilert 18			Dominguez Channel Bacteria TMDL Study	SWRCB	4-27_Dominguez draft report (Text-tables).pdf		1
27	30	Dominguez Channel (Estuary to Vermont)	Bacteriological	E. Coli	=	435	MPN/100mL	18-Jun-02	Good	Water	whole water	Colilert 18			Dominguez Channel Bacteria TMDL Study	SWRCB	4-27_Dominguez draft report (Text-tables).pdf		1
31	31	Dominguez Channel (Estuary to Vermont)	Bacteriological	E. Coli	=	59	MPN/100mL	18-Jun-02	Good	Water	whole water	Colilert 18			Dominguez Channel Bacteria TMDL Study	SWRCB	4-27_Dominguez draft report (Text-tables).pdf		1
38	32	Dominguez Channel (Estuary to Vermont)	Bacteriological	E. Coli	=	454	MPN/100mL	18-Jun-02	Good	Water	whole water	Colilert 18			Dominguez Channel Bacteria TMDL Study	SWRCB	4-27_Dominguez draft report (Text-tables).pdf		1
42	34	Dominguez Channel (Estuary to Vermont)	Bacteriological	E. Coli	=	475	MPN/100mL	18-Jun-02	Good	Water	whole water	Colilert 18			Dominguez Channel Bacteria TMDL Study	SWRCB	4-27_Dominguez draft report (Text-tables).pdf		1
47	35	Dominguez Channel (Estuary to Vermont)	Bacteriological	E. Coli	=	411	MPN/100mL	18-Jun-02	Good	Water	whole water	Colilert 18			Dominguez Channel Bacteria TMDL Study	SWRCB	4-27_Dominguez draft report (Text-tables).pdf		1
52	36	Dominguez Channel (Estuary to Vermont)	Bacteriological	E. Coli	=	205	MPN/100mL	18-Jun-02	Good	Water	whole water	Colilert 18			Dominguez Channel Bacteria TMDL Study	SWRCB	4-27_Dominguez draft report (Text-tables).pdf		1
59	37	Dominguez Channel (Estuary to Vermont)	Bacteriological	E. Coli	=	86	MPN/100mL	18-Jun-02	Good	Water	whole water	Colilert 18			Dominguez Channel Bacteria TMDL Study	SWRCB	4-27_Dominguez draft report (Text-tables).pdf		1
63	38	Dominguez Channel (Estuary to Vermont)	Bacteriological	E. Coli	=	58	MPN/100mL	18-Jun-02	Good	Water	whole water	Colilert 18			Dominguez Channel Bacteria TMDL Study	SWRCB	4-27_Dominguez draft report (Text-tables).pdf		1
67	39	Dominguez Channel (Estuary to Vermont)	Bacteriological	E. Coli	=	40	MPN/100mL	18-Jun-02	Good	Water	whole water	Colilert 18			Dominguez Channel Bacteria TMDL Study	SWRCB	4-27_Dominguez draft report (Text-tables).pdf		1
71	40	Dominguez Channel (Estuary to Vermont)	Bacteriological	E. Coli	=	-137	MPN/100mL	18-Jun-02	Good	Water	whole water	Colilert 18			Dominguez Channel Bacteria TMDL Study	SWRCB	4-27_Dominguez draft report (Text-tables).pdf		1

Dominguez Channel (Estuary to Vermont) Fecal Coliform - Water

Table 1. Data Summary Information

Waterbody Name	Dominguez Channel (Estuary to Vermont)	Region	4
Hydrologic Unit	405.12	Total Waterbody Size	8.3 Miles
Pollutant/Stressor	Fecal Coliform	Size Affected	8.3 Miles
		Extent of Impairment	Entire Reach

Table 2. Summary of Fecal Coliform for Dominguez Channel (Estuary to Vermont)

Dates of Sampling	2/26/2002 - 2/24/2003	Minimum Detected Value	23 MPN/100mL
Number of Samples	24	Maximum Detected Value	53500 MPN/100mL
Number of Detected Samples	24	Median Detected Value	282.5 MPN/100mL
Hardness			N/A
pH			N/A
WER			N/A
Temperature			N/A

Data Sources

Dominguez Channel Bacteria TMDL Study

Beneficial Uses for Dominguez Channel (Estuary to Vermont)

§ NAV § REC2 § EST § WILD § MIGR
§ REC1 § COMM § MAR § RARE § SPWN

Applicable Water Quality Objectives	Out of 24 Samples:	# Exceed	% Exceed	List	Delist
200 MPN/100mL Basin Plan REC1 Freshwater 30-Day Minimum 5 sample	14	58.3%	Yes	No	
400 MPN/100mL Basin Plan REC1 Freshwater Single sample	11	45.8%	Yes	No	
2000 MPN/100mL Basin Plan REC2 30-Day Log Mean Minimum 4 sample	6	25%	Yes	No	
4000 MPN/100mL Basin Plan REC2 30-Day Maximum 10% samples	2	8.3%	No	No	

Triggering Water Quality Objective for Listing

The Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994 contains water quality criteria for waterbodies in the Los Angeles Region. The most conservative applicable water quality criterion for fecal coliform is 200 MPN/100mL for the Basin Plan REC1 Freshwater 30-Day Minimum 5 samples objective. In Dominguez Channel (Estuary to Vermont), the criterion was exceeded in 14 of 24 samples, which is 58.3% of the sample events. Under the state's listing policy, a waterbody is considered to be impaired for fecal coliform if there are 5 or more exceedances out of the 24 samples.

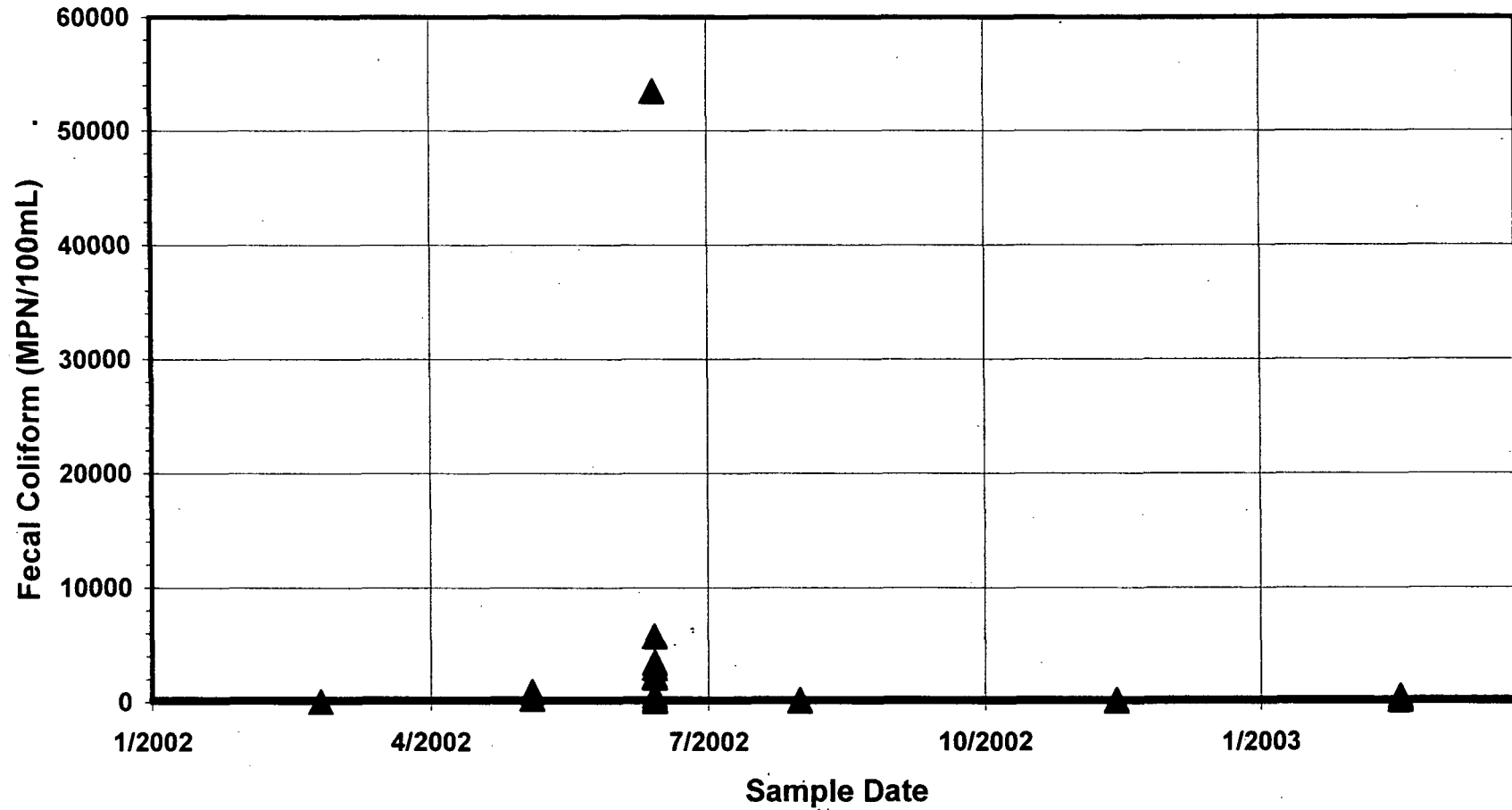
Triggering Water Quality Objective for Delisting

Not eligible for delisting.

References

Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994

Water Data Summary for Dominguez Channel (Estuary to Vermont) – Basin Plan REC1 Freshwater 30-Day Minimum 5 samples Objective



Raw Data

Dominguez Channel (Estuary to Vermont)
Fecal Coliform - Water

Record#	SiteID	Waterbody	Classification	Constituent	Num	Result	Units	Sample Date	Data Qual	Matrix	Extraction	Analytical Method	MDL	Sample Comments	Project Name	Data Source	Filename Spreadsheet	Count
3	26	Dominguez Channel (Estuary to Vermont)	Bacteriological	Fecal Coliform	=	3000	MPN/100mL	18-Jun-02	Good	Water	whole water	Membrane Filtration		Units were CFU/100mL	Dominguez Channel Bacteria TMDL Study	SWRCB	4-27 Dominguez draft report (Text-tables).pdf	1
10	27	Dominguez Channel (Estuary to Vermont)	Bacteriological	Fecal Coliform	=	2300	MPN/100mL	18-Jun-02	Good	Water	whole water	Membrane Filtration		Units were CFU/100mL	Dominguez Channel Bacteria TMDL Study	SWRCB	4-27 Dominguez draft report (Text-tables).pdf	1
15	28	Dominguez Channel (Estuary to Vermont)	Bacteriological	Fecal Coliform	=	5750	MPN/100mL	18-Jun-02	Good	Water	whole water	Membrane Filtration		Units were CFU/100mL	Dominguez Channel Bacteria TMDL Study	SWRCB	4-27 Dominguez draft report (Text-tables).pdf	1
22	29	Dominguez Channel (Estuary to Vermont)	Bacteriological	Fecal Coliform	=	53500	MPN/100mL	18-Jun-02	Good	Water	whole water	Membrane Filtration		Units were CFU/100mL	Dominguez Channel Bacteria TMDL Study	SWRCB	4-27 Dominguez draft report (Text-tables).pdf	1
29	30	Dominguez Channel (Estuary to Vermont)	Bacteriological	Fecal Coliform	=	2150	MPN/100mL	18-Jun-02	Good	Water	whole water	Membrane Filtration		Units were CFU/100mL	Dominguez Channel Bacteria TMDL Study	SWRCB	4-27 Dominguez draft report (Text-tables).pdf	1
33	31	Dominguez Channel (Estuary to Vermont)	Bacteriological	Fecal Coliform	=	535	MPN/100mL	18-Jun-02	Good	Water	whole water	Membrane Filtration		Units were CFU/100mL	Dominguez Channel Bacteria TMDL Study	SWRCB	4-27 Dominguez draft report (Text-tables).pdf	1
40	32	Dominguez Channel (Estuary to Vermont)	Bacteriological	Fecal Coliform	=	3450	MPN/100mL	18-Jun-02	Good	Water	whole water	Membrane Filtration		Units were CFU/100mL	Dominguez Channel Bacteria TMDL Study	SWRCB	4-27 Dominguez draft report (Text-tables).pdf	1
44	34	Dominguez Channel (Estuary to Vermont)	Bacteriological	Fecal Coliform	=	590	MPN/100mL	18-Jun-02	Good	Water	whole water	Membrane Filtration		Units were CFU/100mL	Dominguez Channel Bacteria TMDL Study	SWRCB	4-27 Dominguez draft report (Text-tables).pdf	1
49	35	Dominguez Channel (Estuary to Vermont)	Bacteriological	Fecal Coliform	=	530	MPN/100mL	18-Jun-02	Good	Water	whole water	Membrane Filtration		Units were CFU/100mL	Dominguez Channel Bacteria TMDL Study	SWRCB	4-27 Dominguez draft report (Text-tables).pdf	1
54	36	Dominguez Channel (Estuary to Vermont)	Bacteriological	Fecal Coliform	=	245	MPN/100mL	18-Jun-02	Good	Water	whole water	Membrane Filtration		Units were CFU/100mL	Dominguez Channel Bacteria TMDL Study	SWRCB	4-27 Dominguez draft report (Text-tables).pdf	1
61	37	Dominguez Channel (Estuary to Vermont)	Bacteriological	Fecal Coliform	=	180	MPN/100mL	18-Jun-02	Good	Water	whole water	Membrane Filtration		Units were CFU/100mL	Dominguez Channel Bacteria TMDL Study	SWRCB	4-27 Dominguez draft report (Text-tables).pdf	1
65	38	Dominguez Channel (Estuary to Vermont)	Bacteriological	Fecal Coliform	=	110	MPN/100mL	18-Jun-02	Good	Water	whole water	Membrane Filtration		Units were CFU/100mL	Dominguez Channel Bacteria TMDL Study	SWRCB	4-27 Dominguez draft report (Text-tables).pdf	1
69	39	Dominguez Channel (Estuary to Vermont)	Bacteriological	Fecal Coliform	=	45	MPN/100mL	18-Jun-02	Good	Water	whole water	Membrane Filtration		Units were CFU/100mL	Dominguez Channel Bacteria TMDL Study	SWRCB	4-27 Dominguez draft report (Text-tables).pdf	1
73	40	Dominguez Channel (Estuary to Vermont)	Bacteriological	Fecal Coliform	=	265	MPN/100mL	18-Jun-02	Good	Water	whole water	Membrane Filtration		Units were CFU/100mL	Dominguez Channel Bacteria TMDL Study	SWRCB	4-27 Dominguez draft report (Text-tables).pdf	1
3885	RW2	Dominguez Channel (Estuary to Vermont)	Bacteriological	Fecal Coliform	>	23	MPN/100mL	26-Feb-02	Good	Water					ExxonMobil Torrance Refinery	SWRCB	4-218 Receiving Water Data for Tetra Tech RW2	1
3900	RW2	Dominguez Channel (Estuary to Vermont)	Bacteriological	Fecal Coliform	=	900	MPN/100mL	08-May-02	Good	Water					ExxonMobil Torrance Refinery	SWRCB	4-218 Receiving Water Data for Tetra Tech RW2	1
3952	RW2	Dominguez Channel (Estuary to Vermont)	Bacteriological	Fecal Coliform	=	70	MPN/100mL	06-Aug-02	Good	Water					ExxonMobil Torrance Refinery	SWRCB	4-218 Receiving Water Data for Tetra Tech RW2	1
3983	RW2	Dominguez Channel (Estuary to Vermont)	Bacteriological	Fecal Coliform	=	170	MPN/100mL	20-Nov-02	Good	Water					ExxonMobil Torrance Refinery	SWRCB	4-218 Receiving Water Data for Tetra Tech RW2	1
4047	RW2	Dominguez Channel (Estuary to Vermont)	Bacteriological	Fecal Coliform	=	170	MPN/100mL	24-Feb-03	Good	Water					ExxonMobil Torrance Refinery	SWRCB	4-218 Receiving Water Data for Tetra Tech RW2	1
4094	RW3	Dominguez Channel (Estuary to Vermont)	Bacteriological	Fecal Coliform	>	23	MPN/100mL	26-Feb-02	Good	Water					ExxonMobil Torrance Refinery	SWRCB	4-218 Receiving Water Data for Tetra Tech RW3	1
4187	RW3	Dominguez Channel (Estuary to Vermont)	Bacteriological	Fecal Coliform	=	300	MPN/100mL	08-May-02	Good	Water					ExxonMobil Torrance Refinery	SWRCB	4-218 Receiving Water Data for Tetra Tech RW3	1
4254	RW3	Dominguez Channel (Estuary to Vermont)	Bacteriological	Fecal Coliform	=	170	MPN/100mL	06-Aug-02	Good	Water					ExxonMobil Torrance Refinery	SWRCB	4-218 Receiving Water Data for Tetra Tech RW3	1
4287	RW3	Dominguez Channel (Estuary to Vermont)	Bacteriological	Fecal Coliform	=	50	MPN/100mL	20-Nov-02	Good	Water					ExxonMobil Torrance Refinery	SWRCB	4-218 Receiving Water Data for Tetra Tech RW3	1
4352	RW3	Dominguez Channel (Estuary to Vermont)	Bacteriological	Fecal Coliform	=	500	MPN/100mL	24-Feb-03	Good	Water					ExxonMobil Torrance Refinery	SWRCB	4-218 Receiving Water Data for Tetra Tech RW3	1

**Dominguez Channel (above Vermont)
Total Chromium (Total) - Water**

Table 1. Data Summary Information

Waterbody Name	Dominguez Channel (above Vermont)	Region	4
Hydrologic Unit	405.12	Total Waterbody Size	6.7 Miles
Pollutant/Stressor	Chromium (Total)	Size Affected	6.7 Miles
		Extent of Impairment	Entire Reach

Table 2. Summary of Chromium (Total) for Dominguez Channel (above Vermont)

Dates of Sampling	10/12/2000 - 3/9/2005	Minimum Detected Value	0.5 µg/L
Number of Samples	153	Maximum Detected Value	36 µg/L
Number of Detected Samples	109	Median Detected Value	2.4 µg/L
Hardness			N/A
pH			N/A
WER			N/A
Temperature			N/A

Data Sources

LACSD

Beneficial Uses for Dominguez Channel (above Vermont)

§ MUN § REC2 § WILD
§ REC1 § WARM § RARE

Applicable Water Quality Objectives

50 µg/L Basin Plan MUN

Out of 153 Samples:

Exceed % Exceed List Delist

0 0% No Yes

Triggering Water Quality Objective for Listing

No objectives were exceeded.

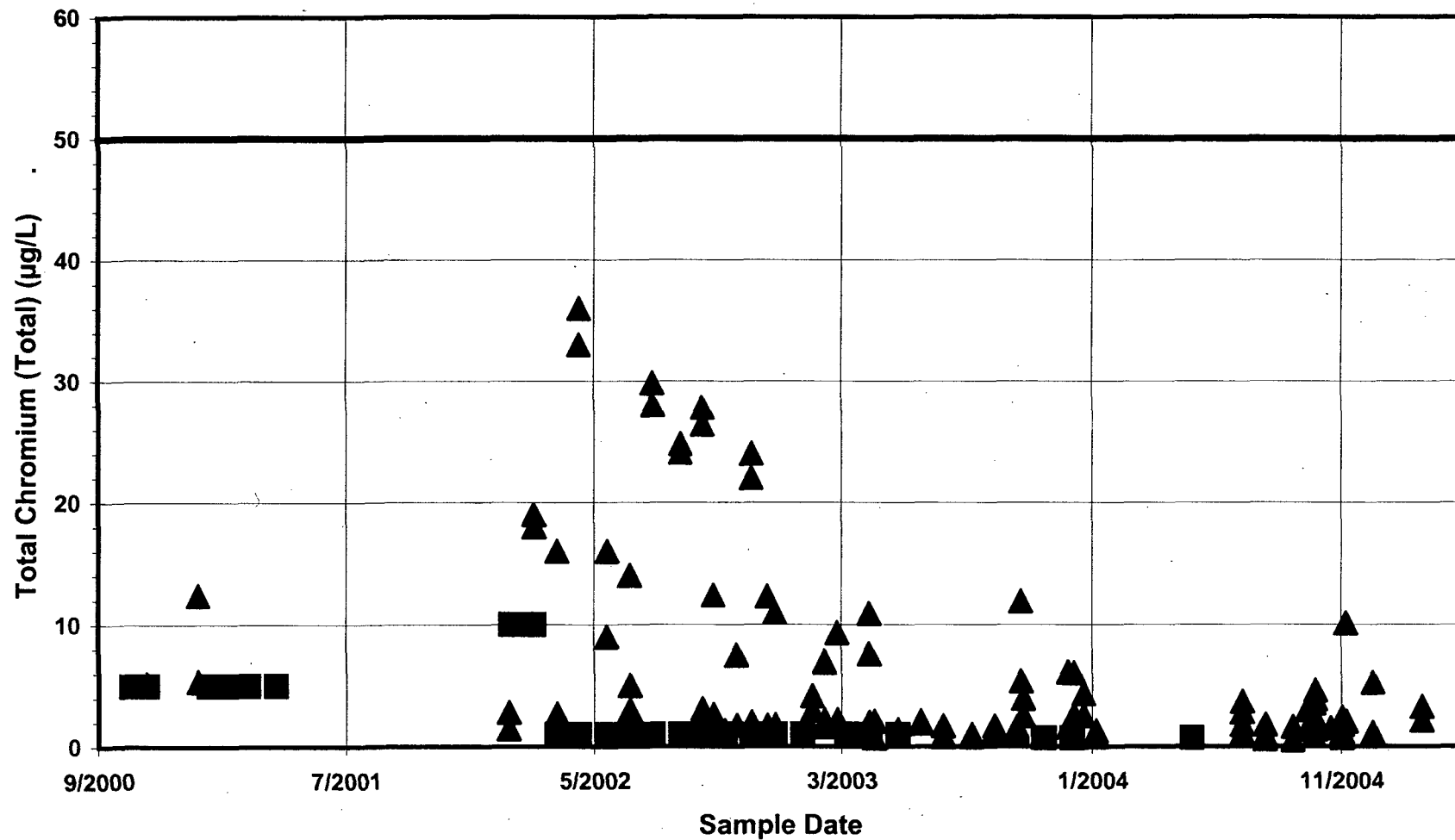
Triggering Water Quality Objective for Delisting

The Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994 contains water quality criteria for waterbodies in the Los Angeles Region. The most conservative applicable water quality criterion for total chromium (total) is 50 µg/L for the Basin Plan MUN objective. In Dominguez Channel (above Vermont), the criterion was exceeded in 0 of 153 samples, which is 0% of the sample events. Under the state's listing policy, a waterbody is eligible for delisting for total chromium (total) if there are 12 or fewer exceedances out of the 153 samples.

References

Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994

Water Data Summary for Dominguez Channel (above Vermont) – Basin Plan MUN Objective



Raw Data

Dominguez Channel (Above Vermont)
Total Chromium - Water

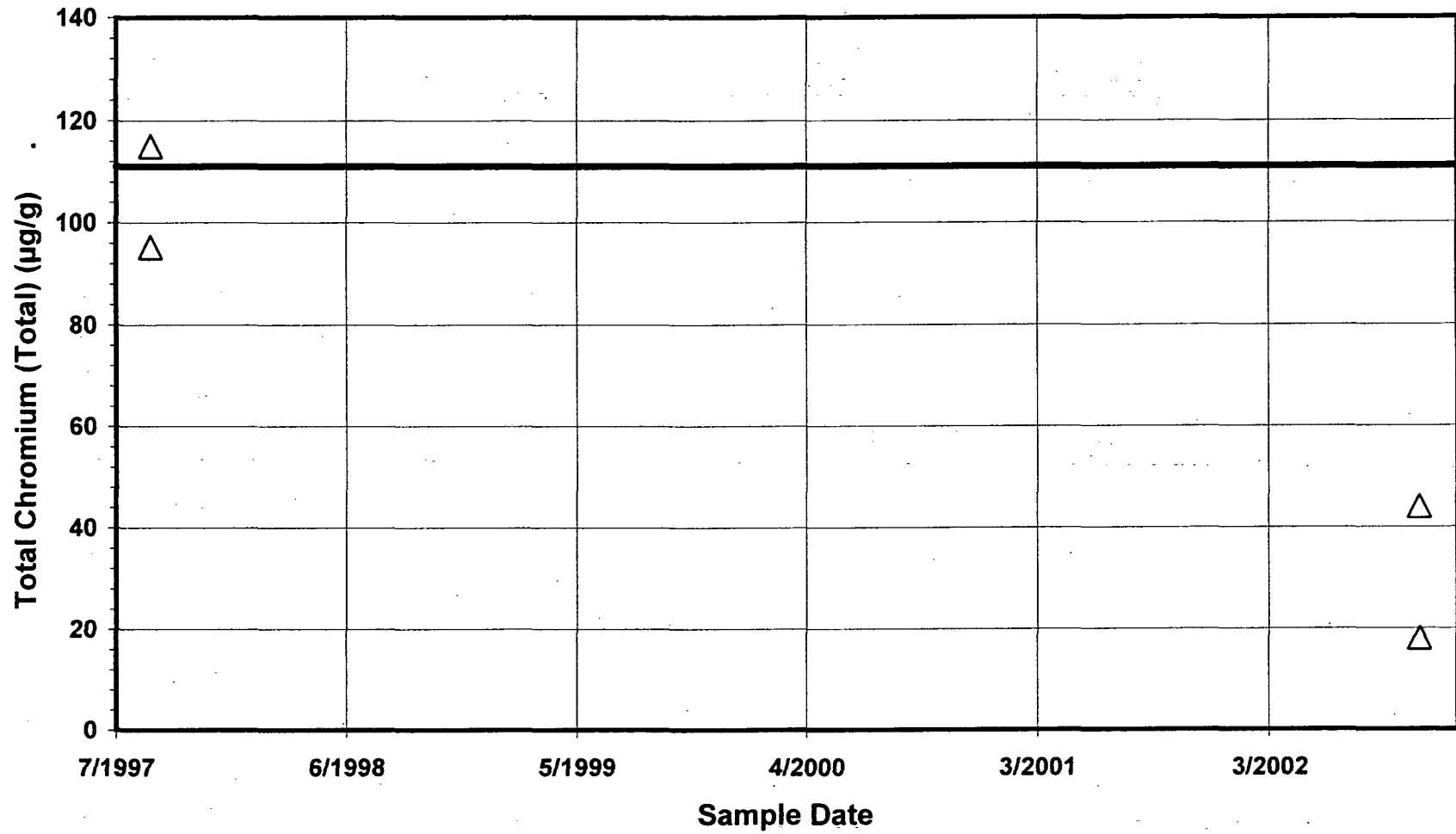
Record#	SiteID	Waterbody	Class	Constituent	Units	Result	Sample Date	Data OK	Matrix	Sample Type	Sample	Factor	Analytical Method	MDL	Sample Comments	Project	Data Source	File Name	Spreadsheet	Barcode	pH	Temp	Table Name
2182	S28	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	=	1.74	08-Nov-02		Water	Composite	Wet	Dissolved	EPA200.8	5	Event Number 0203-01	LACSD	LACSD	LACSD/02-03.xls/Dominguez S28					LACSDDominguezChannel AV Data 303d
2181	S28	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	=	7.48	08-Nov-02		Water	Composite	Wet	Total	EPA200.8	5	Event Number 0203-01	LACSD	LACSD	LACSD/02-03.xls/Dominguez S28					LACSDDominguezChannel AV Data 303d
230	El Segundo Blvd	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	<	10	31-Jan-02	Good	Water			TOTAL		10		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (DC 2002)					
373	El Segundo Blvd	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	<	1	26-Sep-02	Good	Water			Dissolved		1		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (DC 2002)					
372	El Segundo Blvd	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	=	26.4	26-Sep-02	Good	Water			TOTAL		1		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (DC 2002)					
391	El Segundo Blvd	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	<	1	24-Oct-02	Good	Water			Dissolved		1		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (DC 2002)					
245	El Segundo Blvd	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	<	10	28-Feb-02	Good	Water			Dissolved		10		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (DC 2002)					
246	El Segundo Blvd	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	=	18	28-Feb-02	Good	Water			TOTAL		10		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (DC 2002)					
263	El Segundo Blvd	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	=	2.7	28-Mar-02	Good	Water			TOTAL		1		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (DC 2002)					
262	El Segundo Blvd	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	<	1	28-Mar-02	Good	Water			Dissolved		1		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (DC 2002)					
280	El Segundo Blvd	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	<	1	25-Apr-02	Good	Water			Dissolved		1		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (DC 2002)					
279	El Segundo Blvd	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	=	33	25-Apr-02	Good	Water			Total		1		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (DC 2002)					
298	El Segundo Blvd	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	=	16	30-May-02	Good	Water			TOTAL		1		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (DC 2002)					
299	El Segundo Blvd	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	<	1	30-May-02	Good	Water			Dissolved		1		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (DC 2002)					
314	El Segundo Blvd	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	=	3	27-Jun-02	Good	Water			Dissolved		1		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (DC 2002)					
315	El Segundo Blvd	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	=	14	27-Jun-02	Good	Water			TOTAL		1		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (DC 2002)					
335	El Segundo Blvd	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	=	29.8	25-Jul-02	Good	Water			TOTAL		1		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (DC 2002)					
334	El Segundo Blvd	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	<	1	25-Jul-02	Good	Water			Dissolved		1		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (DC 2002)					
354	El Segundo Blvd	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	<	1	29-Aug-02	Good	Water			Dissolved		1		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (DC 2002)					
353	El Segundo Blvd	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	=	24.1	29-Aug-02	Good	Water			Total		1		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (DC 2002)					
409	El Segundo Blvd	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	=	22	26-Nov-02	Good	Water			TOTAL		1		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (DC 2002)					
408	El Segundo Blvd	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	=	2	26-Nov-02	Good	Water			Dissolved		1		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (DC 2002)					
427	El Segundo Blvd	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	<	1	26-Dec-02	Good	Water			Dissolved		1		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (DC 2002)					
428	El Segundo Blvd	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	=	1.8	26-Dec-02	Good	Water			TOTAL		1		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (DC 2002)					
448	El Segundo Blvd	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	<	1	30-Jan-03	Good	Water			TOTAL		1		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (DC 2003)					
468	El Segundo Blvd	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	=	7	27-Feb-03	Good	Water			TOTAL		1		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (DC 2003)					
467	El Segundo Blvd	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	=	2.2	27-Feb-03	Good	Water			Dissolved		1		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (DC 2003)					
490	El Segundo Blvd	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	<	1	27-Mar-03	Good	Water			TOTAL		1		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (DC 2003)					
512	El Segundo Blvd	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	=	7.6	24-Apr-03	Good	Water			TOTAL		1		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (DC 2003)					
511	El Segundo Blvd	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	<	1	24-Apr-03	Good	Water			Dissolved		1		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (DC 2003)					
531	El Segundo Blvd	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	<	1	29-May-03	Good	Water			Dissolved		1		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (DC 2003)					
550	El Segundo Blvd	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	=	1.9	26-Jun-03	Good	Water			TOTAL		1		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (DC 2003)					
568	El Segundo Blvd	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	=	1.7	24-Jul-03	Good	Water			TOTAL		0.7		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (DC 2003)					
588	El Segundo Blvd	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	=	1	28-Aug-03	Good	Water			Dissolved		0.7		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (DC 2003)					
609	El Segundo Blvd	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	=	1.3	25-Sep-03	Good	Water			Dissolved		0.7		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (DC 2003)					
608	El Segundo Blvd	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	=	1.4	25-Sep-03	Good	Water			TOTAL		0.7		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (DC 2003)					
629	El Segundo Blvd	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	=	1.4	23-Oct-03	Good	Water			TOTAL		0.7		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (DC 2003)					
628	El Segundo Blvd	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	=	1.2	23-Oct-03	Good	Water			Dissolved		0.7		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (DC 2003)					
648	El Segundo Blvd	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	<	0.7	25-Nov-03	Good	Water			TOTAL		0.7		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (DC 2003)					
670	El Segundo Blvd	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	<	0.7	30-Dec-03	Good	Water			Dissolved		0.7		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (DC 2003)					
690	El Segundo Blvd	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	=	1	29-Jan-04	Good	Water			Total		0.7		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (DC 2003)					
713	El Segundo Blvd	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	<	0.7	27-May-04	Good	Water			Dissolved		0.7		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (DC 2003)					
734	El Segundo Blvd	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	=	3.7	29-Jul-04	Good	Water			TOTAL		0.1	Original site code = DC-M	WPD	WPD	Revised compilation of LARBCDC 2002-2004 (DC 2003)					
735	El Segundo Blvd	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	=	2.8	29-Jul-04	Good	Water			Dissolved		0.1	Original site code = DC-M	WPD	WPD	Revised compilation of LARBCDC 2002-2004 (DC 2003)					
757	El Segundo Blvd	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	=	0.9	26-Aug-04	Good	Water			Dissolved		0.1	Original site code = DC-M	WPD	WPD	Revised compilation of LARBCDC 2002-2004 (DC 2003)					
758	El Segundo Blvd	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	=	1.8	26-Aug-04	Good	Water			TOTAL		0.1	Original site code = DC-M	WPD	WPD	Revised compilation of LARBCDC 2002-2004 (DC 2003)					
782	El Segundo Blvd	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	=	0.6	30-Sep-04	Good	Water			Dissolved		0.1	Original site code = DC-M	WPD	WPD	Revised compilation of LARBCDC 2002-2004 (DC 2003)					
781	El Segundo Blvd	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	=	1.6	30-Sep-04	Good	Water			TOTAL		0.1	Original site code = DC-M	WPD	WPD	Revised compilation of LARBCDC 2002-2004 (DC 2003)					
806	El Segundo Blvd	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	=	3.9	28-Oct-04	Good	Water			TOTAL		0.1	Original site code = DC-M	WPD	WPD	Revised compilation of LARBCDC 2002-2004 (DC 2003)					
805	El Segundo Blvd	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	=	2.3	28-Oct-04	Good	Water			Dissolved		0.1	Original site code = DC-M	WPD	WPD	Revised compilation of LARBCDC 2002-2004 (DC 2003)					
831	El Segundo Blvd	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	=	1.2	30-Nov-04	Good	Water			Total		0.1	Original site code = DC-M	WPD	WPD	Revised compilation of LARBCDC 2002-2004 (DC 2003)					
830	El Segundo Blvd	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	=	0.7	30-Nov-04	Good	Water			Dissolved		0.1	Original site code = DC-M	WPD	WPD	Revised compilation of LARBCDC 2002-2004 (DC 2003)					
2026	S28	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	=	2.62	10-Oct-02		Water	Composite	Dry	Dissolved	EPA200.8	5	Event Number 0203-01	LACSD	LACSD	LACSD/02-03.xls/Dominguez S28					LACSDDominguezChannel AV Data 303d
2027	S28	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	=	12.4	10-Oct-02		Water	Composite	Dry	Total	EPA200.8	5	Event Number 0203-01	LACSD	LACSD	LACSD/02-03.xls/Dominguez S28					LACSDDominguezChannel AV Data 303d
2337	S28	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	=	1.72	16-Dec-02		Water	Composite	Wet	Dissolved	EPA200.8	5	Event Number 0203-02	LACSD	LACSD	LACSD/02-03.xls/Dominguez S28					LACSDDominguezChannel AV Data 303d
2336	S28	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	=	12.3	16-Dec-02		Water	Composite	Wet	Total	EPA200.8	5	Event Number 0203-02	LACSD	LACSD	LACSD/02-03.xls/Dominguez S28					LACSDDominguezChannel AV Data 303d
2492	S28	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	=	4.17	11-Feb-03		Water	Composite	Wet	Total	EPA200.8	5	Event Number 0203-03	LACSD	LACSD	LACSD/02-03.xls/Dominguez S28					LACSDDominguezChannel AV Data 303d
2491	S28	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	=	2.99	11-Feb-03		Water	Composite	Wet	Dissolved	EPA200.8	5	Event Number 0203-03	LACSD	LACSD	LACSD/02-03.xls/Dominguez S28					LACSDDominguezChannel AV Data 303d
2647	S28	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	=	9.32	15-Mar-03																

Raw Data

Dominguez Channel (Above Vermont)
Total Chromium - Water

3838	S28	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	=	10.1	µg/L	05-Dec-04	Water		Wet	Total		Storm 3 - December 5, 2006	LACSD	LACSD	LACSD/Storm_3_12-05-04.xls/DC (S28)	LACSDDominguezChannel_AV_Data_303d	
3783	S28	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	=	1.51	µg/L	16-Nov-04	Water		Dry	Total		Dry Weather Sampling No	LACSD	LACSD	LACSD/Dry_1_11-02-04.xls/DC (S28)	LACSDDominguezChannel_AV_Data_303d	
2956	S28	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	=	5.37	µg/L	28-Oct-03	Water	Composite	Dry	Dissolved	EPA200.8	5	Event Number 0304-01	LACSD	LACSD	LACSD/03-04.xls/Dominguez S28	LACSDDominguezChannel_AV_Data_303d
2957	S28	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	=	11.9	µg/L	28-Oct-03	Water	Composite	Dry	Total	EPA200.8	5	Event Number 0304-01	LACSD	LACSD	LACSD/03-04.xls/Dominguez S28	LACSDDominguezChannel_AV_Data_303d
3112	S28	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	=	2.51	µg/L	31-Oct-03	Water	Composite	Wet	Dissolved	EPA200.8	5	Event Number 0304-01	LACSD	LACSD	LACSD/03-04.xls/Dominguez S28	LACSDDominguezChannel_AV_Data_303d
3111	S28	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	=	3.95	µg/L	31-Oct-03	Water	Composite	Wet	Total	EPA200.8	5	Event Number 0304-01	LACSD	LACSD	LACSD/03-04.xls/Dominguez S28	LACSDDominguezChannel_AV_Data_303d
3266	S28	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	=	1.61	µg/L	25-Dec-03	Water	Composite	Wet	Dissolved	EPA200.8	5	Event Number 0304-02	LACSD	LACSD	LACSD/03-04.xls/Dominguez S28	LACSDDominguezChannel_AV_Data_303d
3267	S28	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	=	6.13	µg/L	25-Dec-03	Water	Composite	Wet	Total	EPA200.8	5	Event Number 0304-02	LACSD	LACSD	LACSD/03-04.xls/Dominguez S28	LACSDDominguezChannel_AV_Data_303d
3422	S28	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	=	2.58	µg/L	01-Jan-04	Water	Composite	Wet	Dissolved	EPA200.8	5	Event Number 0304-03	LACSD	LACSD	LACSD/03-04.xls/Dominguez S28	LACSDDominguezChannel_AV_Data_303d
3421	S28	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	=	6.06	µg/L	01-Jan-04	Water	Composite	Wet	Total	EPA200.8	5	Event Number 0304-03	LACSD	LACSD	LACSD/03-04.xls/Dominguez S28	LACSDDominguezChannel_AV_Data_303d
3577	S28	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	=	2.53	µg/L	13-Jan-04	Water	Composite	Dry	Dissolved	EPA200.8	5	Event Number 0304-02	LACSD	LACSD	LACSD/03-04.xls/Dominguez S28	LACSDDominguezChannel_AV_Data_303d
3576	S28	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	=	4.36	µg/L	13-Jan-04	Water	Composite	Dry	Total	EPA200.8	5	Event Number 0304-02	LACSD	LACSD	LACSD/03-04.xls/Dominguez S28	LACSDDominguezChannel_AV_Data_303d
1043	S23	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	<	5	µg/L	12-Oct-00	Water	Composite	Wet	Total	A218.2	5	Storm Number 0001-01	LACSD	LACSD	LACSD/2000-01.xls/Table B-8	LACSDDominguezChannel_AV_Data_303d
1113	S23	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	<	5	µg/L	28-Oct-00	Water	Composite	Wet	Total	A218.2	5	Storm Number 0001-02	LACSD	LACSD	LACSD/2000-01.xls/Table B-8	LACSDDominguezChannel_AV_Data_303d
1183	S23	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	<	5	µg/L	31-Oct-00	Water	Composite	Wet	Dissolved	A218.2	5	Storm Number 0001-03	LACSD	LACSD	LACSD/2000-01.xls/Table B-8	LACSDDominguezChannel_AV_Data_303d
1323	S23	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	<	5	µg/L	17-Jan-01	Water	Composite	Wet	Total	A218.2	5	Storm Number 0001-05	LACSD	LACSD	LACSD/2000-01.xls/Table B-8	LACSDDominguezChannel_AV_Data_303d
1392	S23	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	<	5	µg/L	25-Jan-01	Water	Composite	Wet	Total	A218.2	5	Storm Number 0001-06	LACSD	LACSD	LACSD/2000-01.xls/Table B-8	LACSDDominguezChannel_AV_Data_303d
1462	S23	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	<	5	µg/L	30-Jan-01	Water	Composite	Wet	Total	A218.2	5	Storm Number 0001-07	LACSD	LACSD	LACSD/2000-01.xls/Table B-8	LACSDDominguezChannel_AV_Data_303d
1536	S23	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	<	5	µg/L	15-Feb-01	Water	Composite	Wet	Total	A218.2	5	Storm Number 0001-08	LACSD	LACSD	LACSD/2000-01.xls/Table B-8	LACSDDominguezChannel_AV_Data_303d
1610	S23	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	<	5	µg/L	20-Feb-01	Water	Composite	Wet	Total	A218.2	5	Storm Number 0001-09	LACSD	LACSD	LACSD/2000-01.xls/Table B-8	LACSDDominguezChannel_AV_Data_303d
1681	S23	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	<	5	µg/L	28-Feb-01	Water	Composite	Wet	Total	A218.2	5	Storm Number 0001-10	LACSD	LACSD	LACSD/2000-01.xls/Table B-8	LACSDDominguezChannel_AV_Data_303d
1755	S23	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	<	5	µg/L	07-Mar-01	Water	Composite	Wet	Total	A218.2	5	Storm Number 0001-11	LACSD	LACSD	LACSD/2000-01.xls/Table B-8	LACSDDominguezChannel_AV_Data_303d
1829	S23	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	<	5	µg/L	11-Apr-01	Water	Composite	Wet	Total	A218.2	5	Storm Number 0001-12	LACSD	LACSD	LACSD/2000-01.xls/Table B-8	LACSDDominguezChannel_AV_Data_303d
1182	S23	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	=	5.16	µg/L	31-Oct-00	Water	Composite	Wet	Total	A218.2	5	Storm Number 0001-03	LACSD	LACSD	LACSD/2000-01.xls/Table B-8	LACSDDominguezChannel_AV_Data_303d
1252	S23	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	=	5.38	µg/L	04-Jan-01	Water	Composite	Wet	Dissolved	A218.2	5	Storm Number 0001-04	LACSD	LACSD	LACSD/2000-01.xls/Table B-8	LACSDDominguezChannel_AV_Data_303d
1253	S23	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	=	12.4	µg/L	04-Jan-01	Water	Composite	Wet	Total	A218.2	5	Storm Number 0001-04	LACSD	LACSD	LACSD/2000-01.xls/Table B-8	LACSDDominguezChannel_AV_Data_303d
3952	S28	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	=	2.13	µg/L	09-Mar-05	Water		Dry	Dissolved			Dry Weather Sampling No	LACSD	LACSD	LACSD/Dry_2_03-17-05.xls/DC (S28)	LACSDDominguezChannel_AV_Data_303d
3951	S28	Dominguez Channel (above Vermont)	Metal	Chromium (Total)	=	3.26	µg/L	09-Mar-05	Water		Dry	Total			Dry Weather Sampling No	LACSD	LACSD	LACSD/Dry_2_03-17-05.xls/DC (S28)	LACSDDominguezChannel_AV_Data_303d


















Sediment Data Summary for Dominguez Channel (above Vermont) – No Objectives



Raw Data

Dominguez Channel (Above Vermont)
Total Chromium - Sediment

Record#	Site#	Waterbody	Class	Constituent	Units	Result	Sample Date	Date Ofc	Matrix	Fraction	MDL	Sample Comments	Project Name	Data Src	Filename	Spreadsheet	Hardness	pH	Temperature
199	DCU-1-0	Dominguez Channel (above Vermont)	Metal	Chromium (=	44	µg/g	10-Oct-02	Good	Sediment	Total			AMEC Dominguez Channel Estuary	SWRCB	4-56 LA Harbor Reassessment	Excel files based on CSTF data_Final_Sediment_Metals_Dominguez Channel Estuary			
212	DCU-2-0	Dominguez Channel (above Vermont)	Metal	Chromium (=	18	µg/g	10-Oct-02	Good	Sediment	Total			AMEC Dominguez Channel Estuary	SWRCB	4-56 LA Harbor Reassessment	Excel files based on CSTF data_Final_Sediment_Metals_Dominguez Channel Estuary			
876	KAISER INTL - BERTH 48	Dominguez Channel (above Vermont)	Metal	Chromium (=	95.2	µg/g	21-Aug-97	Good	Sediment	Total		moisture = 58%; fines	Bay Protection and Toxic Cleanup Program	SWRCB	BPTCP_chm47_56_chm47_56 TM	Database Description for the BPTCP(Hardcopy)			
966	KAISER INTL - BERTH 49	Dominguez Channel (above Vermont)	Metal	Chromium (=	115	µg/g	21-Aug-97	Good	Sediment	Total		moisture = 49%; fines	Bay Protection and Toxic Cleanup Program	SWRCB	BPTCP_chm47_56_chm47_56 TM	Database Description for the BPTCP(Hardcopy)			

	DominguezChannelAV_Al_Total_water
	DominguezChannelAV_Al_Total_water
	DominguezChannelAV_Cr_Total_Sediment
	DominguezChannelAV_Cr_Total_water
	DominguezChannelAV_Cr_Total_water
	DominguezChannelAV_Ecoli_water
	DominguezChannelAV_Ecoli_water
	DominguezChannelAV_FecalColiform_water
	DominguezChannelAV_FecalColiform_water
	DominguezChannelAV_Zn_Dissolved_water
	DominguezChannelAV_Zn_Dissolved_water
	QueriedRecords_Al_Total_water
	QueriedRecords_Cr_Total_Sediment
	QueriedRecords_Cr_Total_water
	QueriedRecords_Ecoli_water
	QueriedRecords_FecalColiform_water
	QueriedRecords_Zn_Dissolved_water



Dominguez Channel (above Vermont)

Total Aluminum - Water

Table 1. Data Summary Information

Waterbody Name	Dominguez Channel (above Vermont)	Region	4
Hydrologic Unit	405.12	Total Waterbody Size	6.7 Miles
Pollutant/Stressor	Aluminum	Size Affected	6.7 Miles
		Extent of Impairment	Entire Reach

Table 2. Summary of Aluminum for Dominguez Channel (above Vermont)

Dates of Sampling	10/12/2000 - 3/9/2005	Minimum Detected Value	100 µg/L
Number of Samples	46	Maximum Detected Value	2900 µg/L
Number of Detected Samples	26	Median Detected Value	241.45 µg/L
Hardness			N/A
pH			N/A
WER			N/A
Temperature			N/A

Data Sources

LACSD

Beneficial Uses for Dominguez Channel (above Vermont)

§ MUN § REC2 § WILD
 § REC1 § WARM § RARE

Applicable Water Quality Objectives	Out of 46 Samples:	# Exceed	% Exceed	List	Delist
1000 µg/L Basin Plan MUN		6	13%	Yes	No

Triggering Water Quality Objective for Listing

The Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994 contains water quality criteria for waterbodies in the Los Angeles Region. The most conservative applicable water quality criterion for total aluminum is 1000 µg/L for the Basin Plan MUN objective. In Dominguez Channel (above Vermont), the criterion was exceeded in 6 of 46 samples, which is 13% of the sample events. Under the state's listing policy, a waterbody is considered to be impaired for total aluminum if there are 4 or more exceedances out of the 46 samples.

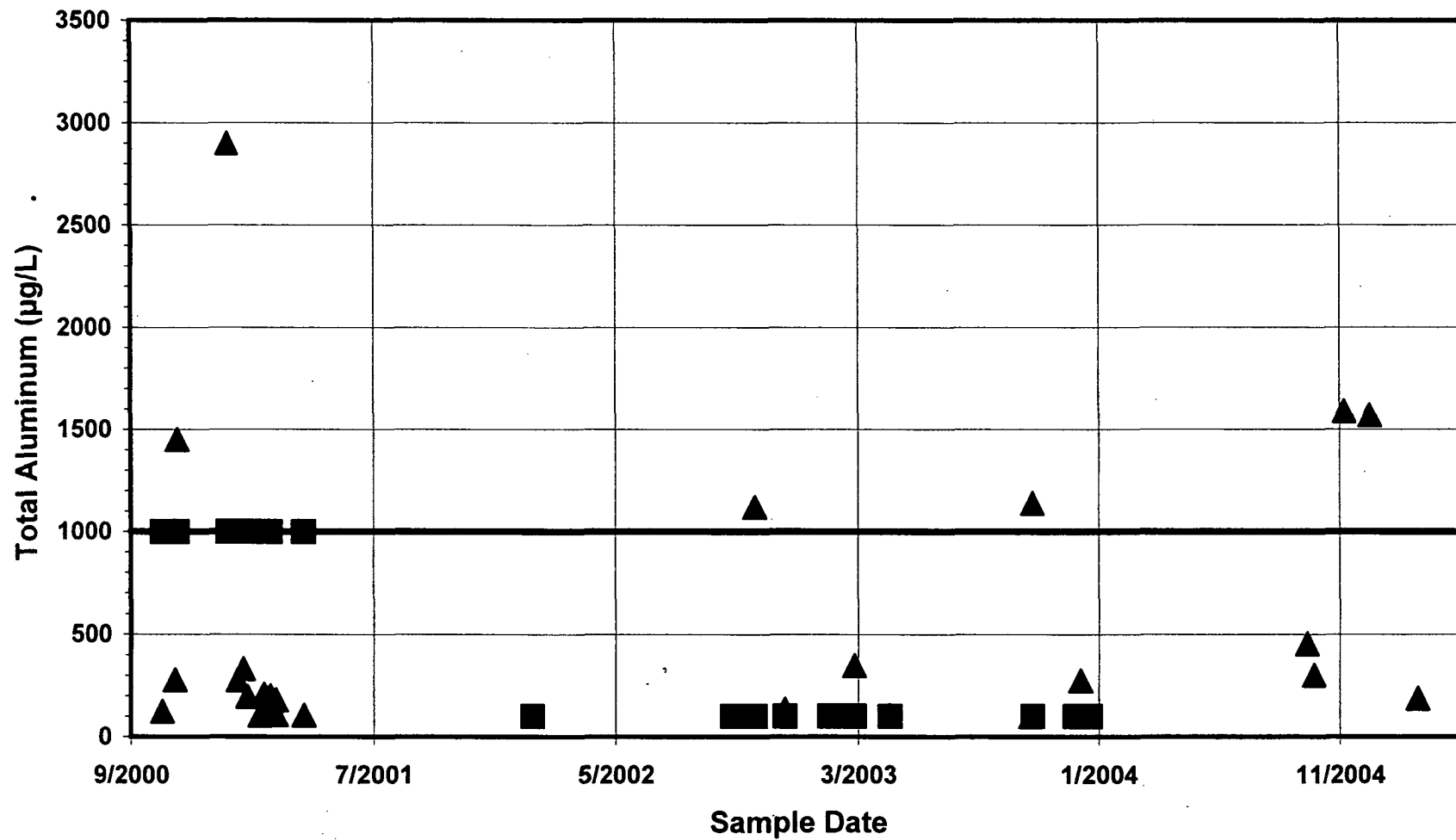
Triggering Water Quality Objective for Delisting

Not eligible for delisting.

References

Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994

Water Data Summary for Dominguez Channel (above Vermont) – Basin Plan MUN Objective















Raw Data

Dominguez Channel (Above Vermont)
Total Aluminum - Water

Record#	SiteID	Waterbody	Class	Constituent	Units	Result	Units	Sample Date	Matrix	Sample Type	Sample	Fraction	Analytical Method	MDL	Sample Comments	Project	Data Source	Filename/Spreadsheet	Hardness	pH	Temp	TableName
1990	S28	Dominguez Channel (above Vermont)	Metal	Aluminum	<	100	µg/L	10-Oct-02	Water	Composite	Dry	Total	EPA200.8	100	Event Number 0203-01	LACSD	LACSD	LACSD/02-03.xls/Dominguez S28				LACSDDominguezChannel AV Data 303d
2146	S28	Dominguez Channel (above Vermont)	Metal	Aluminum	=	1120	µg/L	08-Nov-02	Water	Composite	Wet	Total	EPA200.8	100	Event Number 0203-01	LACSD	LACSD	LACSD/02-03.xls/Dominguez S28				LACSDDominguezChannel AV Data 303d
2145	S28	Dominguez Channel (above Vermont)	Metal	Aluminum	<	100	µg/L	08-Nov-02	Water	Composite	Wet	Dissolved	EPA200.8	100	Event Number 0203-01	LACSD	LACSD	LACSD/02-03.xls/Dominguez S28				LACSDDominguezChannel AV Data 303d
2300	S28	Dominguez Channel (above Vermont)	Metal	Aluminum	=	134	µg/L	16-Dec-02	Water	Composite	Wet	Total	EPA200.8	100	Event Number 0203-02	LACSD	LACSD	LACSD/02-03.xls/Dominguez S28				LACSDDominguezChannel AV Data 303d
2301	S28	Dominguez Channel (above Vermont)	Metal	Aluminum	<	100	µg/L	16-Dec-02	Water	Composite	Wet	Dissolved	EPA200.8	100	Event Number 0203-02	LACSD	LACSD	LACSD/02-03.xls/Dominguez S28				LACSDDominguezChannel AV Data 303d
2456	S28	Dominguez Channel (above Vermont)	Metal	Aluminum	<	100	µg/L	11-Feb-03	Water	Composite	Wet	Total	EPA200.8	100	Event Number 0203-03	LACSD	LACSD	LACSD/02-03.xls/Dominguez S28				LACSDDominguezChannel AV Data 303d
2610	S28	Dominguez Channel (above Vermont)	Metal	Aluminum	<	100	µg/L	15-Mar-03	Water	Composite	Wet	Dissolved	EPA200.8	100	Event Number 0203-05	LACSD	LACSD	LACSD/02-03.xls/Dominguez S28				LACSDDominguezChannel AV Data 303d
2611	S28	Dominguez Channel (above Vermont)	Metal	Aluminum	=	348	µg/L	15-Mar-03	Water	Composite	Wet	Total	EPA200.8	100	Event Number 0203-05	LACSD	LACSD	LACSD/02-03.xls/Dominguez S28				LACSDDominguezChannel AV Data 303d
3720	S28	Dominguez Channel (above Vermont)	Metal	Aluminum	=	301	µg/L	26-Oct-04	Water		Wet	Total			Storm 2 - October 26, 2004	LACSD	LACSD	LACSD/Storm 2 10-26-04.xls/DC (S28)				LACSDDominguezChannel AV Data 303d
3879	S28	Dominguez Channel (above Vermont)	Metal	Aluminum	=	1570	µg/L	07-Jan-05	Water		Wet	Total			Storm 6 for Mass Emission - Janua	LACSD	LACSD	LACSD/Storm 6 ME 01-07-05.xls/DC (S28)				LACSDDominguezChannel AV Data 303d
2765	S28	Dominguez Channel (above Vermont)	Metal	Aluminum	<	100	µg/L	30-Apr-03	Water	Composite	Dry	Dissolved	EPA200.8	100	Event Number 0203-02	LACSD	LACSD	LACSD/02-03.xls/Dominguez S28				LACSDDominguezChannel AV Data 303d
2766	S28	Dominguez Channel (above Vermont)	Metal	Aluminum	=	104	µg/L	30-Apr-03	Water	Composite	Dry	Total	EPA200.8	100	Event Number 0203-02	LACSD	LACSD	LACSD/02-03.xls/Dominguez S28				LACSDDominguezChannel AV Data 303d
3665	S28	Dominguez Channel (above Vermont)	Metal	Aluminum	=	455	µg/L	17-Oct-04	Water		Wet	Total			Storm-1 - 10/17/2004	LACSD	LACSD	LACSD/Storm 1 10-17-04.xls/DC (S28)				LACSDDominguezChannel AV Data 303d
1876	S28	Dominguez Channel (above Vermont)	Metal	Aluminum	<	100	µg/L	28-Jan-02	Water	Composite	Wet	Total	EPA200.8	100	Storm Number 0102-06	LACSD	LACSD	LACSD/01-02.xls/Table B-6 S28				LACSDDominguezChannel AV Data 303d
3823	S28	Dominguez Channel (above Vermont)	Metal	Aluminum	=	1590	µg/L	05-Dec-04	Water		Wet	Total			Storm 3 - December 5, 2004	LACSD	LACSD	LACSD/Storm 3 12-05-04.xls/DC (S28)				LACSDDominguezChannel AV Data 303d
3936	S28	Dominguez Channel (above Vermont)	Metal	Aluminum	=	187	µg/L	09-Mar-05	Water		Dry	Total			Dry Weather Sampling No. 1 - Mar	LACSD	LACSD	LACSD/Dry 2 03-17-05.xls/DC (S28)				LACSDDominguezChannel AV Data 303d
2920	S28	Dominguez Channel (above Vermont)	Metal	Aluminum	=	100	µg/L	28-Oct-03	Water	Composite	Dry	Total	EPA200.8	100	Event Number 0304-01	LACSD	LACSD	LACSD/03-04.xls/Dominguez S28				LACSDDominguezChannel AV Data 303d
3076	S28	Dominguez Channel (above Vermont)	Metal	Aluminum	<	100	µg/L	31-Oct-03	Water	Composite	Wet	Dissolved	EPA200.8	100	Event Number 0304-01	LACSD	LACSD	LACSD/03-04.xls/Dominguez S28				LACSDDominguezChannel AV Data 303d
3075	S28	Dominguez Channel (above Vermont)	Metal	Aluminum	=	1140	µg/L	31-Oct-03	Water	Composite	Wet	Total	EPA200.8	100	Event Number 0304-01	LACSD	LACSD	LACSD/03-04.xls/Dominguez S28				LACSDDominguezChannel AV Data 303d
3231	S28	Dominguez Channel (above Vermont)	Metal	Aluminum	<	100	µg/L	25-Dec-03	Water	Composite	Wet	Total	EPA200.8	100	Event Number 0304-02	LACSD	LACSD	LACSD/03-04.xls/Dominguez S28				LACSDDominguezChannel AV Data 303d
3386	S28	Dominguez Channel (above Vermont)	Metal	Aluminum	<	100	µg/L	01-Jan-04	Water	Composite	Wet	Dissolved	EPA200.8	100	Event Number 0304-03	LACSD	LACSD	LACSD/03-04.xls/Dominguez S28				LACSDDominguezChannel AV Data 303d
3385	S28	Dominguez Channel (above Vermont)	Metal	Aluminum	=	275	µg/L	01-Jan-04	Water	Composite	Wet	Total	EPA200.8	100	Event Number 0304-03	LACSD	LACSD	LACSD/03-04.xls/Dominguez S28				LACSDDominguezChannel AV Data 303d
3540	S28	Dominguez Channel (above Vermont)	Metal	Aluminum	<	100	µg/L	13-Jan-04	Water	Composite	Dry	Total	EPA200.8	100	Event Number 0304-02	LACSD	LACSD	LACSD/03-04.xls/Dominguez S28				LACSDDominguezChannel AV Data 303d
1021	S23	Dominguez Channel (above Vermont)	Metal	Aluminum	<	1000	µg/L	12-Oct-00	Water	Composite	Wet	Dissolved	A202.2	1000	Storm Number 0001-01	LACSD	LACSD	LACSD/2000-01.xls/Table B-8				LACSDDominguezChannel AV Data 303d
1090	S23	Dominguez Channel (above Vermont)	Metal	Aluminum	<	1000	µg/L	28-Oct-00	Water	Composite	Wet	Dissolved	A202.2	1000	Storm Number 0001-02	LACSD	LACSD	LACSD/2000-01.xls/Table B-8				LACSDDominguezChannel AV Data 303d
1160	S23	Dominguez Channel (above Vermont)	Metal	Aluminum	<	1000	µg/L	31-Oct-00	Water	Composite	Wet	Dissolved	A202.2	1000	Storm Number 0001-03	LACSD	LACSD	LACSD/2000-01.xls/Table B-8				LACSDDominguezChannel AV Data 303d
1230	S23	Dominguez Channel (above Vermont)	Metal	Aluminum	<	1000	µg/L	04-Jan-01	Water	Composite	Wet	Dissolved	A202.2	1000	Storm Number 0001-04	LACSD	LACSD	LACSD/2000-01.xls/Table B-8				LACSDDominguezChannel AV Data 303d
1370	S23	Dominguez Channel (above Vermont)	Metal	Aluminum	<	1000	µg/L	25-Jan-01	Water	Composite	Wet	Dissolved	A202.2	1000	Storm Number 0001-06	LACSD	LACSD	LACSD/2000-01.xls/Table B-8				LACSDDominguezChannel AV Data 303d
1441	S23	Dominguez Channel (above Vermont)	Metal	Aluminum	<	1000	µg/L	30-Jan-01	Water	Composite	Wet	Dissolved	A202.2	1000	Storm Number 0001-07	LACSD	LACSD	LACSD/2000-01.xls/Table B-8				LACSDDominguezChannel AV Data 303d
1515	S23	Dominguez Channel (above Vermont)	Metal	Aluminum	<	1000	µg/L	15-Feb-01	Water	Composite	Wet	Dissolved	A202.2	1000	Storm Number 0001-08	LACSD	LACSD	LACSD/2000-01.xls/Table B-8				LACSDDominguezChannel AV Data 303d
1658	S23	Dominguez Channel (above Vermont)	Metal	Aluminum	<	1000	µg/L	28-Feb-01	Water	Composite	Wet	Dissolved	A202.2	1000	Storm Number 0001-10	LACSD	LACSD	LACSD/2000-01.xls/Table B-8				LACSDDominguezChannel AV Data 303d
1806	S23	Dominguez Channel (above Vermont)	Metal	Aluminum	<	1000	µg/L	11-Apr-01	Water	Composite	Wet	Dissolved	A202.2	1000	Storm Number 0001-12	LACSD	LACSD	LACSD/2000-01.xls/Table B-8				LACSDDominguezChannel AV Data 303d
1514	S23	Dominguez Channel (above Vermont)	Metal	Aluminum	=	103.9	µg/L	15-Feb-01	Water	Composite	Wet	Total	A202.2	1000	Storm Number 0001-08	LACSD	LACSD	LACSD/2000-01.xls/Table B-8				LACSDDominguezChannel AV Data 303d
1807	S23	Dominguez Channel (above Vermont)	Metal	Aluminum	=	105.3	µg/L	11-Apr-01	Water	Composite	Wet	Total	A202.2	1000	Storm Number 0001-12	LACSD	LACSD	LACSD/2000-01.xls/Table B-8				LACSDDominguezChannel AV Data 303d
1733	S23	Dominguez Channel (above Vermont)	Metal	Aluminum	=	108	µg/L	07-Mar-01	Water	Composite	Wet	Dissolved	A202.2	1000	Storm Number 0001-11	LACSD	LACSD	LACSD/2000-01.xls/Table B-8				LACSDDominguezChannel AV Data 303d
1020	S23	Dominguez Channel (above Vermont)	Metal	Aluminum	=	125	µg/L	12-Oct-00	Water	Composite	Wet	Total	A202.2	1000	Storm Number 0001-01	LACSD	LACSD	LACSD/2000-01.xls/Table B-8				LACSDDominguezChannel AV Data 303d
1589	S23	Dominguez Channel (above Vermont)	Metal	Aluminum	=	126.1	µg/L	20-Feb-01	Water	Composite	Wet	Dissolved	A202.2	1000	Storm Number 0001-09	LACSD	LACSD	LACSD/2000-01.xls/Table B-8				LACSDDominguezChannel AV Data 303d
1732	S23	Dominguez Channel (above Vermont)	Metal	Aluminum	=	181	µg/L	07-Mar-01	Water	Composite	Wet	Total	A202.2	1000	Storm Number 0001-11	LACSD	LACSD	LACSD/2000-01.xls/Table B-8				LACSDDominguezChannel AV Data 303d
1440	S23	Dominguez Channel (above Vermont)	Metal	Aluminum	=	197	µg/L	30-Jan-01	Water	Composite	Wet	Total	A202.2	1000	Storm Number 0001-07	LACSD	LACSD	LACSD/2000-01.xls/Table B-8				LACSDDominguezChannel AV Data 303d
1659	S23	Dominguez Channel (above Vermont)	Metal	Aluminum	=	201	µg/L	28-Feb-01	Water	Composite	Wet	Total	A202.2	1000	Storm Number 0001-10	LACSD	LACSD	LACSD/2000-01.xls/Table B-8				LACSDDominguezChannel AV Data 303d
1588	S23	Dominguez Channel (above Vermont)	Metal	Aluminum	=	207.9	µg/L	20-Feb-01	Water	Composite	Wet	Total	A202.2	1000	Storm Number 0001-09	LACSD	LACSD	LACSD/2000-01.xls/Table B-8				LACSDDominguezChannel AV Data 303d
1301	S23	Dominguez Channel (above Vermont)	Metal	Aluminum	=	277	µg/L	17-Jan-01	Water	Composite	Wet	Total	A202.2	1000	Storm Number 0001-05	LACSD	LACSD	LACSD/2000-01.xls/Table B-8				LACSDDominguezChannel AV Data 303d
1091	S23	Dominguez Channel (above Vermont)	Metal	Aluminum	=	278	µg/L	28-Oct-00	Water	Composite	Wet	Total	A202.2	1000	Storm Number 0001-02	LACSD	LACSD	LACSD/2000-01.xls/Table B-8				LACSDDominguezChannel AV Data 303d
1371	S23	Dominguez Channel (above Vermont)	Metal	Aluminum	=	332	µg/L	25-Jan-01	Water	Composite	Wet	Total	A202.2	1000	Storm Number 0001-06	LACSD	LACSD	LACSD/2000-01.xls/Table B-8				LACSDDominguezChannel AV Data 303d
1161	S23	Dominguez Channel (above Vermont)	Metal	Aluminum	=	1450	µg/L	31-Oct-00	Water	Composite	Wet	Total	A202.2	1000	Storm Number 0001-03	LACSD	LACSD	LACSD/2000-01.xls/Table B-8				LACSDDominguezChannel AV Data 303d
1231	S23	Dominguez Channel (above Vermont)	Metal	Aluminum	=	2900	µg/L	04-Jan-01	Water	Composite	Wet	Total	A202.2	1000	Storm Number 0001-04	LACSD	LACSD	LACSD/2000-01.xls/Table B-8				LACSDDominguezChannel AV Data 303d

17

-  DominguezChannelETV_AmmoniaAsN_Water
-  DominguezChannelETV_AmmoniaAsN_Water
-  DominguezChannelETV_Ecoli_Water
-  DominguezChannelETV_Ecoli_Water
-  DominguezChannelETV_FecalColiform_Water
-  DominguezChannelETV_FecalColiform_Water
-  DominguezChannelETV_Lead_Total_Sediment
-  DominguezChannelETV_Lead_Total_Sediment
-  QueriedRecords_AmmoniaAsN_Water
-  QueriedRecords_Ecoli_Water
-  QueriedRecords_FecalColiform_Water
-  QueriedRecords_Lead_Total_Sediment

Dominguez Channel (Estuary to Vermont) Ammonia as N - Water

Table 1. Data Summary Information

Waterbody Name	Dominguez Channel (Estuary to Vermont)	Region	4
Hydrologic Unit	405.12	Total Waterbody Size	8.3 Miles
Pollutant/Stressor	Ammonia as N	Size Affected	8.3 Miles
		Extent of Impairment	Entire Reach

Table 2. Summary of Ammonia as N for Dominguez Channel (Estuary to Vermont)

Dates of Sampling	2/26/2002 - 2/24/2003	Minimum Detected Value	0.62 mg/L
Number of Samples	10	Maximum Detected Value	1.2 mg/L
Number of Detected Samples	3	Median Detected Value	0.62 mg/L
Hardness			N/A
pH - actual and/or default values			7.8
WER			N/A
Temperature - actual and/or default values			20 °C

Data Sources

ExxonMobil Torrance Refinery

Beneficial Uses for Dominguez Channel (Estuary to Vermont)

§ NAV § REC2 § EST § WILD § MIGR
 § REC1 § COMM § MAR § RARE § SPWN

Applicable Water Quality Objectives	Out of 10 Samples:	# Exceed	% Exceed	List	Delist
2.2349 mg/L Basin Plan Freshwater SPWN Inland 30-Day Average		0	0%	No	No
5.5873 mg/L Basin Plan Freshwater SPWN Inland 4-Day Average		0/3	0%	No	No
8.1068 mg/L Basin Plan Freshwater MIGR		0	0%	No	No

Triggering Water Quality Objective for Listing

No objectives were exceeded.

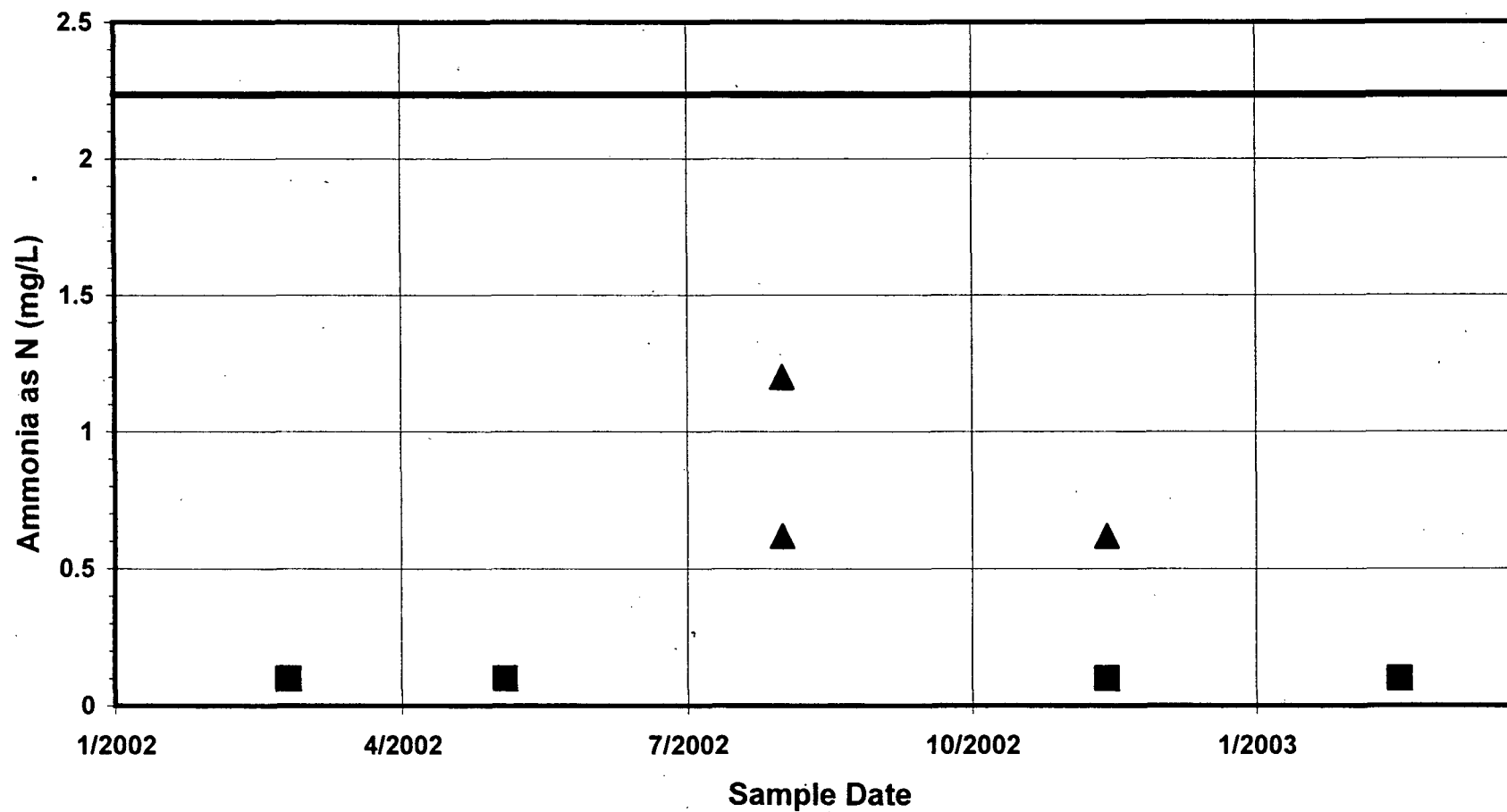
Triggering Water Quality Objective for Delisting

Not eligible for delisting.

References

Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994

Water Data Summary for Dominguez Channel (Estuary to Vermont) – Basin Plan Freshwater SPWN Inland 30-Day Average Objective

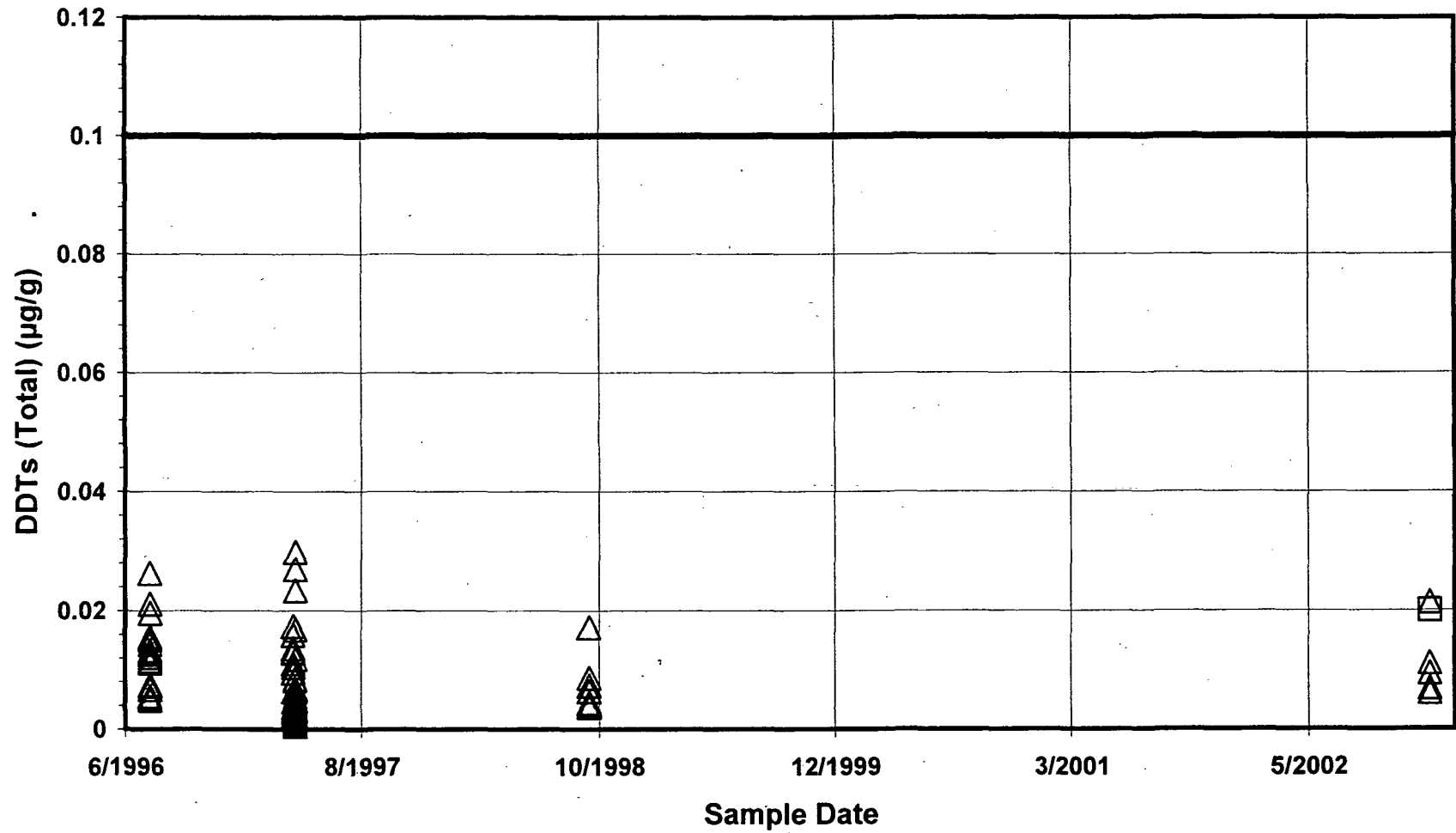










Raw Data

Dominguez Channel (Estuary to Vermont)
Ammonia as N - Water

Record#	SiteID	Waterbody	Classification	Constituent	Num	Result	Units	SampleDate	DataQI	Matrix	Fraction	AnalyticalMe	MBL	ProjectID	ProjectName	DataSource	FilenameSpreadsheet	Count
3882	RW2	Dominguez Channel (Estuary to Vermont)	Nutrient	Ammonia as N	<	0.1	mg/L	26-Feb-02	Good	Water					ExxonMobil Torrance Refinery	SWRCB	4-218_Receiving Water Data for Tetra Tech RW2	1
3897	RW2	Dominguez Channel (Estuary to Vermont)	Nutrient	Ammonia as N	<	0.1	mg/L	08-May-02	Good	Water					ExxonMobil Torrance Refinery	SWRCB	4-218_Receiving Water Data for Tetra Tech RW2	1
3921	RW2	Dominguez Channel (Estuary to Vermont)	Nutrient	Ammonia as N	=	0.62	mg/L	06-Aug-02	Good	Water					ExxonMobil Torrance Refinery	SWRCB	4-218_Receiving Water Data for Tetra Tech RW2	1
3980	RW2	Dominguez Channel (Estuary to Vermont)	Nutrient	Ammonia as N	=	0.62	mg/L	20-Nov-02	Good	Water					ExxonMobil Torrance Refinery	SWRCB	4-218_Receiving Water Data for Tetra Tech RW2	1
4019	RW2	Dominguez Channel (Estuary to Vermont)	Nutrient	Ammonia as N	<	0.1	mg/L	24-Feb-03	Good	Water					ExxonMobil Torrance Refinery	SWRCB	4-218_Receiving Water Data for Tetra Tech RW2	1
4091	RW3	Dominguez Channel (Estuary to Vermont)	Nutrient	Ammonia as N	<	0.1	mg/L	26-Feb-02	Good	Water					ExxonMobil Torrance Refinery	SWRCB	4-218_Receiving Water Data for Tetra Tech RW3	1
4184	RW3	Dominguez Channel (Estuary to Vermont)	Nutrient	Ammonia as N	<	0.1	mg/L	08-May-02	Good	Water					ExxonMobil Torrance Refinery	SWRCB	4-218_Receiving Water Data for Tetra Tech RW3	1
4223	RW3	Dominguez Channel (Estuary to Vermont)	Nutrient	Ammonia as N	=	1.2	mg/L	06-Aug-02	Good	Water					ExxonMobil Torrance Refinery	SWRCB	4-218_Receiving Water Data for Tetra Tech RW3	1
4284	RW3	Dominguez Channel (Estuary to Vermont)	Nutrient	Ammonia as N	<	0.1	mg/L	20-Nov-02	Good	Water					ExxonMobil Torrance Refinery	SWRCB	4-218_Receiving Water Data for Tetra Tech RW3	1
4323	RW3	Dominguez Channel (Estuary to Vermont)	Nutrient	Ammonia as N	<	0.1	mg/L	24-Feb-03	Good	Water					ExxonMobil Torrance Refinery	SWRCB	4-218_Receiving Water Data for Tetra Tech RW3	1

Tissue Data Summary for Los Angeles Harbor Main Channel – No Objectives



	LongBeachHarborCerritosChannel_Cu_Total_Sediment
	LongBeachHarborCerritosChannel_Cu_Total_Sediment
	LongBeachHarborCerritosChannel_DDTs_Total_Tissue
	LongBeachHarborCerritosChannel_Zn_Total_Sediment
	LongBeachHarborCerritosChannel_Zn_Total_Sediment
	QueriedRecords_Cu_Total_Sediment
	QueriedRecords_DDTs_Total_Tissue
	QueriedRecords_Zn_Total_Sediment

Long Beach Harbor Cerritos Channel, E Basin, Inner Harbor Total Copper - Sediment

Table 1. Data Summary Information

Waterbody Name	Long Beach Harbor Cerritos Channel, E Basin, Inner Harbor	Region	4
Hydrologic Unit	405.12	Total Waterbody Size	Not available
Pollutant/Stressor	Copper	Size Affected	Not available
		Extent of Impairment	Entire Reach

Table 2. Summary of Copper for Long Beach Harbor Cerritos Channel, E Basin, Inner Harbor

Dates of Sampling	11/3/1987 - 10/13/1999	Minimum Detected Value	0.6 µg/g
Number of Samples	27	Maximum Detected Value	1400 µg/g
Number of Detected Samples	27	Median Detected Value	107 µg/g
Hardness			N/A
pH			N/A
WER			N/A
Temperature			N/A

Data Sources

LA Contaminated Sediments Task Force Database

Beneficial Uses for Long Beach Harbor Cerritos Channel, E Basin, Inner Harbor

§ IND § REC1 § COMM § RARE
§ NAV § REC2 § MAR § SHELL

Applicable Water Quality Objectives	Out of 27 Samples:	# Exceed	% Exceed	List	Delist
270 µg/g		N/A	N/A	No	No

Triggering Water Quality Objective for Listing

No objectives were exceeded.

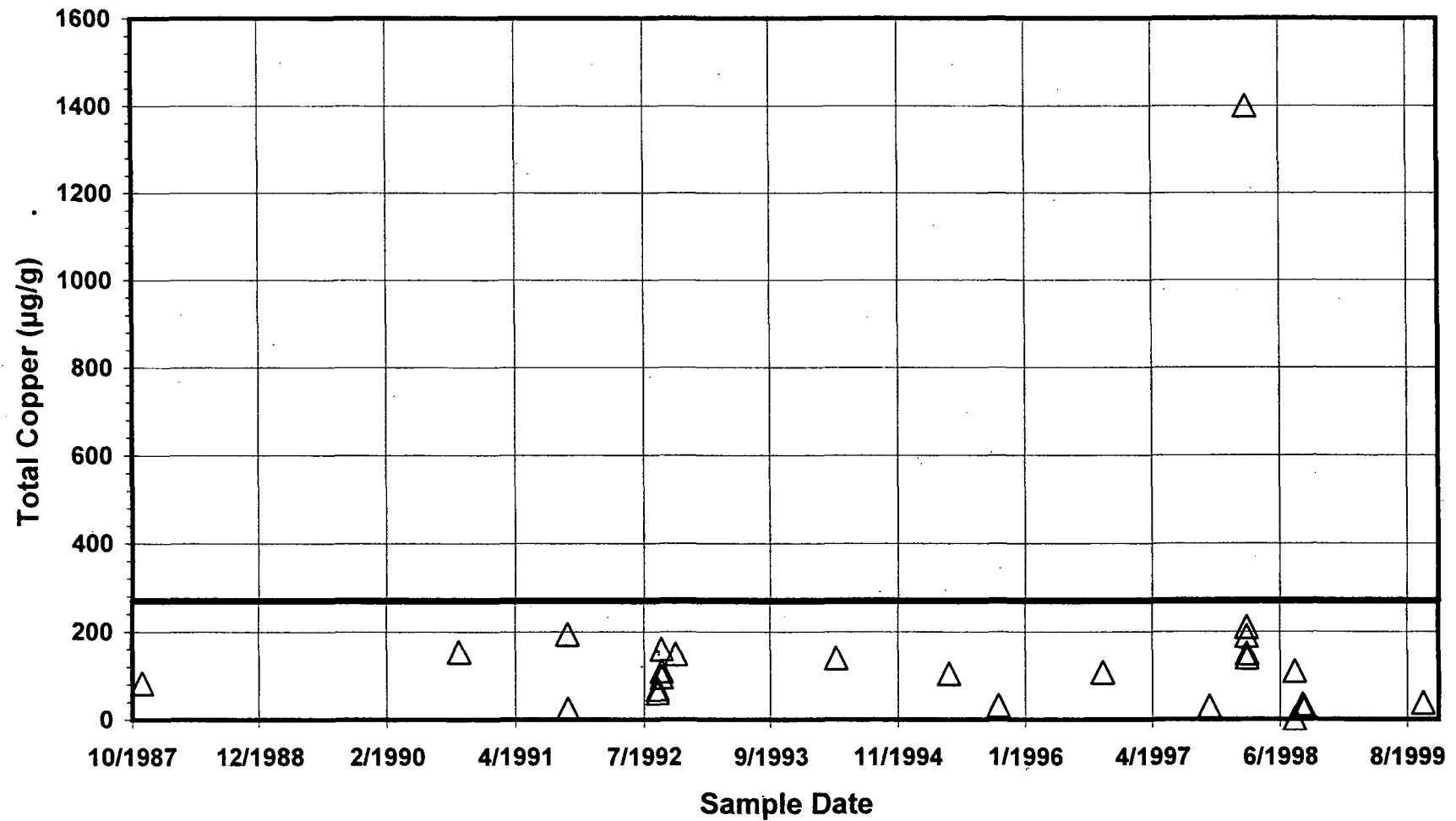
Triggering Water Quality Objective for Delisting









Not eligible for delisting.

References

None

Sediment Data Summary for Long Beach Harbor Cerritos Channel, E Basin, Inner Harbor – No Objectives



-
-  LongBeachHarborMainChannel_Cu_Total_Sediment
 -  LongBeachHarborMainChannel_Cu_Total_Sediment
 -  LongBeachHarborMainChannel_DDTs_Total_Tissue
 -  LongBeachHarborMainChannel_Zn_Total_Sediment
 -  LongBeachHarborMainChannel_Zn_Total_Sediment
 -  QueriedRecords_Cu_Total_Sediment
 -  QueriedRecords_DDTs_Total_Tissue
 -  QueriedRecords_Zn_Total_Sediment

Long Beach Harbor Main Channel, SE, W Basin, Pier J, Breakwater Total Copper - Sediment

Table 1. Data Summary Information

Waterbody Name	Long Beach Harbor Main Channel, SE, W Basin, Pier J, Breakwater	Region	4
Hydrologic Unit	405.12	Total Waterbody Size	1076 Acres
Pollutant/Stressor	Copper	Size Affected	1076 Acres
		Extent of Impairment	Entire Reach

Table 2. Summary of Copper for Long Beach Harbor Main Channel, SE, W Basin, Pier J, Breakwater

Dates of Sampling	8/18/1992 - 10/5/1998	Minimum Detected Value	0.211 µg/g
Number of Samples	266	Maximum Detected Value	1104.382 µg/g
Number of Detected Samples	266	Median Detected Value	30.15 µg/g
Hardness			N/A
pH			N/A
WER			N/A
Temperature			N/A

Data Sources

LA Contaminated Sediments Task Force Database

Beneficial Uses for Long Beach Harbor Main Channel, SE, W Basin, Pier J, Breakwater

Applicable Water Quality Objectives	Out of 266 Samples:	# Exceed	% Exceed	List	Delist
270 µg/g		N/A	N/A	No	Yes

Triggering Water Quality Objective for Listing

No objectives were exceeded.

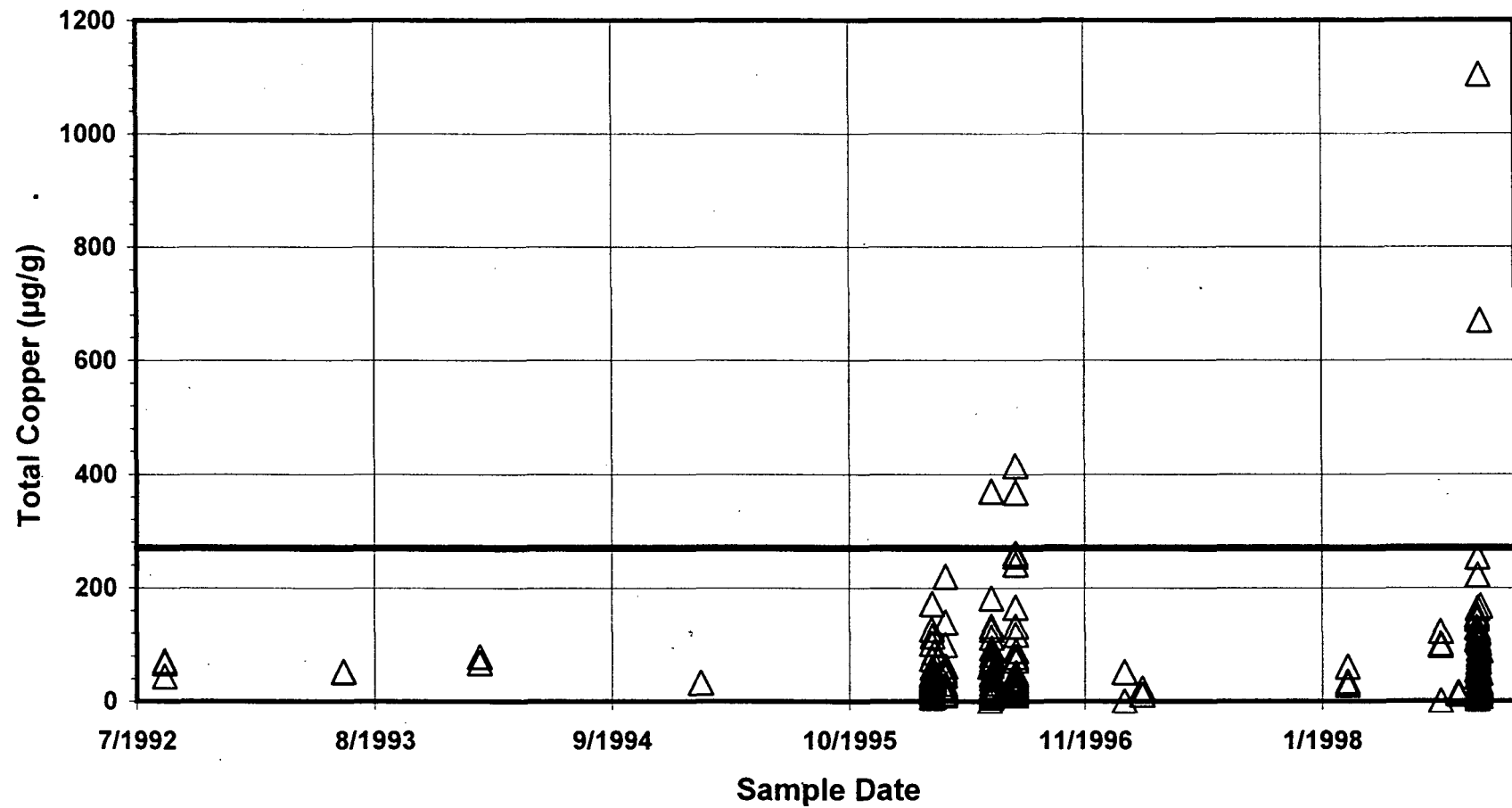
Triggering Water Quality Objective for Delisting









The contains water quality criteria for waterbodies in California. The most conservative applicable water quality criterion for total copper is 270 µg/g for the objective. In Long Beach Harbor Main Channel, SE, W Basin, Pier J, Breakwater, the criterion was exceeded in 5 of 266 samples, which is 1.9% of the sample events. Under the state's listing policy, a waterbody is eligible for delisting for total copper if there are 22 or fewer exceedances out of the 266 samples.

References

None

Sediment Data Summary for Long Beach Harbor Main Channel, SE, W Basin, Pier J, Breakwater – No Objectives



	LosAngelesHarborMainChannel_Cu_Total_Sediment
	LosAngelesHarborMainChannel_Cu_Total_Sediment
	LosAngelesHarborMainChannel_DDTs_Total_Tissue
	LosAngelesHarborMainChannel_Zn_Total_Sediment
	LosAngelesHarborMainChannel_Zn_Total_Sediment
	QueriedRecords_Cu_Total_Sediment
	QueriedRecords_DDTs_Total_Tissue
	QueriedRecords_Zn_Total_Sediment

Los Angeles Harbor Main Channel Total Copper - Sediment

Table 1. Data Summary Information

Waterbody Name	Los Angeles Harbor Main Channel	Region	4
Hydrologic Unit	405.12	Total Waterbody Size	279 Acres
Pollutant Stressor	Copper	Size of Reach	279 Acres
		Extent of Impairment	Entire Reach

Table 2. Summary of Copper for Los Angeles Harbor Main Channel

Dates of Sampling	5/6/1993 - 12/20/2002	Minimum Detected Value	0.41 µg/g
Number of Samples	57	Maximum Detected Value	1200 µg/g
Number of Detected Samples	56	Median Detected Value	50.5 µg/g
Hardness			N/A
pH			N/A
WER			N/A
Temperature			N/A

Data Sources

LA Contaminated Sediments Task Force Database

Beneficial Uses for Los Angeles Harbor Main Channel

§ IND § FRSH § POW § SAL
 § AGR § NAV § AQUA § WILD

Applicable Water Quality Objectives	Out of 57 Samples:	# Exceed	% Exceed	List	Delist
270 µg/g		N/A	N/A	No	Yes

Triggering Water Quality Objective for Listing









No objectives were exceeded.

Triggering Water Quality Objective for Delisting

The contains water quality criteria for waterbodies in California. The most conservative applicable water quality criterion for total copper is 270 µg/g for the objective. In Los Angeles Harbor Main Channel, the criterion was exceeded in 3 of 57 samples, which is 5.3% of the sample events. Under the state's listing policy, a waterbody is eligible for delisting for total copper if there are 4 or fewer exceedances out of the 57 samples.

References

None

-
-  LosAngelesHarborEWBasin_Cu_Total_Sediment
 -  LosAngelesHarborEWBasin_Cu_Total_Sediment
 -  LosAngelesHarborEWBasin_DDTs_Total_Tissue
 -  LosAngelesHarborEWBasin_Zn_Total_Sediment
 -  LosAngelesHarborEWBasin_Zn_Total_Sediment
 -  QueriedRecords_Cu_Total_Sediment
 -  QueriedRecords_DDTs_Total_Tissue
 -  QueriedRecords_Zn_Total_Sediment

Los Angeles Harbor E , W Basin, Slip No 1, Slip No 5, Turning Basin, Cerritos Channel Total Copper - Sediment

Table 1. Data Summary Information

Waterbody Name	Los Angeles Harbor E , W Basin, Slip No 1, Slip No 5, Turning Basin, Cerritos Channel	Region	4
Hydrologic Unit	405.12	Total Waterbody Size	Not available
Pollutant/Stream	Copper	Slips Affected	Not available
		Extent of Impairment	Entire Reach

Table 2. Summary of Copper for Los Angeles Harbor E , W Basin, Slip No 1, Slip No 5, Turning Basin, Cerritos C

Dates of Sampling	11/3/1987 - 1/1/2003	Minimum Detected Value	0.272 µg/g
Number of Samples	280	Maximum Detected Value	300 µg/g
Number of Detected Samples	280	Median Detected Value	46.3 µg/g
Hardness			N/A
pH			N/A
WER			N/A
Temperature			N/A

Data Sources

LA Contaminated Sediments Task Force Database

Beneficial Uses for Los Angeles Harbor E , W Basin, Slip No 1, Slip No 5, Turning Basin, Cerrito

§ IND § REC1 § COMM § RARE
§ NAV § REC2 § MAR § SHELL

Applicable Water Quality Objectives	Out of 280 Samples:	# Exceed	% Exceed	List	Delist
270 µg/g		N/A	N/A	No	Yes

Triggering Water Quality Objective for Listing

No objectives were exceeded.

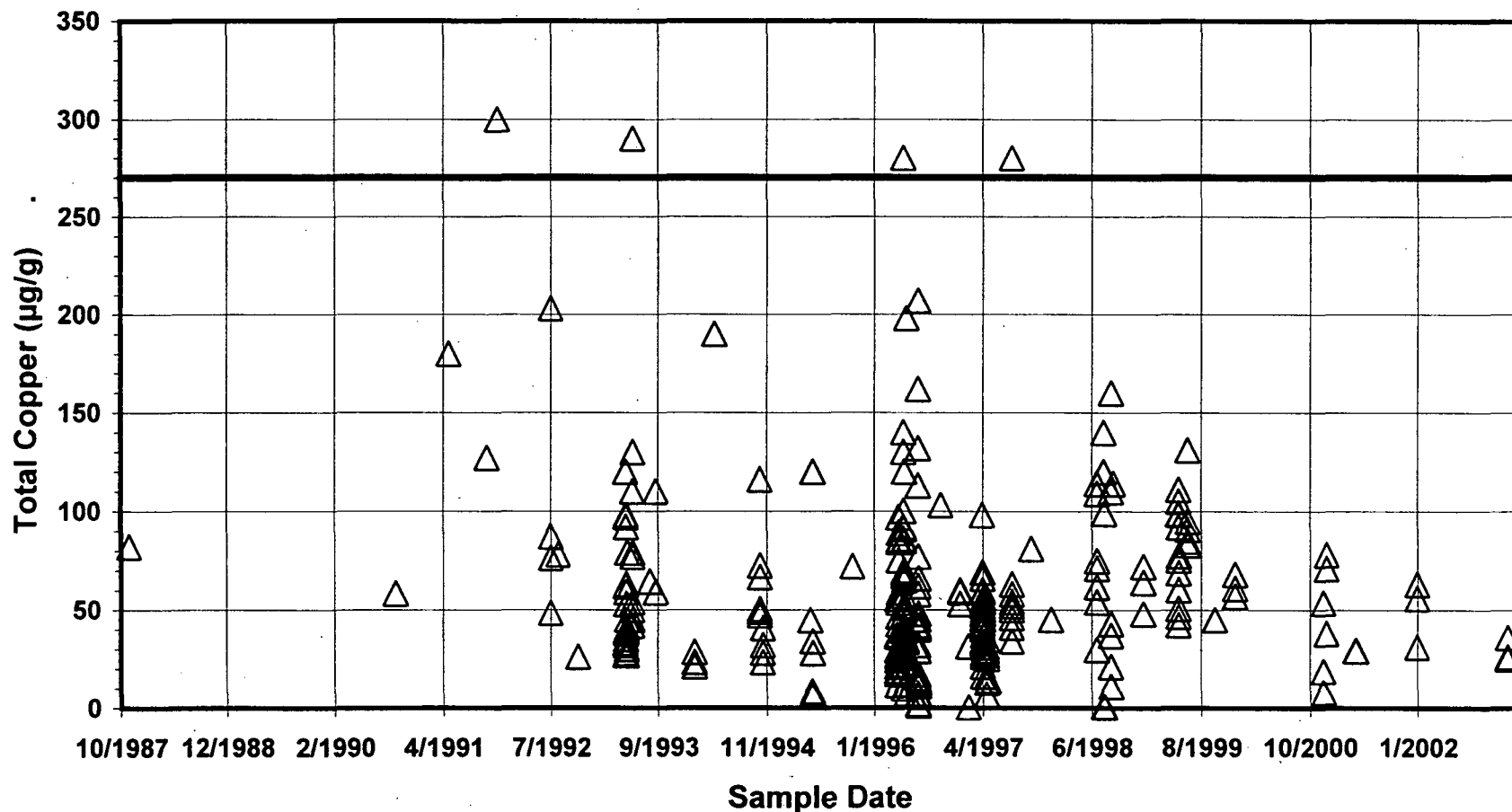
Triggering Water Quality Objective for Delisting

The contains water quality criteria for waterbodies in California. The most conservative applicable water quality criterion for total copper is 270 µg/g for the objective. In Los Angeles Harbor E , W Basin, Slip No 1, Slip No 5, Turning Basin, Cerritos Channel, the criterion was exceeded in 4 of 280 samples, which is 1.4% of the sample events. Under the state's listing policy, a waterbody is eligible for delisting for total copper if there are 23 or fewer exceedances out of the 280 samples.

References

None

Sediment Data Summary for Los Angeles Harbor E , W Basin, Slip No 1, Slip No 5, Turning Basin, Cerritos Channel – No Objectives



- LosAngelesHarborSouthwestSlip_Cu_Total_Sediment
- LosAngelesHarborSouthwestSlip_Cu_Total_Sediment
- LosAngelesHarborSouthwestSlip_Zn_Total_Sediment
- LosAngelesHarborSouthwestSlip_Zn_Total_Sediment
- QueriedRecords_Cu_Total_Sediment
- QueriedRecords_Zn_Total_Sediment

Inner
LB Harbor, main
channel SE W
Basin Pier 3 Break-
water?

Los Angeles ~~Harbor~~
Harbor (Main channel)

LA Harbor SW Slip

Outer
Inner Breakwater
(LA Harbor)

Los Angeles Harbor Southwest Slip Total Copper - Sediment

Table 1. Data Summary Information

Waterbody Name	Los Angeles Harbor Southwest Slip	Region	4
Hydrologic Unit	405.12	Total Waterbody Size	63 Acres
Pollutant/Stressor	Copper	Size Affected	63 Acres
		Extent of Impairment	Entire Reach

Table 2. Summary of Copper for Los Angeles Harbor Southwest Slip

Dates of Sampling	4/30/1993 - 4/14/1997	Minimum Detected Value	32 µg/g
Number of Samples	24	Maximum Detected Value	990 µg/g
Number of Detected Samples	24	Median Detected Value	101 µg/g
Hardness			N/A
pH			N/A
WER			N/A
Temperature			N/A

Data Sources

LA Contaminated Sediments Task Force Database

Beneficial Uses for Los Angeles Harbor Southwest Slip

§ IND § FRSH § POW § SAL
§ AGR § NAV § AQUA § WILD

Applicable Water Quality Objectives	Out of 24 Samples:	# Exceed	% Exceed	List	Delist
270 µg/g		N/A	N/A	Yes	No

Triggering Water Quality Objective for Listing

The contains water quality criteria for waterbodies in California. The most conservative applicable water quality criterion for total copper is 270 µg/g for the objective. In Los Angeles Harbor Southwest Slip, the criterion was exceeded in 6 of 24 samples, which is 25% of the sample events. Under the state's listing policy, a waterbody is considered to be impaired for total copper if there are 2 or more exceedances out of the 24 samples.

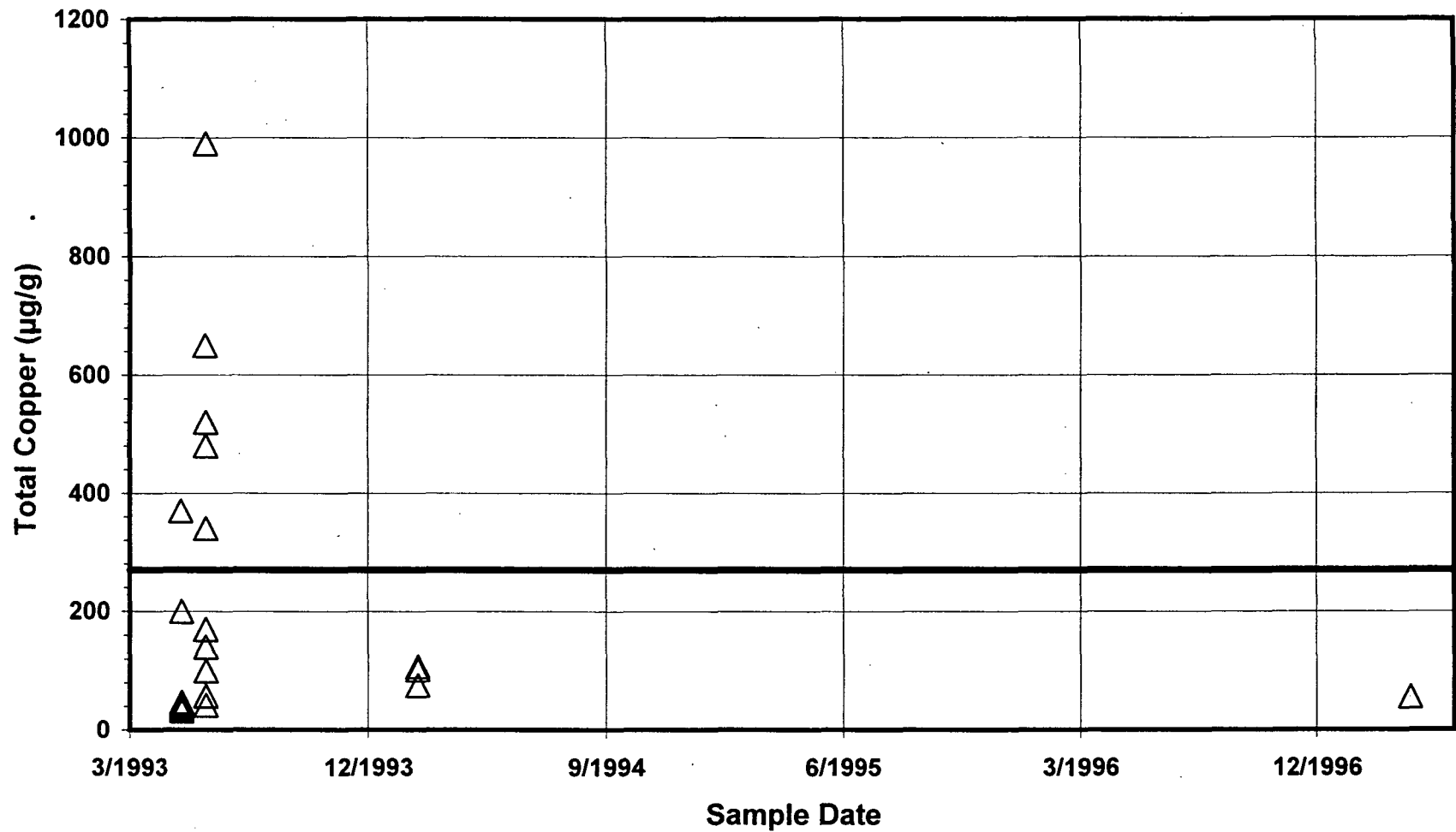
Triggering Water Quality Objective for Delisting

Not eligible for delisting.

References

None

Sediment Data Summary for Los Angeles Harbor Southwest Slip – No Objectives



Raw Data

Los Angeles Harbor Southwest Slip
Total Copper - Sediment

Record#	SiteID	Waterbody	Class	Constituent	Num	Result	Units	Sample Date	Data Ql	Matrix	Sample Type	Sample Fraction	Analytical Method	MDL	Project#	Project Name	Data Source	Filename/Spreadsheet	Hardness	pH	Temp	Count	
43	1062	Los Angeles Harbor Southwest Slip	Metal	Copper	=	102	µg/g	01-Feb-94	Good	Sediment	Grab, modified Van	Dry	Total		BP	LA Contaminated Sediments Task F	SWRCB	LA consed taskforce_LACSTF_2_LAconsed	CSTF_SQD_Ver2.0.mdb			1	
140	1063	Los Angeles Harbor Southwest Slip	Metal	Copper	=	107	µg/g	01-Feb-94	Good	Sediment	Grab, modified Van	Dry	Total		BP	LA Contaminated Sediments Task F	SWRCB	LA consed taskforce_LACSTF_2_LAconsed	CSTF_SQD_Ver2.0.mdb			1	
237	1064	Los Angeles Harbor Southwest Slip	Metal	Copper	=	75.2	µg/g	01-Feb-94	Good	Sediment	Grab, modified Van	Dry	Total		BP	LA Contaminated Sediments Task F	SWRCB	LA consed taskforce_LACSTF_2_LAconsed	CSTF_SQD_Ver2.0.mdb			1	
320	107-9 A	Los Angeles Harbor Southwest Slip	Metal	Copper	=	650	µg/g	28-May-93	Good	Sediment	Core	Dry	Total	EPA7211	0.1	112	LA Contaminated Sediments Task F	SWRCB	LA consed taskforce_LACSTF_2_LAconsed	CSTF_SQD_Ver2.0.mdb			1
403	107-9 B	Los Angeles Harbor Southwest Slip	Metal	Copper	=	520	µg/g	29-May-93	Good	Sediment	Core	Dry	Total	EPA7211	0.1	112	LA Contaminated Sediments Task F	SWRCB	LA consed taskforce_LACSTF_2_LAconsed	CSTF_SQD_Ver2.0.mdb			1
404	107-9 B	Los Angeles Harbor Southwest Slip	Metal	Copper	=	990	µg/g	29-May-93	Good	Sediment	Core	Dry	Total	EPA7211	0.1	112	LA Contaminated Sediments Task F	SWRCB	LA consed taskforce_LACSTF_2_LAconsed	CSTF_SQD_Ver2.0.mdb			1
405	107-9 B	Los Angeles Harbor Southwest Slip	Metal	Copper	=	57	µg/g	29-May-93	Good	Sediment	Core	Dry	Total	EPA7211	0.1	112	LA Contaminated Sediments Task F	SWRCB	LA consed taskforce_LACSTF_2_LAconsed	CSTF_SQD_Ver2.0.mdb			1
509	107-9 C	Los Angeles Harbor Southwest Slip	Metal	Copper	=	170	µg/g	29-May-93	Good	Sediment	Core	Dry	Total	EPA7211	0.1	112	LA Contaminated Sediments Task F	SWRCB	LA consed taskforce_LACSTF_2_LAconsed	CSTF_SQD_Ver2.0.mdb			1
510	107-9 C	Los Angeles Harbor Southwest Slip	Metal	Copper	=	480	µg/g	29-May-93	Good	Sediment	Core	Dry	Total	EPA7211	0.1	112	LA Contaminated Sediments Task F	SWRCB	LA consed taskforce_LACSTF_2_LAconsed	CSTF_SQD_Ver2.0.mdb			1
598	107-9 D	Los Angeles Harbor Southwest Slip	Metal	Copper	=	340	µg/g	29-May-93	Good	Sediment	Core	Dry	Total	EPA7211	0.1	112	LA Contaminated Sediments Task F	SWRCB	LA consed taskforce_LACSTF_2_LAconsed	CSTF_SQD_Ver2.0.mdb			1
599	107-9 D	Los Angeles Harbor Southwest Slip	Metal	Copper	=	42	µg/g	29-May-93	Good	Sediment	Core	Dry	Total	EPA7211	0.1	112	LA Contaminated Sediments Task F	SWRCB	LA consed taskforce_LACSTF_2_LAconsed	CSTF_SQD_Ver2.0.mdb			1
676	107-9 E	Los Angeles Harbor Southwest Slip	Metal	Copper	=	140	µg/g	29-May-93	Good	Sediment	Core	Dry	Total	EPA7211	0.1	112	LA Contaminated Sediments Task F	SWRCB	LA consed taskforce_LACSTF_2_LAconsed	CSTF_SQD_Ver2.0.mdb			1
737	107-9 F	Los Angeles Harbor Southwest Slip	Metal	Copper	=	100	µg/g	29-May-93	Good	Sediment	Core	Dry	Total	EPA7211	0.1	112	LA Contaminated Sediments Task F	SWRCB	LA consed taskforce_LACSTF_2_LAconsed	CSTF_SQD_Ver2.0.mdb			1
798	107-9 G	Los Angeles Harbor Southwest Slip	Metal	Copper	=	170	µg/g	29-May-93	Good	Sediment	Core	Dry	Total	EPA7211	0.1	112	LA Contaminated Sediments Task F	SWRCB	LA consed taskforce_LACSTF_2_LAconsed	CSTF_SQD_Ver2.0.mdb			1
860	118/120	Los Angeles Harbor Southwest Slip	Metal	Copper	=	56	µg/g	14-Apr-97	Good	Sediment	Composite, core	Dry	Total	EPA6020	0.1	48	LA Contaminated Sediments Task F	SWRCB	LA consed taskforce_LACSTF_2_LAconsed	CSTF_SQD_Ver2.0.mdb			1
925	FTS-1	Los Angeles Harbor Southwest Slip	Metal	Copper	=	45	µg/g	01-May-93	Good	Sediment	Core, vibracore	Dry	Total	EPA7211		15	LA Contaminated Sediments Task F	SWRCB	LA consed taskforce_LACSTF_2_LAconsed	CSTF_SQD_Ver2.0.mdb			1
926	FTS-1	Los Angeles Harbor Southwest Slip	Metal	Copper	=	41	µg/g	01-May-93	Good	Sediment	Core, vibracore	Dry	Total	EPA7211		15	LA Contaminated Sediments Task F	SWRCB	LA consed taskforce_LACSTF_2_LAconsed	CSTF_SQD_Ver2.0.mdb			1
927	FTS-1	Los Angeles Harbor Southwest Slip	Metal	Copper	=	32	µg/g	01-May-93	Good	Sediment	Core, vibracore	Dry	Total	EPA7211		15	LA Contaminated Sediments Task F	SWRCB	LA consed taskforce_LACSTF_2_LAconsed	CSTF_SQD_Ver2.0.mdb			1
928	FTS-1	Los Angeles Harbor Southwest Slip	Metal	Copper	=	47	µg/g	01-May-93	Good	Sediment	Core, vibracore	Dry	Total	EPA7211		15	LA Contaminated Sediments Task F	SWRCB	LA consed taskforce_LACSTF_2_LAconsed	CSTF_SQD_Ver2.0.mdb			1
1006	FTS-2	Los Angeles Harbor Southwest Slip	Metal	Copper	=	39	µg/g	01-May-93	Good	Sediment	Core, vibracore	Dry	Total	EPA7211		15	LA Contaminated Sediments Task F	SWRCB	LA consed taskforce_LACSTF_2_LAconsed	CSTF_SQD_Ver2.0.mdb			1
1007	FTS-2	Los Angeles Harbor Southwest Slip	Metal	Copper	=	44	µg/g	01-May-93	Good	Sediment	Core, vibracore	Dry	Total	EPA7211		15	LA Contaminated Sediments Task F	SWRCB	LA consed taskforce_LACSTF_2_LAconsed	CSTF_SQD_Ver2.0.mdb			1
1008	FTS-2	Los Angeles Harbor Southwest Slip	Metal	Copper	=	200	µg/g	01-May-93	Good	Sediment	Core, vibracore	Dry	Total	EPA7211		15	LA Contaminated Sediments Task F	SWRCB	LA consed taskforce_LACSTF_2_LAconsed	CSTF_SQD_Ver2.0.mdb			1
1009	FTS-2	Los Angeles Harbor Southwest Slip	Metal	Copper	=	36	µg/g	01-May-93	Good	Sediment	Core, vibracore	Dry	Total	EPA7211		15	LA Contaminated Sediments Task F	SWRCB	LA consed taskforce_LACSTF_2_LAconsed	CSTF_SQD_Ver2.0.mdb			1
1076	FTS-3	Los Angeles Harbor Southwest Slip	Metal	Copper	=	370	µg/g	30-Apr-93	Good	Sediment	Core, vibracore	Dry	Total	EPA7211		15	LA Contaminated Sediments Task F	SWRCB	LA consed taskforce_LACSTF_2_LAconsed	CSTF_SQD_Ver2.0.mdb			1

Long Beach Harbor Main Channel, SE, W Basin, Pier J, Breakwater Total Zinc - Sediment

Table 1. Data Summary Information

Waterbody Name	Long Beach Harbor Main Channel, SE, W Basin, Pier J, Breakwater	Region	4
Hydrologic Unit	405.12	Total Waterbody Size	1076 Acres
Pollutant/Stressor	Zinc	Size Affected	1076 Acres
		Extent of Impairment	Entire Reach

Table 2. Summary of Zinc for Long Beach Harbor Main Channel, SE, W Basin, Pier J, Breakwater

Dates of Sampling	8/18/1992 - 10/5/1998	Minimum Detected Value	0.774 µg/g
Number of Samples	263	Maximum Detected Value	4170 µg/g
Number of Detected Samples	263	Median Detected Value	80 µg/g
Hardness			N/A
pH			N/A
WER			N/A
Temperature			N/A

Data Sources

LA Contaminated Sediments Task Force Database

Beneficial Uses for Long Beach Harbor Main Channel, SE, W Basin, Pier J, Breakwater

Applicable Water Quality Objectives	Out of 263 Samples:	# Exceed	% Exceed	List	Delist
410 µg/g		N/A	N/A	No	Yes

Triggering Water Quality Objective for Listing

No objectives were exceeded.

Triggering Water Quality Objective for Delisting

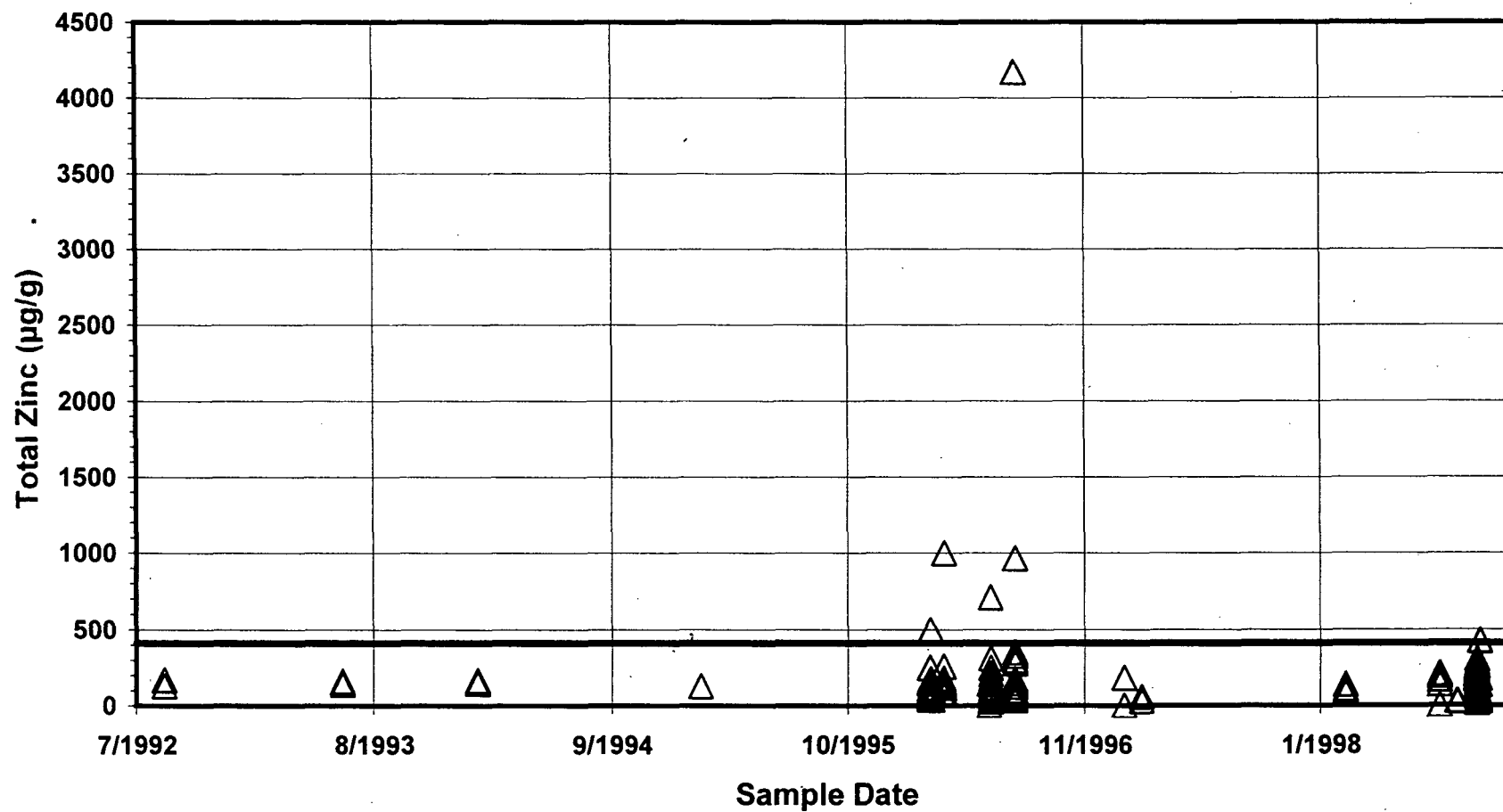
The contains water quality criteria for waterbodies in California. The most conservative applicable water quality criterion for total zinc is 410 µg/g for the objective. In Long Beach Harbor Main Channel, SE, W Basin, Pier J, Breakwater, the criterion was exceeded in 7 of 263 samples, which is 2.7% of the sample events. Under the state's listing policy, a waterbody is eligible for delisting for total zinc if there are 22 or fewer exceedances out of the 263 samples.

6

References

None

Sediment Data Summary for Long Beach Harbor Main Channel, SE, W Basin, Pier J, Breakwater – No Objectives



Long Beach Harbor Cerritos Channel, E Basin, Inner Harbor Total Zinc - Sediment

Table 1. Data Summary Information

Waterbody Name	Long Beach Harbor Cerritos Channel, E Basin, Inner Harbor	Region	4
Hydrologic Unit	405.12	Total Waterbody Size	Not available
Pollutant/Stressor	Zinc	Size Affected	Not available
		Extent of Impairment	Entire Reach

Table 2. Summary of Zinc for Long Beach Harbor Cerritos Channel, E Basin, Inner Harbor

Dates of Sampling	11/3/1987 - 10/13/1999	Minimum Detected Value	2.39 µg/g
Number of Samples	57	Maximum Detected Value	870 µg/g
Number of Detected Samples	57	Median Detected Value	200 µg/g
Hardness			N/A
pH			N/A
WER			N/A
Temperature			N/A

Data Sources

LA Contaminated Sediments Task Force Database

Beneficial Uses for Long Beach Harbor Cerritos Channel, E Basin, Inner Harbor

§ IND § REC1 § COMM § RARE
§ NAV § REC2 § MAR § SHELL

Applicable Water Quality Objectives	Out of 57 Samples:	# Exceed	% Exceed	List	Delist
410 µg/g		N/A	N/A	Yes	No

Triggering Water Quality Objective for Listing

The contains water quality criteria for waterbodies in California. The most conservative applicable water quality criterion for total zinc is 410 µg/g for the objective. In Long Beach Harbor Cerritos Channel, E Basin, Inner Harbor, the criterion was exceeded in 10 of 57 samples, which is 17.5% of the sample events. Under the state's listing policy, a waterbody is considered to be impaired for total zinc if there are 5 or more exceedances out of the 57 samples.

(11)

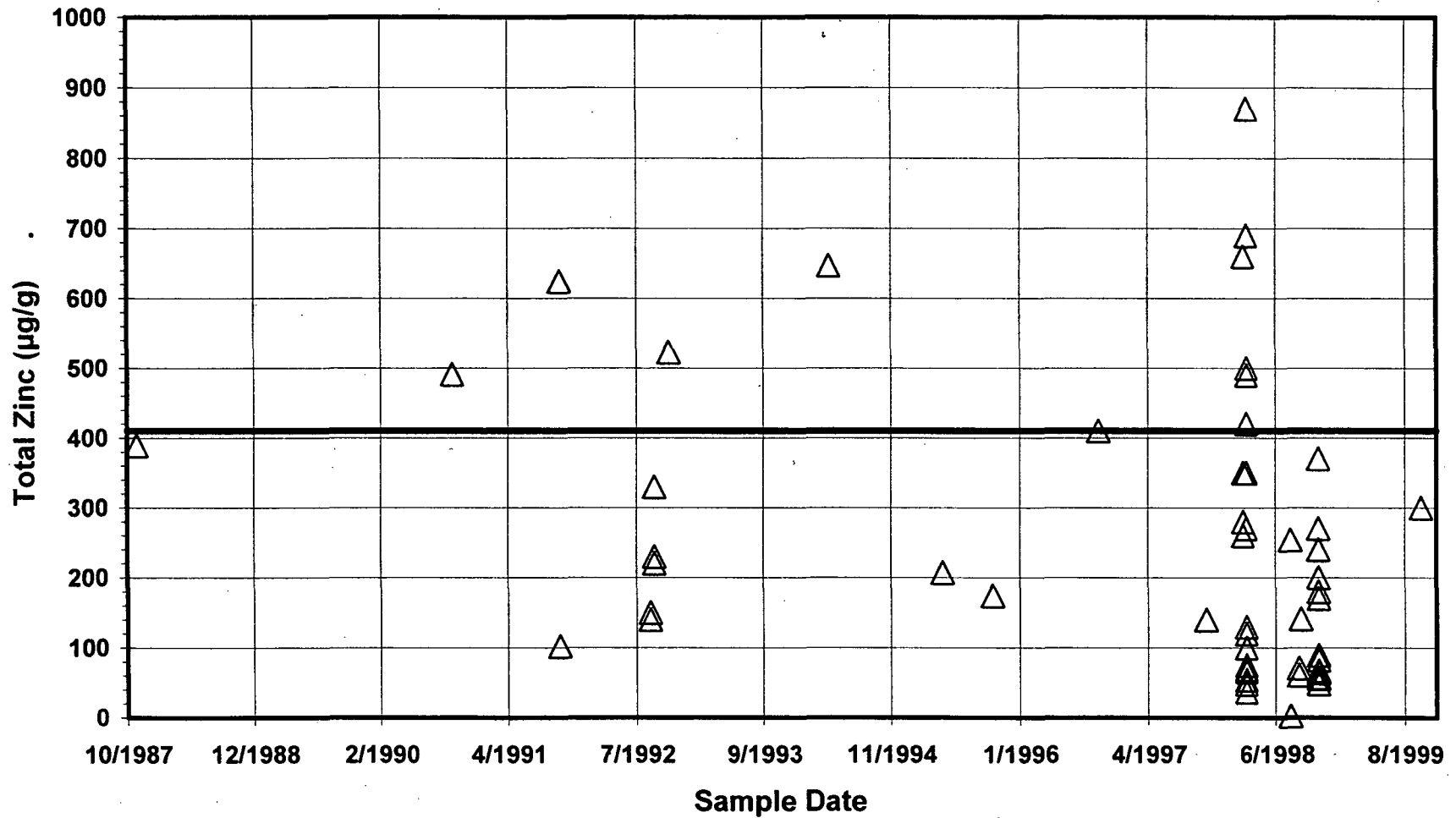
Triggering Water Quality Objective for Delisting

Not eligible for delisting.

References

None

Sediment Data Summary for Long Beach Harbor Cerritos Channel, E Basin, Inner Harbor – No Objectives



**Los Angeles Harbor E , W Basin, Slip No 1, Slip No 5, Turning Basin, Cerritos Channel
Total Zinc - Sediment**

Table 1. Data Summary Information

Waterbody Name	Los Angeles Harbor E , W Basin, Slip No 1, Slip No 5, Turning Basin, Cerritos Channel	Region	4
Hydrologic Unit	405.12	Total Waterbody Size	Not available
Pollutant/Stressor	Zinc	Size Affected	Not available
		Extent of Impairment	Entire Reach

Table 2. Summary of Zinc for Los Angeles Harbor E , W Basin, Slip No 1, Slip No 5, Turning Basin, Cerritos Chan

Dates of Sampling	11/3/1987 - 1/1/2003	Minimum Detected Value	0.399 µg/g
Number of Samples	315	Maximum Detected Value	690 µg/g
Number of Detected Samples	315	Median Detected Value	110 µg/g
Hardness			N/A
pH			N/A
WER			N/A
Temperature			N/A

Data Sources

LA Contaminated Sediments Task Force Database

Beneficial Uses for Los Angeles Harbor E , W Basin, Slip No 1, Slip No 5, Turning Basin, Cerrito

§ IND § REC1 § COMM § RARE
§ NAV § REC2 § MAR § SHELL

Applicable Water Quality Objectives	Out of 315 Samples:	# Exceed	% Exceed	List	Delist
410 µg/g		N/A	N/A	No	Yes

Triggering Water Quality Objective for Listing

No objectives were exceeded.

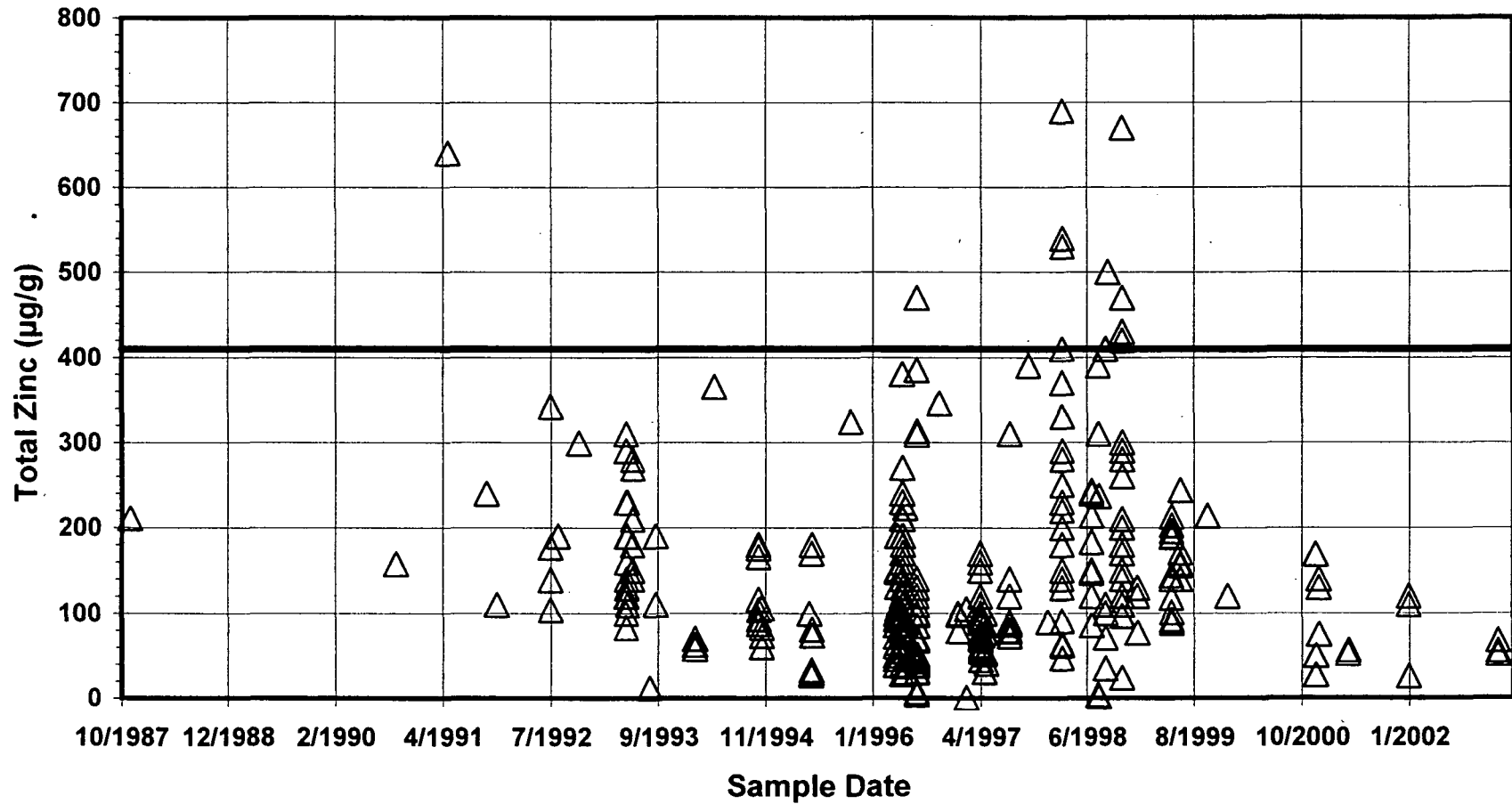
Triggering Water Quality Objective for Delisting

The contains water quality criteria for waterbodies in California. The most conservative applicable water quality criterion for total zinc is 410 µg/g for the objective. In Los Angeles Harbor E , W Basin, Slip No 1, Slip No 5, Turning Basin, Cerritos Channel, the criterion was exceeded in 10 of 315 samples, which is 3.2% of the sample events. Under the state's listing policy, a waterbody is eligible for delisting for total zinc if there are 26 or fewer exceedances out of the 315 samples.

References

None

Sediment Data Summary for Los Angeles Harbor E , W Basin, Slip No 1, Slip No 5, Turning Basin, Cerritos Channel – No Objectives



Los Angeles Harbor Main Channel Total Zinc - Sediment

Table 1. Data Summary Information

Waterbody Name	Los Angeles Harbor Main Channel	Region	4
Hydrologic Unit	405.12	Total Waterbody Size	279 Acres
Pollutant/Stressor	Zinc	Size Affected	279 Acres
		Extent of Impairment	Entire Reach

Table 2. Summary of Zinc for Los Angeles Harbor Main Channel

Dates of Sampling	5/6/1993 - 12/20/2002	Minimum Detected Value	1.34 µg/g
Number of Samples	59	Maximum Detected Value	770 µg/g
Number of Detected Samples	58	Median Detected Value	110 µg/g
Hardness			N/A
pH			N/A
WER			N/A
Temperature			N/A

Data Sources

LA Contaminated Sediments Task Force Database

Beneficial Uses for Los Angeles Harbor Main Channel

§ IND § FRSH § POW § SAL
 § AGR § NAV § AQUA § WILD

Applicable Water Quality Objectives	Out of 59 Samples:	# Exceed	% Exceed	List	Delist
410 µg/g		N/A	N/A	No	Yes

Triggering Water Quality Objective for Listing

No objectives were exceeded.

Triggering Water Quality Objective for Delisting

The contains water quality criteria for waterbodies in California. The most conservative applicable water quality criterion for total zinc is 410 µg/g for the objective. In Los Angeles Harbor Main Channel, the criterion was exceeded in 1 of 59 samples, which is 1.7% of the sample events. Under the state's listing policy, a waterbody is eligible for delisting for total zinc if there are 4 or fewer exceedances out of the 59 samples.

References

None

Los Angeles Harbor Southwest Slip Total Zinc - Sediment

Table 1. Data Summary Information

Waterbody Name	Los Angeles Harbor Southwest Slip	Region	4
Hydrologic Units	405.12	Total Waterbody Size	63 Acres
Pollutant/Stressor	Zinc	Size Affected	63 Acres
		Extent of Impairment	Entire Reach

Table 2. Summary of Zinc for Los Angeles Harbor Southwest Slip

Dates of Sampling	4/30/1993 - 4/14/1997	Minimum Detected Value	100 µg/g
Number of Samples	22	Maximum Detected Value	1850 µg/g
Number of Detected Samples	22	Median Detected Value	204 µg/g
Hardness			N/A
pH			N/A
WER			N/A
Temperature			N/A

Data Sources

LA Contaminated Sediments Task Force Database

Beneficial Uses for Los Angeles Harbor Southwest Slip

§ IND § FRSH § POW § SAL
 § AGR § NAV § AQUA § WILD

Applicable Water Quality Objectives	Out of 22 Samples:	# Exceed	% Exceed	List	Delist
410 µg/g		N/A	N/A	Yes	No

Triggering Water Quality Objective for Listing

The contains water quality criteria for waterbodies in California. The most conservative applicable water quality criterion for total zinc is 410 µg/g for the objective. In Los Angeles Harbor Southwest Slip, the criterion was exceeded in 7 of 22 samples, which is 31.8% of the sample events. Under the state's listing policy, a waterbody is considered to be impaired for total zinc if there are 2 or more exceedances out of the 22 samples.

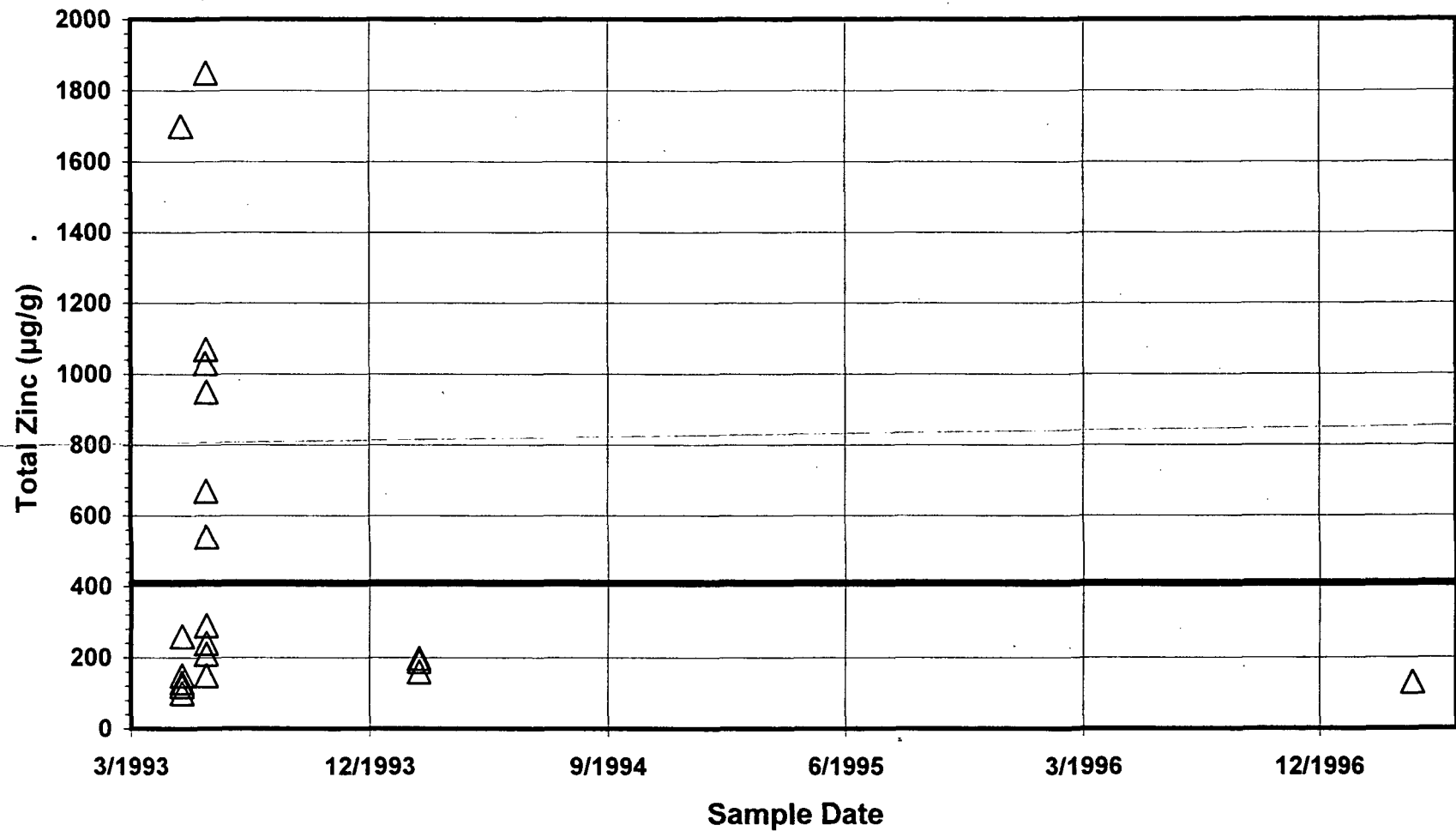
Triggering Water Quality Objective for Delisting

Not eligible for delisting.

References

None

Sediment Data Summary for Los Angeles Harbor Southwest Slip – No Objectives



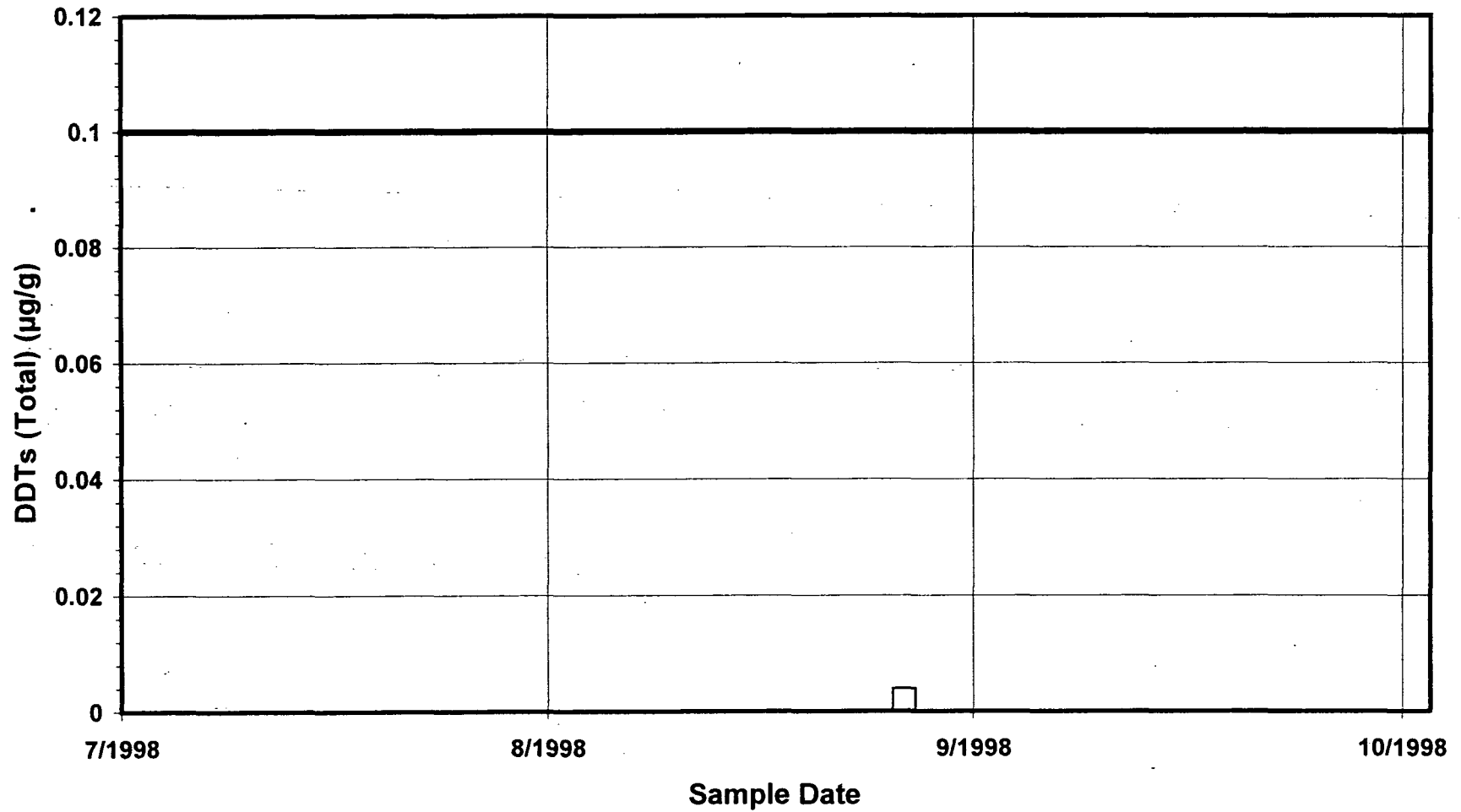
Raw Data

Los Angeles Harbor Southwest Slip
Total Zinc - Sediment

Record#	Site ID	Waterbody	Class	Const	NumOf	Result	Units	Sample Date	Data QUA	Matrix	Sample Type	Sample Fraction	Analytical Method	MDL	Project ID	Project Name	Data Source	Filename Spreadsheet	Hardness	pH	Temp	Count
97	1062	Los Angeles Harbor Southwest Slip	Metal	Zinc	=	198	µg/g	01-Feb-94	Good	Sediment	Grab, modified V	Dry	Total		BP	LA Contaminated Sediments Task F	SWRCB	LA consed taskforce	LACSTF_2	LAconsed_CSTF_SQD_Ver2.0	1	
194	1063	Los Angeles Harbor Southwest Slip	Metal	Zinc	=	189	µg/g	01-Feb-94	Good	Sediment	Grab, modified V	Dry	Total		BP	LA Contaminated Sediments Task F	SWRCB	LA consed taskforce	LACSTF_2	LAconsed_CSTF_SQD_Ver2.0	1	
291	1064	Los Angeles Harbor Southwest Slip	Metal	Zinc	=	160	µg/g	01-Feb-94	Good	Sediment	Grab, modified V	Dry	Total		BP	LA Contaminated Sediments Task F	SWRCB	LA consed taskforce	LACSTF_2	LAconsed_CSTF_SQD_Ver2.0	1	
353	107-9 A	Los Angeles Harbor Southwest Slip	Metal	Zinc	=	1030	µg/g	28-May-93	Good	Sediment	Core	Dry	Total	EPA7950	0.1	112	LA Contaminated Sediments Task F	SWRCB	LA consed taskforce	LACSTF_2	LAconsed_CSTF_SQD_Ver2.0	1
468	107-9 B	Los Angeles Harbor Southwest Slip	Metal	Zinc	=	950	µg/g	29-May-93	Good	Sediment	Core	Dry	Total	EPA7950	0.1	112	LA Contaminated Sediments Task F	SWRCB	LA consed taskforce	LACSTF_2	LAconsed_CSTF_SQD_Ver2.0	1
469	107-9 B	Los Angeles Harbor Southwest Slip	Metal	Zinc	=	150	µg/g	29-May-93	Good	Sediment	Core	Dry	Total	EPA7950	0.1	112	LA Contaminated Sediments Task F	SWRCB	LA consed taskforce	LACSTF_2	LAconsed_CSTF_SQD_Ver2.0	1
470	107-9 B	Los Angeles Harbor Southwest Slip	Metal	Zinc	=	1070	µg/g	29-May-93	Good	Sediment	Core	Dry	Total	EPA7950	0.1	112	LA Contaminated Sediments Task F	SWRCB	LA consed taskforce	LACSTF_2	LAconsed_CSTF_SQD_Ver2.0	1
560	107-9 C	Los Angeles Harbor Southwest Slip	Metal	Zinc	=	670	µg/g	29-May-93	Good	Sediment	Core	Dry	Total	EPA7950	0.1	112	LA Contaminated Sediments Task F	SWRCB	LA consed taskforce	LACSTF_2	LAconsed_CSTF_SQD_Ver2.0	1
561	107-9 C	Los Angeles Harbor Southwest Slip	Metal	Zinc	=	540	µg/g	29-May-93	Good	Sediment	Core	Dry	Total	EPA7950	0.1	112	LA Contaminated Sediments Task F	SWRCB	LA consed taskforce	LACSTF_2	LAconsed_CSTF_SQD_Ver2.0	1
646	107-9 D	Los Angeles Harbor Southwest Slip	Metal	Zinc	=	150	µg/g	29-May-93	Good	Sediment	Core	Dry	Total	EPA7950	0.1	112	LA Contaminated Sediments Task F	SWRCB	LA consed taskforce	LACSTF_2	LAconsed_CSTF_SQD_Ver2.0	1
647	107-9 D	Los Angeles Harbor Southwest Slip	Metal	Zinc	=	1850	µg/g	29-May-93	Good	Sediment	Core	Dry	Total	EPA7950	0.1	112	LA Contaminated Sediments Task F	SWRCB	LA consed taskforce	LACSTF_2	LAconsed_CSTF_SQD_Ver2.0	1
708	107-9 E	Los Angeles Harbor Southwest Slip	Metal	Zinc	=	240	µg/g	29-May-93	Good	Sediment	Core	Dry	Total	EPA7950	0.1	112	LA Contaminated Sediments Task F	SWRCB	LA consed taskforce	LACSTF_2	LAconsed_CSTF_SQD_Ver2.0	1
769	107-9 F	Los Angeles Harbor Southwest Slip	Metal	Zinc	=	210	µg/g	29-May-93	Good	Sediment	Core	Dry	Total	EPA7950	0.1	112	LA Contaminated Sediments Task F	SWRCB	LA consed taskforce	LACSTF_2	LAconsed_CSTF_SQD_Ver2.0	1
830	107-9 G	Los Angeles Harbor Southwest Slip	Metal	Zinc	=	290	µg/g	29-May-93	Good	Sediment	Core	Dry	Total	EPA7950	0.1	112	LA Contaminated Sediments Task F	SWRCB	LA consed taskforce	LACSTF_2	LAconsed_CSTF_SQD_Ver2.0	1
899	118/120	Los Angeles Harbor Southwest Slip	Metal	Zinc	=	130	µg/g	14-Apr-97	Good	Sediment	Composite, core	Dry	Total	EPA6020	1	48	LA Contaminated Sediments Task F	SWRCB	LA consed taskforce	LACSTF_2	LAconsed_CSTF_SQD_Ver2.0	1
970	FTS-1	Los Angeles Harbor Southwest Slip	Metal	Zinc	=	100	µg/g	01-May-93	Good	Sediment	Core, vibracore	Dry	Total	EPA7950		15	LA Contaminated Sediments Task F	SWRCB	LA consed taskforce	LACSTF_2	LAconsed_CSTF_SQD_Ver2.0	1
971	FTS-1	Los Angeles Harbor Southwest Slip	Metal	Zinc	=	130	µg/g	01-May-93	Good	Sediment	Core, vibracore	Dry	Total	EPA7950		15	LA Contaminated Sediments Task F	SWRCB	LA consed taskforce	LACSTF_2	LAconsed_CSTF_SQD_Ver2.0	1
972	FTS-1	Los Angeles Harbor Southwest Slip	Metal	Zinc	=	150	µg/g	01-May-93	Good	Sediment	Core, vibracore	Dry	Total	EPA7950		15	LA Contaminated Sediments Task F	SWRCB	LA consed taskforce	LACSTF_2	LAconsed_CSTF_SQD_Ver2.0	1
1055	FTS-2	Los Angeles Harbor Southwest Slip	Metal	Zinc	=	130	µg/g	01-May-93	Good	Sediment	Core, vibracore	Dry	Total	EPA7950		15	LA Contaminated Sediments Task F	SWRCB	LA consed taskforce	LACSTF_2	LAconsed_CSTF_SQD_Ver2.0	1
1056	FTS-2	Los Angeles Harbor Southwest Slip	Metal	Zinc	=	120	µg/g	01-May-93	Good	Sediment	Core, vibracore	Dry	Total	EPA7950		15	LA Contaminated Sediments Task F	SWRCB	LA consed taskforce	LACSTF_2	LAconsed_CSTF_SQD_Ver2.0	1
1057	FTS-2	Los Angeles Harbor Southwest Slip	Metal	Zinc	=	260	µg/g	01-May-93	Good	Sediment	Core, vibracore	Dry	Total	EPA7950		15	LA Contaminated Sediments Task F	SWRCB	LA consed taskforce	LACSTF_2	LAconsed_CSTF_SQD_Ver2.0	1
1098	FTS-3	Los Angeles Harbor Southwest Slip	Metal	Zinc	=	1700	µg/g	30-Apr-93	Good	Sediment	Core, vibracore	Dry	Total	EPA7950		15	LA Contaminated Sediments Task F	SWRCB	LA consed taskforce	LACSTF_2	LAconsed_CSTF_SQD_Ver2.0	1

①

Tissue Data Summary for Long Beach Harbor Cerritos Channel, E Basin, Inner Harbor – No Objectives

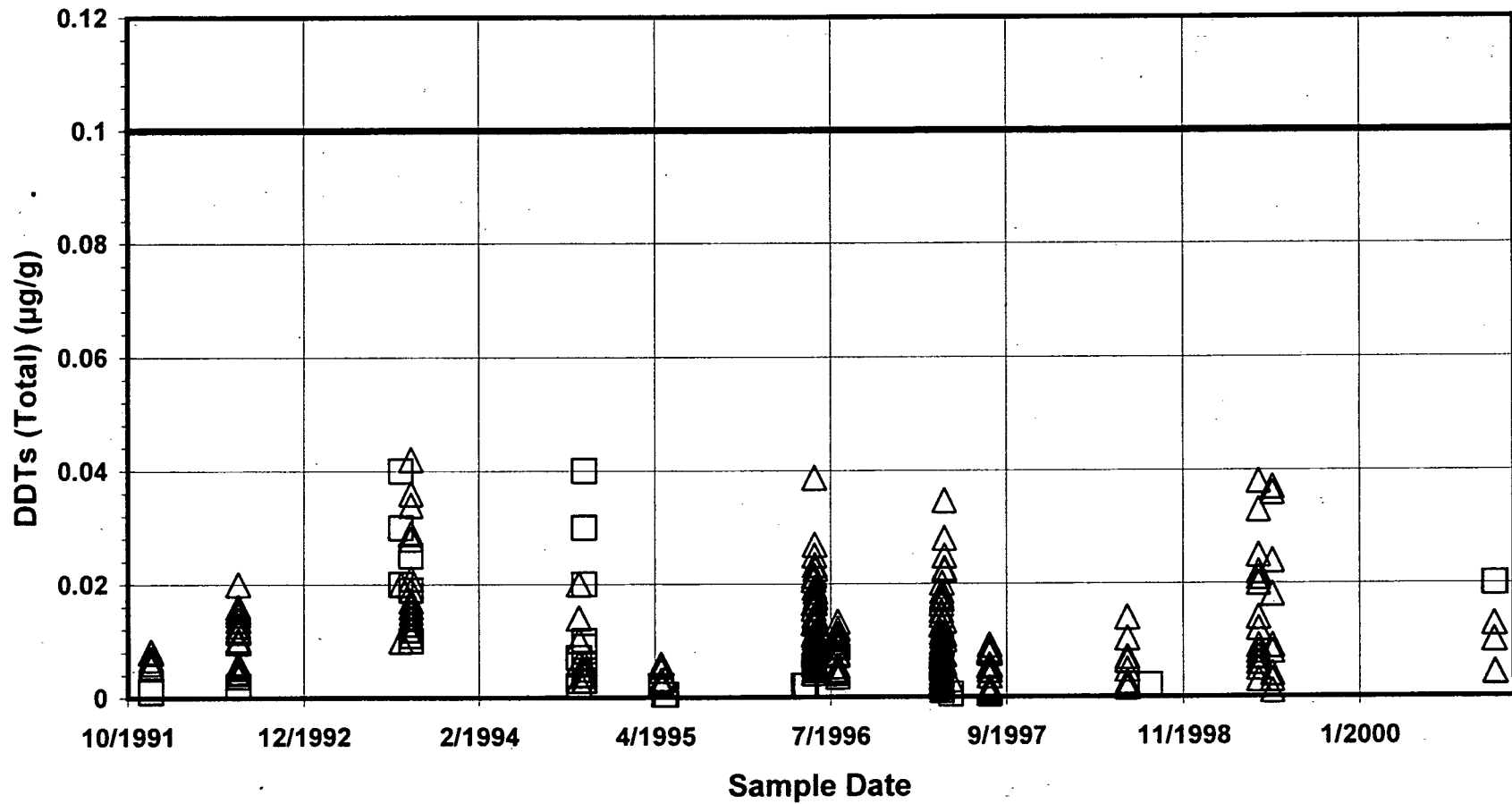


Raw Data

Long Beach Harbor Cerritos Channel
DDTs (Total) - Tissue

Record#	Site ID	Waterbody	Classification	Constituent	Num	Result	Units	Sample Date	Data QC	Matrix	Sample Type	Sample Organism	Analytical Method	Project Name	Data Source	Filename	Spreadsheet	Count	
948	Area E	Long Beach Harbor Cerritos Channel, E Basin, Inner Ha	OC Pesticide	DDTs (Total)	<	0.002	µg/g	27-Aug-98	Good	Tissue	Composite	Wet	Macoma nasuta (Shell)	EPA8080	LA Contaminated Sediments Ta	SWRCB	LA consed taskforce	LACSTF_2_LAconsed_C	1
2422	Area F	Long Beach Harbor Cerritos Channel, E Basin, Inner Ha	OC Pesticide	DDTs (Total)	<	0.002	µg/g	27-Aug-98	Good	Tissue	Composite	Wet	Macoma nasuta (Shell)	EPA8080	LA Contaminated Sediments Ta	SWRCB	LA consed taskforce	LACSTF_2_LAconsed_C	1

Tissue Data Summary for Los Angeles Harbor E , W Basin, Slip No 1, Slip No 5, Turning Basin, Cerritos Channel – No Objectives









Raw Data

Los Angeles Harbor E , W Basin, Slip No 1, Slip No 5, Turning Basin, Cerritos Channel
DDTs (Total) - Tissue

32977	Slip 5	Los Angeles Harbor E , W Basin, Slip No 1, Slip No 5, Turning Basin, Cerritos Channel	OC Pesticide	DDTs (Total) =	0.0016	µg/g	01-Jul-98	Good	Tissue	Composite, 4Wet	Nephtys caecoides	NR
32978	Slip 5	Los Angeles Harbor E , W Basin, Slip No 1, Slip No 5, Turning Basin, Cerritos Channel	OC Pesticide	DDTs (Total) =	0.007	µg/g	01-Jul-98	Good	Tissue	Composite, 4Wet	Macoma nasuta (Shellfi	NR
32979	Slip 5	Los Angeles Harbor E , W Basin, Slip No 1, Slip No 5, Turning Basin, Cerritos Channel	OC Pesticide	DDTs (Total) =	0.007	µg/g	01-Jul-98	Good	Tissue	Composite, 4Wet	Nephtys caecoides	NR
33543	Test Site	Los Angeles Harbor E , W Basin, Slip No 1, Slip No 5, Turning Basin, Cerritos Channel	OC Pesticide	DDTs (Total) =	0.0024	µg/g	10-May-95	Good	Tissue	Composite, 4Wet	Nephtys caecoides	EPA8080
33544	Test Site	Los Angeles Harbor E , W Basin, Slip No 1, Slip No 5, Turning Basin, Cerritos Channel	OC Pesticide	DDTs (Total) =	0.0058	µg/g	10-May-95	Good	Tissue	Composite, 4Wet	Nephtys caecoides	EPA8080
33545	Test Site	Los Angeles Harbor E , W Basin, Slip No 1, Slip No 5, Turning Basin, Cerritos Channel	OC Pesticide	DDTs (Total) =	0.0023	µg/g	10-May-95	Good	Tissue	Composite, 4Wet	Nephtys caecoides	EPA8080
33546	Test Site	Los Angeles Harbor E , W Basin, Slip No 1, Slip No 5, Turning Basin, Cerritos Channel	OC Pesticide	DDTs (Total) =	0.00278	µg/g	10-May-95	Good	Tissue	Composite, 4Wet	Macoma nasuta (Shellfi	EPA8080
33547	Test Site	Los Angeles Harbor E , W Basin, Slip No 1, Slip No 5, Turning Basin, Cerritos Channel	OC Pesticide	DDTs (Total) =	0.00478	µg/g	10-May-95	Good	Tissue	Composite, 4Wet	Macoma nasuta (Shellfi	EPA8080
33548	Test Site	Los Angeles Harbor E , W Basin, Slip No 1, Slip No 5, Turning Basin, Cerritos Channel	OC Pesticide	DDTs (Total) =	0.00241	µg/g	10-May-95	Good	Tissue	Composite, 4Wet	Macoma nasuta (Shellfi	EPA8080
33549	Test Site	Los Angeles Harbor E , W Basin, Slip No 1, Slip No 5, Turning Basin, Cerritos Channel	OC Pesticide	DDTs (Total) =	0.00543	µg/g	10-May-95	Good	Tissue	Composite, 4Wet	Nephtys caecoides	EPA8080
33550	Test Site	Los Angeles Harbor E , W Basin, Slip No 1, Slip No 5, Turning Basin, Cerritos Channel	OC Pesticide	DDTs (Total) =	0.002	µg/g	10-May-95	Good	Tissue	Composite, 4Wet	Macoma nasuta (Shellfi	EPA8080
33552	Test Site	Los Angeles Harbor E , W Basin, Slip No 1, Slip No 5, Turning Basin, Cerritos Channel	OC Pesticide	DDTs (Total) =	0.00297	µg/g	10-May-95	Good	Tissue	Composite, 4Wet	Nephtys caecoides	EPA8080

104	LA Contaminated Sediments Tas	SWRCB	LA consed taskforce	LACSTF 2 LA	1
104	LA Contaminated Sediments Tas	SWRCB	LA consed taskforce	LACSTF 2 LA	1
104	LA Contaminated Sediments Tas	SWRCB	LA consed taskforce	LACSTF 2 LA	1
9	LA Contaminated Sediments Tas	SWRCB	LA consed taskforce	LACSTF 2 LA	1
9	LA Contaminated Sediments Tas	SWRCB	LA consed taskforce	LACSTF 2 LA	1
9	LA Contaminated Sediments Tas	SWRCB	LA consed taskforce	LACSTF 2 LA	1
9	LA Contaminated Sediments Tas	SWRCB	LA consed taskforce	LACSTF 2 LA	1
9	LA Contaminated Sediments Tas	SWRCB	LA consed taskforce	LACSTF 2 LA	1
9	LA Contaminated Sediments Tas	SWRCB	LA consed taskforce	LACSTF 2 LA	1
9	LA Contaminated Sediments Tas	SWRCB	LA consed taskforce	LACSTF 2 LA	1
9	LA Contaminated Sediments Tas	SWRCB	LA consed taskforce	LACSTF 2 LA	1
9	LA Contaminated Sediments Tas	SWRCB	LA consed taskforce	LACSTF 2 LA	1

	LAHarborInnerCabrilloBeachArea_Enterococcus_Water
	LAHarborInnerCabrilloBeachArea_Enterococcus_Water
	LAHarborInnerCabrilloBeachArea_TotalColiform_Water
	LAHarborInnerCabrilloBeachArea_TotalColiform_Water
	QueriedRecords_Enterococcus_Water
	QueriedRecords_TotalColiform_Water

Cabrillo Beach (Inner) LA Harbor Area Enterococcus - Water

Table 1. Data Summary Information

Waterbody Name	Cabrillo Beach (Inner) LA Harbor Area	Region	4
Hydrologic Unit	405.12	Total Waterbody Size	0.56 Miles
Pollutant/Stressor	Enterococcus	Size Affected	0.56 Miles
		Extent of Impairment	Entire Reach

Table 2. Summary of Enterococcus for Cabrillo Beach (Inner) LA Harbor Area

Dates of Sampling	1/1/1996 - 4/29/2003	Minimum Detected Value	1 MPN/100mL
Number of Samples	2963	Maximum Detected Value	11000 MPN/100mL
Number of Detected Samples	2963	Median Detected Value	18 MPN/100mL
Hardness			N/A
pH			N/A
WER			N/A
Temperature			N/A

Data Sources

Raw Bacteria Data from Cabrillo Beach

Beneficial Uses for Cabrillo Beach (Inner) LA Harbor Area

§ NAV § REC2 § MAR § MIGR § SHELL
 § RECI § COMM § WILD § SPWN

Applicable Water Quality Objectives	Out of 2963 Samples:	# Exceed	% Exceed	List	Delist
35 MPN/100mL Basin Plan REC1 Marine 30-Day Minimum 5 samples		668	22.5%	Yes	No
104 MPN/100mL Basin Plan REC1 Marine Single sample		413	13.9%	No	Yes

Triggering Water Quality Objective for Listing

The Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994 contains water quality criteria for waterbodies in the Los Angeles Region. The most conservative applicable water quality criterion for enterococcus is 35 MPN/100mL for the Basin Plan REC1 Marine 30-Day Minimum 5 samples objective. In Cabrillo Beach (Inner) LA Harbor Area, the criterion was exceeded in 668 of 2963 samples, which is 22.5% of the sample events. Under the state's listing policy, a waterbody is considered to be impaired for enterococcus if there are 492 or more exceedances out of the 2963 samples.

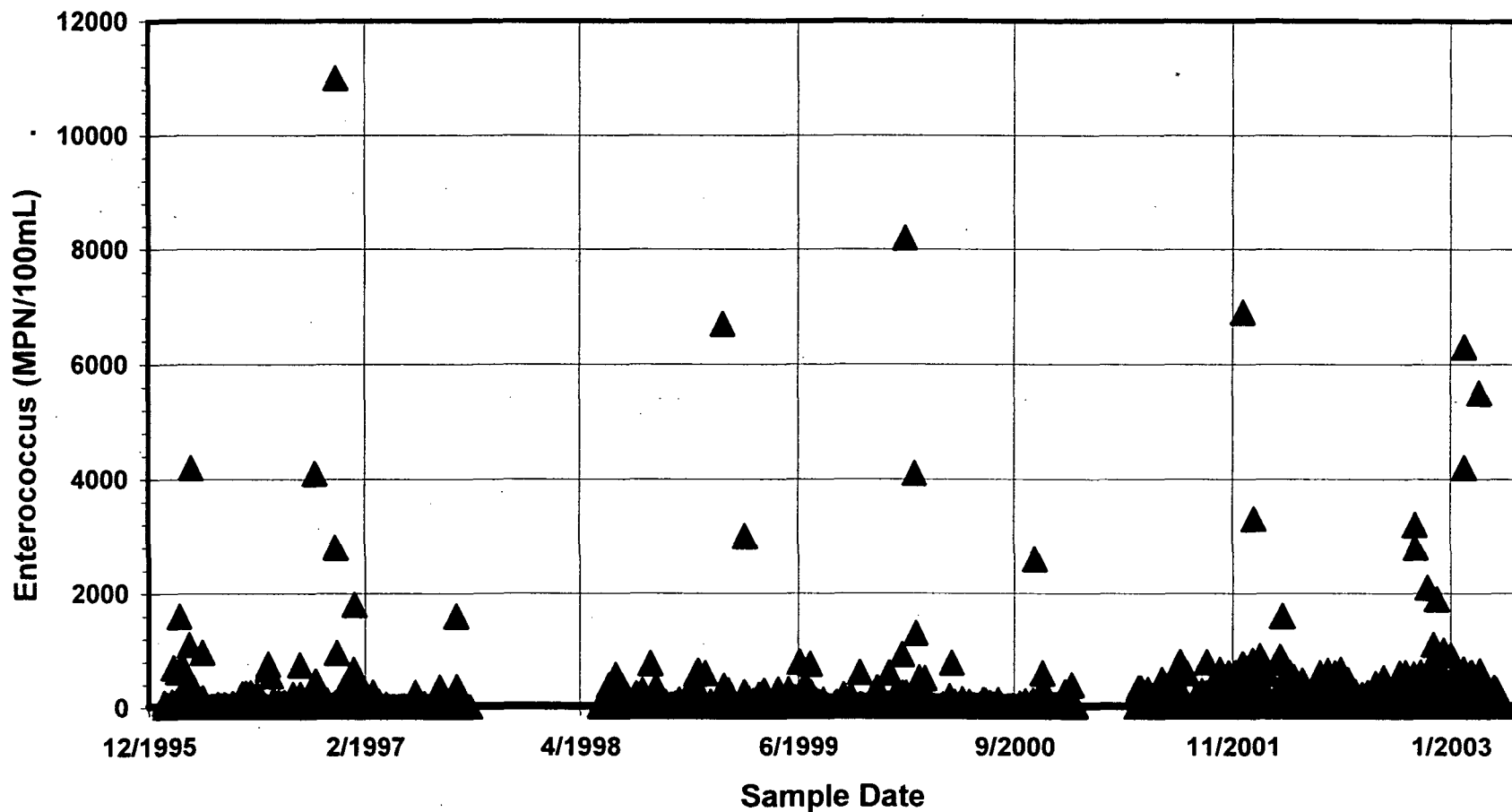
Triggering Water Quality Objective for Delisting

Not eligible for delisting.

References

Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994

Water Data Summary for Cabrillo Beach (Inner) LA Harbor Area – Basin Plan REC1 Marine 30-Day Minimum 5 samples Objective



Los Angeles River Reach 1 (Estuary to Carson Street) pH - Water

Table 1. Data Summary Information

Waterbody Name	Los Angeles River Reach 1 (Estuary to Carson Street)	Region	4
Hydrologic Unit	405.12	Total Waterbody Size	3.4 Miles
Pollutant/Stressor	pH	Size Affected	3.4 Miles
		Extent of Impairment	Entire Reach

Table 2. Summary of pH for Los Angeles River Reach 1 (Estuary to Carson Street)

Dates of Sampling	10/14/1997 - 3/17/2005
Number of Samples	54
Number of Detected Samples	54
Minimum Detected Value	6.16 pH Units
Maximum Detected Value	9.87 pH Units
Median Detected Value	7.06 pH Units
Hardness	N/A
pH	N/A
WER	N/A
Temperature	N/A

Beneficial Uses for Los Angeles River Reach 1 (Estuary to Carson Street)

§ MUN § PROC § REC1 § WARM § WILD § MIGR § SHELL
 § IND § GWR § REC2 § MAR § RARE § SPWN

Applicable Water Quality Objectives	Out of 54 Samples:	# Exceed	% Exceed	List	Delist
6.5 pH Units Basin Plan Minimum		2	3.7%	No	Yes
8.5 pH Units Basin Plan Maximum		7	13%	No	Yes

Triggering Water Quality Objective for Listing

No objectives were exceeded.

Triggering Water Quality Objective for Delisting

The Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994 contains water quality criteria for waterbodies in the Los Angeles Region. The Basin Plan requires a pH range between 6.5 to 8.5. In Los Angeles River Reach 1 (Estuary to Carson Street), 2 of 54 samples were below this range, which is 3.7% of the sample events. Under the state's listing policy, a waterbody is eligible for delisting for pH if 8 or fewer of the 54 samples are below the required range.

References

Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994

Raw Data

LA River Reach 1
pH - Water

RecordID	SiteID	Waterbody	Classification	Const	Numof	Result	Units	SampleDate	DataQua	Matrix	SampleTyp	Sampled	Fractn	AnalyticalMethd	MD	SampleComme	ProjectName	DataSource	FilenameSpreadsheets	TableName	
462	S10	Los Angeles River Reach 1	Conventional	pH	=	7.07	pH Units	10-Nov-97	Good	Water	Composite				14		2002 Regional V	SWRCB	4-56-4-81_2002_303d_data_4-70_LA_River_Ch		
300	S10	Los Angeles River Reach 1	Conventional	pH	=	9.19	pH Units	14-Oct-97	Good	Water	Composite				14		2002 Regional V	SWRCB	4-56-4-81_2002_303d_data_4-70_LA_River_Ch		
5457	S10	Los Angeles River Reach 1	Conventional	pH	=	8.29	pH Units	17-Mar-05		Water		Dry				Dry Weather Sar	LACSD	LACSD	LACSD/Dry_2_03-17-05.xls/LAR (S10)	LACSDLARiver_R1_Data_303d	
5181	S10	Los Angeles River Reach 1	Conventional	pH	=	6.8	pH Units	17-Oct-04		Water		Wet				Storm 1 - 10/17/04	LACSD	LACSD	LACSD/Storm_1_10-17-04.xls/LAR (S10)	LACSDLARiver_R1_Data_303d	
925	S10	Los Angeles River Reach 1	Conventional	pH	=	6.76	pH Units	05-Dec-97	Good	Water	Composite				14		2002 Regional V	SWRCB	4-56-4-81_2002_303d_data_4-70_LA_River_Ch		
1097	S10	Los Angeles River Reach 1	Conventional	pH	=	6.85	pH Units	18-Dec-97	Good	Water	Composite				14		2002 Regional V	SWRCB	4-56-4-81_2002_303d_data_4-70_LA_River_Ch		
1260	S10	Los Angeles River Reach 1	Conventional	pH	=	6.73	pH Units	04-Jan-98	Good	Water	Composite				14		2002 Regional V	SWRCB	4-56-4-81_2002_303d_data_4-70_LA_River_Ch		
1427	S10	Los Angeles River Reach 1	Conventional	pH	=	6.77	pH Units	09-Jan-98	Good	Water	Composite				14		2002 Regional V	SWRCB	4-56-4-81_2002_303d_data_4-70_LA_River_Ch		
1595	S10	Los Angeles River Reach 1	Conventional	pH	=	6.73	pH Units	29-Jan-98	Good	Water	Composite				14		2002 Regional V	SWRCB	4-56-4-81_2002_303d_data_4-70_LA_River_Ch		
1767	S10	Los Angeles River Reach 1	Conventional	pH	=	6.93	pH Units	04-Feb-98	Good	Water	Composite				14		2002 Regional V	SWRCB	4-56-4-81_2002_303d_data_4-70_LA_River_Ch		
1928	S10	Los Angeles River Reach 1	Conventional	pH	=	8.91	pH Units	22-Oct-98	Good	Water	Composite				14		2002 Regional V	SWRCB	4-56-4-81_2002_303d_data_4-70_LA_River_Ch		
1986	S10	Los Angeles River Reach 1	Conventional	pH	=	7.21	pH Units	15-Mar-99	Good	Water	Composite				14		2002 Regional V	SWRCB	4-56-4-81_2002_303d_data_4-70_LA_River_Ch		
2030	S10	Los Angeles River Reach 1	Conventional	pH	=	7.44	pH Units	20-Mar-99	Good	Water	Grab				14		2002 Regional V	SWRCB	4-56-4-81_2002_303d_data_4-70_LA_River_Ch		
2086	S10	Los Angeles River Reach 1	Conventional	pH	=	7.32	pH Units	25-Mar-99	Good	Water	Composite				14		2002 Regional V	SWRCB	4-56-4-81_2002_303d_data_4-70_LA_River_Ch		
2137	S10	Los Angeles River Reach 1	Conventional	pH	=	7.19	pH Units	06-Apr-99	Good	Water	Composite				14		2002 Regional V	SWRCB	4-56-4-81_2002_303d_data_4-70_LA_River_Ch		
2184	S10	Los Angeles River Reach 1	Conventional	pH	=	7.97	pH Units	08-Apr-99	Good	Water	Composite				14		2002 Regional V	SWRCB	4-56-4-81_2002_303d_data_4-70_LA_River_Ch		
2228	S10	Los Angeles River Reach 1	Conventional	pH	=	7.45	pH Units	11-Apr-99	Good	Water	Composite				14		2002 Regional V	SWRCB	4-56-4-81_2002_303d_data_4-70_LA_River_Ch		
5585	S10	Los Angeles River Reach 1	Conventional	pH	=	8.44	pH Units	10-Oct-02	Good	Water	Composite	Dry		SM 4500H B			LADPW Monitori	SWRCB	4-40_LACDPW_2002-2003_Appendix_B.pdf		
5715	S10	Los Angeles River Reach 1	Conventional	pH	=	8.85	pH Units	08-Nov-02	Good	Water	Composite	Wet		SM 4500H B			LADPW Monitori	SWRCB	4-40_LACDPW_2002-2003_Appendix_B.pdf		
5847	S10	Los Angeles River Reach 1	Conventional	pH	=	7.01	pH Units	16-Dec-02	Good	Water	Composite	Wet		SM 4500H B			LADPW Monitori	SWRCB	4-40_LACDPW_2002-2003_Appendix_B.pdf		
5978	S10	Los Angeles River Reach 1	Conventional	pH	=	7.44	pH Units	11-Feb-03	Good	Water	Composite	Wet		SM 4500H B			LADPW Monitori	SWRCB	4-40_LACDPW_2002-2003_Appendix_B.pdf		
6110	S10	Los Angeles River Reach 1	Conventional	pH	=	7.09	pH Units	15-Mar-03	Good	Water	Composite	Dry		SM 4500H B			LADPW Monitori	SWRCB	4-40_LACDPW_2002-2003_Appendix_B.pdf		
6240	S10	Los Angeles River Reach 1	Conventional	pH	=	9.87	pH Units	30-Apr-03	Good	Water	Composite	Dry		SM 4500H B			LADPW Monitori	SWRCB	4-40_LACDPW_2002-2003_Appendix_B.pdf		
2432	S10	Los Angeles River Reach 1	Conventional	pH	=	7.04	pH Units	30-Oct-00		Water	Composite	Wet		A150.1			Storm Number 0	LACSD	LACSD	LACSD/2000-01.xls/Table B-3	LACSDLARiver_R1_Data_303d
2508	S10	Los Angeles River Reach 1	Conventional	pH	=	7.02	pH Units	08-Jan-01		Water	Composite	Wet		A150.1			Storm Number 0	LACSD	LACSD	LACSD/2000-01.xls/Table B-3	LACSDLARiver_R1_Data_303d
5346	S10	Los Angeles River Reach 1	Conventional	pH	=	6.16	pH Units	05-Dec-00		Water		Wet					Storm 3 - Decem	LACSD	LACSD	LACSD/Storm_3_12-05-04.xls/LAR (S10)	LACSDLARiver_R1_Data_303d
2291	S10	Los Angeles River Reach 1	Conventional	pH	=	7.19	pH Units	12-Oct-00		Water	Composite	Wet		A150.1			Storm Number 0	LACSD	LACSD	LACSD/2000-01.xls/Table B-3	LACSDLARiver_R1_Data_303d
2359	S10	Los Angeles River Reach 1	Conventional	pH	=	7.04	pH Units	28-Oct-00		Water	Composite	Wet		A150.1			Storm Number 0	LACSD	LACSD	LACSD/2000-01.xls/Table B-3	LACSDLARiver_R1_Data_303d
2584	S10	Los Angeles River Reach 1	Conventional	pH	=	6.53	pH Units	11-Jan-01		Water	Composite	Wet		A150.1			Storm Number 0	LACSD	LACSD	LACSD/2000-01.xls/Table B-3	LACSDLARiver_R1_Data_303d
2655	S10	Los Angeles River Reach 1	Conventional	pH	=	6.83	pH Units	25-Jan-01		Water	Composite	Wet		A150.1			Storm Number 0	LACSD	LACSD	LACSD/2000-01.xls/Table B-3	LACSDLARiver_R1_Data_303d
2728	S10	Los Angeles River Reach 1	Conventional	pH	=	6.67	pH Units	30-Jan-01		Water	Composite	Wet		A150.1			Storm Number 0	LACSD	LACSD	LACSD/2000-01.xls/Table B-3	LACSDLARiver_R1_Data_303d
2804	S10	Los Angeles River Reach 1	Conventional	pH	=	6.64	pH Units	14-Feb-01		Water	Composite	Wet		A150.1			Storm Number 0	LACSD	LACSD	LACSD/2000-01.xls/Table B-3	LACSDLARiver_R1_Data_303d
2875	S10	Los Angeles River Reach 1	Conventional	pH	=	7.6	pH Units	20-Feb-01		Water	Composite	Wet		A150.1			Storm Number 0	LACSD	LACSD	LACSD/2000-01.xls/Table B-3	LACSDLARiver_R1_Data_303d
2948	S10	Los Angeles River Reach 1	Conventional	pH	=	6.92	pH Units	28-Feb-01		Water	Composite	Wet		A150.1			Storm Number 0	LACSD	LACSD	LACSD/2000-01.xls/Table B-3	LACSDLARiver_R1_Data_303d
3024	S10	Los Angeles River Reach 1	Conventional	pH	=	6.79	pH Units	06-Mar-01		Water	Composite	Wet		A150.1			Storm Number 0	LACSD	LACSD	LACSD/2000-01.xls/Table B-3	LACSDLARiver_R1_Data_303d
3101	S10	Los Angeles River Reach 1	Conventional	pH	=	7.89	pH Units	24-Nov-01		Water	Composite	Wet		A150.1			Storm Number 0	LACSD	LACSD	LACSD/01-02.xls/Table B-3 S10	LACSDLARiver_R1_Data_303d
3180	S10	Los Angeles River Reach 1	Conventional	pH	=	6.86	pH Units	29-Nov-01		Water	Composite	Wet		A150.1			Storm Number 0	LACSD	LACSD	LACSD/01-02.xls/Table B-3 S10	LACSDLARiver_R1_Data_303d
3254	S10	Los Angeles River Reach 1	Conventional	pH	=	7.55	pH Units	03-Dec-01		Water	Composite	Wet		A150.1			Storm Number 0	LACSD	LACSD	LACSD/01-02.xls/Table B-3 S10	LACSDLARiver_R1_Data_303d
3329	S10	Los Angeles River Reach 1	Conventional	pH	=	6.92	pH Units	20-Dec-01		Water	Composite	Wet		A150.1			Storm Number 0	LACSD	LACSD	LACSD/01-02.xls/Table B-3 S10	LACSDLARiver_R1_Data_303d
3408	S10	Los Angeles River Reach 1	Conventional	pH	=	6.7	pH Units	28-Jan-02		Water	Composite	Wet		A150.1			Storm Number 0	LACSD	LACSD	LACSD/01-02.xls/Table B-3 S10	LACSDLARiver_R1_Data_303d
3560	S10	Los Angeles River Reach 1	Conventional	pH	=	8.44	pH Units	10-Oct-02		Water	Composite	Dry		SM4500H B			Event Number 0	LACSD	LACSD	LACSD/02-03.xls/L.A. S10	LACSDLARiver_R1_Data_303d
3715	S10	Los Angeles River Reach 1	Conventional	pH	=	8.85	pH Units	08-Nov-02		Water	Composite	Wet		SM4500H B			Event Number 0	LACSD	LACSD	LACSD/02-03.xls/L.A. S10	LACSDLARiver_R1_Data_303d
3870	S10	Los Angeles River Reach 1	Conventional	pH	=	7.01	pH Units	16-Dec-02		Water	Composite	Wet		SM4500H B			Event Number 0	LACSD	LACSD	LACSD/02-03.xls/L.A. S10	LACSDLARiver_R1_Data_303d
4025	S10	Los Angeles River Reach 1	Conventional	pH	=	7.44	pH Units	11-Feb-03		Water	Composite	Wet		SM4500H B			Event Number 0	LACSD	LACSD	LACSD/02-03.xls/L.A. S10	LACSDLARiver_R1_Data_303d
4180	S10	Los Angeles River Reach 1	Conventional	pH	=	7.09	pH Units	15-Mar-03		Water	Composite	Wet		SM4500H B			Event Number 0	LACSD	LACSD	LACSD/02-03.xls/L.A. S10	LACSDLARiver_R1_Data_303d
4335	S10	Los Angeles River Reach 1	Conventional	pH	=	9.87	pH Units	30-Apr-03		Water	Composite	Dry		SM4500H B			Event Number 0	LACSD	LACSD	LACSD/02-03.xls/L.A. S10	LACSDLARiver_R1_Data_303d
4490	S10	Los Angeles River Reach 1	Conventional	pH	=	7.47	pH Units	28-Oct-03		Water	Composite	Dry		SM4500H B			Event Number 0	LACSD	LACSD	LACSD/03-04.xls/L.A. S10	LACSDLARiver_R1_Data_303d
4645	S10	Los Angeles River Reach 1	Conventional	pH	=	7.35	pH Units	31-Oct-03		Water	Composite	Wet		SM4500H B			Event Number 0	LACSD	LACSD	LACSD/03-04.xls/L.A. S10	LACSDLARiver_R1_Data_303d
4800	S10	Los Angeles River Reach 1	Conventional	pH	=	6.55	pH Units	25-Dec-03		Water	Composite	Wet		SM4500H B			Event Number 0	LACSD	LACSD	LACSD/03-04.xls/L.A. S10	LACSDLARiver_R1_Data_303d
4955	S10	Los Angeles River Reach 1	Conventional	pH	=	6.3	pH Units	01-Jan-04		Water	Composite	Wet		SM4500H B			Event Number 0	LACSD	LACSD	LACSD/03-04.xls/L.A. S10	LACSDLARiver_R1_Data_303d
5110	S10	Los Angeles River Reach 1	Conventional	pH	=	7.05	pH Units	13-Jan-04		Water	Composite	Dry		SM4500H B			Event Number 0	LACSD	LACSD	LACSD/03-04.xls/L.A. S10	LACSDLARiver_R1_Data_303d
5233	S10	Los Angeles River Reach 1	Conventional	pH	=	6.56	pH Units	26-Oct-04		Water		Wet					Storm 2 - Octobe	LACSD	LACSD	LACSD/Storm_2_10-26-04.xls/LAR (S10)	LACSDLARiver_R1_Data_303d
5399	S10	Los Angeles River Reach 1	Conventional	pH	=	6.87	pH Units	07-Jan-05		Water		Wet					Storm 6 for Mass	LACSD	LACSD	LACSD/Storm_6_ME_01-07-05.xls/LAR (S10)	LACSDLARiver_R1_Data_303d
5289	S10	Los Angeles River Reach 1	Conventional	pH	=	9.4	pH Units	16-Nov-04		Water		Dry					Dry Weather Sar	LACSD	LACSD	LACSD/Dry_1_11-02-04.xls/LAR (S10)	LACSDLARiver_R1_Data_303d

Los Angeles River Reach 1 (Estuary to Carson Street) Dissolved Zinc - Water

Table 1. Data Summary Information

Waterbody Name	Los Angeles River Reach 1 (Estuary to Carson Street)	Region	4
Hydrologic Unit	405.12	Total Waterbody Size	3.4 Miles
Pollutant/Stressor	Zinc	Size Affected	3.4 Miles
		Extent of Impairment	Entire Reach

Table 2. Summary of Zinc for Los Angeles River Reach 1 (Estuary to Carson Street)

Dates of Sampling	10/12/2000 - 3/17/2005	Minimum Detected Value	10 µg/L
Number of Samples	54	Maximum Detected Value	184 µg/L
Number of Detected Samples	52	Median Detected Value	43.99 µg/L
Hardness - actual and/or default values			159-237 mg/L
pH			N/A
WER			1
Temperature			N/A

Data Sources

LACSD

Beneficial Uses for Los Angeles River Reach 1 (Estuary to Carson Street)

§ MUN § PROC § REC1 § WARM § WILD § MIGR § SHELL
 § IND § GWR § REC2 § MAR § RARE § SPWN

Applicable Water Quality Objectives	Out of 54 Samples:	# Exceed	% Exceed	List	Delist
170-250 µg/L	CTR Aquatic Life Freshwater Chronic (CCC)	0	0%	No	Yes
170-240 µg/L	CTR Aquatic Life Freshwater Acute (CMC)	0	0%	No	Yes

Triggering Water Quality Objective for Listing

No objectives were exceeded.

7 of 72
at least

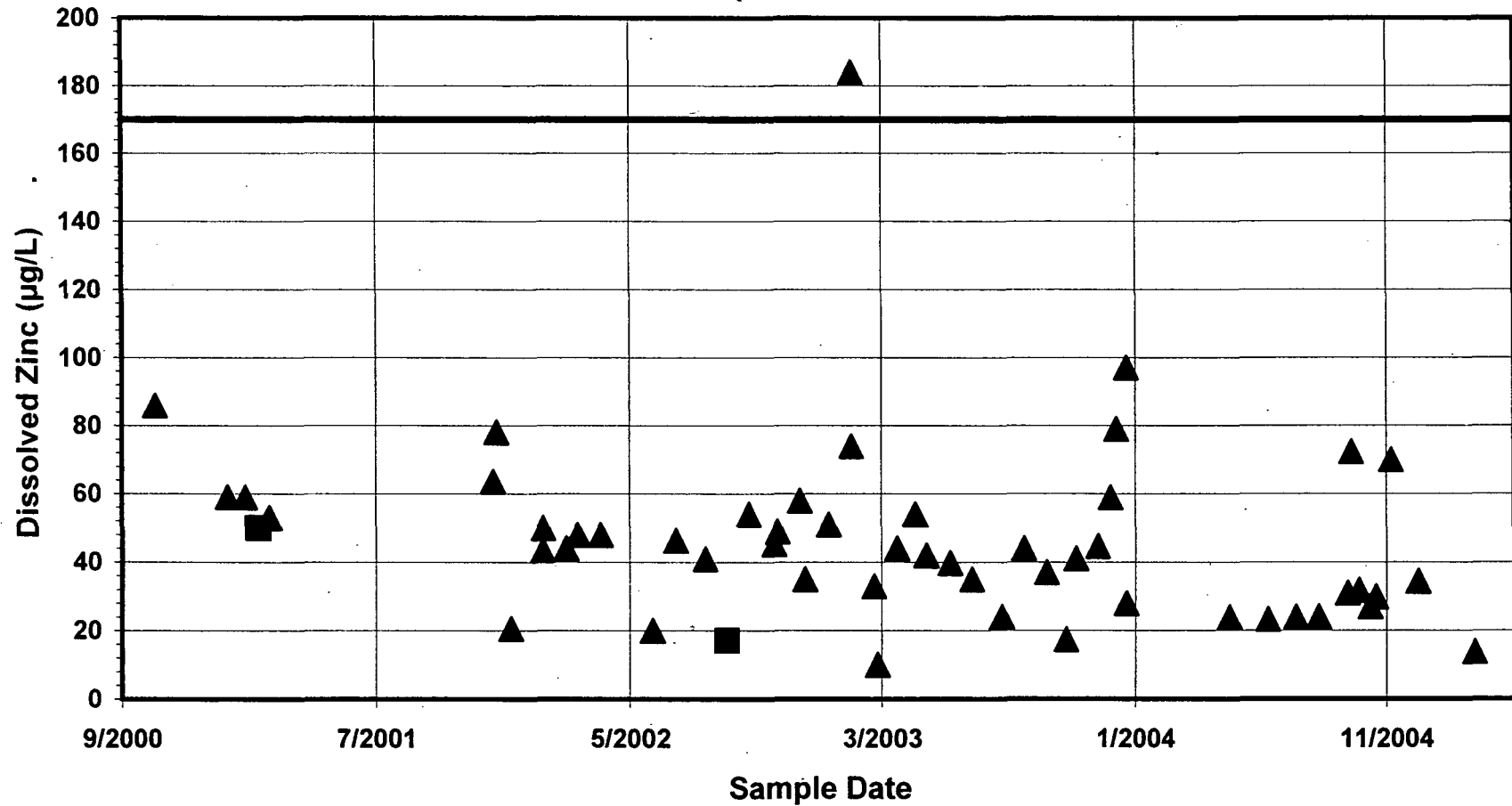
Triggering Water Quality Objective for Delisting

The California Toxics Rule contains water quality criteria for waterbodies in California. The most conservative applicable water quality criterion for dissolved zinc is 170 µg/L for the CTR Aquatic Life Freshwater Chronic (CCC) objective. In Los Angeles River Reach 1 (Estuary to Carson Street), the criterion was exceeded in 0 of 54 samples, which is 0% of the sample events. Under the state's listing policy, a waterbody is eligible for delisting for dissolved zinc if there are 4 or fewer exceedances out of the 54 samples.

References

California Toxics Rule

Water Data Summary for Los Angeles River Reach 1 (Estuary to Carson Street) – CTR Aquatic Life Freshwater Chronic (CCC) Objective



Raw Data

LA River Reach 1
Dissolved Zinc - Water

RecordID	SiteID	WaterBody	Classific	Constitu	NumD	Result	Units	SampleDate	DataQc	Matrix	SampleType	SampleFract	AnalyticalM	MDL	SampleComme	ProjectName	DataSource	FilenameSpreadsheet	Hardness	pH	Temperat	Table Name
5472	S10	Los Angeles River Reach 1	Metal	Zinc	=	13.8	µg/L	17-Mar-05		Water		Dry	Dissolved		Dry Weather Sar	LACSD	LACSD	LACSD/Dry_2_03-17-05.xls/LAR (S10)				LACSDLARiver_R1_Data_303d
5195	S10	Los Angeles River Reach 1	Metal	Zinc	=	72.4	µg/L	17-Oct-04		Water		Wet	Dissolved		Storm 1 - 10/17/04	LACSD	LACSD	LACSD/Storm_1_10-17-04.xls/LAR (S10)				LACSDLARiver_R1_Data_303d
5413	S10	Los Angeles River Reach 1	Metal	Zinc	=	34.4	µg/L	07-Jan-05		Water		Wet	Dissolved		Storm 6 for Mass	LACSD	LACSD	LACSD/Storm_6_ME_01-07-05.xls/LAR (S10)				LACSDLARiver_R1_Data_303d
3743	S10	Los Angeles River Reach 1	Metal	Zinc	=	45.3	µg/L	08-Nov-02		Water	Composite	Wet	Dissolved	EPA200.8	Event Number 0	LACSD	LACSD	LACSD/02-03.xls/L.A. S10				LACSDLARiver_R1_Data_303d
3898	S10	Los Angeles River Reach 1	Metal	Zinc	=	35	µg/L	16-Dec-02		Water	Composite	Wet	Dissolved	EPA200.8	Event Number 0	LACSD	LACSD	LACSD/02-03.xls/L.A. S10				LACSDLARiver_R1_Data_303d
4052	S10	Los Angeles River Reach 1	Metal	Zinc	=	74	µg/L	11-Feb-03		Water	Composite	Wet	Dissolved	EPA200.8	Event Number 0	LACSD	LACSD	LACSD/02-03.xls/L.A. S10				LACSDLARiver_R1_Data_303d
4207	S10	Los Angeles River Reach 1	Metal	Zinc	=	10	µg/L	15-Mar-03		Water	Composite	Wet	Dissolved	EPA200.8	Event Number 0	LACSD	LACSD	LACSD/02-03.xls/L.A. S10				LACSDLARiver_R1_Data_303d
4363	S10	Los Angeles River Reach 1	Metal	Zinc	=	54	µg/L	30-Apr-03		Water	Composite	Dry	Dissolved	EPA200.8	Event Number 0	LACSD	LACSD	LACSD/02-03.xls/L.A. S10				LACSDLARiver_R1_Data_303d
6277	Willow St.	Los Angeles River Reach 1	Metal	Zinc	=	50	µg/L	29-Jan-02	Good	Water			Dissolved	10		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (LAR 2002)				
6297	Willow St.	Los Angeles River Reach 1	Metal	Zinc	=	44	µg/L	26-Feb-02	Good	Water			Dissolved	10		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (LAR 2002)				
6313	Willow St.	Los Angeles River Reach 1	Metal	Zinc	=	48	µg/L	12-Mar-02	Good	Water			Dissolved	10		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (LAR 2002)				
6332	Willow St.	Los Angeles River Reach 1	Metal	Zinc	=	48	µg/L	09-Apr-02	Good	Water			Dissolved	17.2		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (LAR 2002)				
6352	Willow St.	Los Angeles River Reach 1	Metal	Zinc	=	20	µg/L	11-Jun-02	Good	Water			Dissolved	17.2		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (LAR 2002)				
6370	Willow St.	Los Angeles River Reach 1	Metal	Zinc	=	46.4	µg/L	09-Jul-02	Good	Water			Dissolved	17.2		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (LAR 2002)				
6387	Willow St.	Los Angeles River Reach 1	Metal	Zinc	=	41	µg/L	14-Aug-02	Good	Water			Dissolved	17.2		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (LAR 2002)				
6403	Willow St.	Los Angeles River Reach 1	Metal	Zinc	<	17.2	µg/L	10-Sep-02	Good	Water			Dissolved	17.2		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (LAR 2002)				
6423	Willow St.	Los Angeles River Reach 1	Metal	Zinc	=	54	µg/L	08-Oct-02	Good	Water			Dissolved	17.2		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (LAR 2002)				
6438	Willow St.	Los Angeles River Reach 1	Metal	Zinc	=	49	µg/L	12-Nov-02	Good	Water			Dissolved	17.2		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (LAR 2002)				
6456	Willow St.	Los Angeles River Reach 1	Metal	Zinc	=	58	µg/L	10-Dec-02	Good	Water			Dissolved	17.2		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (LAR 2002)				
6475	Willow St.	Los Angeles River Reach 1	Metal	Zinc	=	51	µg/L	14-Jan-03	Good	Water			Dissolved	6		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (LAR 2003 revised)				
6498	Willow St.	Los Angeles River Reach 1	Metal	Zinc	=	184	µg/L	11-Feb-03	Good	Water			Dissolved	6		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (LAR 2003 revised)				
6516	Willow St.	Los Angeles River Reach 1	Metal	Zinc	=	33	µg/L	11-Mar-03	Good	Water			Dissolved	6		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (LAR 2003 revised)				
6540	Willow St.	Los Angeles River Reach 1	Metal	Zinc	=	43.98	µg/L	08-Apr-03	Good	Water			Dissolved	6		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (LAR 2003 revised)				
6558	Willow St.	Los Angeles River Reach 1	Metal	Zinc	=	42	µg/L	13-May-03	Good	Water			Dissolved	6		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (LAR 2003 revised)				
6580	Willow St.	Los Angeles River Reach 1	Metal	Zinc	=	39.8	µg/L	11-Jun-03	Good	Water			Dissolved	6		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (LAR 2003 revised)				
6599	Willow St.	Los Angeles River Reach 1	Metal	Zinc	=	35	µg/L	08-Jul-03	Good	Water			Dissolved	2		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (LAR 2003 revised)				
6618	Willow St.	Los Angeles River Reach 1	Metal	Zinc	=	24	µg/L	13-Aug-03	Good	Water			Dissolved	2		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (LAR 2003 revised)				
6639	Willow St.	Los Angeles River Reach 1	Metal	Zinc	=	44	µg/L	09-Sep-03	Good	Water			Dissolved	2		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (LAR 2003 revised)				
6657	Willow St.	Los Angeles River Reach 1	Metal	Zinc	=	37	µg/L	07-Oct-03	Good	Water			Dissolved	2		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (LAR 2003 revised)				
6682	Willow St.	Los Angeles River Reach 1	Metal	Zinc	=	41.1	µg/L	12-Nov-03	Good	Water			Dissolved	2		WPD	WPD	Revised compilation of LARBCDC 2002 169				
6705	Willow St.	Los Angeles River Reach 1	Metal	Zinc	=	44.7	µg/L	09-Dec-03	Good	Water			Dissolved	2		WPD	WPD	Revised compilation of LARBCDC 2002 159				
6728	Willow St.	Los Angeles River Reach 1	Metal	Zinc	=	28	µg/L	13-Jan-04	Good	Water			Dissolved	2		WPD	WPD	Revised compilation of LARBCDC 2002 189				
6754	Willow St.	Los Angeles River Reach 1	Metal	Zinc	=	23.9	µg/L	20-May-04	Good	Water			Dissolved	2		WPD	WPD	Revised compilation of LARBCDC 2002 203				
6777	Willow St.	Los Angeles River Reach 1	Metal	Zinc	=	23.3	µg/L	06-Jul-04	Good	Water			Dissolved	2		WPD	WPD	Revised compilation of LARBCDC 2002 237				
6804	Willow St.	Los Angeles River Reach 1	Metal	Zinc	=	24	µg/L	10-Aug-04	Good	Water			Dissolved	4		WPD	WPD	Revised compilation of LARBCDC 2002 218				
6826	Willow St.	Los Angeles River Reach 1	Metal	Zinc	=	24	µg/L	07-Sep-04	Good	Water			Dissolved	4		WPD	WPD	Revised compilation of LARBCDC 2002 211				
6847	Willow St.	Los Angeles River Reach 1	Metal	Zinc	=	31	µg/L	12-Oct-04	Good	Water			Dissolved	4		WPD	WPD	Revised compilation of LARBCDC 2002 212				
6867	Willow St.	Los Angeles River Reach 1	Metal	Zinc	=	27	µg/L	09-Nov-04	Good	Water			Dissolved	4		WPD	WPD	Revised compilation of LARBCDC 2002 178				
5305	S10	Los Angeles River Reach 1	Metal	Zinc	=	29.9	µg/L	16-Nov-04		Water		Dry	Dissolved		Dry Weather Sar	LACSD	LACSD	LACSD/Dry_1_11-02-04.xls/LAR (S10)				LACSDLARiver_R1_Data_303d
2530	S10	Los Angeles River Reach 1	Metal	Zinc	=	59.1	µg/L	08-Jan-01		Water	Composite	Wet	Dissolved	A289.1	Storm Number 0	LACSD	LACSD	LACSD/2000-01.xls/Table B-3				LACSDLARiver_R1_Data_303d
2311	S10	Los Angeles River Reach 1	Metal	Zinc	=	85.9	µg/L	12-Oct-00		Water	Composite	Wet	Dissolved	A289.1	Storm Number 0	LACSD	LACSD	LACSD/2000-01.xls/Table B-3				LACSDLARiver_R1_Data_303d
2750	S10	Los Angeles River Reach 1	Metal	Zinc	=	59	µg/L	30-Jan-01		Water	Composite	Wet	Dissolved	A289.1	Storm Number 0	LACSD	LACSD	LACSD/2000-01.xls/Table B-3				LACSDLARiver_R1_Data_303d
2827	S10	Los Angeles River Reach 1	Metal	Zinc	<	50	µg/L	14-Feb-01		Water	Composite	Wet	Dissolved	A289.1	Storm Number 0	LACSD	LACSD	LACSD/2000-01.xls/Table B-3				LACSDLARiver_R1_Data_303d
2971	S10	Los Angeles River Reach 1	Metal	Zinc	=	53	µg/L	28-Feb-01		Water	Composite	Wet	Dissolved	A289.1	Storm Number 0	LACSD	LACSD	LACSD/2000-01.xls/Table B-3				LACSDLARiver_R1_Data_303d
3204	S10	Los Angeles River Reach 1	Metal	Zinc	=	63.6	µg/L	29-Nov-01		Water	Composite	Wet	Dissolved	EPA200.8	Storm Number 0	LACSD	LACSD	LACSD/01-02.xls/Table B-3 S10				LACSDLARiver_R1_Data_303d
3275	S10	Los Angeles River Reach 1	Metal	Zinc	=	78.1	µg/L	03-Dec-01		Water	Composite	Wet	Dissolved	EPA200.8	Storm Number 0	LACSD	LACSD	LACSD/01-02.xls/Table B-3 S10				LACSDLARiver_R1_Data_303d
3353	S10	Los Angeles River Reach 1	Metal	Zinc	=	20.6	µg/L	20-Dec-01		Water	Composite	Wet	Dissolved	EPA200.8	Storm Number 0	LACSD	LACSD	LACSD/01-02.xls/Table B-3 S10				LACSDLARiver_R1_Data_303d
3432	S10	Los Angeles River Reach 1	Metal	Zinc	=	43.5	µg/L	28-Jan-02		Water	Composite	Wet	Dissolved	EPA200.8	Storm Number 0	LACSD	LACSD	LACSD/01-02.xls/Table B-3 S10				LACSDLARiver_R1_Data_303d
4673	S10	Los Angeles River Reach 1	Metal	Zinc	=	17.4	µg/L	31-Oct-03		Water	Composite	Wet	Dissolved	EPA200.8	Event Number 0	LACSD	LACSD	LACSD/03-04.xls/L.A. S10				LACSDLARiver_R1_Data_303d
4828	S10	Los Angeles River Reach 1	Metal	Zinc	=	59	µg/L	25-Dec-03		Water	Composite	Wet	Dissolved	EPA200.8	Event Number 0	LACSD	LACSD	LACSD/03-04.xls/L.A. S10				LACSDLARiver_R1_Data_303d
4983	S10	Los Angeles River Reach 1	Metal	Zinc	=	79	µg/L	01-Jan-04		Water	Composite	Wet	Dissolved	EPA200.8	Event Number 0	LACSD	LACSD	LACSD/03-04.xls/L.A. S10				LACSDLARiver_R1_Data_303d
5137	S10	Los Angeles River Reach 1	Metal	Zinc	=	97	µg/L	13-Jan-04		Water	Composite	Dry	Dissolved	EPA200.8	Event Number 0	LACSD	LACSD	LACSD/03-04.xls/L.A. S10				LACSDLARiver_R1_Data_303d
5248	S10	Los Angeles River Reach 1	Metal	Zinc	=	31.8	µg/L	26-Oct-04		Water		Wet	Dissolved		Storm 2 - October	LACSD	LACSD	LACSD/Storm_2_10-26-04.xls/LAR (S10)				LACSDLARiver_R1_Data_303d
5360	S10	Los Angeles River Reach 1	Metal	Zinc	=	70	µg/L	05-Dec-04		Water		Wet	Dissolved		Storm 3 - Decem	LACSD	LACSD	LACSD/Storm_3_12-05-04.xls/LAR (S10)				LACSDLARiver_R1_Data_303d

-
-  LosAngelesRiverR4_AmmoniaAsN_Water
 -  LosAngelesRiverR4_AmmoniaAsN_Water
 -  LosAngelesRiverR4_FecalColiform_Water
 -  LosAngelesRiverR4_FecalColiform_Water
 -  QueriedRecords_AmmoniaAsN_Water
 -  QueriedRecords_FecalColiform_Water

Los Angeles River Reach 4 (Riverside Dr. to Sepulveda Dam)

Ammonia as N - Water

Table 1. Data Summary Information

Waterbody Name	Los Angeles River Reach 4 (Riverside Dr. to Sepulveda Dam)	Region	4
Hydrologic Unit	405.21	Total Waterbody Size	11 Miles
Pollutant/Stressor	Ammonia as N	Size Affected	11 Miles
		Extent of Impairment	Entire Reach

Table 2. Summary of Ammonia as N for Los Angeles River Reach 4 (Riverside Dr. to Sepulveda Dam)

Dates of Sampling	8/5/1997 - 2/1/2001	Minimum Detected Value	0.11 mg/L
Number of Samples	44	Maximum Detected Value	17.36 mg/L
Number of Detected Samples	44	Median Detected Value	5.04 mg/L
Hardness			N/A
pH - actual and/or default values			7.8
WER			N/A
Temperature - actual and/or default values			20 °C

Data Sources

2002 Regional Water Quality Assessment and Update of 303(d) List for the Los Angeles Region; LA City Bureau of Sanitation

Beneficial Uses for Los Angeles River Reach 4 (Riverside Dr. to Sepulveda Dam)

§ MUN § GWR § REC2 § WILD
 § IND § RECI § WARM § WET

Applicable Water Quality Objectives	Out of 44 Samples:	# Exceed	% Exceed	List	Delist
2.2349 mg/L Basin Plan Freshwater Not SPWN Inland 30-Day Average	27	61.4%	Yes	No	
5.5873 mg/L Basin Plan Freshwater Not SPWN Inland 4-Day Average	20	45.5%	Yes	No	
12.139 mg/L Basin Plan Freshwater Not COLD or MIGR	1	2.3%	No	Yes	

Triggering Water Quality Objective for Listing

The Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994 contains water quality criteria for waterbodies in the Los Angeles Region. The most conservative applicable water quality criterion for ammonia as n is 2.235 mg/L for the Basin Plan Freshwater Not SPWN Inland 30-Day Average objective. In Los Angeles River Reach 4 (Riverside Dr. to Sepulveda Dam), the criterion was exceeded in 27 of 44 samples, which is 61.4% of the sample events. Under the state's listing policy, a waterbody is considered to be impaired for ammonia as n if there are 4 or more exceedances out of the 44 samples.

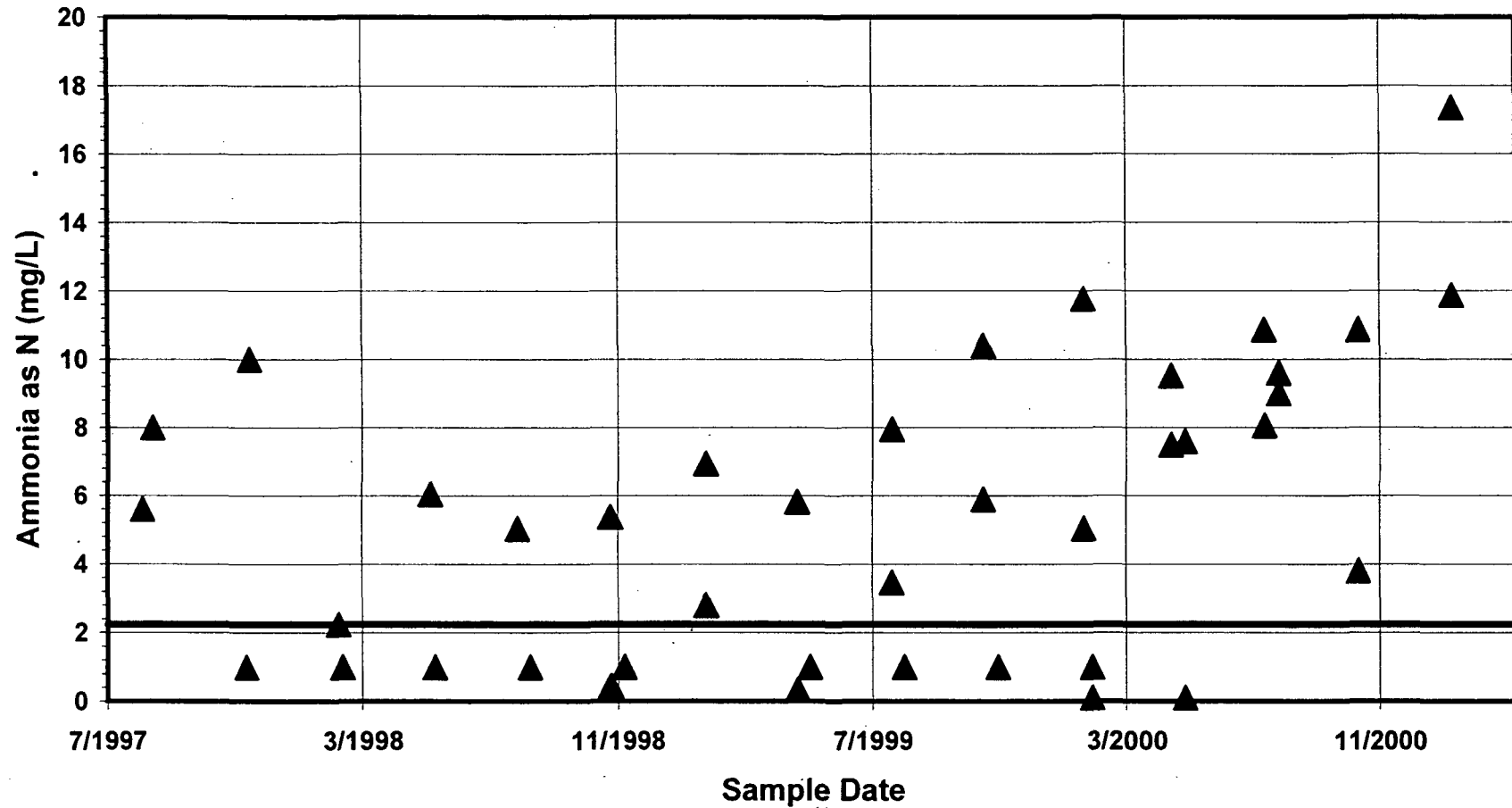
Triggering Water Quality Objective for Delisting

Not eligible for delisting.

References

Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994

**Water Data Summary for Los Angeles River Reach 4
(Riverside Dr. to Sepulveda Dam) – Basin Plan
Freshwater Not SPWN Inland 30-Day Average Objective**



Los Angeles River Reach 1 (Estuary to Carson Street)

Dissolved Copper - Water

Table 1. Data Summary Information

Waterbody Name	Los Angeles River Reach 1 (Estuary to Carson Street)	Region	4
Hydrologic Unit	405.12	Total Waterbody Size	3.4 Miles
Pollutant/Stressor	Copper	Size Affected	3.4 Miles
		Extent of Impairment	Entire Reach

Table 2. Summary of Copper for Los Angeles River Reach 1 (Estuary to Carson Street)

Dates of Sampling	10/12/2000 - 3/17/2005	Minimum Detected Value	3.61 µg/L
Number of Samples	63	Maximum Detected Value	23.1 µg/L
Number of Detected Samples	57	Median Detected Value	9 µg/L
Hardness - actual and/or default values			159-237 mg/L
pH			N/A
WER			1
Temperature			N/A

Data Sources

LACSD

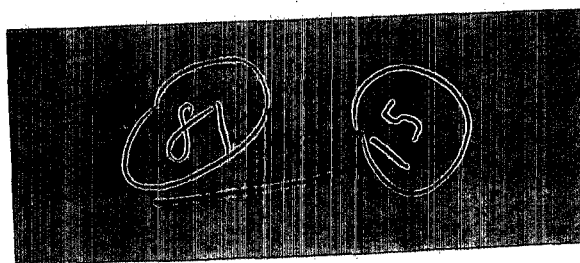
Beneficial Uses for Los Angeles River Reach 1 (Estuary to Carson Street)

§ MUN § PROC § REC1 § WARM § WILD § MIGR § SHELL
 § IND § GWR § REC2 § MAR § RARE § SPWN

Applicable Water Quality Objectives	Out of 63 Samples:	# Exceed	% Exceed	List	Delist
13-19 µg/L CTR Aquatic Life Freshwater Chronic (CCC)		4	6.3%	No	Yes
21-30 µg/L CTR Aquatic Life Freshwater Acute (CMC)		0	0%	No	Yes
1300 µg/L CTR Human Health Water & Organism		0	0%	No	Yes

Triggering Water Quality Objective for Listing

No objectives were exceeded.



Triggering Water Quality Objective for Delisting

The California Toxics Rule contains water quality criteria for waterbodies in California. The most conservative applicable water quality criterion for dissolved copper is 13 µg/L for the CTR Aquatic Life Freshwater Chronic (CCC) objective. In Los Angeles River Reach 1 (Estuary to Carson Street), the criterion was exceeded in 4 of 63 samples, which is 6.4% of the sample events. Under the state's listing policy, a waterbody is eligible for delisting for dissolved copper if there are 5 or fewer exceedances out of the 63 samples.

References

California Toxics Rule




LA River Reach 1 Dissolved Copper - Water

RecordID	SiteID	Waterbody	Material	Concentration	Units	SampleDate	LabQuality	Matrix	SampleType	SampleType	SampleType	Method	MDL	SampleComments	ProjectName	DataSource	Filename	Spreadsheet	Hardness	pH	Temperature	TableName
5161	S10	(Estuary to Carson Street)	Metal	Copper	=	10.8 µg/L		Water		Wet	Dissolved			Storm 1 - 10/17/2004	LACSD	LACSD	LACSD/Storm_1_10-17-04.xls/LAR (S10)				LACSDLARiver_R1_Data_303d	
5271	S10	(Estuary to Carson Street)	Metal	Copper	=	9.92 µg/L		Water		Dry	Dissolved			No. 1 - November 16,	LACSD	LACSD	LACSD/Dry_1_11-02-04.xls/LAR (S10)				LACSDLARiver_R1_Data_303d	
3508	S10	(Estuary to Carson Street)	Metal	Copper	=	4.77 µg/L		Water	Composite	Dry	Dissolved	EPA200.8	5	Event Number 0203-01	LACSD	LACSD	LACSD/02-03.xls/L.A. S10				LACSDLARiver_R1_Data_303d	
3662	S10	(Estuary to Carson Street)	Metal	Copper	=	14.1 µg/L		Water	Composite	Wet	Dissolved	EPA200.8	5	Event Number 0203-01	LACSD	LACSD	LACSD/02-03.xls/L.A. S10				LACSDLARiver_R1_Data_303d	
3817	S10	(Estuary to Carson Street)	Metal	Copper	=	5.21 µg/L		Water	Composite	Wet	Dissolved	EPA200.8	5	Event Number 0203-02	LACSD	LACSD	LACSD/02-03.xls/L.A. S10				LACSDLARiver_R1_Data_303d	
3973	S10	(Estuary to Carson Street)	Metal	Copper	=	5.51 µg/L		Water	Composite	Wet	Dissolved	EPA200.8	5	Event Number 0203-03	LACSD	LACSD	LACSD/02-03.xls/L.A. S10				LACSDLARiver_R1_Data_303d	
4128	S10	(Estuary to Carson Street)	Metal	Copper	=	7.07 µg/L		Water	Composite	Wet	Dissolved	EPA200.8	5	Event Number 0203-05	LACSD	LACSD	LACSD/02-03.xls/L.A. S10				LACSDLARiver_R1_Data_303d	
4282	S10	(Estuary to Carson Street)	Metal	Copper	=	10.4 µg/L		Water	Composite	Dry	Dissolved	EPA200.8	5	Event Number 0203-02	LACSD	LACSD	LACSD/02-03.xls/L.A. S10				LACSDLARiver_R1_Data_303d	
6268	Willow St.	(Estuary to Carson Street)	Metal	Copper	=	18 µg/L		Water			Dissolved		10		WPD	WPD	(LAR 2002)					
6288	Willow St.	(Estuary to Carson Street)	Metal	Copper	<	10 µg/L	Good	Water			Dissolved		10		WPD	WPD	(LAR 2002)					
6306	Willow St.	(Estuary to Carson Street)	Metal	Copper	<	10 µg/L	Good	Water			Dissolved		10		WPD	WPD	(LAR 2002)					
6324	Willow St.	(Estuary to Carson Street)	Metal	Copper	=	9.3 µg/L	Good	Water			Dissolved		4		WPD	WPD	(LAR 2002)					
6344	Willow St.	(Estuary to Carson Street)	Metal	Copper	=	9 µg/L	Good	Water			Dissolved		4		WPD	WPD	(LAR 2002)					
6361	Willow St.	(Estuary to Carson Street)	Metal	Copper	=	5.1 µg/L	Good	Water			Dissolved		4		WPD	WPD	(LAR 2002)					
6379	Willow St.	(Estuary to Carson Street)	Metal	Copper	<	4 µg/L	Good	Water			Dissolved		4		WPD	WPD	(LAR 2002)					
6395	Willow St.	(Estuary to Carson Street)	Metal	Copper	=	8 µg/L	Good	Water			Dissolved		4		WPD	WPD	(LAR 2002)					
6413	Willow St.	(Estuary to Carson Street)	Metal	Copper	=	4.7 µg/L	Good	Water			Dissolved		4		WPD	WPD	(LAR 2002)					
6431	Willow St.	(Estuary to Carson Street)	Metal	Copper	=	12 µg/L	Good	Water			Dissolved		4		WPD	WPD	(LAR 2002)					
6449	Willow St.	(Estuary to Carson Street)	Metal	Copper	=	13 µg/L	Good	Water			Dissolved		4		WPD	WPD	(LAR 2002)					
6466	Willow St.	(Estuary to Carson Street)	Metal	Copper	=	9 µg/L	Good	Water			Dissolved		1		WPD	WPD	(LAR 2003 revised)					
6486	Willow St.	(Estuary to Carson Street)	Metal	Copper	=	12 µg/L	Good	Water			Dissolved		1		WPD	WPD	(LAR 2003 revised)					
6508	Willow St.	(Estuary to Carson Street)	Metal	Copper	=	8.6 µg/L	Good	Water			Dissolved		1		WPD	WPD	(LAR 2003 revised)					
6527	Willow St.	(Estuary to Carson Street)	Metal	Copper	=	9.84 µg/L	Good	Water			Dissolved		1		WPD	WPD	(LAR 2003 revised)					
6551	Willow St.	(Estuary to Carson Street)	Metal	Copper	=	12 µg/L	Good	Water			Dissolved		1		WPD	WPD	(LAR 2003 revised)					
6569	Willow St.	(Estuary to Carson Street)	Metal	Copper	=	10.8 µg/L	Good	Water			Dissolved		1		WPD	WPD	(LAR 2003 revised)					
6591	Willow St.	(Estuary to Carson Street)	Metal	Copper	=	10.3 µg/L	Good	Water			Dissolved		1.5		WPD	WPD	(LAR 2003 revised)					
6609	Willow St.	(Estuary to Carson Street)	Metal	Copper	=	8 µg/L	Good	Water			Dissolved		1.5		WPD	WPD	(LAR 2003 revised)					
6630	Willow St.	(Estuary to Carson Street)	Metal	Copper	=	9.4 µg/L	Good	Water			Dissolved		1.5		WPD	WPD	(LAR 2003 revised)					
6648	Willow St.	(Estuary to Carson Street)	Metal	Copper	=	10 µg/L	Good	Water			Dissolved		1.5		WPD	WPD	(LAR 2003 revised)					
6672	Willow St.	(Estuary to Carson Street)	Metal	Copper	=	12.1 µg/L	Good	Water			Dissolved		1.5		WPD	WPD	(LAR 2003 revised)			169		
6696	Willow St.	(Estuary to Carson Street)	Metal	Copper	=	14.2 µg/L	Good	Water			Dissolved		1.5		WPD	WPD	(LAR 2003 revised)			159		
6718	Willow St.	(Estuary to Carson Street)	Metal	Copper	=	11.6 µg/L	Good	Water			Dissolved		1.5		WPD	WPD	(LAR 2004)			189		
6743	Willow St.	(Estuary to Carson Street)	Metal	Copper	=	13.7 µg/L	Good	Water			Dissolved		1.5		WPD	WPD	(LAR 2004)			203		
6767	Willow St.	(Estuary to Carson Street)	Metal	Copper	=	8.6 µg/L	Good	Water			Dissolved		1.5		WPD	WPD	(LAR 2004)			237		
6793	Willow St.	(Estuary to Carson Street)	Metal	Copper	<	10 µg/L	Good	Water			Dissolved		4		WPD	WPD	(LAR 2004)			218		
6816	Willow St.	(Estuary to Carson Street)	Metal	Copper	<	10 µg/L	Good	Water			Dissolved		4		WPD	WPD	(LAR 2004)			211		
6838	Willow St.	(Estuary to Carson Street)	Metal	Copper	=	6 µg/L	Good	Water			Dissolved		4		WPD	WPD	(LAR 2004)			212		
6858	Willow St.	(Estuary to Carson Street)	Metal	Copper	=	13 µg/L	Good	Water			Dissolved		4		WPD	WPD	(LAR 2004)			178		
2407	S10	(Estuary to Carson Street)	Metal	Copper	=	7.01 µg/L		Water	Composite	Wet	Dissolved	A220.1	5	Storm Number 0001-03	LACSD	LACSD	LACSD/2000-01.xls/Table B-3				LACSDLARiver_R1_Data_303d	
2484	S10	(Estuary to Carson Street)	Metal	Copper	=	12.5 µg/L		Water	Composite	Wet	Dissolved	A220.1	5	Storm Number 0001-04	LACSD	LACSD	LACSD/2000-01.xls/Table B-3				LACSDLARiver_R1_Data_303d	
5439	S10	(Estuary to Carson Street)	Metal	Copper	=	6.07 µg/L		Water		Dry	Dissolved			No. 1 - March 17, 2005	LACSD	LACSD	LACSD/Dry_2_03-17-05.xls/LAR (S10)				LACSDLARiver_R1_Data_303d	
2272	S10	(Estuary to Carson Street)	Metal	Copper	=	14.4 µg/L		Water	Composite	Wet	Dissolved	A220.1	5	Storm Number 0001-01	LACSD	LACSD	LACSD/2000-01.xls/Table B-3				LACSDLARiver_R1_Data_303d	
2339	S10	(Estuary to Carson Street)	Metal	Copper	=	5.26 µg/L		Water	Composite	Wet	Dissolved	A220.1	5	Storm Number 0001-02	LACSD	LACSD	LACSD/2000-01.xls/Table B-3				LACSDLARiver_R1_Data_303d	
2559	S10	(Estuary to Carson Street)	Metal	Copper	=	6.41 µg/L		Water	Composite	Wet	Dissolved	A220.1	5	Storm Number 0001-05	LACSD	LACSD	LACSD/2000-01.xls/Table B-3				LACSDLARiver_R1_Data_303d	
2636	S10	(Estuary to Carson Street)	Metal	Copper	=	11.3 µg/L		Water	Composite	Wet	Dissolved	A220.1	5	Storm Number 0001-06	LACSD	LACSD	LACSD/2000-01.xls/Table B-3				LACSDLARiver_R1_Data_303d	
2704	S10	(Estuary to Carson Street)	Metal	Copper	=	8.5 µg/L		Water	Composite	Wet	Dissolved	A220.1	5	Storm Number 0001-07	LACSD	LACSD	LACSD/2000-01.xls/Table B-3				LACSDLARiver_R1_Data_303d	
2779	S10	(Estuary to Carson Street)	Metal	Copper	=	7.18 µg/L		Water	Composite	Wet	Dissolved	A220.1	5	Storm Number 0001-08	LACSD	LACSD	LACSD/2000-01.xls/Table B-3				LACSDLARiver_R1_Data_303d	
2855	S10	(Estuary to Carson Street)	Metal	Copper	=	7.57 µg/L		Water	Composite	Wet	Dissolved	A220.1	5	Storm Number 0001-09	LACSD	LACSD	LACSD/2000-01.xls/Table B-3				LACSDLARiver_R1_Data_303d	
2924	S10	(Estuary to Carson Street)	Metal	Copper	=	7.96 µg/L		Water	Composite	Wet	Dissolved	A220.1	5	Storm Number 0001-10	LACSD	LACSD	LACSD/2000-01.xls/Table B-3				LACSDLARiver_R1_Data_303d	
2999	S10	(Estuary to Carson Street)	Metal	Copper	<	5 µg/L		Water	Composite	Wet	Dissolved	A220.1	5	Storm Number 0001-11	LACSD	LACSD	LACSD/2000-01.xls/Table B-3				LACSDLARiver_R1_Data_303d	
3077	S10	(Estuary to Carson Street)	Metal	Copper	=	10.1 µg/L		Water	Composite	Wet	Dissolved	EPA200.8	0.5	Storm Number 0102-02	LACSD	LACSD	LACSD/01-02.xls/Table B-3 S10				LACSDLARiver_R1_Data_303d	
3155	S10	(Estuary to Carson Street)	Metal	Copper	=	17.6 µg/L		Water	Composite	Wet	Dissolved	EPA200.8	0.5	Storm Number 0102-03	LACSD	LACSD	LACSD/01-02.xls/Table B-3 S10				LACSDLARiver_R1_Data_303d	
3235	S10	(Estuary to Carson Street)	Metal	Copper	=	23.1 µg/L		Water	Composite	Wet	Dissolved	EPA200.8	0.5	Storm Number 0102-04	LACSD	LACSD	LACSD/01-02.xls/Table B-3 S10				LACSDLARiver_R1_Data_303d	
3305	S10	(Estuary to Carson Street)	Metal	Copper	=	3.61 µg/L		Water	Composite	Wet	Dissolved	EPA200.8	0.5	Storm Number 0102-05	LACSD	LACSD	LACSD/01-02.xls/Table B-3 S10				LACSDLARiver_R1_Data_303d	
3384	S10	(Estuary to Carson Street)	Metal	Copper	=	6.12 µg/L		Water	Composite	Wet	Dissolved	EPA200.8	0.5	Storm Number 0102-06	LACSD	LACSD	LACSD/01-02.xls/Table B-3 S10				LACSDLARiver_R1_Data_303d	

LA River Reach 1
Dissolved Copper - Water

4438	S10	(Estuary to Carson Street)	Metal	Copper	=	10	µg/L	28-Oct-03	Water	Composite	Dry	Dissolved	EPA200.8	5	Event Number 0304-01	LACSD	LACSD	LACSD/03-04.xls/L.A. S10
4593	S10	(Estuary to Carson Street)	Metal	Copper	=	4.48	µg/L	31-Oct-03	Water	Composite	Wet	Dissolved	EPA200.8	5	Event Number 0304-01	LACSD	LACSD	LACSD/03-04.xls/L.A. S10
4748	S10	(Estuary to Carson Street)	Metal	Copper	=	7.99	µg/L	25-Dec-03	Water	Composite	Wet	Dissolved	EPA200.8	5	Event Number 0304-02	LACSD	LACSD	LACSD/03-04.xls/L.A. S10
4903	S10	(Estuary to Carson Street)	Metal	Copper	=	10.6	µg/L	01-Jan-04	Water	Composite	Wet	Dissolved	EPA200.8	5	Event Number 0304-03	LACSD	LACSD	LACSD/03-04.xls/L.A. S10
5057	S10	(Estuary to Carson Street)	Metal	Copper	=	6.73	µg/L	13-Jan-04	Water	Composite	Dry	Dissolved	EPA200.8	5	Event Number 0304-02	LACSD	LACSD	LACSD/03-04.xls/L.A. S10
5216	S10	(Estuary to Carson Street)	Metal	Copper	=	5.36	µg/L	26-Oct-04	Water		Wet	Dissolved		2004		LACSD	LACSD	LACSD/Storm_2_10-26-04.xls/LAR (S10)
5380	S10	(Estuary to Carson Street)	Metal	Copper	=	5.79	µg/L	07-Jan-05	Water		Wet	Dissolved		Emission - January 7,		LACSD	LACSD	LACSD/Storm_6_ME_01-07-05.xls/LAR (S10)
5326	S10	(Estuary to Carson Street)	Metal	Copper	=	8.06	µg/L	05-Dec-04	Water		Wet	Dissolved		2004		LACSD	LACSD	LACSD/Storm_3_12-05-04.xls/LAR (S10)

LACSDLARiver_R1_Data_303d
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-  LosAngelesRiverEstuary_Zn_Total_Sediment
 -  LosAngelesRiverEstuary_Zn_Total_Sediment
 -  QueriedRecords_Zn_Total_Sediment

Los Angeles River Estuary (Queensway Bay)

Total Zinc - Sediment

Table 1. Data Summary Information

Waterbody Name	Los Angeles River Estuary (Queensway Bay)	Region	4
		Total Waterbody Size	261 Acres
Hydrologic Unit	405.12	Size Affected	261 Acres
Pollutant/Stressor	Zinc	Extent of Impairment	Entire Reach

Table 2. Summary of Zinc for Los Angeles River Estuary (Queensway Bay)

Dates of Sampling	9/2/1992 - 7/30/1998	Minimum Detected Value	2.94 µg/g
Number of Samples	55	Maximum Detected Value	417 µg/g
Number of Detected Samples	55	Median Detected Value	213 µg/g
Hardness			N/A
pH			N/A
WER			N/A
Temperature			N/A

Data Sources

ACOE Environmental Assessment for LA River Estuary Maintenance Dredging

Beneficial Uses for Los Angeles River Estuary (Queensway Bay)

§ IND § REC1 § COMM § MAR § RARE § SPWN § WET
 § NAV § REC2 § EST § WILD § MIGR § SHELL

Applicable Water Quality Objectives	Out of 55 Samples:	# Exceed	% Exceed	List	Delist
410 µg/g		N/A	N/A	No	Yes

Triggering Water Quality Objective for Listing

No objectives were exceeded.

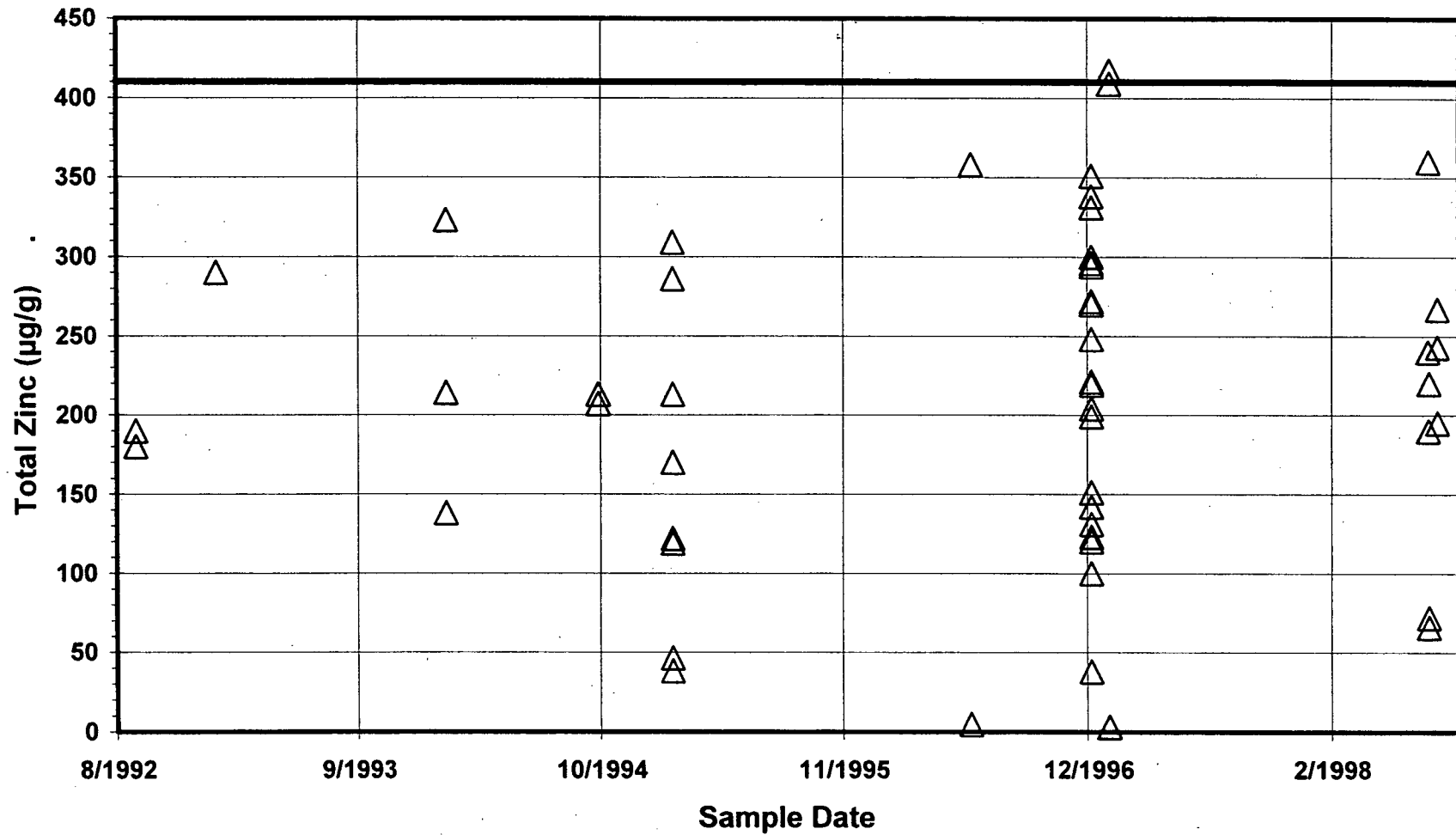
Triggering Water Quality Objective for Delisting
















The contains water quality criteria for waterbodies in California. The most conservative applicable water quality criterion for total zinc is 410 µg/g for the objective. In Los Angeles River Estuary (Queensway Bay), the criterion was exceeded in 2 of 55 samples, which is 3.6% of the sample events. Under the state's listing policy, a waterbody is eligible for delisting for total zinc if there are 4 or fewer exceedances out of the 55 samples.

References

None

Sediment Data Summary for Los Angeles River Estuary (Queensway Bay) – No Objectives



	LosAngelesRiverR1_Aluminum_Water
	LosAngelesRiverR1_Aluminum_Water
	LosAngelesRiverR1_Cu_Dissolved_Water
	LosAngelesRiverR1_Cu_Dissolved_Water
	LosAngelesRiverR1_FecalColiform_Water
	LosAngelesRiverR1_FecalColiform_Water
	LosAngelesRiverR1_pH_Water
	LosAngelesRiverR1_pH_Water
	LosAngelesRiverR1_Zn_Dissolved_Water
	LosAngelesRiverR1_Zn_Dissolved_Water
	QueriedRecords_Aluminum_Water
	QueriedRecords_Cu_Dissolved_Water
	QueriedRecords_FecalColiform_Water
	QueriedRecords_pH_Water
	QueriedRecords_Zn_Dissolved_Water

Los Angeles River Reach 1 (Estuary to Carson Street) Total Aluminum - Water

Table 1. Data Summary Information

Waterbody Name	Los Angeles River Reach 1 (Estuary to Carson Street)	Region	4
Hydrologic Unit	405.12	Total Waterbody Size	3.4 Miles
Pollutant/Stressor	Aluminum	Size Affected	3.4 Miles
		Extent of Impairment	Entire Reach

Table 2. Summary of Aluminum for Los Angeles River Reach 1 (Estuary to Carson Street)

Dates of Sampling	10/14/1997 - 3/17/2005	Minimum Detected Value	0.5 µg/L
Number of Samples	80	Maximum Detected Value	14600 µg/L
Number of Detected Samples	47	Median Detected Value	100 µg/L
Hardness			N/A
pH			N/A
WER			N/A
Temperature			N/A

Data Sources

LACSD

Beneficial Uses for Los Angeles River Reach 1 (Estuary to Carson Street)

§ MUN § PROC § REC1 § WARM § WILD § MIGR § SHELL
 § IND § GWR § REC2 § MAR § RARE § SPWN

Applicable Water Quality Objectives	Out of 80 Samples:	# Exceed	% Exceed	List	Delist
1000 µg/L Basin Plan MUN		6	7.5%	No	Yes

Triggering Water Quality Objective for Listing

No objectives were exceeded.

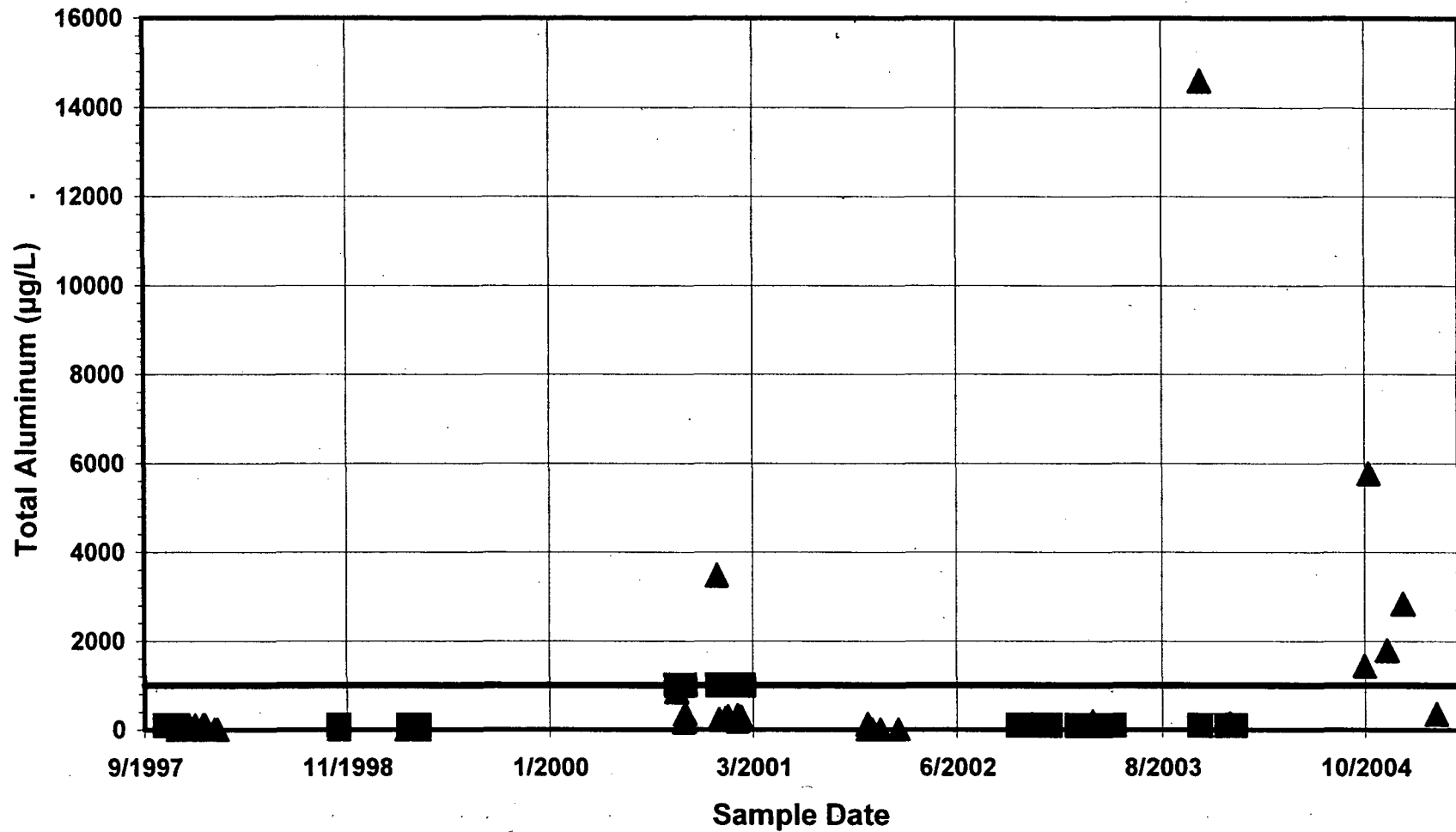
Triggering Water Quality Objective for Delisting

The Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994 contains water quality criteria for waterbodies in the Los Angeles Region. The most conservative applicable water quality criterion for total aluminum is 1000 µg/L for the Basin Plan MUN objective. In Los Angeles River Reach 1 (Estuary to Carson Street), the criterion was exceeded in 6 of 80 samples, which is 7.5% of the sample events. Under the state's listing policy, a waterbody is eligible for delisting for total aluminum if there are 6 or fewer exceedances out of the 80 samples.

References

Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994

Water Data Summary for Los Angeles River Reach 1 (Estuary to Carson Street) – Basin Plan MUN Objective



Raw Data

LA River Reach 1
Aluminum - Water

2973	S10	Los Angeles River Reach 1	Metal	Aluminum	<	1000	µg/L	06-Mar-01	Water	Composite	Wet	Total	A202.2	1000	Storm Number 000	LACSD	LACSD	LACSD/2000-01.xls/Table B-3	LACSDLARiver R1 Data 303d
3050	S10	Los Angeles River Reach 1	Metal	Aluminum	=	125	µg/L	24-Nov-01	Water	Composite	Wet	Total	EPA200.8	100	Storm Number 0102	LACSD	LACSD	LACSD/01-02.xls/Table B-3 S10	LACSDLARiver R1 Data 303d
3049	S10	Los Angeles River Reach 1	Metal	Aluminum	<	0	µg/L	24-Nov-01	Water	Composite	Wet	Dissolved	EPA200.8	100	Storm Number 0102	LACSD	LACSD	LACSD/01-02.xls/Table B-3 S10	LACSDLARiver R1 Data 303d
3129	S10	Los Angeles River Reach 1	Metal	Aluminum	<	0	µg/L	29-Nov-01	Water	Composite	Wet	Dissolved	EPA200.8	100	Storm Number 0102	LACSD	LACSD	LACSD/01-02.xls/Table B-3 S10	LACSDLARiver R1 Data 303d
3207	S10	Los Angeles River Reach 1	Metal	Aluminum	<	0	µg/L	03-Dec-01	Water	Composite	Wet	Total	EPA200.8	100	Storm Number 0102	LACSD	LACSD	LACSD/01-02.xls/Table B-3 S10	LACSDLARiver R1 Data 303d
3278	S10	Los Angeles River Reach 1	Metal	Aluminum	<	0	µg/L	20-Dec-01	Water	Composite	Wet	Total	EPA200.8	100	Storm Number 0102	LACSD	LACSD	LACSD/01-02.xls/Table B-3 S10	LACSDLARiver R1 Data 303d
3356	S10	Los Angeles River Reach 1	Metal	Aluminum	<	0	µg/L	28-Jan-02	Water	Composite	Wet	Total	EPA200.8	100	Storm Number 0102	LACSD	LACSD	LACSD/01-02.xls/Table B-3 S10	LACSDLARiver R1 Data 303d
5141	S10	Los Angeles River Reach 1	Metal	Aluminum	=	1440	µg/L	17-Oct-04	Water	Composite	Wet	Total	EPA200.8	100	Storm 1 - 10/17/200	LACSD	LACSD	LACSD/Storm_1_10-17-04.xls/LAR (S10)	LACSDLARiver R1 Data 303d
4396	S10	Los Angeles River Reach 1	Metal	Aluminum	<	100	µg/L	28-Oct-03	Water	Composite	Dry	Total	EPA200.8	100	Event Number 0304	LACSD	LACSD	LACSD/03-04.xls/LA_S10	LACSDLARiver R1 Data 303d
4551	S10	Los Angeles River Reach 1	Metal	Aluminum	<	100	µg/L	31-Oct-03	Water	Composite	Wet	Dissolved	EPA200.8	100	Event Number 0304	LACSD	LACSD	LACSD/03-04.xls/LA_S10	LACSDLARiver R1 Data 303d
4550	S10	Los Angeles River Reach 1	Metal	Aluminum	=	14600	µg/L	31-Oct-03	Water	Composite	Wet	Total	EPA200.8	100	Event Number 0304	LACSD	LACSD	LACSD/03-04.xls/LA_S10	LACSDLARiver R1 Data 303d
4705	S10	Los Angeles River Reach 1	Metal	Aluminum	<	100	µg/L	25-Dec-03	Water	Composite	Wet	Dissolved	EPA200.8	100	Event Number 0304	LACSD	LACSD	LACSD/03-04.xls/LA_S10	LACSDLARiver R1 Data 303d
4706	S10	Los Angeles River Reach 1	Metal	Aluminum	=	117	µg/L	25-Dec-03	Water	Composite	Wet	Total	EPA200.8	100	Event Number 0304	LACSD	LACSD	LACSD/03-04.xls/LA_S10	LACSDLARiver R1 Data 303d
4860	S10	Los Angeles River Reach 1	Metal	Aluminum	<	100	µg/L	01-Jan-04	Water	Composite	Wet	Dissolved	EPA200.8	100	Event Number 0304	LACSD	LACSD	LACSD/03-04.xls/LA_S10	LACSDLARiver R1 Data 303d
4861	S10	Los Angeles River Reach 1	Metal	Aluminum	=	144	µg/L	01-Jan-04	Water	Composite	Wet	Total	EPA200.8	100	Event Number 0304	LACSD	LACSD	LACSD/03-04.xls/LA_S10	LACSDLARiver R1 Data 303d
5015	S10	Los Angeles River Reach 1	Metal	Aluminum	<	100	µg/L	13-Jan-04	Water	Composite	Dry	Total	EPA200.8	100	Event Number 0304	LACSD	LACSD	LACSD/03-04.xls/LA_S10	LACSDLARiver R1 Data 303d
5307	S10	Los Angeles River Reach 1	Metal	Aluminum	=	1790	µg/L	05-Dec-04	Water	Composite	Wet	Total	EPA200.8	100	Storm 3 - December	LACSD	LACSD	LACSD/Storm_3_12-05-04.xls/LAR (S10)	LACSDLARiver R1 Data 303d

Los Angeles River Reach 1 (Estuary to Carson Street) Fecal Coliform - Water

Table 1. Data Summary Information

Waterbody Name	Los Angeles River Reach 1 (Estuary to Carson Street)	Region	4
Hydrologic Unit	405.12	Total Waterbody Size	3.4 Miles
Pollutant/Stressor	Fecal Coliform	Size Affected	3.4 Miles
		Extent of Impairment	Entire Reach

Table 2. Summary of Fecal Coliform for Los Angeles River Reach 1 (Estuary to Carson Street)

Dates of Sampling	11/10/1997 - 3/17/2005	Minimum Detected Value	20 MPN/100mL
Number of Samples	43	Maximum Detected Value	1600000 MPN/100mL
Number of Detected Samples	43	Median Detected Value	240000 MPN/100mL
Hardness			N/A
pH			N/A
WER			N/A
Temperature			N/A

Data Sources

LACSD

Beneficial Uses for Los Angeles River Reach 1 (Estuary to Carson Street)

§ MUN § PROC § REC1 § WARM § WILD § MIGR § SHELL
§ IND § GWR § REC2 § MAR § RARE § SPWN

Applicable Water Quality Objectives	Out of 43 Samples:	# Exceed	% Exceed	List	Delist
200 MPN/100mL Basin Plan REC1 Freshwater 30-Day Minimum 5 sample	41	95.3%	Yes	No	
400 MPN/100mL Basin Plan REC1 Freshwater Single sample	40	93%	Yes	No	
2000 MPN/100mL Basin Plan REC2 30-Day Log Mean Minimum 4 sample	38	88.4%	Yes	No	
4000 MPN/100mL Basin Plan REC2 30-Day Maximum 10% samples	38	88.4%	Yes	No	

Triggering Water Quality Objective for Listing

The Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994 contains water quality criteria for waterbodies in the Los Angeles Region. The most conservative applicable water quality criterion for fecal coliform is 200 MPN/100mL for the Basin Plan REC1 Freshwater 30-Day Minimum 5 samples objective. In Los Angeles River Reach 1 (Estuary to Carson Street), the criterion was exceeded in 41 of 43 samples, which is 95.4% of the sample events. Under the state's listing policy, a waterbody is considered to be impaired for fecal coliform if there are 8 or more exceedances out of the 43 samples.

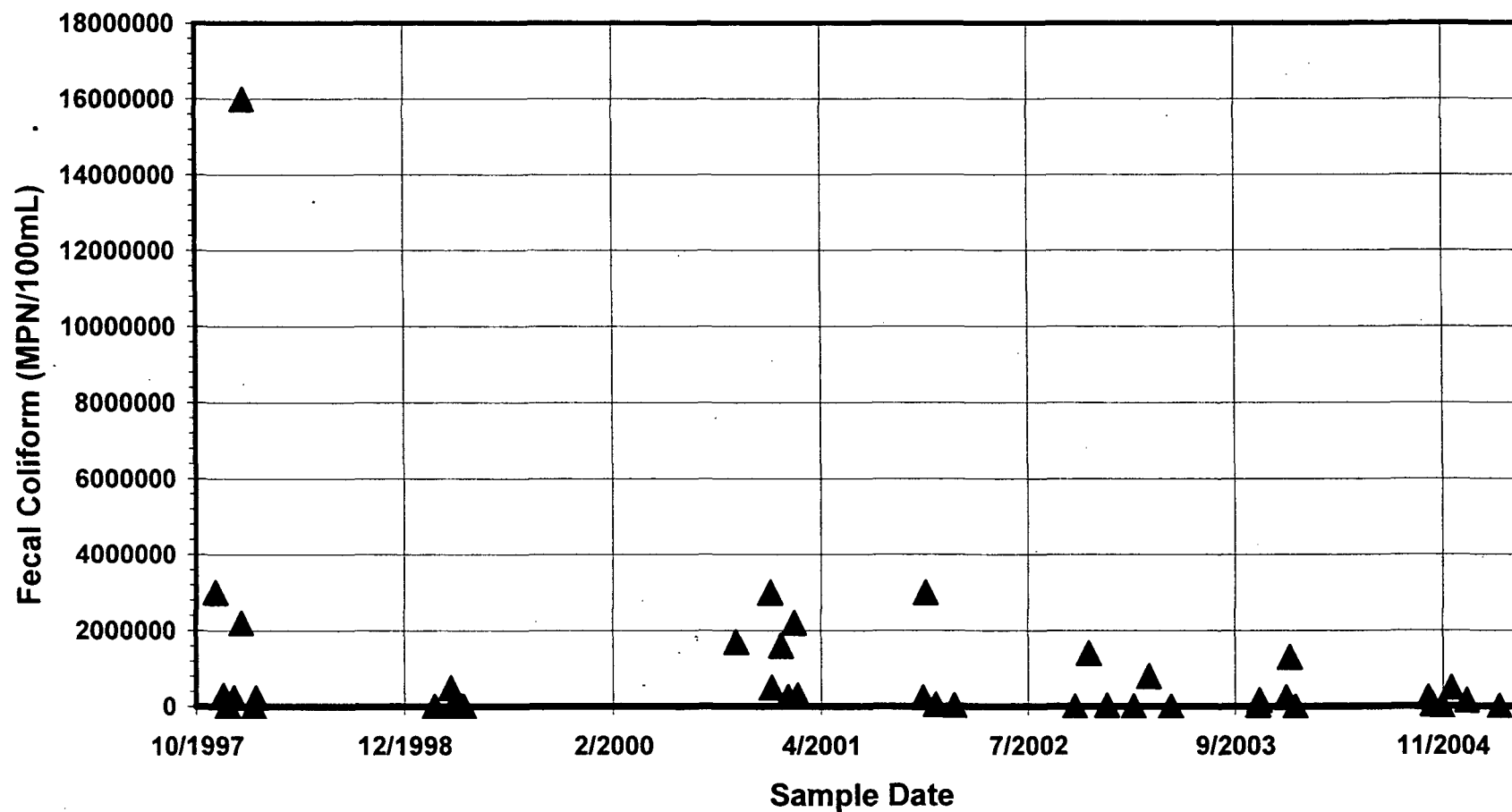
Triggering Water Quality Objective for Delisting

Not eligible for delisting.

References

Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994.

Water Data Summary for Los Angeles River Reach 1 (Estuary to Carson Street) – Basin Plan REC1 Freshwater 30-Day Minimum 5 samples Objective



Raw Data

LA River Reach 1
Fecal Coliform - Water

RecordID	SiteID	Waterbody	Classification	Constituent	Unit	Result	Units	SampleDate	DataQ	Method	SampleType	SampleFraction	AnalyticalM	MDL	SampleComment	ProjectName	DataSource	FilenameSpreadsheet	TableName	
480	S10	Los Angeles River Reach 1	Bacteriological	Fecal Coliform	=	3000000	MPN/100mL	10-Nov-97	Good	Water	Grab					2002 Regional Water Q	SWRCB	4-56-4-81_2002_303d_data_4-69_LA_River		
5443	S10	Los Angeles River Reach 1	Bacteriological	Fecal Coliform	=	16000	MPN/100ml	17-Mar-05		Water		Dry			Dry Weather Sar	LACSD	LACSD	LACSD/Dry_2_03-17-05.xls/LAR (S10)	LACSDLARiver_R1_Data_303d	
650	S10	Los Angeles River Reach 1	Bacteriological	Fecal Coliform	=	300000	MPN/100mL	26-Nov-97	Good	Water	Grab					2002 Regional Water Q	SWRCB	4-56-4-81_2002_303d_data_4-69_LA_River		
5219	S10	Los Angeles River Reach 1	Bacteriological	Fecal Coliform	=	50000	MPN/100ml	26-Oct-04		Water		Wet			Storm 2 - Octob	LACSD	LACSD	LACSD/Storm_2_10-26-04.xls/LAR (S10)	LACSDLARiver_R1_Data_303d	
945	S10	Los Angeles River Reach 1	Bacteriological	Fecal Coliform	=	22000	MPN/100mL	05-Dec-97	Good	Water	Grab					2002 Regional Water Q	SWRCB	4-56-4-81_2002_303d_data_4-69_LA_River		
1060	S10	Los Angeles River Reach 1	Bacteriological	Fecal Coliform	=	240000	MPN/100mL	18-Dec-97	Good	Water	Grab					2002 Regional Water Q	SWRCB	4-56-4-81_2002_303d_data_4-69_LA_River		
5275	S10	Los Angeles River Reach 1	Bacteriological	Fecal Coliform	=	170	MPN/100ml	16-Nov-04		Water		Dry			Dry Weather Sar	LACSD	LACSD	LACSD/Dry_1_11-02-04.xls/LAR (S10)	LACSDLARiver_R1_Data_303d	
1279	S10	Los Angeles River Reach 1	Bacteriological	Fecal Coliform	=	2200000	MPN/100mL	04-Jan-98	Good	Water	Grab					2002 Regional Water Q	SWRCB	4-56-4-81_2002_303d_data_4-69_LA_River		
1446	S10	Los Angeles River Reach 1	Bacteriological	Fecal Coliform	=	16000000	MPN/100mL	09-Jan-98	Good	Water	Grab					2002 Regional Water Q	SWRCB	4-56-4-81_2002_303d_data_4-69_LA_River		
1614	S10	Los Angeles River Reach 1	Bacteriological	Fecal Coliform	=	7000	MPN/100mL	29-Jan-98	Good	Water	Grab					2002 Regional Water Q	SWRCB	4-56-4-81_2002_303d_data_4-69_LA_River		
1619	S10	Los Angeles River Reach 1	Bacteriological	Fecal Coliform	=	240000	MPN/100mL	03-Feb-98	Good	Water	Grab					2002 Regional Water Q	SWRCB	4-56-4-81_2002_303d_data_4-69_LA_River		
1947	S10	Los Angeles River Reach 1	Bacteriological	Fecal Coliform	=	5000	MPN/100mL	09-Feb-99	Good	Water	Grab					2002 Regional Water Q	SWRCB	4-56-4-81_2002_303d_data_4-69_LA_River		
1972	S10	Los Angeles River Reach 1	Bacteriological	Fecal Coliform	=	500000	MPN/100mL	15-Mar-99	Good	Water	Grab					2002 Regional Water Q	SWRCB	4-56-4-81_2002_303d_data_4-69_LA_River		
2043	S10	Los Angeles River Reach 1	Bacteriological	Fecal Coliform	=	24000	MPN/100mL	20-Mar-99	Good	Water	Grab					2002 Regional Water Q	SWRCB	4-56-4-81_2002_303d_data_4-69_LA_River		
2071	S10	Los Angeles River Reach 1	Bacteriological	Fecal Coliform	=	30000	MPN/100mL	25-Mar-99	Good	Water	Grab					2002 Regional Water Q	SWRCB	4-56-4-81_2002_303d_data_4-69_LA_River		
2102	S10	Los Angeles River Reach 1	Bacteriological	Fecal Coliform	=	17000	MPN/100mL	06-Apr-99	Good	Water	Grab					2002 Regional Water Q	SWRCB	4-56-4-81_2002_303d_data_4-69_LA_River		
2172	S10	Los Angeles River Reach 1	Bacteriological	Fecal Coliform	=	5000	MPN/100mL	08-Apr-99	Good	Water	Grab					2002 Regional Water Q	SWRCB	4-56-4-81_2002_303d_data_4-69_LA_River		
2240	S10	Los Angeles River Reach 1	Bacteriological	Fecal Coliform	=	700	MPN/100mL	11-Apr-99	Good	Water	Grab					2002 Regional Water Q	SWRCB	4-56-4-81_2002_303d_data_4-69_LA_River		
3523	S10	Los Angeles River Reach 1	Bacteriological	Fecal Coliform	=	1100	MPN/100ml	10-Oct-02		Water	Grab	Dry		SM9230B	20	Event Number 0	LACSD	LACSD	LACSD/02-03.xls/LA_S10	LACSDLARiver_R1_Data_303d
3678	S10	Los Angeles River Reach 1	Bacteriological	Fecal Coliform	=	1400000	MPN/100ml	08-Nov-02		Water	Grab	Wet		SM9230B	20	Event Number 0	LACSD	LACSD	LACSD/02-03.xls/LA_S10	LACSDLARiver_R1_Data_303d
3833	S10	Los Angeles River Reach 1	Bacteriological	Fecal Coliform	=	30000	MPN/100ml	16-Dec-02		Water	Grab	Wet		SM9230B	20	Event Number 0	LACSD	LACSD	LACSD/02-03.xls/LA_S10	LACSDLARiver_R1_Data_303d
3988	S10	Los Angeles River Reach 1	Bacteriological	Fecal Coliform	=	11000	MPN/100ml	11-Feb-03		Water	Grab	Wet		SM9230B	20	Event Number 0	LACSD	LACSD	LACSD/02-03.xls/LA_S10	LACSDLARiver_R1_Data_303d
4143	S10	Los Angeles River Reach 1	Bacteriological	Fecal Coliform	=	800000	MPN/100ml	15-Mar-03		Water	Grab	Wet		SM9230B	20	Event Number 0	LACSD	LACSD	LACSD/02-03.xls/LA_S10	LACSDLARiver_R1_Data_303d
4298	S10	Los Angeles River Reach 1	Bacteriological	Fecal Coliform	=	20	MPN/100ml	30-Apr-03		Water	Grab	Dry		SM9230B	20	Event Number 0	LACSD	LACSD	LACSD/02-03.xls/LA_S10	LACSDLARiver_R1_Data_303d
5384	S10	Los Angeles River Reach 1	Bacteriological	Fecal Coliform	=	160000	MPN/100ml	07-Jan-05		Water		Wet			Storm 6 for Mass	LACSD	LACSD	LACSD/Storm_6_ME_01-07-05.xls/LAR	LACSDLARiver_R1_Data_303d	
2411	S10	Los Angeles River Reach 1	Bacteriological	Fecal Coliform	=	1700000	MPN/100ml	30-Oct-00		Water	Grab	Wet		C9221C	20	Storm Number 0	LACSD	LACSD	LACSD/2000-01.xls/Table B-3	LACSDLARiver_R1_Data_303d
2487	S10	Los Angeles River Reach 1	Bacteriological	Fecal Coliform	=	3000000	MPN/100ml	08-Jan-01		Water	Grab	Wet		C9221C	20	Storm Number 0	LACSD	LACSD	LACSD/2000-01.xls/Table B-3	LACSDLARiver_R1_Data_303d
2563	S10	Los Angeles River Reach 1	Bacteriological	Fecal Coliform	=	500000	MPN/100ml	11-Jan-01		Water	Grab	Wet		C9221C	20	Storm Number 0	LACSD	LACSD	LACSD/2000-01.xls/Table B-3	LACSDLARiver_R1_Data_303d
2707	S10	Los Angeles River Reach 1	Bacteriological	Fecal Coliform	=	1600000	MPN/100ml	30-Jan-01		Water	Grab	Wet		C9221C	20	Storm Number 0	LACSD	LACSD	LACSD/2000-01.xls/Table B-3	LACSDLARiver_R1_Data_303d
2783	S10	Los Angeles River Reach 1	Bacteriological	Fecal Coliform	=	260000	MPN/100ml	14-Feb-01		Water	Grab	Wet		C9221C	20	Storm Number 0	LACSD	LACSD	LACSD/2000-01.xls/Table B-3	LACSDLARiver_R1_Data_303d
2927	S10	Los Angeles River Reach 1	Bacteriological	Fecal Coliform	=	2200000	MPN/100ml	28-Feb-01		Water	Grab	Wet		C9221C	20	Storm Number 0	LACSD	LACSD	LACSD/2000-01.xls/Table B-3	LACSDLARiver_R1_Data_303d
3003	S10	Los Angeles River Reach 1	Bacteriological	Fecal Coliform	=	300000	MPN/100ml	06-Mar-01		Water	Grab	Wet		C9221C	20	Storm Number 0	LACSD	LACSD	LACSD/2000-01.xls/Table B-3	LACSDLARiver_R1_Data_303d
3080	S10	Los Angeles River Reach 1	Bacteriological	Fecal Coliform	=	240000	MPN/100ml	24-Nov-01		Water	Grab	Wet		C9221C	20	Storm Number 0	LACSD	LACSD	LACSD/01-02.xls/Table B-3 S10	LACSDLARiver_R1_Data_303d
3159	S10	Los Angeles River Reach 1	Bacteriological	Fecal Coliform	=	3000000	MPN/100ml	29-Nov-01		Water	Grab	Wet		C9221C	20	Storm Number 0	LACSD	LACSD	LACSD/01-02.xls/Table B-3 S10	LACSDLARiver_R1_Data_303d
3308	S10	Los Angeles River Reach 1	Bacteriological	Fecal Coliform	=	50000	MPN/100ml	20-Dec-01		Water	Grab	Wet		C9221C	20	Storm Number 0	LACSD	LACSD	LACSD/01-02.xls/Table B-3 S10	LACSDLARiver_R1_Data_303d
3387	S10	Los Angeles River Reach 1	Bacteriological	Fecal Coliform	=	35000	MPN/100ml	28-Jan-02		Water	Grab	Wet		C9221C	20	Storm Number 0	LACSD	LACSD	LACSD/01-02.xls/Table B-3 S10	LACSDLARiver_R1_Data_303d
5166	S10	Los Angeles River Reach 1	Bacteriological	Fecal Coliform	=	240000	MPN/100ml	17-Oct-04		Water		Wet			Storm 1 - 10/17/	LACSD	LACSD	LACSD/Storm_1_10-17-04.xls/LAR (S10)	LACSDLARiver_R1_Data_303d	
4453	S10	Los Angeles River Reach 1	Bacteriological	Fecal Coliform	=	28000	MPN/100ml	28-Oct-03		Water	Grab	Dry		SM9230B	20	Event Number 0	LACSD	LACSD	LACSD/03-04.xls/LA_S10	LACSDLARiver_R1_Data_303d
4608	S10	Los Angeles River Reach 1	Bacteriological	Fecal Coliform	=	170000	MPN/100ml	31-Oct-03		Water	Grab	Wet		SM9230B	20	Event Number 0	LACSD	LACSD	LACSD/03-04.xls/LA_S10	LACSDLARiver_R1_Data_303d
4763	S10	Los Angeles River Reach 1	Bacteriological	Fecal Coliform	=	240000	MPN/100ml	25-Dec-03		Water	Grab	Wet		SM9230B	20	Event Number 0	LACSD	LACSD	LACSD/03-04.xls/LA_S10	LACSDLARiver_R1_Data_303d
4918	S10	Los Angeles River Reach 1	Bacteriological	Fecal Coliform	=	1300000	MPN/100ml	01-Jan-04		Water	Grab	Wet		SM9230B	20	Event Number 0	LACSD	LACSD	LACSD/03-04.xls/LA_S10	LACSDLARiver_R1_Data_303d
5073	S10	Los Angeles River Reach 1	Bacteriological	Fecal Coliform	=	230	MPN/100ml	13-Jan-04		Water	Grab	Dry		SM9230B	20	Event Number 0	LACSD	LACSD	LACSD/03-04.xls/LA_S10	LACSDLARiver_R1_Data_303d
5330	S10	Los Angeles River Reach 1	Bacteriological	Fecal Coliform	=	500000	MPN/100ml	05-Dec-04		Water		Wet			Storm 3 - Decem	LACSD	LACSD	LACSD/Storm_3_12-05-04.xls/LAR (S10)	LACSDLARiver_R1_Data_303d	

Los Angeles River Reach 4 (Riverside Dr. to Sepulveda Dam) Fecal Coliform - Water

Table 1. Data Summary Information

Waterbody Name	Los Angeles River Reach 4 (Riverside Dr. to Sepulveda Dam)	Region	4
Hydrologic Unit	405.21	Total Waterbody Size	11 Miles
Pollutant/Stressor	Fecal Coliform	Size Affected	11 Miles
		Extent of Impairment	Entire Reach

Table 2. Summary of Fecal Coliform for Los Angeles River Reach 4 (Riverside Dr. to Sepulveda Dam)

Dates of Sampling	7/1/1997 - 12/30/2003	Minimum Detected Value	1 MPN/100mL
Number of Samples	897	Maximum Detected Value	60000 MPN/100mL
Number of Detected Samples	896	Median Detected Value	500 MPN/100mL
Hardness			N/A
pH			N/A
WER			N/A
Temperature			N/A

Data Sources

Donald C. Tillman Water Reclamation Plant NPDES

Beneficial Uses for Los Angeles River Reach 4 (Riverside Dr. to Sepulveda Dam)

§ MUN § GWR § REC2 § WILD
§ IND § REC1 § WARM § WET

Applicable Water Quality Objectives	Out of 897 Samples:	# Exceed	% Exceed	List	Delist
200 MPN/100mL Basin Plan REC1 Freshwater 30-Day Minimum 5 samples	851/896	851/896	95%	Yes	No
400 MPN/100mL Basin Plan REC1 Freshwater Single sample	534	534	59.5%	Yes	No
2000 MPN/100mL Basin Plan REC2 30-Day Log Mean Minimum 4 samples	119	119	13.3%	No	Yes
4000 MPN/100mL Basin Plan REC2 30-Day Maximum 10% samples	46	46	5.1%	No	Yes

Triggering Water Quality Objective for Listing

The Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994 contains water quality criteria for waterbodies in the Los Angeles Region. The most conservative applicable water quality criterion for fecal coliform is 200 MPN/100mL for the Basin Plan REC1 Freshwater 30-Day Minimum 5 samples objective. In Los Angeles River Reach 4 (Riverside Dr. to Sepulveda Dam), the criterion was exceeded in 851 of 896 samples, which is 95% of the sample events. Under the state's listing policy, a waterbody is considered to be impaired for fecal coliform if there are 149 or more exceedances out of the 896 samples.

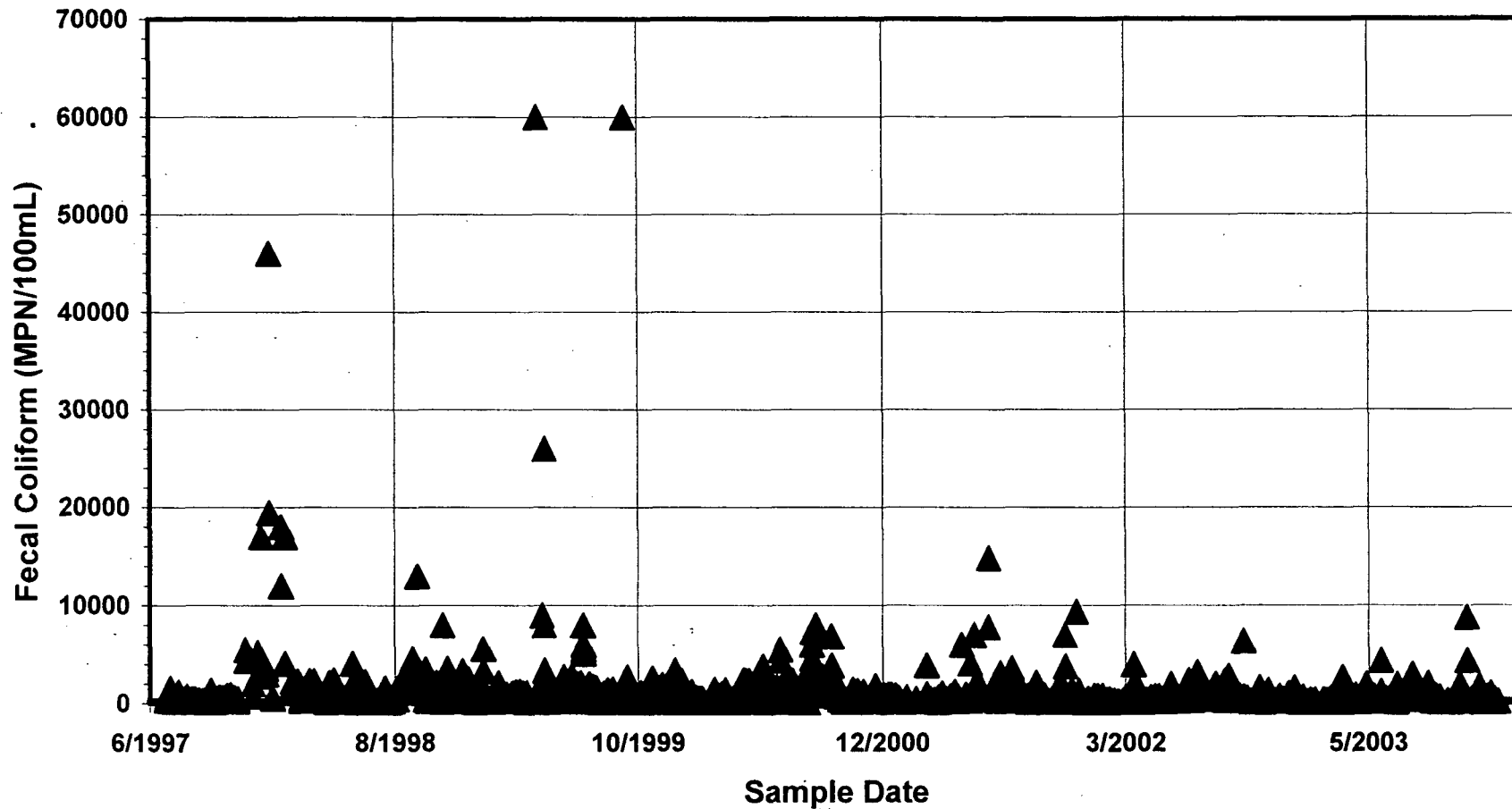
Triggering Water Quality Objective for Delisting

Not eligible for delisting.

References

Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994

Water Data Summary for Los Angeles River Reach 4 (Riverside Dr. to Sepulveda Dam) – Basin Plan REC1 Freshwater 30-Day Minimum 5 samples Objective



-  LosAngelesRiverR6_1,1-DCE_Water
-  LosAngelesRiverR6_1,1-DCE_Water
-  LosAngelesRiverR6_FecalColiform_Water
-  LosAngelesRiverR6_FecalColiform_Water
-  LosAngelesRiverR6_Trichloroethylene_Water
-  LosAngelesRiverR6_Trichloroethylene_Water
-  QueriedRecords_1,1-DCE_Water
-  QueriedRecords_FecalColiform_Water
-  QueriedRecords_Trichloroethylene_Water

Los Angeles River Reach 6 (Above Sepulveda Flood Control Basin)

1,1-Dichloroethylene - Water

Table 1. Data Summary Information

Waterbody Name	Los Angeles River Reach 6 (Above Sepulveda Flood Control Basin)	Region	4
Hydrologic Unit	405.21	Total Waterbody Size	7 Miles
Pollutant/Stressor	1,1-Dichloroethylene	Size Affected	7 Miles
		Extent of Impairment	Entire Reach

Table 2. Summary of 1,1-Dichloroethylene for Los Angeles River Reach 6 (Above Sepulveda Flood Control Basin)

Dates of Sampling	9/20/2001 - 10/9/2004	Minimum Detected Value	N/A
Number of Samples	16	Maximum Detected Value	N/A
Number of Detected Samples	0	Median Detected Value	N/A
Hardness			N/A
pH			N/A
WER			N/A
Temperature			N/A

Data Sources

California Toxics Rule LA River Summary

Beneficial Uses for Los Angeles River Reach 6 (Above Sepulveda Flood Control Basin)

§ MUN § GWR § REC2 § WILD
 § IND § RECI § WARM § WET

Applicable Water Quality Objectives	Out of 16 Samples:	# Exceed	% Exceed	List	Delist
0.057 µg/L CTR Human Health Water & Organism		0/0	0%	No	No
3.2 µg/L CTR Human Health Organism		0	0%	No	No
6 µg/L Basin Plan MUN		0	0%	No	No

Triggering Water Quality Objective for Listing

No objectives were exceeded.

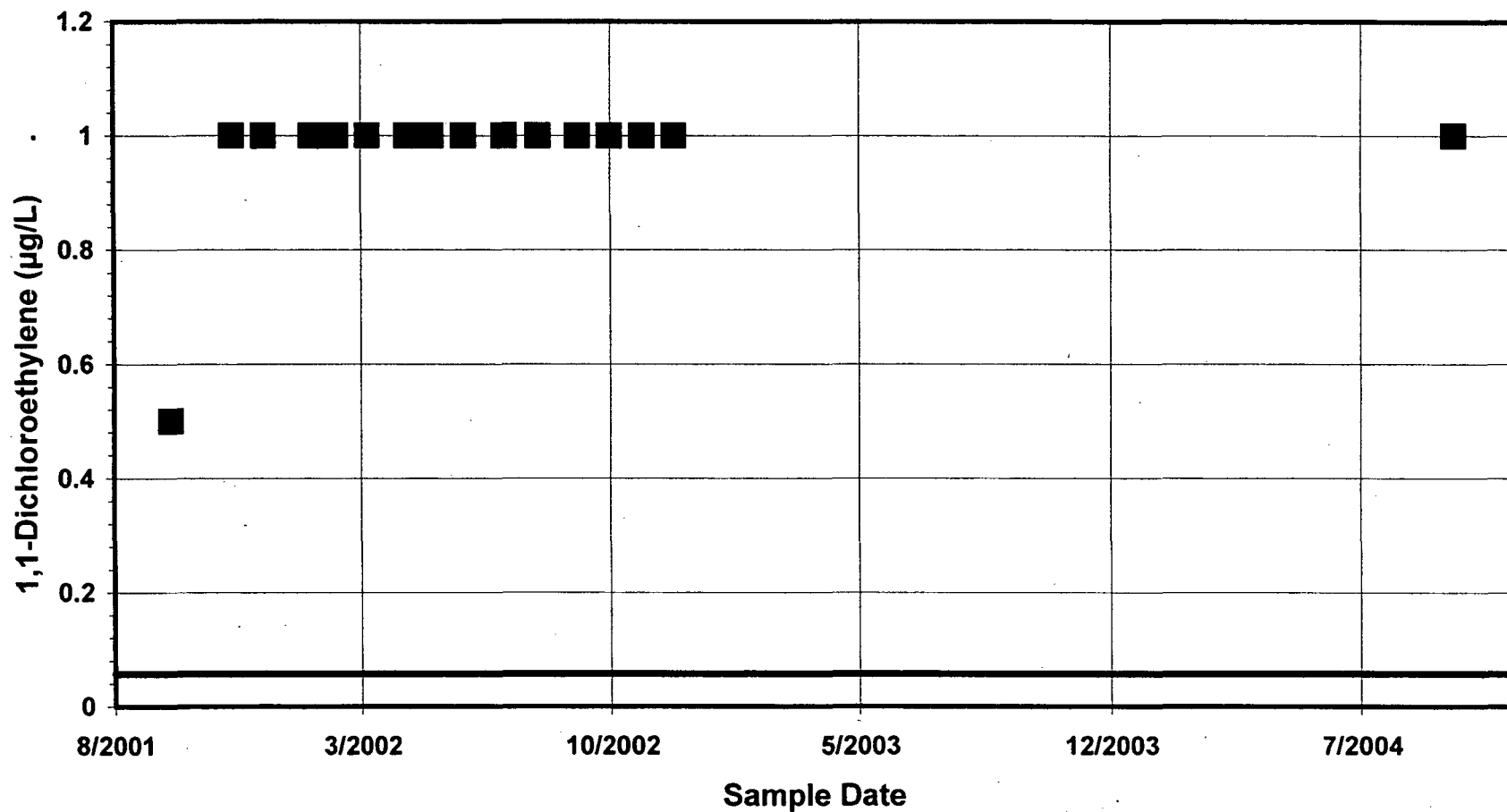
Triggering Water Quality Objective for Delisting

Not eligible for delisting.

References

Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994
 California Toxics Rule

Water Data Summary for Los Angeles River Reach 6 (Above Sepulveda Flood Control Basin) – CTR Human Health Water & Organism Objective



Raw Data

LA River Reach 6
1,1 - Dichloroethylene - Water

Record	Site ID	Waterbody	Classification	Constituent	NumQl	Result	Units	Sample Date	Data Ql	Matrix	Factor	Analytical Meth	MDL	Sample Comments	Project Name	Data Source	Filename/Spreadsheet
5	L.A. River at Owensm	Los Angeles River Reach 6	Volatile Organic	1,1-Dichloroethylene	<	0.5	µg/L	20-Sep-01	Good	Water		USEPA 8260 B	0.28	No samples collected for	California Toxics Rule LA River Su	SWRCB	4-405_CTR LA River summary LA River CTR summary
153	L.A. River at Owensm	Los Angeles River Reach 6	Volatile Organic	1,1-Dichloroethylene	<	1	µg/L	13-Nov-01	Good	Water		EPA 8260 B	0.19	No samples collected for	California Toxics Rule LA River Su	SWRCB	4-405_CTR LA River summary LA River CTR summary
280	L.A. River at Owensm	Los Angeles River Reach 6	Volatile Organic	1,1-Dichloroethylene	<	1	µg/L	11-Dec-01	Good	Water		EPA 8260 B	0.19	No samples collected for	California Toxics Rule LA River Su	SWRCB	4-405_CTR LA River summary LA River CTR summary
406	L.A. River at Owensm	Los Angeles River Reach 6	Volatile Organic	1,1-Dichloroethylene	<	1	µg/L	22-Jan-02	Good	Water		EPA 8260 B	0.19	No samples collected for	California Toxics Rule LA River Su	SWRCB	4-405_CTR LA River summary LA River CTR summary
533	L.A. River at Owensm	Los Angeles River Reach 6	Volatile Organic	1,1-Dichloroethylene	<	1	µg/L	12-Feb-02	Good	Water		EPA 8260 B	0.19	No samples collected for	California Toxics Rule LA River Su	SWRCB	4-405_CTR LA River summary LA River CTR summary
659	L.A. River at Owensm	Los Angeles River Reach 6	Volatile Organic	1,1-Dichloroethylene	<	1	µg/L	12-Mar-02	Good	Water		EPA 8260 B	0.19	No samples collected for	California Toxics Rule LA River Su	SWRCB	4-405_CTR LA River summary LA River CTR summary
786	L.A. River at Owensm	Los Angeles River Reach 6	Volatile Organic	1,1-Dichloroethylene	<	1	µg/L	16-Apr-02	Good	Water		EPA 8260 B	0.19	No samples collected for	California Toxics Rule LA River Su	SWRCB	4-405_CTR LA River summary LA River CTR summary
913	L.A. River at Owensm	Los Angeles River Reach 6	Volatile Organic	1,1-Dichloroethylene	<	1	µg/L	07-May-02	Good	Water		EPA 8260 B	0.19	No samples collected for	California Toxics Rule LA River Su	SWRCB	4-405_CTR LA River summary LA River CTR summary
1040	L.A. River at Owensm	Los Angeles River Reach 6	Volatile Organic	1,1-Dichloroethylene	<	1	µg/L	04-Jun-02	Good	Water		EPA 8260 B	0.19	No samples collected for	California Toxics Rule LA River Su	SWRCB	4-405_CTR LA River summary LA River CTR summary
1493	L.A. River at Owensm	Los Angeles River Reach 6	Volatile Organic	1,1-Dichloroethylene	<	1	µg/L	08-Oct-02	Good	Water		EPA 8260 B	0.19	No samples collected for	California Toxics Rule LA River Su	SWRCB	4-405_CTR LA River summary LA River CTR summary
1167	L.A. River at Owensm	Los Angeles River Reach 6	Volatile Organic	1,1-Dichloroethylene	<	1	µg/L	09-Jul-02	Good	Water		EPA 8260 B	0.19	No samples collected for	California Toxics Rule LA River Su	SWRCB	4-405_CTR LA River summary LA River CTR summary
1294	L.A. River at Owensm	Los Angeles River Reach 6	Volatile Organic	1,1-Dichloroethylene	<	1	µg/L	07-Aug-02	Good	Water		EPA 8260 B	0.19	No samples collected for	California Toxics Rule LA River Su	SWRCB	4-405_CTR LA River summary LA River CTR summary
1366	L.A. River at Owensm	Los Angeles River Reach 6	Volatile Organic	1,1-Dichloroethylene	<	1	µg/L	10-Sep-02	Good	Water		EPA 8260 B	0.19	No samples collected for	California Toxics Rule LA River Su	SWRCB	4-405_CTR LA River summary LA River CTR summary
1621	L.A. River at Owensm	Los Angeles River Reach 6	Volatile Organic	1,1-Dichloroethylene	<	1	µg/L	05-Nov-02	Good	Water		EPA 8260 B	0.19	No samples collected for	California Toxics Rule LA River Su	SWRCB	4-405_CTR LA River summary LA River CTR summary
1748	L.A. River at Owensm	Los Angeles River Reach 6	Volatile Organic	1,1-Dichloroethylene	<	1	µg/L	03-Dec-02	Good	Water		EPA 8260 B	0.19	No samples collected for	California Toxics Rule LA River Su	SWRCB	4-405_CTR LA River summary LA River CTR summary
1875	L.A. River at Owensm	Los Angeles River Reach 6	Volatile Organic	1,1-Dichloroethylene	<	1	µg/L	09-Oct-04	Good	Water		EPA 8260 B	0.19	No samples collected for	California Toxics Rule LA River Su	SWRCB	4-405_CTR LA River summary LA River CTR summary

Los Angeles River Reach 6 (Above Sepulveda Flood Control Basin) Fecal Coliform - Water

Table 1. Data Summary Information

Waterbody Name	Los Angeles River Reach 6 (Above Sepulveda Flood Control Basin)	Region	4
Hydrologic Unit	405.21	Total Waterbody Size	7 Miles
Pollutant/Stressor	Fecal Coliform	Size Affected	7 Miles
		Extent of Impairment	Entire Reach

Table 2. Summary of Fecal Coliform for Los Angeles River Reach 6 (Above Sepulveda Flood Control Basin)

Dates of Sampling	10/5/1998 - 12/30/2003	Minimum Detected Value	18 MPN/100mL
Number of Samples	259	Maximum Detected Value	80000 MPN/100mL
Number of Detected Samples	258	Median Detected Value	1400 MPN/100mL
Hardness			N/A
pH			N/A
WER			N/A
Temperature			N/A

Data Sources

Donald C. Tillman Water Reclamation Plant NPDES

Beneficial Uses for Los Angeles River Reach 6 (Above Sepulveda Flood Control Basin)

§ MUN § GWR § REC2 § WILD
§ IND § RECI § WARM § WET

Applicable Water Quality Objectives	Out of 259 Samples:	# Exceed	% Exceed	List	Delist
200 MPN/100mL Basin Plan REC1 Freshwater 30-Day Minimum 5 samples	254/258	254	98.4%	Yes	No
400 MPN/100mL Basin Plan REC1 Freshwater Single sample	216/258	216	83.7%	Yes	No
2000 MPN/100mL Basin Plan REC2 30-Day Log Mean Minimum 4 samples	106	106	40.9%	Yes	No
4000 MPN/100mL Basin Plan REC2 30-Day Maximum 10% samples	62	62	23.9%	Yes	No

Triggering Water Quality Objective for Listing

The Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994 contains water quality criteria for waterbodies in the Los Angeles Region. The most conservative applicable water quality criterion for fecal coliform is 200 MPN/100mL for the Basin Plan REC1 Freshwater 30-Day Minimum 5 samples objective. In Los Angeles River Reach 6 (Above Sepulveda Flood Control Basin), the criterion was exceeded in 254 of 258 samples, which is 98.4% of the sample events. Under the state's listing policy, a waterbody is considered to be impaired for fecal coliform if there are 43 or more exceedances out of the 258 samples.

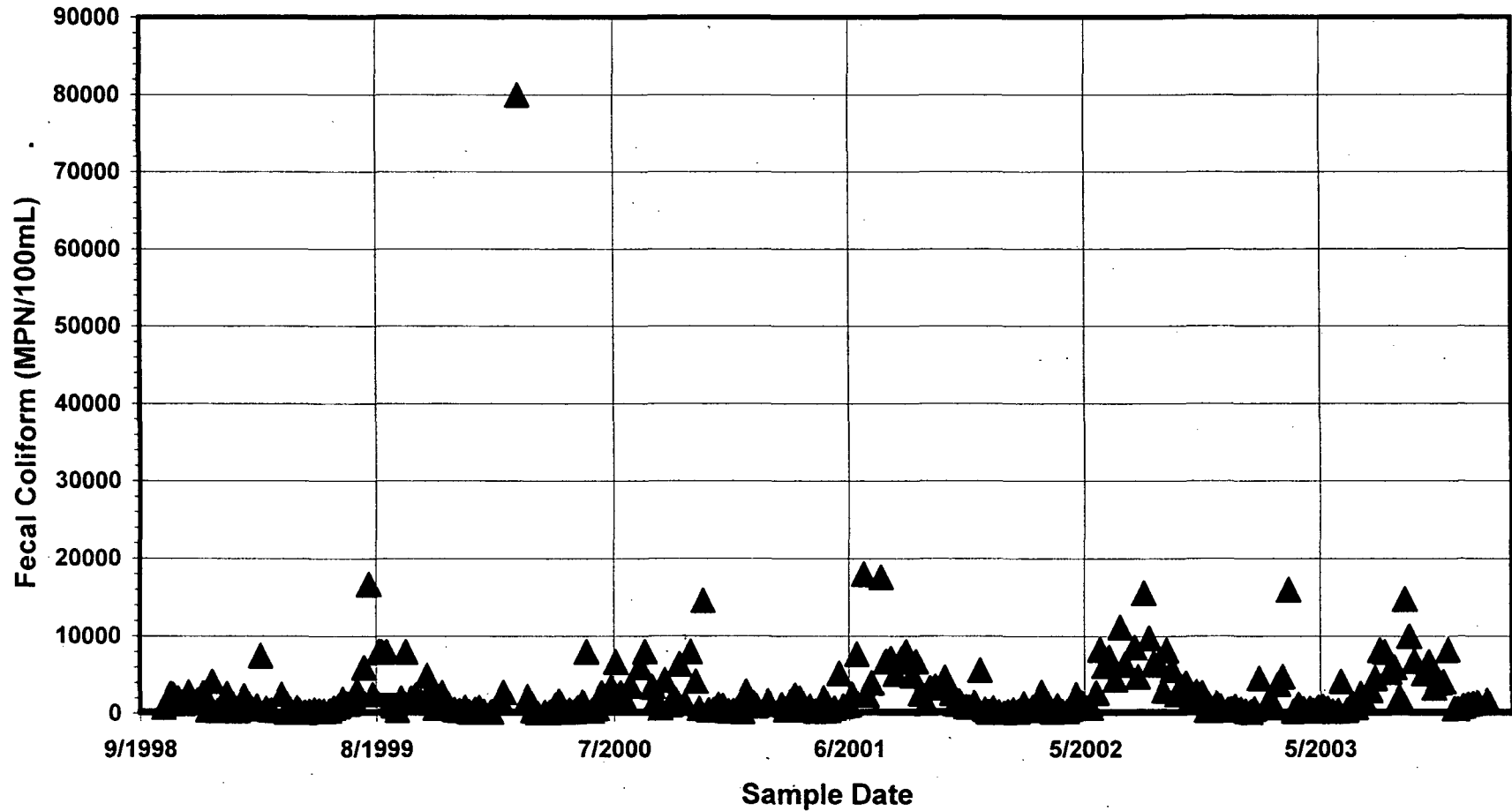
Triggering Water Quality Objective for Delisting

Not eligible for delisting.

References

Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994

**Water Data Summary for Los Angeles River Reach 6 (Above
Sepulveda Flood Control Basin) – Basin Plan REC1
Freshwater 30-Day Minimum 5 samples Objective**



Los Angeles River Reach 6 (Above Sepulveda Flood Control Basin) Trichloroethylene - Water

Table 1. Data Summary Information

Waterbody Name	Los Angeles River Reach 6 (Above Sepulveda Flood Control Basin)	Region	4
Hydrologic Unit	405.21	Total Waterbody Size	7 Miles
Pollutant/Stressor	Trichloroethylene	Size Affected	7 Miles
		Extent of Impairment	Entire Reach

Table 2. Summary of Trichloroethylene for Los Angeles River Reach 6 (Above Sepulveda Flood Control Basin)

Dates of Sampling	9/20/2001 - 10/9/2004	Minimum Detected Value	N/A
Number of Samples	16	Maximum Detected Value	N/A
Number of Detected Samples	0	Median Detected Value	N/A
Hardness			N/A
pH			N/A
WER			N/A
Temperature			N/A

Data Sources

California Toxics Rule LA River Summary

Beneficial Uses for Los Angeles River Reach 6 (Above Sepulveda Flood Control Basin)

§ MUN § GWR § REC2 § WILD
§ IND § RECI § WARM § WET

Applicable Water Quality Objectives	Out of 16 Samples:	# Exceed	% Exceed	List	Delist
2.7 µg/L CTR Human Health Water & Organism		0	0%	No	No
5 µg/L Basin Plan MUN		0	0%	No	No
81 µg/L CTR Human Health Organism		0	0%	No	No

Triggering Water Quality Objective for Listing

No objectives were exceeded.

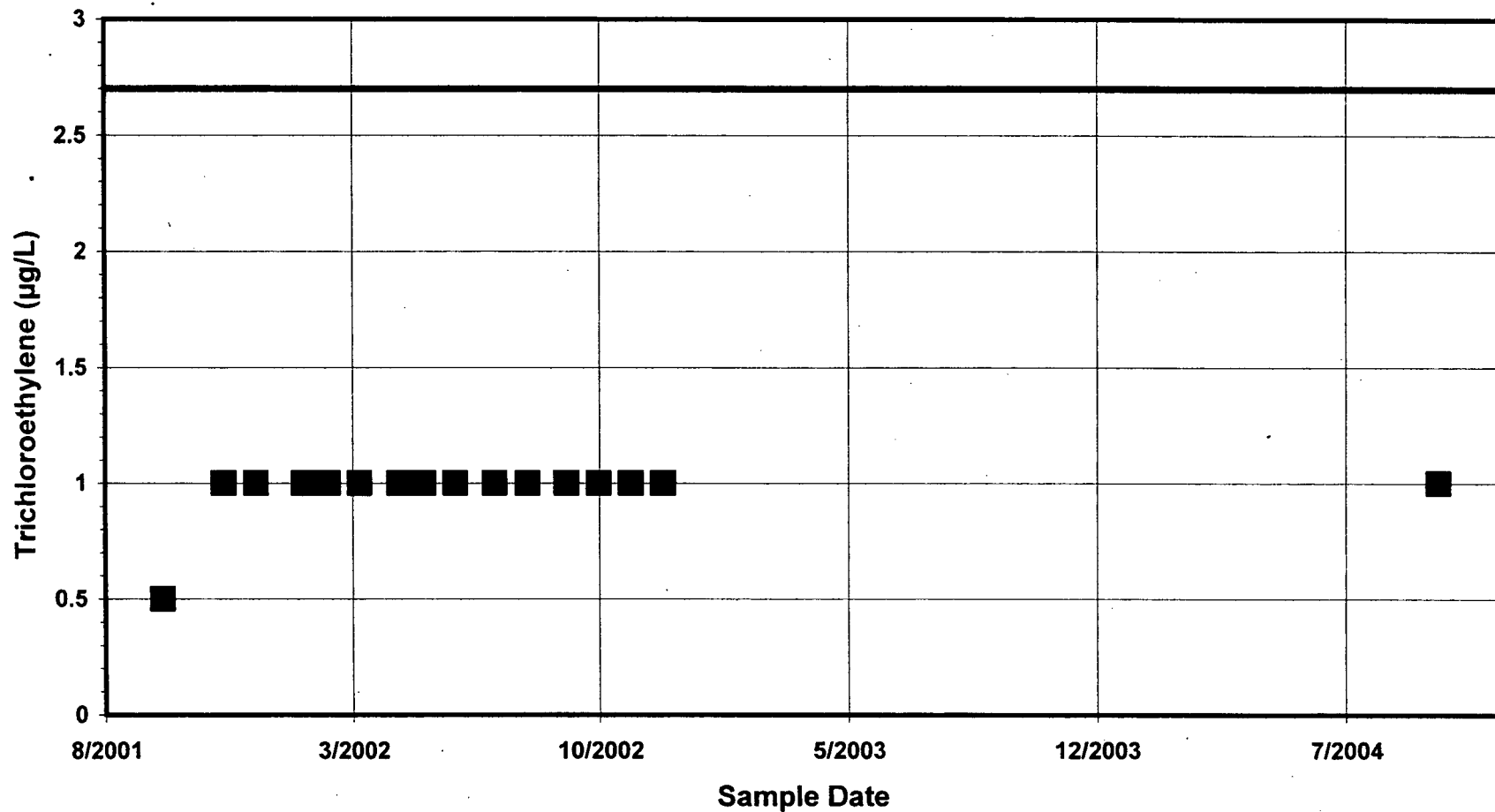
Triggering Water Quality Objective for Delisting

Not eligible for delisting.

References

Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994
California Toxics Rule




Water Data Summary for Los Angeles River Reach 6 (Above Sepulveda Flood Control Basin) – CTR Human Health Water & Organism Objective



Raw Data

LA River Reach 6
Trichloroethylene - Water

Record#	SiteID	Waterbody	Classification	Constituent	NumQ	Result	Units	SampleDate	DataQ4	Matrix	Extraction	AnalyticalMetho	MDL	SampleComments	ProjectName	DataSource	FilenameSpreadsheet
127	LA River at Owens	Los Angeles River Reach 6	Volatile Organic	Trichloroethylene	<	0.5	µg/L	20-Sep-01	Good	Water		USEPA 8260B	0.13	No samples collected fr	California Toxics Rule LA River Summary	SWRCB	4-405_CTR LA River summary LA River CTR summary
273	LA River at Owens	Los Angeles River Reach 6	Volatile Organic	Trichloroethylene	<	1	µg/L	13-Nov-01	Good	Water		EPA 8260 B	0.23	No samples collected fr	California Toxics Rule LA River Summary	SWRCB	4-405_CTR LA River summary LA River CTR summary
399	LA River at Owens	Los Angeles River Reach 6	Volatile Organic	Trichloroethylene	<	1	µg/L	11-Dec-01	Good	Water		EPA 8260B	0.23	No samples collected fr	California Toxics Rule LA River Summary	SWRCB	4-405_CTR LA River summary LA River CTR summary
526	LA River at Owens	Los Angeles River Reach 6	Volatile Organic	Trichloroethylene	<	1	µg/L	22-Jan-02	Good	Water		EPA 8260B	0.23	No samples collected fr	California Toxics Rule LA River Summary	SWRCB	4-405_CTR LA River summary LA River CTR summary
652	LA River at Owens	Los Angeles River Reach 6	Volatile Organic	Trichloroethylene	<	1	µg/L	12-Feb-02	Good	Water		EPA 8260B	0.23	No samples collected fr	California Toxics Rule LA River Summary	SWRCB	4-405_CTR LA River summary LA River CTR summary
779	LA River at Owens	Los Angeles River Reach 6	Volatile Organic	Trichloroethylene	<	1	µg/L	12-Mar-02	Good	Water		EPA 8260B	0.23	No samples collected fr	California Toxics Rule LA River Summary	SWRCB	4-405_CTR LA River summary LA River CTR summary
906	LA River at Owens	Los Angeles River Reach 6	Volatile Organic	Trichloroethylene	<	1	µg/L	16-Apr-02	Good	Water		EPA 8260B	0.23	No samples collected fr	California Toxics Rule LA River Summary	SWRCB	4-405_CTR LA River summary LA River CTR summary
1359	LA River at Owens	Los Angeles River Reach 6	Volatile Organic	Trichloroethylene	<	1	µg/L	07-Aug-02	Good	Water		EPA 8260B	0.23	No samples collected fr	California Toxics Rule LA River Summary	SWRCB	4-405_CTR LA River summary LA River CTR summary
1033	LA River at Owens	Los Angeles River Reach 6	Volatile Organic	Trichloroethylene	<	1	µg/L	07-May-02	Good	Water		EPA 8260B	0.23	No samples collected fr	California Toxics Rule LA River Summary	SWRCB	4-405_CTR LA River summary LA River CTR summary
1160	LA River at Owens	Los Angeles River Reach 6	Volatile Organic	Trichloroethylene	<	1	µg/L	04-Jun-02	Good	Water		EPA 8260B	0.23	No samples collected fr	California Toxics Rule LA River Summary	SWRCB	4-405_CTR LA River summary LA River CTR summary
1287	LA River at Owens	Los Angeles River Reach 6	Volatile Organic	Trichloroethylene	<	1	µg/L	09-Jul-02	Good	Water		EPA 8260B	0.23	No samples collected fr	California Toxics Rule LA River Summary	SWRCB	4-405_CTR LA River summary LA River CTR summary
1486	LA River at Owens	Los Angeles River Reach 6	Volatile Organic	Trichloroethylene	<	1	µg/L	10-Sep-02	Good	Water		EPA 8260B	0.23	No samples collected fr	California Toxics Rule LA River Summary	SWRCB	4-405_CTR LA River summary LA River CTR summary
1614	LA River at Owens	Los Angeles River Reach 6	Volatile Organic	Trichloroethylene	<	1	µg/L	08-Oct-02	Good	Water		EPA 8260B	0.23	No samples collected fr	California Toxics Rule LA River Summary	SWRCB	4-405_CTR LA River summary LA River CTR summary
1741	LA River at Owens	Los Angeles River Reach 6	Volatile Organic	Trichloroethylene	<	1	µg/L	05-Nov-02	Good	Water		EPA 8260B	0.23	No samples collected fr	California Toxics Rule LA River Summary	SWRCB	4-405_CTR LA River summary LA River CTR summary
1868	LA River at Owens	Los Angeles River Reach 6	Volatile Organic	Trichloroethylene	<	1	µg/L	03-Dec-02	Good	Water		EPA 8260B	0.23	No samples collected fr	California Toxics Rule LA River Summary	SWRCB	4-405_CTR LA River summary LA River CTR summary
1996	LA River at Owens	Los Angeles River Reach 6	Volatile Organic	Trichloroethylene	<	1	µg/L	09-Oct-04	Good	Water		EPA 8260 B	0.23	No samples collected fr	California Toxics Rule LA River Summary	SWRCB	4-405_CTR LA River summary LA River CTR summary

-
-  MachadoLake_AmmoniaAsN_Water
 -  MachadoLake_AmmoniaAsN_Water
 -  QueriedRecords_AmmoniaAsN_Water

Machado Lake (Harbor Park Lake)

Ammonia as N - Water

Table 1. Data Summary Information

Waterbody Name	Machado Lake (Harbor Park Lake)	Region	4
Hydrologic Unit	405.12	Total Waterbody Size	45 Acres
Pollutant/Stressor	Ammonia as N	Size Affected	45 Acres
		Extent of Impairment	Entire Reach

Table 2. Summary of Ammonia as N for Machado Lake (Harbor Park Lake)

Dates of Sampling	3/6/2001 - 6/27/2001	Minimum Detected Value	0.1 mg/L
Number of Samples	17	Maximum Detected Value	0.52 mg/L
Number of Detected Samples	13	Median Detected Value	0.3 mg/L
Hardness			N/A
pH - default value			7.8
WER			N/A
Temperature - default value			20 °C

Data Sources

Ken Malloy Harbor Regional Park Development Program Volume 1

Beneficial Uses for Machado Lake (Harbor Park Lake)

§ REC1

§ REC2

Applicable Water Quality Objectives	Out of 17 Samples:	# Exceed	% Exceed	List	Delist
2.2349 mg/L Basin Plan Freshwater Not SPWN Inland 30-Day Average	0	0%	No	No	
5.5873 mg/L Basin Plan Freshwater Not SPWN Inland 4-Day Average	0/13	0%	No	No	
12.139 mg/L Basin Plan Freshwater Not COLD or MIGR	0	0%	No	No	

Triggering Water Quality Objective for Listing

No objectives were exceeded.

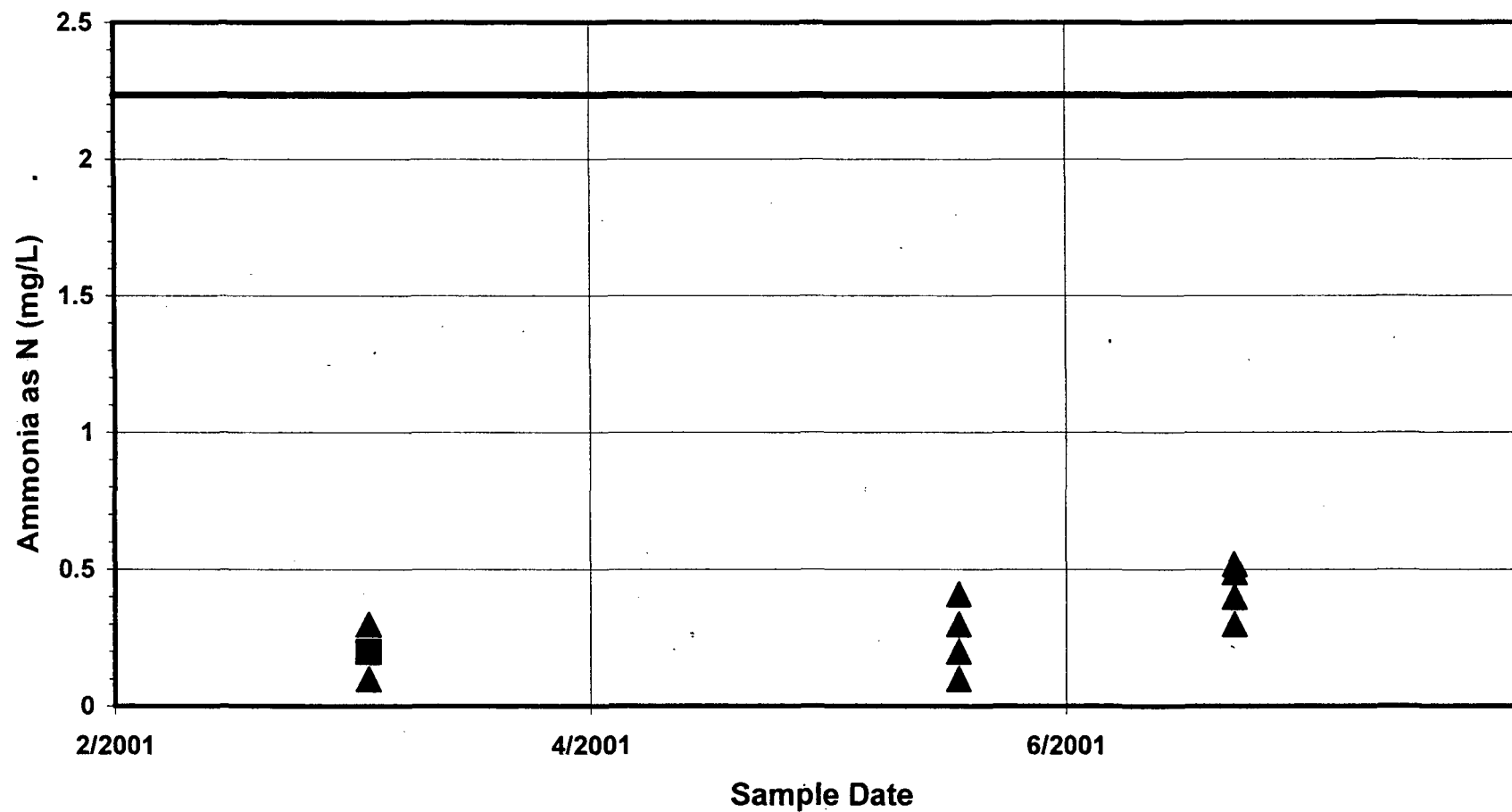
Triggering Water Quality Objective for Delisting

Not eligible for delisting.

References

Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994















Water Data Summary for Machado Lake (Harbor Park Lake) – Basin Plan Freshwater Not SPWN Inland 30-Day Average Objective



Raw Data

Machado Lake Ammonia as N - Water

Record#	Site	Waterbody	Classifica	Constituent	NumQ	Result	Units	Sample Date	Data Qua	Matrix	Sample Ty	Sample Fraction	Analytical Method	MDL	Project Name	Data Source	Filename Spreadsheet
9	B	Machado Lake	Nutrient	Ammonia as N	=	0.3	mg/L	06-Mar-01	Good	Water		Wet			Ken Malloy Harbor Regional Pa	SWRCB	4-21_Hardcopy
83	B	Machado Lake	Nutrient	Ammonia as N	=	0.41	mg/L	22-May-01	Good	Water		Dry			Ken Malloy Harbor Regional Pa	SWRCB	4-21_Hardcopy
156	B	Machado Lake	Nutrient	Ammonia as N	=	0.52	mg/L	27-Jun-01	Good	Water		Dry			Ken Malloy Harbor Regional Pa	SWRCB	4-21_Hardcopy
157	B	Machado Lake	Nutrient	Ammonia as N	=	0.4	mg/L	27-Jun-01	Good	Water	FieldDup	Dry			Ken Malloy Harbor Regional Pa	SWRCB	4-21_Hardcopy
231	C	Machado Lake	Nutrient	Ammonia as N	=	0.1	mg/L	06-Mar-01	Good	Water		Wet			Ken Malloy Harbor Regional Pa	SWRCB	4-21_Hardcopy
232	C	Machado Lake	Nutrient	Ammonia as N	=	0.2	mg/L	06-Mar-01	Good	Water	FieldDup	Wet			Ken Malloy Harbor Regional Pa	SWRCB	4-21_Hardcopy
312	C	Machado Lake	Nutrient	Ammonia as N	=	0.3	mg/L	22-May-01	Good	Water		Dry			Ken Malloy Harbor Regional Pa	SWRCB	4-21_Hardcopy
385	C	Machado Lake	Nutrient	Ammonia as N	=	0.49	mg/L	27-Jun-01	Good	Water		Dry			Ken Malloy Harbor Regional Pa	SWRCB	4-21_Hardcopy
453	D	Machado Lake	Nutrient	Ammonia as N	<	0.2	mg/L	06-Mar-01	Good	Water		Wet			Ken Malloy Harbor Regional Pa	SWRCB	4-21_Hardcopy
527	E	Machado Lake	Nutrient	Ammonia as N	<	0.2	mg/L	06-Mar-01	Good	Water		Wet			Ken Malloy Harbor Regional Pa	SWRCB	4-21_Hardcopy
601	F	Machado Lake	Nutrient	Ammonia as N	<	0.2	mg/L	06-Mar-01	Good	Water		Wet			Ken Malloy Harbor Regional Pa	SWRCB	4-21_Hardcopy
675	F	Machado Lake	Nutrient	Ammonia as N	=	0.1	mg/L	22-May-01	Fair	Water		Dry			Ken Malloy Harbor Regional Pa	SWRCB	4-21_Hardcopy
748	F	Machado Lake	Nutrient	Ammonia as N	=	0.3	mg/L	27-Jun-01	Good	Water		Dry			Ken Malloy Harbor Regional Pa	SWRCB	4-21_Hardcopy
820	G	Machado Lake	Nutrient	Ammonia as N	<	0.2	mg/L	06-Mar-01	Good	Water		Wet			Ken Malloy Harbor Regional Pa	SWRCB	4-21_Hardcopy
894	G	Machado Lake	Nutrient	Ammonia as N	=	0.1	mg/L	22-May-01	Fair	Water		Dry			Ken Malloy Harbor Regional Pa	SWRCB	4-21_Hardcopy
895	G	Machado Lake	Nutrient	Ammonia as N	=	0.2	mg/L	22-May-01	Fair	Water	FieldDup	Dry			Ken Malloy Harbor Regional Pa	SWRCB	4-21_Hardcopy
974	G	Machado Lake	Nutrient	Ammonia as N	=	0.3	mg/L	27-Jun-01	Good	Water		Dry			Ken Malloy Harbor Regional Pa	SWRCB	4-21_Hardcopy

-  MDRBackBasins_DDTs_Total_Sediment
-  MDRBackBasins_DDTs_Total_Sediment
-  MDRBackBasins_DDTs_Total_Tissue
-  MDRBackBasins_Enterococcus
-  MDRBackBasins_Enterococcus
-  MDRBackBasins_FecalColiform
-  MDRBackBasins_FecalColiform
-  MDRBackBasins_TotalColiform
-  MDRBackBasins_TotalColiform
-  QueriedRecords_DDTs_Total_Sediment
-  QueriedRecords_DDTs_Total_Tissue
-  QueriedRecords_Enterococcus
-  QueriedRecords_FecalColiform
-  QueriedRecords_TotalColiform

**Marina del Rey Harbor - Back Basins
DDTs (Total) - Sediment**

Table 1. Data Summary Information

Waterbody Name	Marina del Rey Harbor - Back Basins	Region	4
Hydrologic Unit	405.17	Total Waterbody Size	391 Acres
Pollutant Stressor	DDTs (Total)	Size Affected	391 Acres
		Extent of Impairment	Entire Reach

Table 2. Summary of DDTs (Total) for Marina del Rey Harbor - Back Basins

Dates of Sampling	10/18/1990 - 10/13/1999	Minimum Detected Value	0.001 µg/g
Number of Samples	97	Maximum Detected Value	0.236 µg/g
Number of Detected Samples	96	Median Detected Value	0.04 µg/g
Hardness			N/A
pH			N/A
WER			N/A
Temperature			N/A

Data Sources

LA Contaminated Sediments Task Force Database

Beneficial Uses for Marina del Rey Harbor - Back Basins

§ NAV § REC2 § MAR § SHELL
§ REC1 § COMM § WILD

Applicable Water Quality Objectives	Out of 97 Samples:	# Exceed	% Exceed	List	Delist
None		N/A	N/A	N/A	N/A

Triggering Water Quality Objective for Listing

No objectives were exceeded.

Triggering Water Quality Objective for Delisting

Not eligible for delisting.

References

None

**Marina del Rey Harbor - Back Basins
DDTs (Total) - Tissue**

Table 1. Data Summary Information

Waterbody Name	Marina del Rey Harbor - Back Basins	Region	4
Hydrologic Unit	405.17	Total Waterbody Size	391 Acres
Pollutant/Stressor	DDTs (Total)	Size Affected	391 Acres
		Extent of Impairment	Entire Reach

Table 2. Summary of DDTs (Total) for Marina del Rey Harbor - Back Basins

Dates of Sampling	9/2/1998 - 9/2/1998	Minimum Detected Value	0.007 µg/g
Number of Samples	4	Maximum Detected Value	0.035 µg/g
Number of Detected Samples	4	Median Detected Value	0.01 µg/g
Hardness			N/A
pH			N/A
WER			N/A
Temperature			N/A

Data Sources

LA Contaminated Sediments Task Force Database

Beneficial Uses for Marina del Rey Harbor - Back Basins

§ NAV § REC2 § MAR § SHELL
§ REC1 § COMM § WILD

Applicable Water Quality Objectives

None

Out of 4 Samples:

# Exceed	% Exceed	List	Delist
N/A	N/A	N/A	N/A

Triggering Water Quality Objective for Listing

No objectives were exceeded.

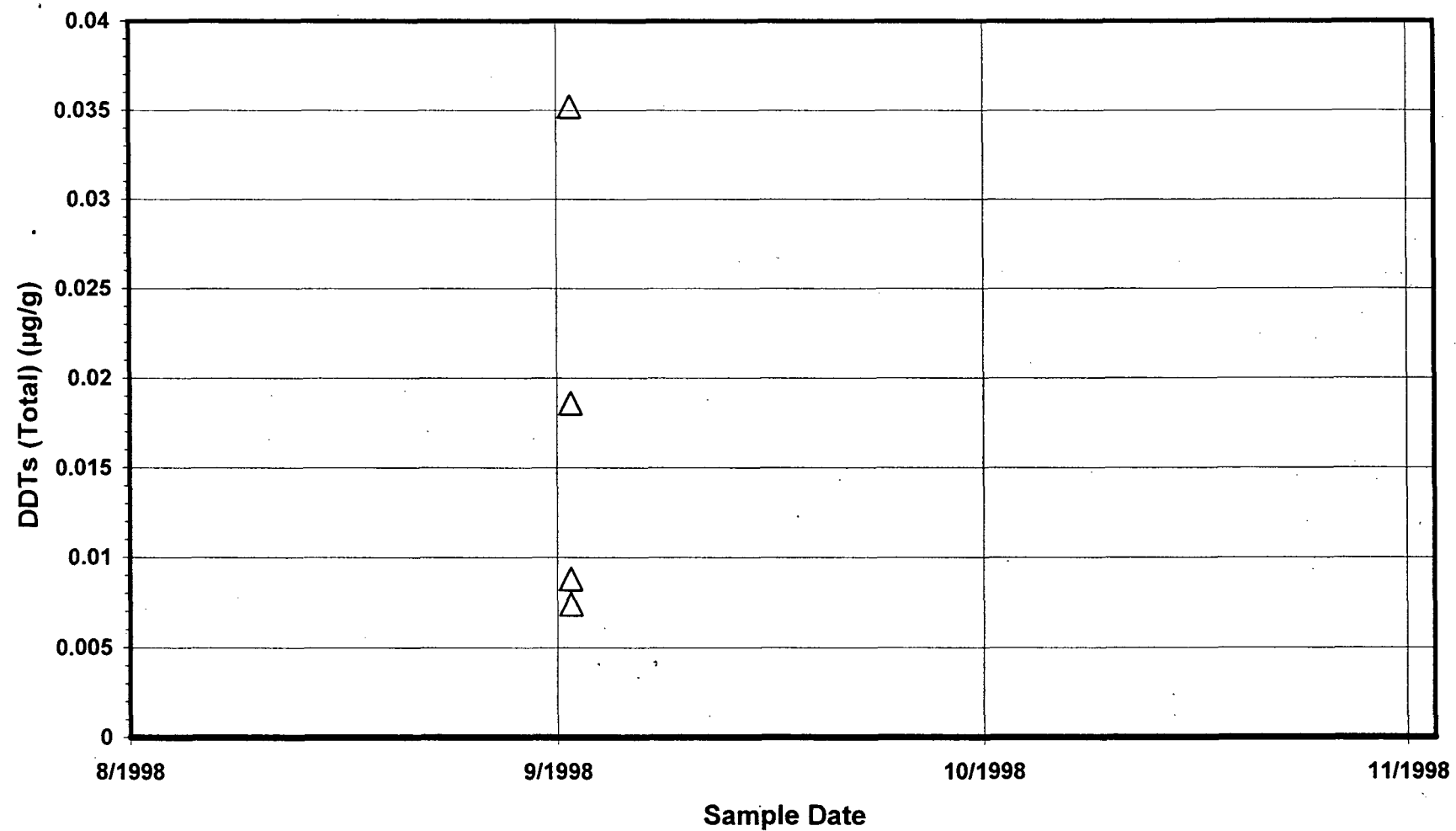
Triggering Water Quality Objective for Delisting

Not eligible for delisting.

References

None

Tissue Data Summary for Marina del Rey Harbor - Back Basins – No Objectives



Raw Data

Marina Del Rey - Back Basins
DDTs (Total) - Tissue

Record	SiteID	Waterbody	Classification	Constituent	NumC	Result	Units	Sample Date	Date Col	Matrix	SampleID	Sampled	Organism	Sample Comments	ProjectID	Project Name	Data Source	Filename Spreadsheet
1781	2444	Marina del Rey Harbor - Back Basins	OC Pesticide	DDTs (Total)	=	0.0074	µg/g	02-Sep-98	Good	Tissue	Grab	Wet		89	LA Contaminated Sediments Task Force De SWRCB	LA consed taskforce LACSTF 2 LAconsed CSTF SQD Ver2.0.mdb	tblChemistryResults&tblChemistryBatchInfo	
2030	2446	Marina del Rey Harbor - Back Basins	OC Pesticide	DDTs (Total)	=	0.0088	µg/g	02-Sep-98	Good	Tissue	Grab	Wet		89	LA Contaminated Sediments Task Force De SWRCB	LA consed taskforce LACSTF 2 LAconsed CSTF SQD Ver2.0.mdb	tblChemistryResults&tblChemistryBatchInfo	
2180	2447	Marina del Rey Harbor - Back Basins	OC Pesticide	DDTs (Total)	=	0.0186	µg/g	02-Sep-98	Good	Tissue	Grab	Wet		89	LA Contaminated Sediments Task Force De SWRCB	LA consed taskforce LACSTF 2 LAconsed CSTF SQD Ver2.0.mdb	tblChemistryResults&tblChemistryBatchInfo	
2331	2448	Marina del Rey Harbor - Back Basins	OC Pesticide	DDTs (Total)	=	0.0352	µg/g	02-Sep-98	Good	Tissue	Grab	Wet		89	LA Contaminated Sediments Task Force De SWRCB	LA consed taskforce LACSTF 2 LAconsed CSTF SQD Ver2.0.mdb	tblChemistryResults&tblChemistryBatchInfo	
5830	Marina c	Marina del Rey Harbor - Back Basins	OC Pesticide	DDTs (Total)	=	0.246	µg/g	22-Jun-93	Good	Tissue			White Croaker Age = -888; Weight = 148; L=405.13.00	TSMP	SWRCB	ORG WET.DBF		

Marina del Rey Harbor - Back Basins Enterococcus - Water

Table 1. Data Summary Information

Waterbody Name	Marina del Rey Harbor - Back Basins	Region	4
Hydrologic Unit	405.17	Total Waterbody Size	391 Acres
Pollutant/Stressor	Enterococcus	Size Affected	391 Acres
		Extent of Impairment	Entire Reach

Table 2. Summary of Enterococcus for Marina del Rey Harbor - Back Basins

Dates of Sampling	7/6/1995 - 6/20/2002	Minimum Detected Value	1 MPN/100mL
Number of Samples	1516	Maximum Detected Value	16000 MPN/100mL
Number of Detected Samples	1157	Median Detected Value	17 MPN/100mL
Hardness			N/A
pH			N/A
WER			N/A
Temperature			N/A

Data Sources

The Marine Environment of Marina del Rey

Beneficial Uses for Marina del Rey Harbor - Back Basins

§ NAV § REC2 § MAR § SHELL
§ REC1 § COMM § WILD

Applicable Water Quality Objectives	Out of 1516 Samples:	# Exceed	% Exceed	List	Delist
35 MPN/100mL Basin Plan REC1 Marine 30-Day Minimum 5 samples		419/1514	27.7%	Yes	No
104 MPN/100mL Basin Plan REC1 Marine Single sample		231	15.2%	No	Yes

Triggering Water Quality Objective for Listing

The Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994 contains water quality criteria for waterbodies in the Los Angeles Region. The most conservative applicable water quality criterion for enterococcus is 35 MPN/100mL for the Basin Plan REC1 Marine 30-Day Minimum 5 samples objective. In Marina del Rey Harbor - Back Basins, the criterion was exceeded in 419 of 1514 samples, which is 27.7% of the sample events. Under the state's listing policy, a waterbody is considered to be impaired for enterococcus if there are 252 or more exceedances out of the 1514 samples.

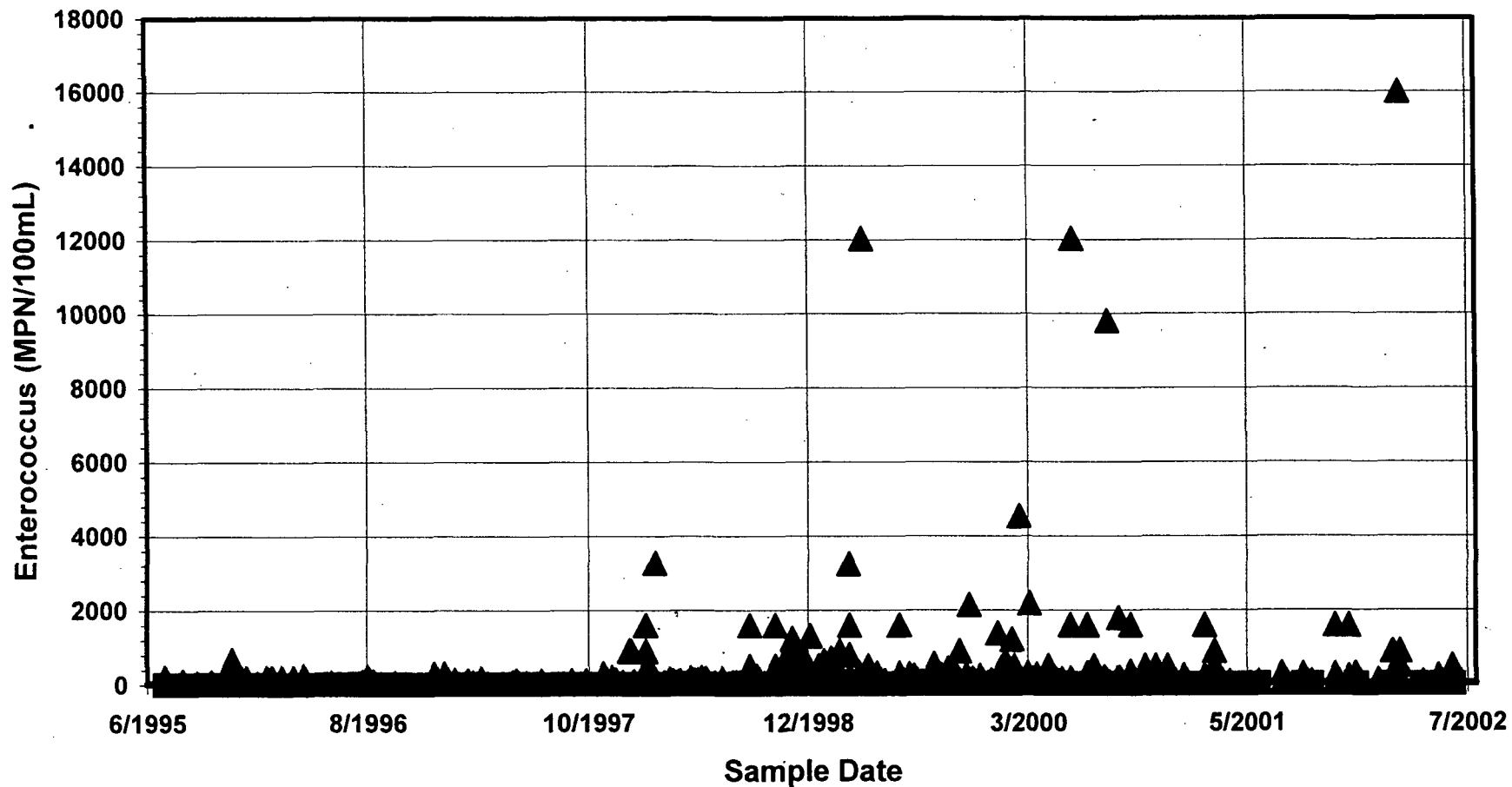
Triggering Water Quality Objective for Delisting

Not eligible for delisting.

References

Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994

Water Data Summary for Marina del Rey Harbor - Back Basins – Basin Plan REC1 Marine 30-Day Minimum 5 samples Objective



Marina del Rey Harbor - Back Basins Fecal Coliform - Water

Table 1. Data Summary Information

Waterbody Name	Marina del Rey Harbor - Back Basins	Region	4
Hydrologic Unit	405.17	Total Waterbody Size	391 Acres
Pollutant/Stressor	Fecal Coliform	Size Affected	391 Acres
		Extent of Impairment	Entire Reach

Table 2. Summary of Fecal Coliform for Marina del Rey Harbor - Back Basins

Dates of Sampling	7/6/1995 - 6/20/2002	Minimum Detected Value	1 MPN/100mL
Number of Samples	1520	Maximum Detected Value	16000 MPN/100mL
Number of Detected Samples	1143	Median Detected Value	80 MPN/100mL
Hardness			N/A
pH			N/A
WER			N/A
Temperature			N/A

Data Sources

The Marine Environment of Marina del Rey

Beneficial Uses for Marina del Rey Harbor - Back Basins

§ NAV § REC2 § MAR § SHELL
§ REC1 § COMM § WILD

Applicable Water Quality Objectives	Out of 1520 Samples:	# Exceed	% Exceed	List	Delist
200 MPN/100mL Basin Plan REC1 Marine 30-Day Minimum 5 samples		330	21.7%	Yes	No
400 MPN/100mL Basin Plan REC1 Marine Single sample		213	14%	No	Yes
2000 MPN/100mL Basin Plan REC2 30-Day Log Mean Minimum 4 samples		91	6%	No	Yes
4000 MPN/100mL Basin Plan REC2 30-Day Maximum 10% samples		57	3.8%	No	Yes

Triggering Water Quality Objective for Listing

The Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994 contains water quality criteria for waterbodies in the Los Angeles Region. The most conservative applicable water quality criterion for fecal coliform is 200 MPN/100mL for the Basin Plan REC1 Marine 30-Day Minimum 5 samples objective. In Marina del Rey Harbor - Back Basins, the criterion was exceeded in 330 of 1520 samples, which is 21.7% of the sample events. Under the state's listing policy, a waterbody is considered to be impaired for fecal coliform if there are 253 or more exceedances out of the 1520 samples.

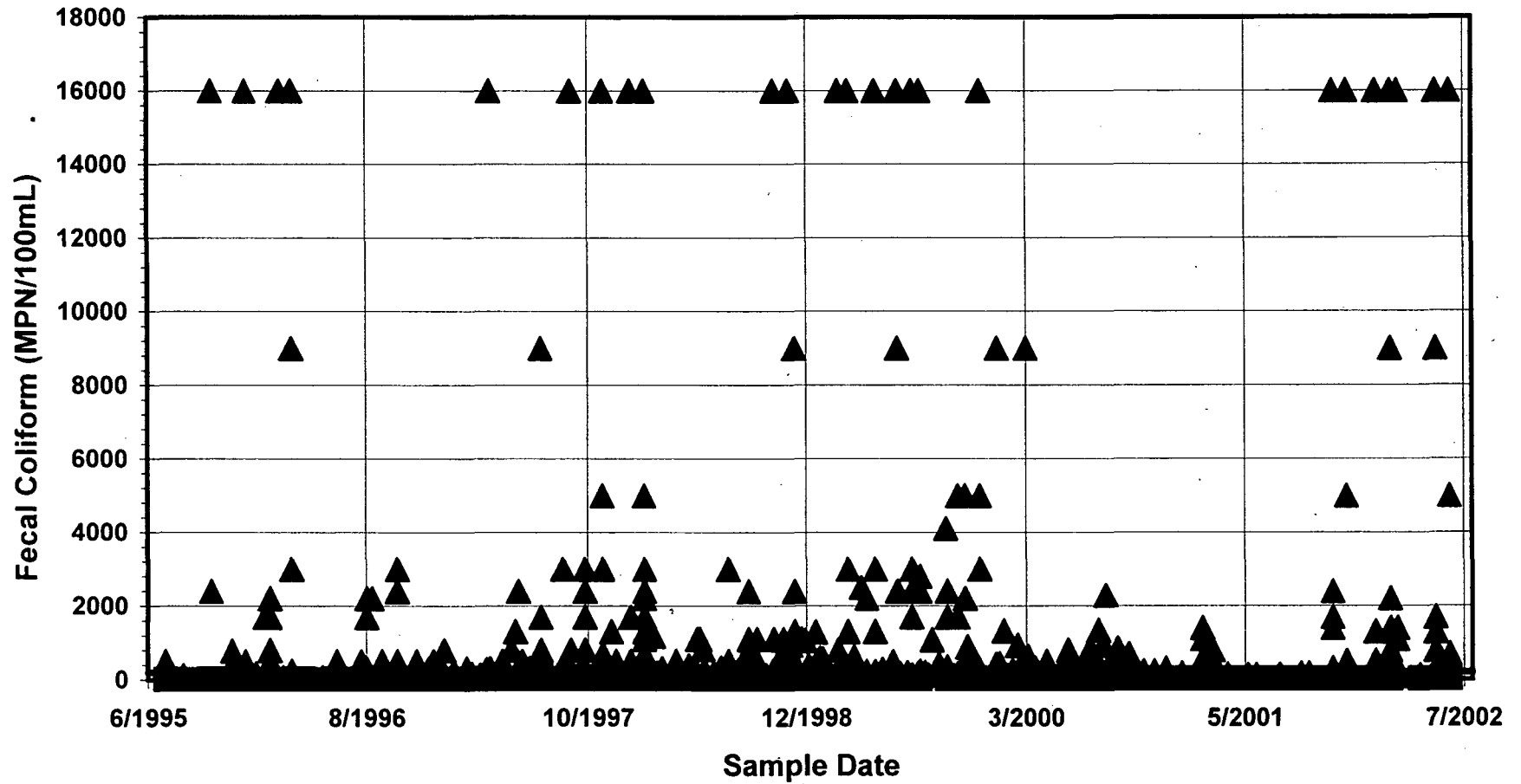
Triggering Water Quality Objective for Delisting

Not eligible for delisting.

References

Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994

Water Data Summary for Marina del Rey Harbor - Back Basins – Basin Plan REC1 Marine 30-Day Minimum 5 samples Objective



Marina del Rey Harbor - Back Basins Total Coliform - Water

Table 1. Data Summary Information

Waterbody Name	Marina del Rey Harbor - Back Basins	Region	4
Hydrologic Unit	405.17	Total Waterbody Size	391 Acres
Pollutant/Stressor	Total Coliform	Size Affected	391 Acres
		Extent of Impairment	Entire Reach

Table 2. Summary of Total Coliform for Marina del Rey Harbor - Back Basins

Dates of Sampling	7/6/1995 - 6/20/2002	Minimum Detected Value	1 MPN/100mL
Number of Samples	1520	Maximum Detected Value	50000 MPN/100mL
Number of Detected Samples	1350	Median Detected Value	230 MPN/100mL
Hardness			N/A
pH			N/A
WER			N/A
Temperature			N/A

Data Sources

The Marine Environment of Marina del Rey

Beneficial Uses for Marina del Rey Harbor - Back Basins

§ NAV § REC2 § MAR § SHELL
§ RECI § COMM § WILD

Applicable Water Quality Objectives	Out of 1520 Samples:	# Exceed	% Exceed	List	Delist
70 MPN/100mL Basin Plan SHELL 30-Day Median		997	65.6%	Yes	No
230 MPN/100mL Basin Plan SHELL 30-Day Max 10% 5-tube decimal diluti		650	42.8%	Yes	No
330 MPN/100mL Basin Plan SHELL 30-Day Max 10% 3-tube decimal diluti		545	35.9%	Yes	No
1000 MPN/100mL Basin Plan RECI Marine 30-Day Minimum 5 samples		363	23.9%	Yes	No
1000 MPN/100mL Basin Plan RECI Marine Ratio Single sample		380	25%	Yes	No
10000 MPN/100mL Basin Plan RECI Marine Single sample		122	8%	No	Yes

Triggering Water Quality Objective for Listing

The Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994 contains water quality criteria for waterbodies in the Los Angeles Region. The most conservative applicable water quality criterion for total coliform is 70 MPN/100mL for the Basin Plan SHELL 30-Day Median objective. In Marina del Rey Harbor - Back Basins, the criterion was exceeded in 997 of 1520 samples, which is 65.6% of the sample events. Under the state's listing policy, a waterbody is considered to be impaired for total coliform if there are 253 or more exceedances out of the 1520 samples.

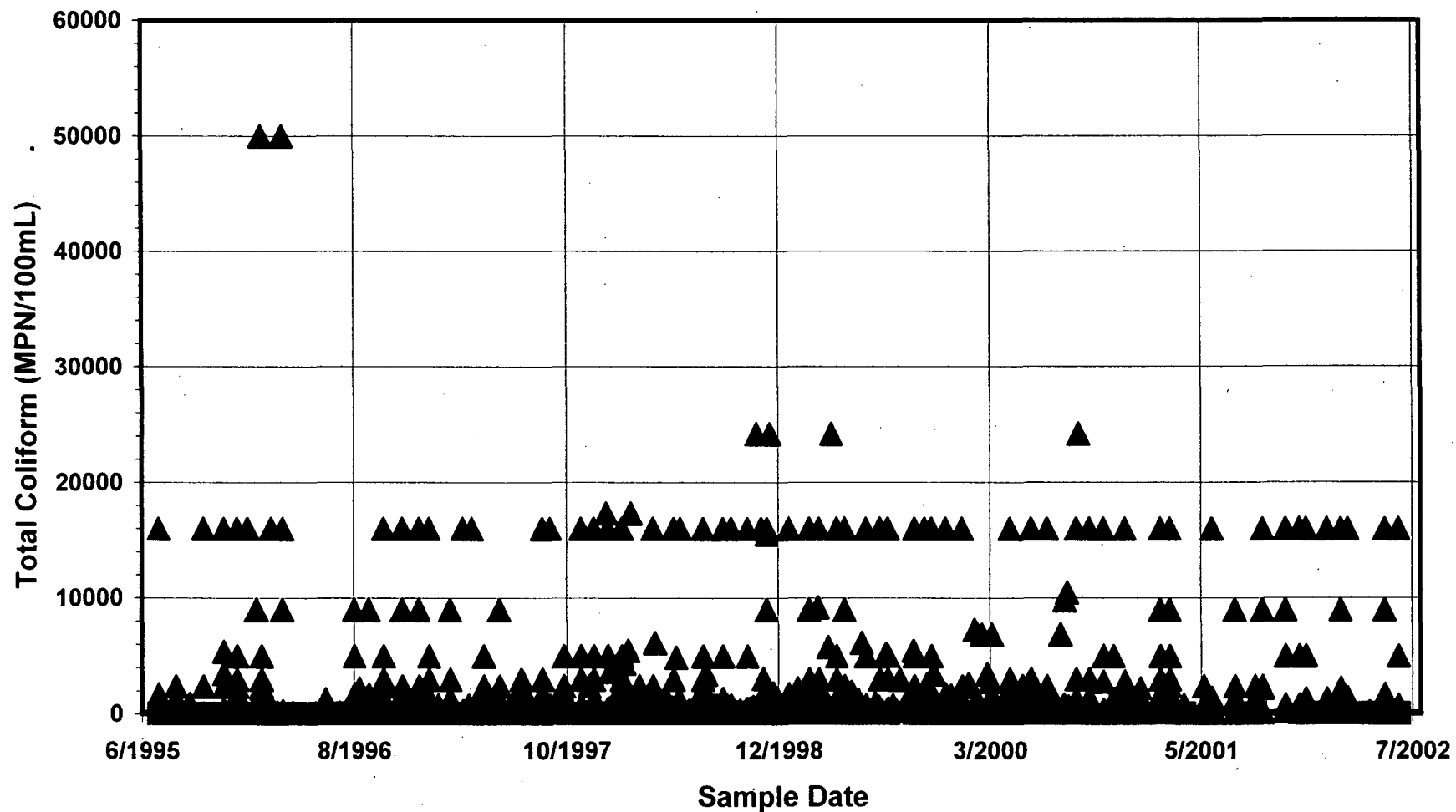
Triggering Water Quality Objective for Delisting

Not eligible for delisting.

References

Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994

Water Data Summary for Marina del Rey Harbor - Back Basins – Basin Plan SHELL 30-Day Median Objective








Raw Data

Marina Del Rey Harbor - Back Basins
Total Coliform - Water

12841	Station 9	Marina del Rey Harbor - Back Basins	Bacteriological	Total Coliform	=	170	MPN/100mL	13-Sep-01	Good	Water	Dry
12847	Station 9	Marina del Rey Harbor - Back Basins	Bacteriological	Total Coliform	=	300	MPN/100mL	31-Oct-01	Good	Water	Dry
12853	Station 9	Marina del Rey Harbor - Back Basins	Bacteriological	Total Coliform	=	300	MPN/100mL	28-Nov-01	Good	Water	Dry
12859	Station 9	Marina del Rey Harbor - Back Basins	Bacteriological	Total Coliform	<	20	MPN/100mL	12-Dec-01	Good	Water	Dry
12865	Station 9	Marina del Rey Harbor - Back Basins	Bacteriological	Total Coliform	<	20	MPN/100mL	24-Jan-02	Good	Water	Dry
12873	Station 9	Marina del Rey Harbor - Back Basins	Bacteriological	Total Coliform	=	20	MPN/100mL	22-Feb-02	Good	Water	Dry
12879	Station 9	Marina del Rey Harbor - Back Basins	Bacteriological	Total Coliform	=	130	MPN/100mL	08-Mar-02	Good	Water	Wet
12884	Station 9	Marina del Rey Harbor - Back Basins	Bacteriological	Total Coliform	=	20	MPN/100mL	22-Apr-02	Good	Water	Dry
12889	Station 9	Marina del Rey Harbor - Back Basins	Bacteriological	Total Coliform	=	90	MPN/100mL	23-May-02	Good	Water	Wet

		The Marine Environment of Marina del Rey	SWRCB	4-86 MdR Beaches and Harbors coliform data.xls	Total Coliform
		The Marine Environment of Marina del Rey	SWRCB	4-86 MdR Beaches and Harbors coliform data.xls	Total Coliform
		The Marine Environment of Marina del Rey	SWRCB	4-86 MdR Beaches and Harbors coliform data.xls	Total Coliform
		The Marine Environment of Marina del Rey	SWRCB	4-86 MdR Beaches and Harbors coliform data.xls	Total Coliform
		The Marine Environment of Marina del Rey	SWRCB	4-86 MdR Beaches and Harbors coliform data.xls	Total Coliform
		The Marine Environment of Marina del Rey	SWRCB	4-86 MdR Beaches and Harbors coliform data.xls	Total Coliform
		The Marine Environment of Marina del Rey	SWRCB	4-86 MdR Beaches and Harbors coliform data.xls	Total Coliform
		The Marine Environment of Marina del Rey	SWRCB	4-86 MdR Beaches and Harbors coliform data.xls	Total Coliform

-  MDRHarborBeach_Enterococcus_Water
-  MDRHarborBeach_Enterococcus_Water
-  MDRHarborBeach_FecalColiform_Water
-  MDRHarborBeach_FecalColiform_Water
-  MDRHarborBeach_TotalColiform_Water
-  MDRHarborBeach_TotalColiform_Water
-  QueriedRecords_Enterococcus_Water
-  QueriedRecords_FecalColiform_Water
-  QueriedRecords_TotalColiform_Water

Marina del Rey Harbor Beach Enterococcus - Water

Table 1. Data Summary Information

Waterbody Name	Marina del Rey Harbor Beach	Region	4
Hydrologic Unit	405.13	Total Waterbody Size	0.29 Miles
Pollutant/Stressor	Enterococcus	Size Affected	0.29 Miles
		Extent of Impairment	Entire Reach

Table 2. Summary of Enterococcus for Marina del Rey Harbor Beach

Dates of Sampling	1/2/1996 - 4/27/2003	Minimum Detected Value	1 MPN/100mL
Number of Samples	938	Maximum Detected Value	12033 MPN/100mL
Number of Detected Samples	938	Median Detected Value	20 MPN/100mL
Hardness			N/A
pH			N/A
WER			N/A
Temperature			N/A

Data Sources

Heal The Bay

Beneficial Uses for Marina del Rey Harbor Beach

§ NAV § REC2 § MAR § RARE
§ RECI § COMM § WILD

Applicable Water Quality Objectives	Out of 938 Samples:	# Exceed	% Exceed	List	Delist
35 MPN/100mL Basin Plan REC1 Marine 30-Day Minimum 5 samples		396	42.2%	Yes	No
104 MPN/100mL Basin Plan REC1 Marine Single sample		182	19.4%	Yes	No

Triggering Water Quality Objective for Listing

The Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994 contains water quality criteria for waterbodies in the Los Angeles Region. The most conservative applicable water quality criterion for enterococcus is 35 MPN/100mL for the Basin Plan REC1 Marine 30-Day Minimum 5 samples objective. In Marina del Rey Harbor Beach, the criterion was exceeded in 396 of 938 samples, which is 42.2% of the sample events. Under the state's listing policy, a waterbody is considered to be impaired for enterococcus if there are 156 or more exceedances out of the 938 samples.

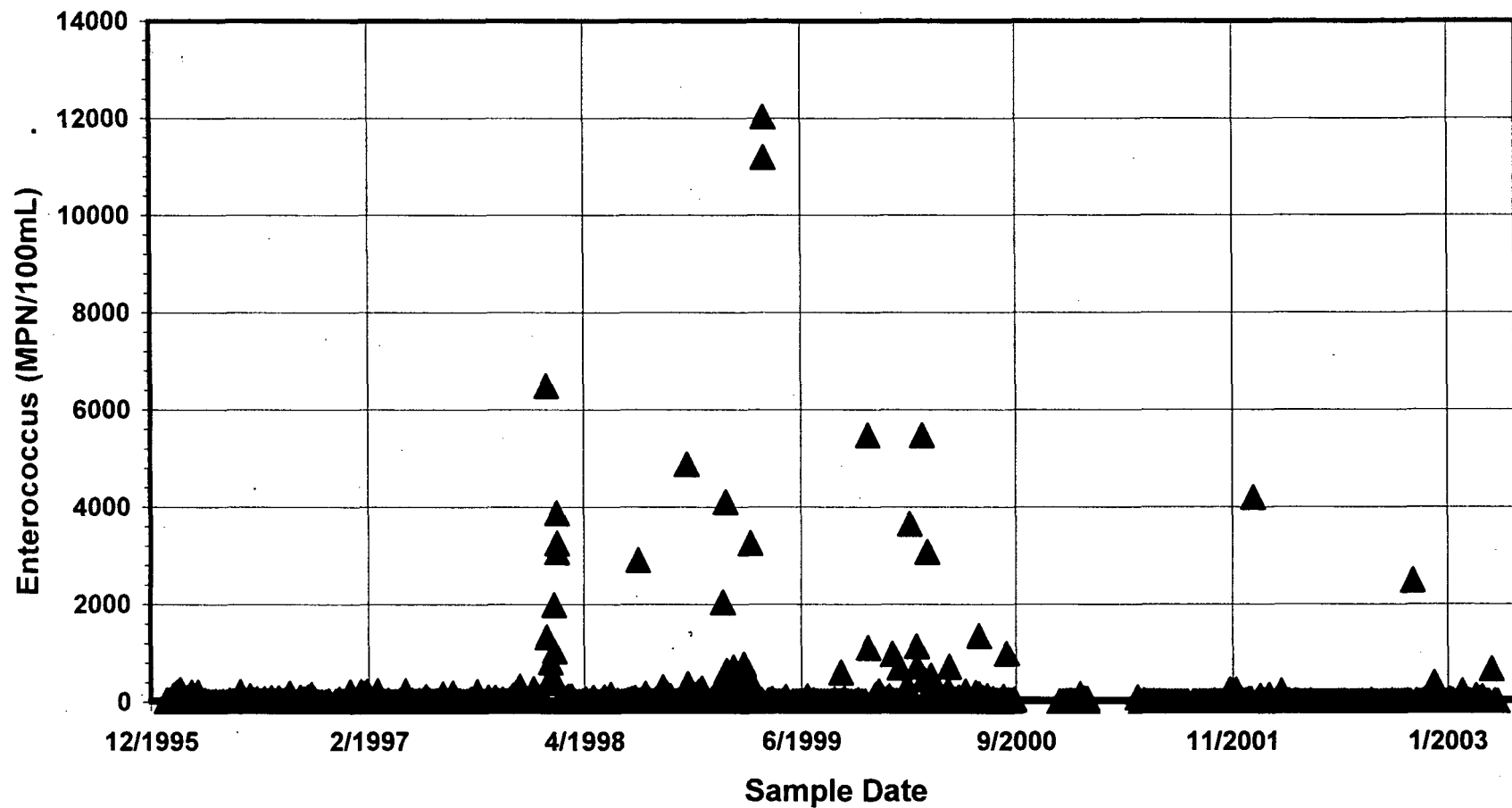
Triggering Water Quality Objective for Delisting

Not eligible for delisting.

References

Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties. 1994

Water Data Summary for Marina del Rey Harbor Beach – Basin Plan REC1 Marine 30-Day Minimum 5 samples Objective



Marina del Rey Harbor Beach Fecal Coliform - Water

Table 1. Data Summary Information

Waterbody Name	Marina del Rey Harbor Beach	Region	4
Hydrologic Unit	405.13	Total Waterbody Size	0.29 Miles
Pollutant/Stressor	Fecal Coliform	Size Affected	0.29 Miles
		Extent of Impairment	Entire Reach

Table 2. Summary of Fecal Coliform for Marina del Rey Harbor Beach

Dates of Sampling	1/2/1996 - 4/28/2003	Minimum Detected Value	1 MPN/100mL
Number of Samples	1612	Maximum Detected Value	16000 MPN/100mL
Number of Detected Samples	1612	Median Detected Value	35 MPN/100mL
Hardness			N/A
pH			N/A
WER			N/A
Temperature			N/A

Data Sources

Heal The Bay

Beneficial Uses for Marina del Rey Harbor Beach

§ NAV § REC2 § MAR § RARE
§ REC1 § COMM § WILD

Applicable Water Quality Objectives	Out of 1612 Samples:	# Exceed	% Exceed	List	Delist
200 MPN/100mL Basin Plan REC1 Marine 30-Day Minimum 5 samples		172	10.7%	No	Yes
400 MPN/100mL Basin Plan REC1 Marine Single sample		171	10.6%	No	Yes
2000 MPN/100mL Basin Plan REC2 30-Day Log Mean Minimum 4 samples		48	3%	No	Yes
4000 MPN/100mL Basin Plan REC2 30-Day Maximum 10% samples		24	1.5%	No	Yes

Triggering Water Quality Objective for Listing

No objectives were exceeded.

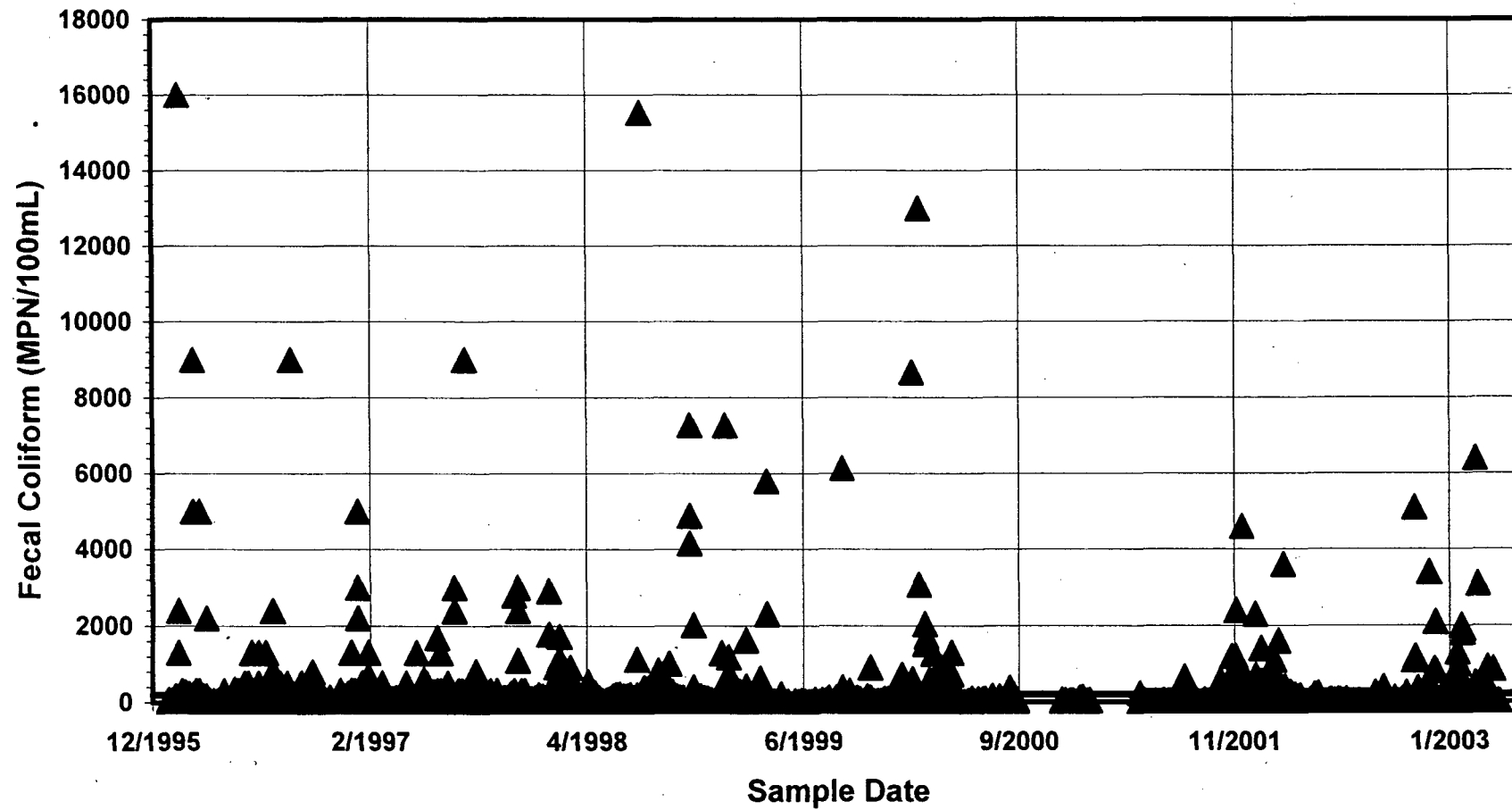
Triggering Water Quality Objective for Delisting

The Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994 contains water quality criteria for waterbodies in the Los Angeles Region. The most conservative applicable water quality criterion for fecal coliform is 200 MPN/100mL for the Basin Plan REC1 Marine 30-Day Minimum 5 samples objective. In Marina del Rey Harbor Beach, the criterion was exceeded in 172 of 1612 samples, which is 10.7% of the sample events. Under the state's listing policy, a waterbody is eligible for delisting for fecal coliform if there are 267 or fewer exceedances out of the 1612 samples.

References

Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994

Water Data Summary for Marina del Rey Harbor Beach – Basin Plan REC1 Marine 30-Day Minimum 5 samples Objective



Raw Data

Marina Del Rey Harbor Beach
Fecal Coliform - Water

4108	Marina del Rey Harbor Beach	Bacteriological	Fecal Coliform	=	20	MPN/100mL	16-Apr-03	Good	Water	WaterChem		
4110	Marina del Rey Harbor Beach	Bacteriological	Fecal Coliform	=	20	MPN/100mL	17-Apr-03	Good	Water	WaterChem		
4112	Marina del Rey Harbor Beach	Bacteriological	Fecal Coliform	=	10	MPN/100mL	18-Apr-03	Good	Water	WaterChem		
4114	Marina del Rey Harbor Beach	Bacteriological	Fecal Coliform	=	10	MPN/100mL	19-Apr-03	Good	Water	WaterChem		
4116	Marina del Rey Harbor Beach	Bacteriological	Fecal Coliform	=	10	MPN/100mL	20-Apr-03	Good	Water	WaterChem		
4119	Marina del Rey Harbor Beach	Bacteriological	Fecal Coliform	=	10	MPN/100mL	21-Apr-03	Good	Water	WaterChem		
4121	Marina del Rey Harbor Beach	Bacteriological	Fecal Coliform	=	10	MPN/100mL	22-Apr-03	Good	Water	WaterChem		
4123	Marina del Rey Harbor Beach	Bacteriological	Fecal Coliform	=	10	MPN/100mL	23-Apr-03	Good	Water	WaterChem		
4125	Marina del Rey Harbor Beach	Bacteriological	Fecal Coliform	=	10	MPN/100mL	24-Apr-03	Good	Water	WaterChem		
4127	Marina del Rey Harbor Beach	Bacteriological	Fecal Coliform	=	20	MPN/100mL	25-Apr-03	Good	Water	WaterChem		
4129	Marina del Rey Harbor Beach	Bacteriological	Fecal Coliform	=	10	MPN/100mL	26-Apr-03	Good	Water	WaterChem		
4132	Marina del Rey Harbor Beach	Bacteriological	Fecal Coliform	=	10	MPN/100mL	27-Apr-03	Good	Water	WaterChem		
4134	Marina del Rey Harbor Beach	Bacteriological	Fecal Coliform	=	20	MPN/100mL	28-Apr-03	Good	Water	WaterChem		

Fecal Coliform	Heal The Bay	HYPERION, City	SWRCB	HTB-Heal the Bay EPA Request I
Fecal Coliform	Heal The Bay	HYPERION, City	SWRCB	HTB-Heal the Bay EPA Request I
Fecal Coliform	Heal The Bay	HYPERION, City	SWRCB	HTB-Heal the Bay EPA Request I
Fecal Coliform	Heal The Bay	HYPERION, City	SWRCB	HTB-Heal the Bay EPA Request I
Fecal Coliform	Heal The Bay	HYPERION, City	SWRCB	HTB-Heal the Bay EPA Request I
Fecal Coliform	Heal The Bay	HYPERION, City	SWRCB	HTB-Heal the Bay EPA Request I
Fecal Coliform	Heal The Bay	HYPERION, City	SWRCB	HTB-Heal the Bay EPA Request I
Fecal Coliform	Heal The Bay	HYPERION, City	SWRCB	HTB-Heal the Bay EPA Request I
Fecal Coliform	Heal The Bay	HYPERION, City	SWRCB	HTB-Heal the Bay EPA Request I
Fecal Coliform	Heal The Bay	HYPERION, City	SWRCB	HTB-Heal the Bay EPA Request I
Fecal Coliform	Heal The Bay	HYPERION, City	SWRCB	HTB-Heal the Bay EPA Request I
Fecal Coliform	Heal The Bay	HYPERION, City	SWRCB	HTB-Heal the Bay EPA Request I
Fecal Coliform	Heal The Bay	HYPERION, City	SWRCB	HTB-Heal the Bay EPA Request I
Fecal Coliform	Heal The Bay	HYPERION, City	SWRCB	HTB-Heal the Bay EPA Request I
Fecal Coliform	Heal The Bay	HYPERION, City	SWRCB	HTB-Heal the Bay EPA Request I

Marina del Rey Harbor Beach Total Coliform - Water

Table 1. Data Summary Information

Waterbody Name	Marina del Rey Harbor Beach	Region	4
Hydrologic Unit	405.13	Total Waterbody Size	0.29 Miles
Pollutant/Stressor	Total Coliform	Size Affected	0.29 Miles
		Extent of Impairments	Entire Reach

Table 2. Summary of Total Coliform for Marina del Rey Harbor Beach

Dates of Sampling	1/2/1996 - 4/28/2003	Minimum Detected Value	1 MPN/100mL
Number of Samples	1585	Maximum Detected Value	240000 MPN/100mL
Number of Detected Samples	1585	Median Detected Value	209 MPN/100mL
Hardness			N/A
pH			N/A
WER			N/A
Temperature			N/A

Data Sources

Heal The Bay

Beneficial Uses for Marina del Rey Harbor Beach

§ NAV § REC2 § MAR § RARE
§ REC1 § COMM § WILD

Applicable Water Quality Objectives	Out of 1585 Samples:	# Exceed	% Exceed	List	Delist
1000 MPN/100mL Basin Plan REC1 Marine Ratio Single sample		253	16%	No	Yes
1000 MPN/100mL Basin Plan REC1 Marine 30-Day Minimum 5 samples		144	9.1%	No	Yes
10000 MPN/100mL Basin Plan REC1 Marine Single sample		68	4.3%	No	Yes

Triggering Water Quality Objective for Listing






No objectives were exceeded.

Triggering Water Quality Objective for Delisting

The Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994 contains water quality criteria for waterbodies in the Los Angeles Region. The most conservative applicable water quality criterion for total coliform is 1000 MPN/100mL for the Basin Plan REC1 Marine Ratio Single sample objective. In Marina del Rey Harbor Beach, the criterion was exceeded in 253 of 1585 samples, which is 16% of the sample events. Under the state's listing policy, a waterbody is eligible for delisting for total coliform if there are 263 or fewer exceedances out of the 1585 samples.

References

Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994

-
-  PointFerminParkBeach_Total&FecalColiform&Enterococcus_Water
 -  PointFerminParkBeach_Total&FecalColiform&Enterococcus_Water
 -  QueriedRecords_Enterococcus_Water
 -  QueriedRecords_FecalColiform_Water
 -  QueriedRecords_TotalColiform_Water

Point Fermin Park Beach Enterococcus - Water

Table 1. Data Summary Information

Waterbody Name	Point Fermin Park Beach	Region	4
Hydrologic Unit	405.12	Total Waterbody Size	1.6 Miles
Pollutant/Stressor	Enterococcus	Size Affected	1.6 Miles
		Extent of Impairment	Entire Reach

Table 2. Summary of Enterococcus for Point Fermin Park Beach

Dates of Sampling	12/31/2001 - 4/29/2003	Minimum Detected Value	1 MPN/100mL
Number of Samples	78	Maximum Detected Value	140 MPN/100mL
Number of Detected Samples	78	Median Detected Value	2 MPN/100mL
Hardness			N/A
pH			N/A
WER			N/A
Temperature			N/A

Data Sources

Heal The Bay

Beneficial Uses for Point Fermin Park Beach

§ NAV § REC2 § MAR § MIGR § SHELL
 § REC1 § COMM § WILD § SPWN

Applicable Water Quality Objectives	Out of 78 Samples:	# Exceed	% Exceed	List	Delist
35 MPN/100mL Basin Plan REC1 Marine 30-Day Minimum 5 samples	0	0%	No	Yes	
104 MPN/100mL Basin Plan REC1 Marine Single sample	1	1.3%	No	Yes	

Triggering Water Quality Objective for Listing

No objectives were exceeded.

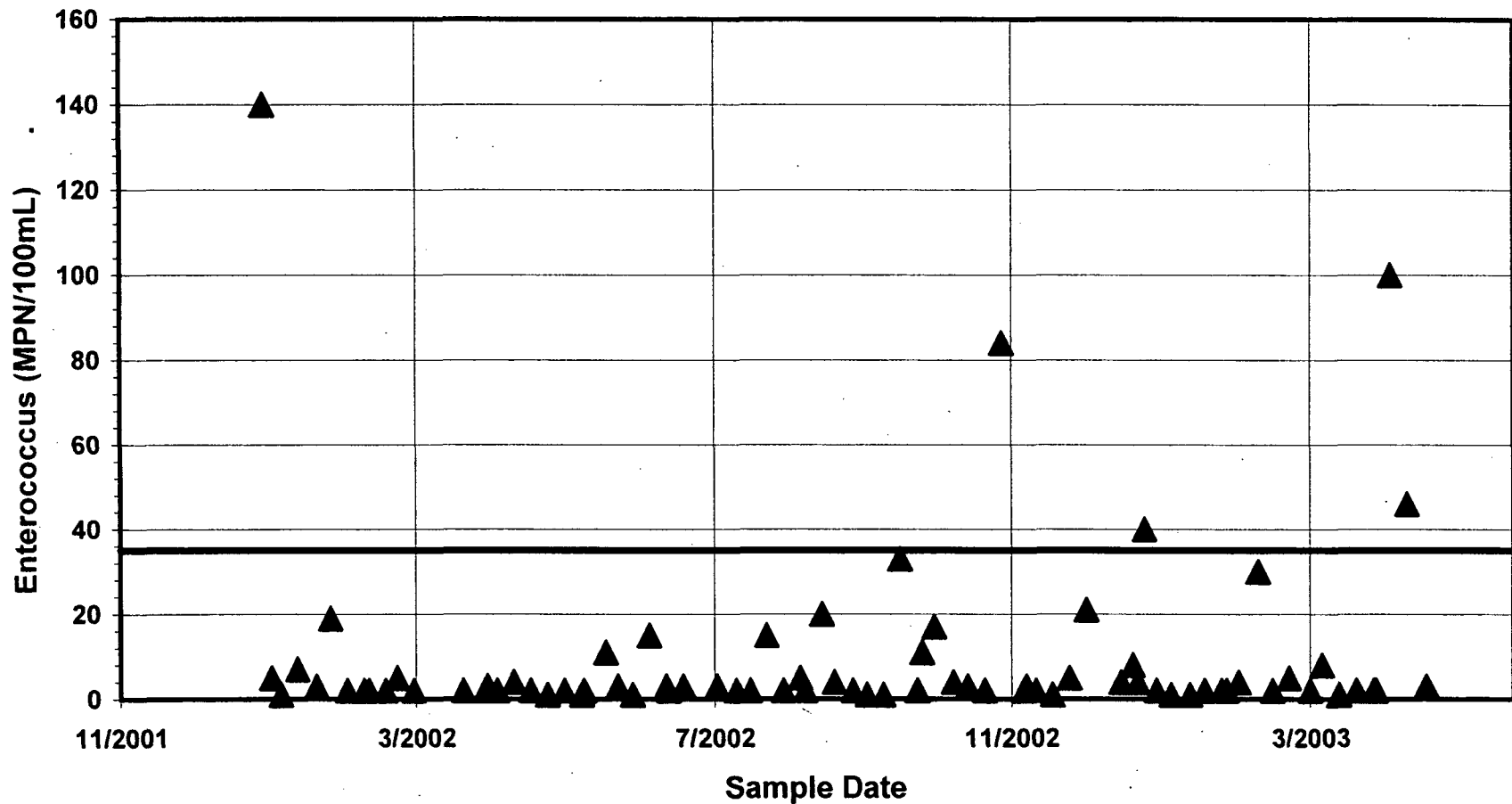
Triggering Water Quality Objective for Delisting

The Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994 contains water quality criteria for waterbodies in the Los Angeles Region. The most conservative applicable water quality criterion for enterococcus is 35 MPN/100mL for the Basin Plan REC1 Marine 30-Day Minimum 5 samples objective. In Point Fermin Park Beach, the criterion was exceeded in 0 of 78 samples, which is 0% of the sample events. Under the state's listing policy, a waterbody is eligible for delisting for enterococcus if there are 12 or fewer exceedances out of the 78 samples.

References

Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994

Water Data Summary for Point Fermin Park Beach – Basin Plan REC1 Marine 30-Day Minimum 5 samples Objective



Point Fermin Park Beach Total Coliform - Water

Table 1. Data Summary Information

Waterbody Name	Point Fermin Park Beach	Region	4
Hydrologic Unit	405.12	Total Waterbody Size	1.6 Miles
Pollutant/Stressor	Total Coliform	Size Affected	1.6 Miles
		Extent of Impairment	Entire Reach

Table 2. Summary of Total Coliform for Point Fermin Park Beach

Dates of Sampling	12/31/2001 - 4/29/2003	Minimum Detected Value	1 MPN/100mL
Number of Samples	458	Maximum Detected Value	3200 MPN/100mL
Number of Detected Samples	458	Median Detected Value	12.5 MPN/100mL
Hardness			N/A
pH			N/A
WER			N/A
Temperature			N/A

Data Sources

Heal The Bay

Beneficial Uses for Point Fermin Park Beach

§ NAV § REC2 § MAR § MIGR § SHELL
 § REC1 § COMM § WILD § SPWN

Applicable Water Quality Objectives	Out of 458 Samples:	# Exceed	% Exceed	List	Delist
70 MPN/100mL Basin Plan SHELL 30-Day Median		104	22.7%	Yes	No
230 MPN/100mL Basin Plan SHELL 30-Day Max 10% 5-tube decimal dilu		39	8.5%	No	Yes
330 MPN/100mL Basin Plan SHELL 30-Day Max 10% 3-tube decimal dilu		34	7.4%	No	Yes
1000 MPN/100mL Basin Plan REC1 Marine 30-Day Minimum 5 samples		0	0%	No	Yes
1000 MPN/100mL Basin Plan REC1 Marine Ratio Single sample		12	2.6%	No	Yes
10000 MPN/100mL Basin Plan REC1 Marine Single sample		0	0%	No	Yes

Triggering Water Quality Objective for Listing

The Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994 contains water quality criteria for waterbodies in the Los Angeles Region. The most conservative applicable water quality criterion for total coliform is 70 MPN/100mL for the Basin Plan SHELL 30-Day Median objective. In Point Fermin Park Beach, the criterion was exceeded in 104 of 458 samples, which is 22.7% of the sample events. Under the state's listing policy, a waterbody is considered to be impaired for total coliform if there are 76 or more exceedances out of the 458 samples.

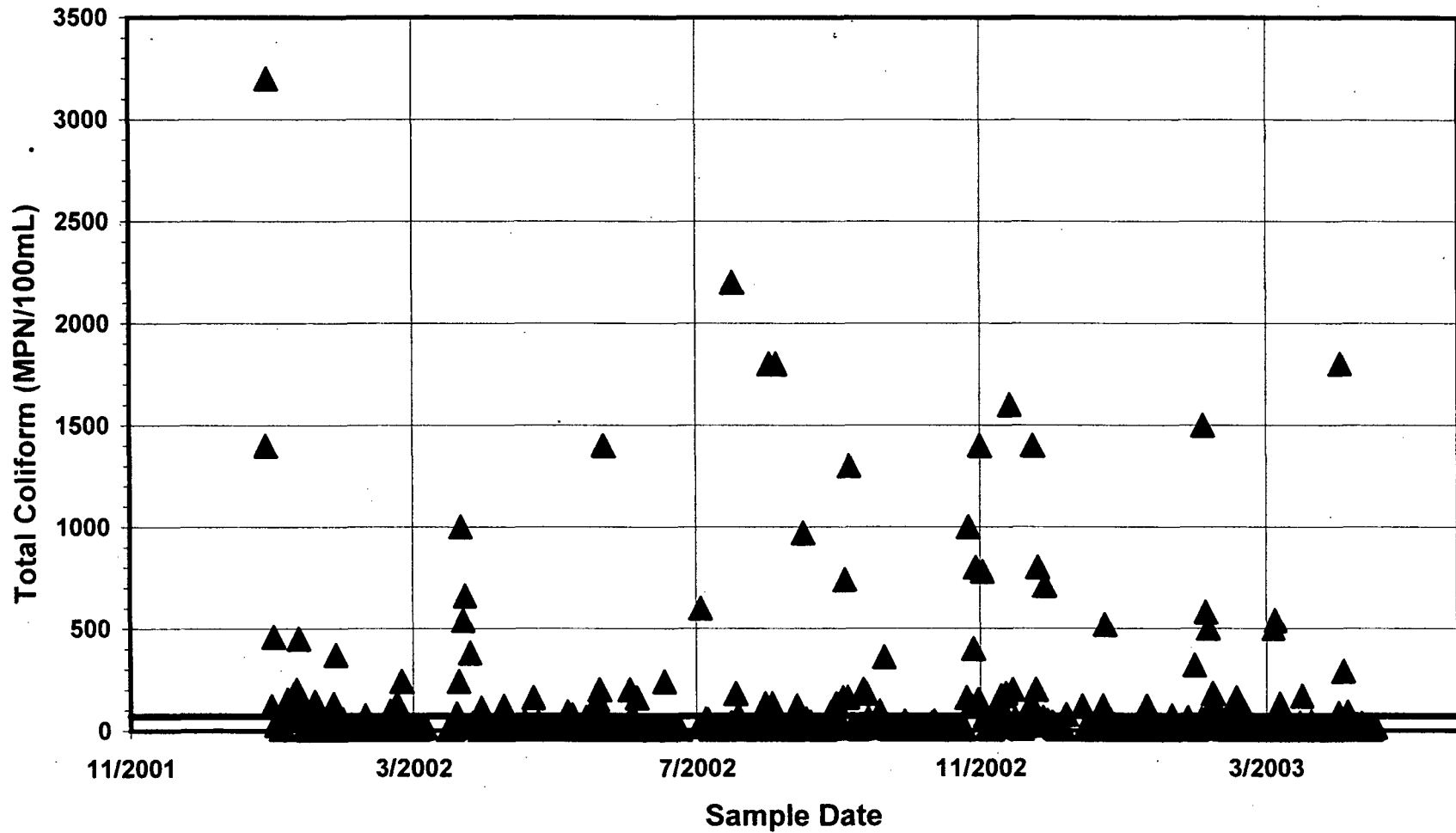
Triggering Water Quality Objective for Delisting

Not eligible for delisting.

References

Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994

Water Data Summary for Point Fermin Park Beach – Basin Plan SHELL 30-Day Median Objective



Point Fermin Park Beach Fecal Coliform - Water

Table 1. Data Summary Information

Waterbody Name	Point Fermin Park Beach	Region	4
Hydrologic Unit	405.12	Total Waterbody Size	1.6 Miles
Pollutant/Stressor	Fecal Coliform	Size Affected	1.6 Miles
		Extent of Impairment	Entire Reach

Table 2. Summary of Fecal Coliform for Point Fermin Park Beach

Dates of Sampling	12/31/2001 - 4/29/2003	Minimum Detected Value	1 MPN/100mL
Number of Samples	134	Maximum Detected Value	260 MPN/100mL
Number of Detected Samples	134	Median Detected Value	2 MPN/100mL
Hardness			N/A
pH			N/A
WER			N/A
Temperature			N/A

Data Sources

Heal The Bay

Beneficial Uses for Point Fermin Park Beach

§ NAV § REC2 § MAR § MIGR § SHELL
 § REC1 § COMM § WILD § SPWN

Applicable Water Quality Objectives	Out of 134 Samples:	# Exceed	% Exceed	List	Delist
200 MPN/100mL Basin Plan REC1 Marine 30-Day Minimum 5 samples	5	0	0%	No	Yes
400 MPN/100mL Basin Plan REC1 Marine Single sample	1	0	0%	No	Yes
2000 MPN/100mL Basin Plan REC2 30-Day Log Mean Minimum 4 sample	4	0	0%	No	Yes
4000 MPN/100mL Basin Plan REC2 30-Day Maximum 10% samples	13	0	0%	No	Yes

Triggering Water Quality Objective for Listing

No objectives were exceeded.

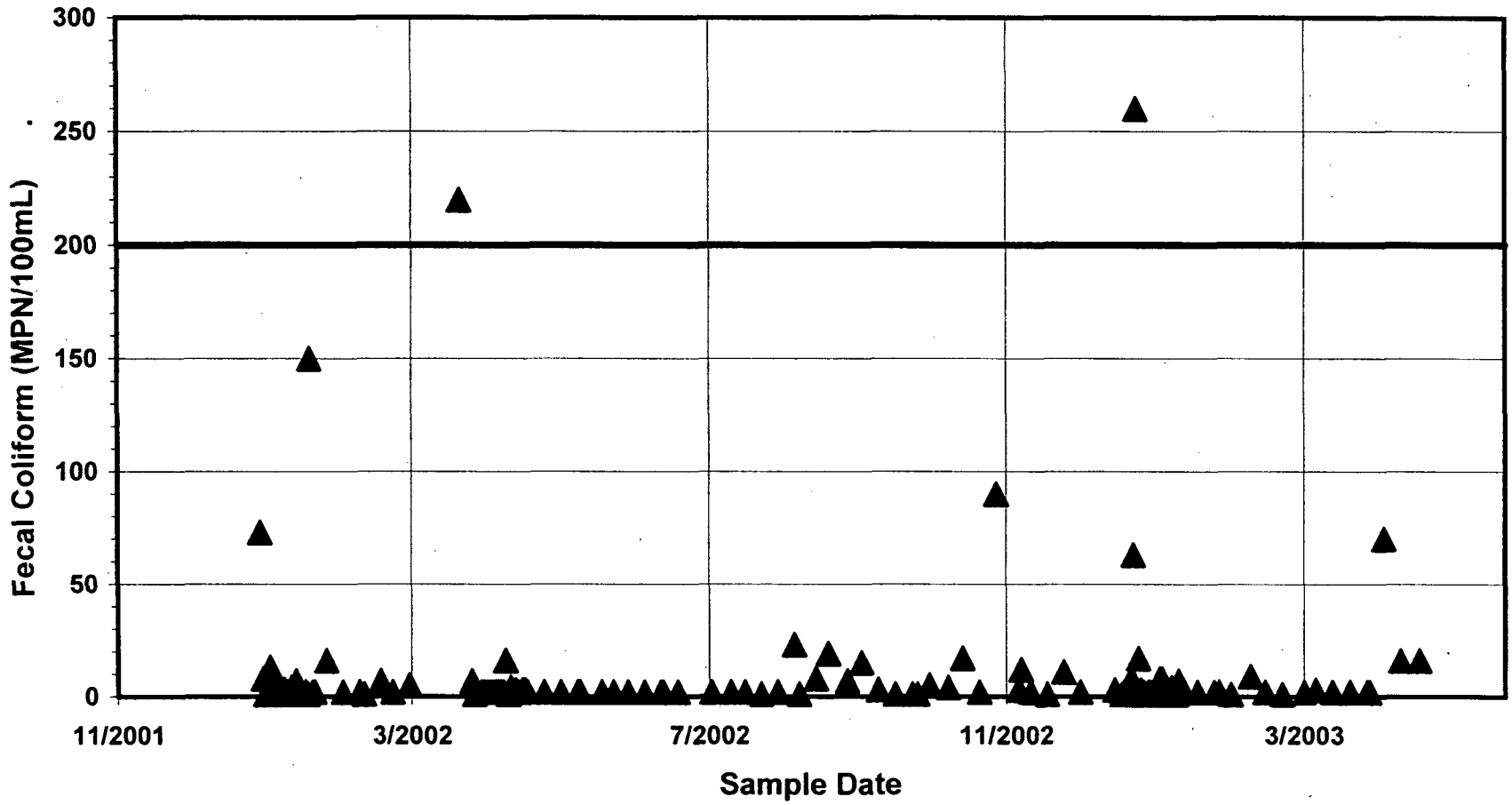
Triggering Water Quality Objective for Delisting









The Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994 contains water quality criteria for waterbodies in the Los Angeles Region. The most conservative applicable water quality criterion for fecal coliform is 200 MPN/100mL for the Basin Plan REC1 Marine 30-Day Minimum 5 samples objective. In Point Fermin Park Beach, the criterion was exceeded in 0 of 134 samples, which is 0% of the sample events. Under the state's listing policy, a waterbody is eligible for delisting for fecal coliform if there are 22 or fewer exceedances out of the 134 samples.

References

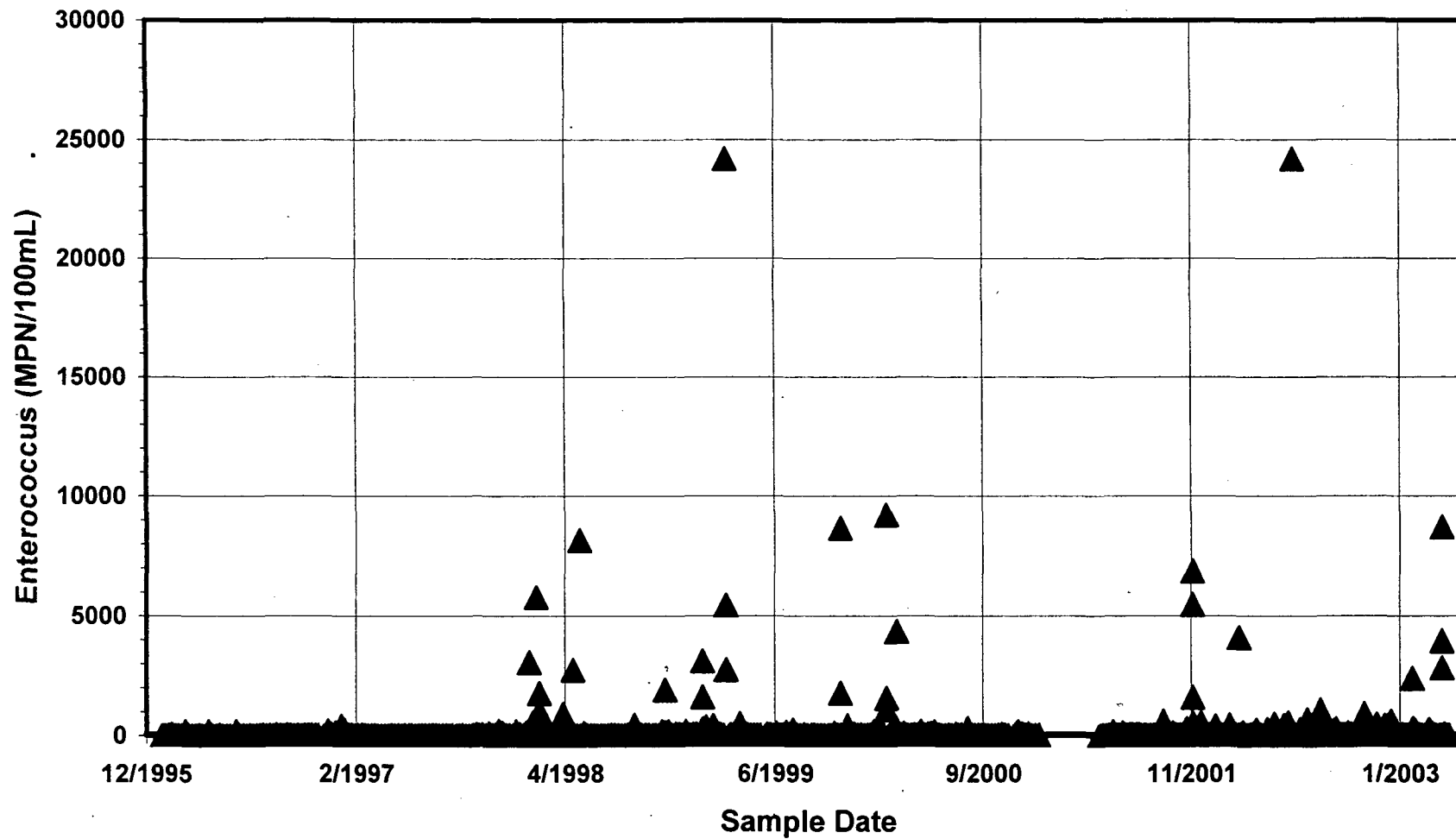
Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994




Water Data Summary for Point Fermin Park Beach – Basin Plan REC1 Marine 30-Day Minimum 5 samples Objective



	QueriedRecords_Enterococcus_Water
	QueriedRecords_FecalColiform_Water
	QueriedRecords_TotalColiform_Water
	SantaMonicaBeach_Enterococcus_Water
	SantaMonicaBeach_Enterococcus_Water
	SantaMonicaBeach_FecalColiform_Water
	SantaMonicaBeach_FecalColiform_Water
	SantaMonicaBeach_TotalColiform_Water
	SantaMonicaBeach_TotalColiform_Water

Water Data Summary for Santa Monica Beach – Basin Plan REC1 Marine 30-Day Minimum 5 samples Objective



 QueriedRecords_PAHs_Total_Sediment
 SantaMonicaBay_PAHs_Total_Sediment
 SantaMonicaBay_PAHs_Total_Sediment

Santa Monica Bay Offshore/Nearshore PAHs (Total) - Sediment

Table 1. Data Summary Information

Waterbody Name	Santa Monica Bay Offshore/Nearshore	Region	4
Hydrologic Unit	405.13	Total Waterbody Size	146645 Acres
Pollutant/Stressor	PAHs (Total)	Size Affected	146645 Acres
		Extent of Impairment	Entire Reach

Table 2. Summary of PAHs (Total) for Santa Monica Bay Offshore/Nearshore

Dates of Sampling	5/13/1980 - 11/19/2001	Minimum Detected Value	0.004 µg/g
Number of Samples	269	Maximum Detected Value	24.118 µg/g
Number of Detected Samples	247	Median Detected Value	0.23 µg/g
Hardness			N/A
pH			N/A
WER			N/A
Temperature			N/A

Data Sources

LA Contaminated Sediments Task Force Database

Beneficial Uses for Santa Monica Bay Offshore/Nearshore

§ IND § REC1 § COMM § MAR § BIOL § MIGR § SHELL
 § NAV § REC2 § AQUA § WILD § RARE § SPWN

Applicable Water Quality Objectives	Out of 269 Samples:	# Exceed	% Exceed	List	Delist
1800 µg/g		N/A	N/A	No	Yes

Triggering Water Quality Objective for Listing

No objectives were exceeded.

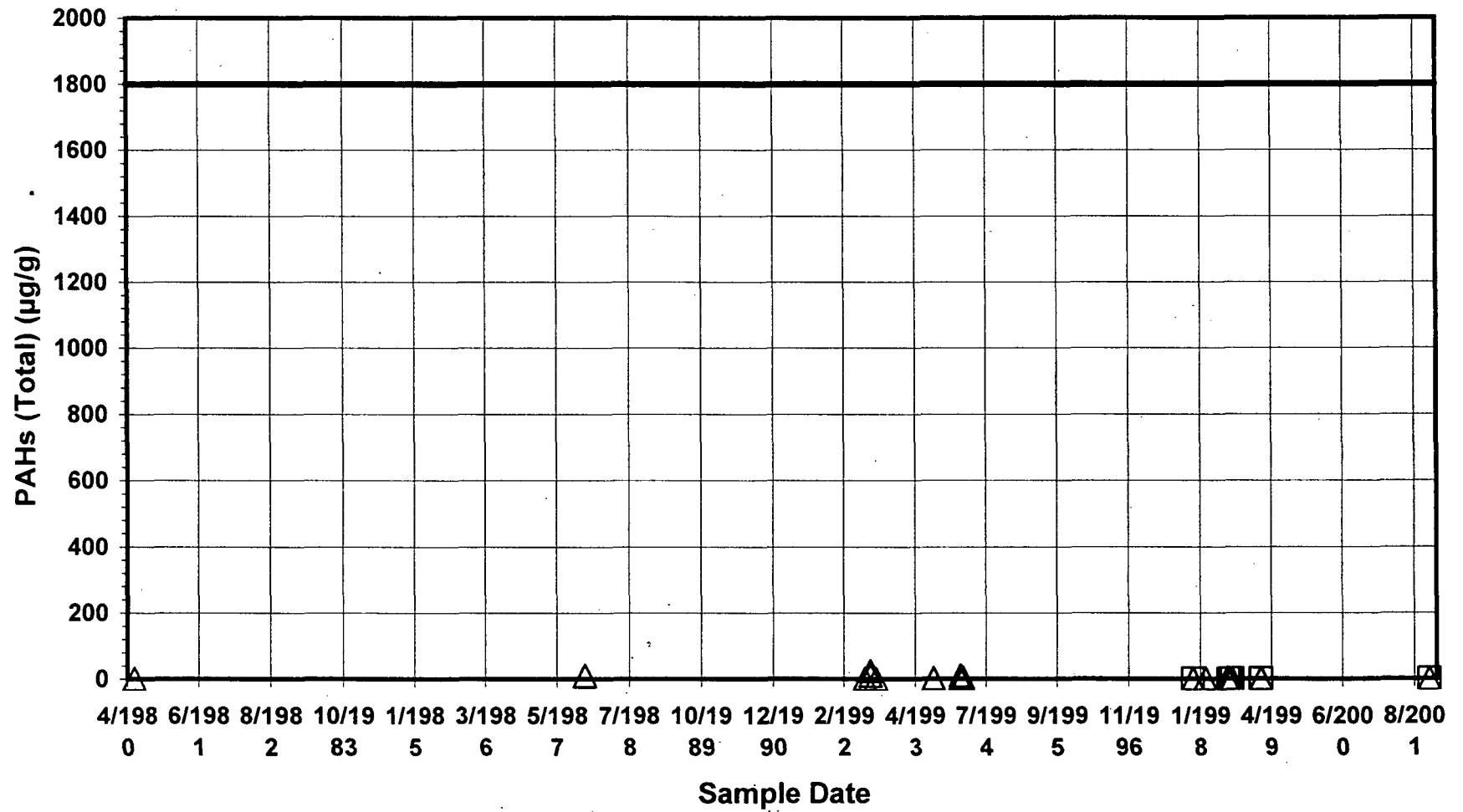
Triggering Water Quality Objective for Delisting

The contains water quality criteria for waterbodies in California. The most conservative applicable water quality criterion for pahs (total) is 1800 µg/g for the objective. In Santa Monica Bay Offshore/Nearshore, the criterion was exceeded in 0 of 269 samples, which is 0% of the sample events. Under the state's listing policy, a waterbody is eligible for delisting for pahs (total) if there are 22 or fewer exceedances out of the 269 samples.

References

None

Sediment Data Summary for Santa Monica Bay Offshore/Nearshore – No Objectives



Santa Monica Beach Fecal Coliform - Water

Table 1. Data Summary Information

Waterbody Name	Santa Monica Beach	Region	4
Hydrologic Unit	405.13	Total Waterbody Size	3 Miles
Pollutant/Stressor	Fecal Coliform	Size Affected	3 Miles
		Extent of Impairment	Entire Reach

Table 2. Summary of Fecal Coliform for Santa Monica Beach

Dates of Sampling	4/26/2000 - 4/28/2003	Minimum Detected Value	1 MPN/100mL
Number of Samples	2648	Maximum Detected Value	24000 MPN/100mL
Number of Detected Samples	2648	Median Detected Value	21 MPN/100mL
Hardness			N/A
pH			N/A
WER			N/A
Temperature			N/A

Data Sources

Heal The Bay

Beneficial Uses for Santa Monica Beach

§ NAV § REC2 § MAR § MIGR § SHELL
 § REC1 § COMM § WILD § SPWN

Applicable Water Quality Objectives	Out of 2648 Samples:	# Exceed	% Exceed	List	Delist
200 MPN/100mL Basin Plan REC1 Marine 30-Day Minimum 5 samples		3	0.1%	No	Yes
400 MPN/100mL Basin Plan REC1 Marine Single sample		162	6.1%	No	Yes
2000 MPN/100mL Basin Plan REC2 30-Day Log Mean Minimum 4 sample		16	0.6%	No	Yes
4000 MPN/100mL Basin Plan REC2 30-Day Maximum 10% samples		8	0.3%	No	Yes

Triggering Water Quality Objective for Listing

No objectives were exceeded.

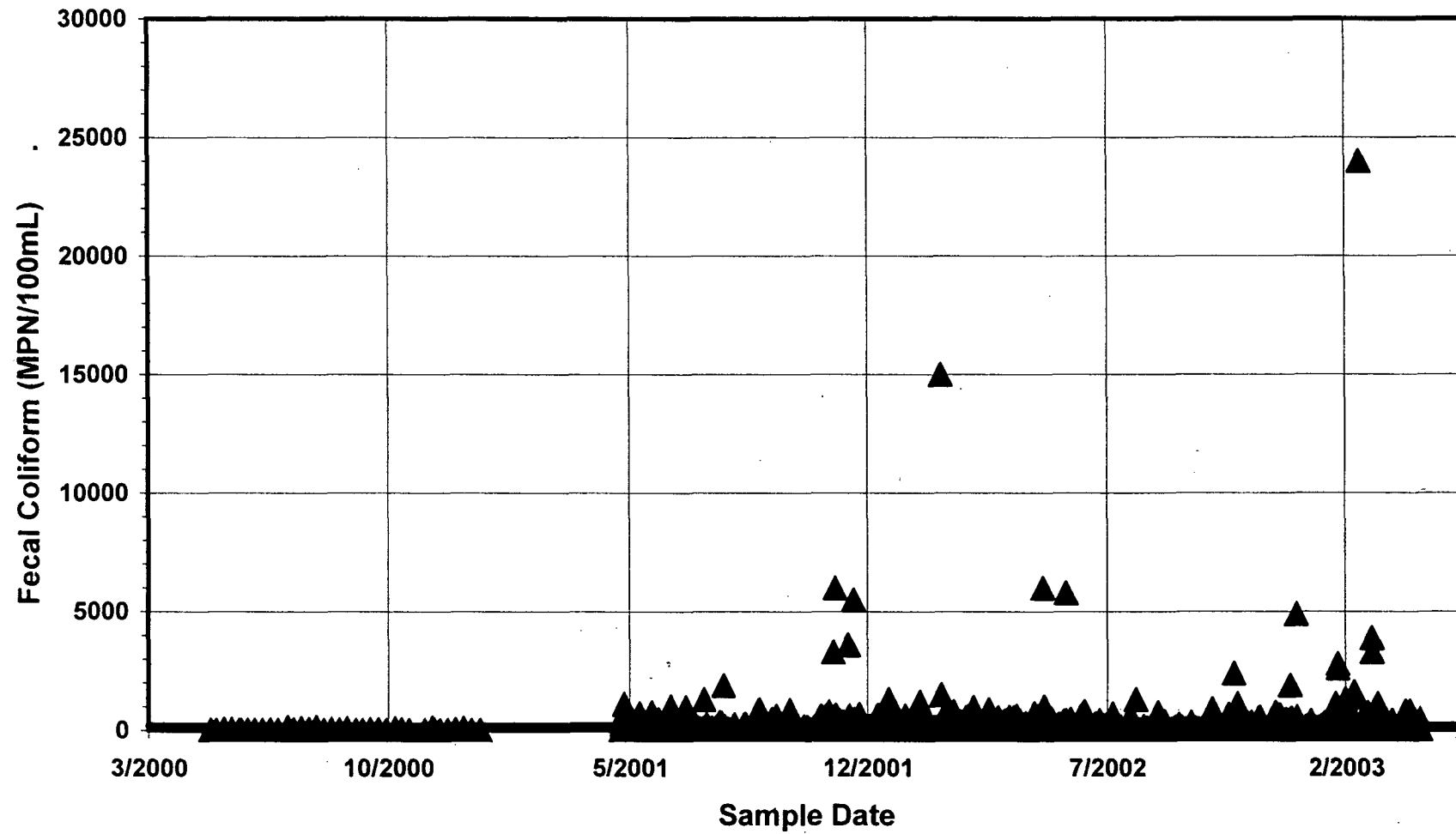
Triggering Water Quality Objective for Delisting

The Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994 contains water quality criteria for waterbodies in the Los Angeles Region. The most conservative applicable water quality criterion for fecal coliform is 200 MPN/100mL for the Basin Plan REC1 Marine 30-Day Minimum 5 samples objective. In Santa Monica Beach, the criterion was exceeded in 3 of 2648 samples, which is 0.1% of the sample events. Under the state's listing policy, a waterbody is eligible for delisting for fecal coliform if there are 439 or fewer exceedances out of the 2648 samples.

References

Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994

Water Data Summary for Santa Monica Beach – Basin Plan REC1 Marine 30-Day Minimum 5 samples Objective



Santa Monica Beach Total Coliform - Water

Table 1. Data Summary Information

Waterbody Name	Santa Monica Beach	Region	4
Hydrologic Unit	405.13	Total Waterbody Size	3 Miles
Pollutant/Stressor	Total Coliform	Size Affected	3 Miles
		Extent of Impairment	Entire Reach

Table 2. Summary of Total Coliform for Santa Monica Beach

Dates of Sampling	4/26/2000 - 4/28/2003	Minimum Detected Value	4 MPN/100mL
Number of Samples	2570	Maximum Detected Value	84000 MPN/100mL
Number of Detected Samples	2570	Median Detected Value	59 MPN/100mL
Hardness			N/A
pH			N/A
WER			N/A
Temperature			N/A

Data Sources

Heal The Bay

Beneficial Uses for Santa Monica Beach

§ NAV § REC2 § MAR § MIGR § SHELL
 § REC1 § COMM § WILD § SPWN

Applicable Water Quality Objectives	Out of 2570 Samples:	# Exceed	% Exceed	List	Delist
70 MPN/100mL Basin Plan SHELL 30-Day Median		1199	46.7%	Yes	No
230 MPN/100mL Basin Plan SHELL 30-Day Max 10% 5-tube decimal dilu		620	24.1%	Yes	No
330 MPN/100mL Basin Plan SHELL 30-Day Max 10% 3-tube decimal dilu		518	20.2%	Yes	No
1000 MPN/100mL Basin Plan REC1 Marine 30-Day Minimum 5 samples		23	0.9%	No	Yes
1000 MPN/100mL Basin Plan REC1 Marine Ratio Single sample		252	9.8%	No	Yes
10000 MPN/100mL Basin Plan REC1 Marine Single sample		62	2.4%	No	Yes

Triggering Water Quality Objective for Listing

The Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994 contains water quality criteria for waterbodies in the Los Angeles Region. The most conservative applicable water quality criterion for total coliform is 70 MPN/100mL for the Basin Plan SHELL 30-Day Median objective. In Santa Monica Beach, the criterion was exceeded in 1199 of 2570 samples, which is 46.6% of the sample events. Under the state's listing policy, a waterbody is considered to be impaired for total coliform if there are 427 or more exceedances out of the 2570 samples.

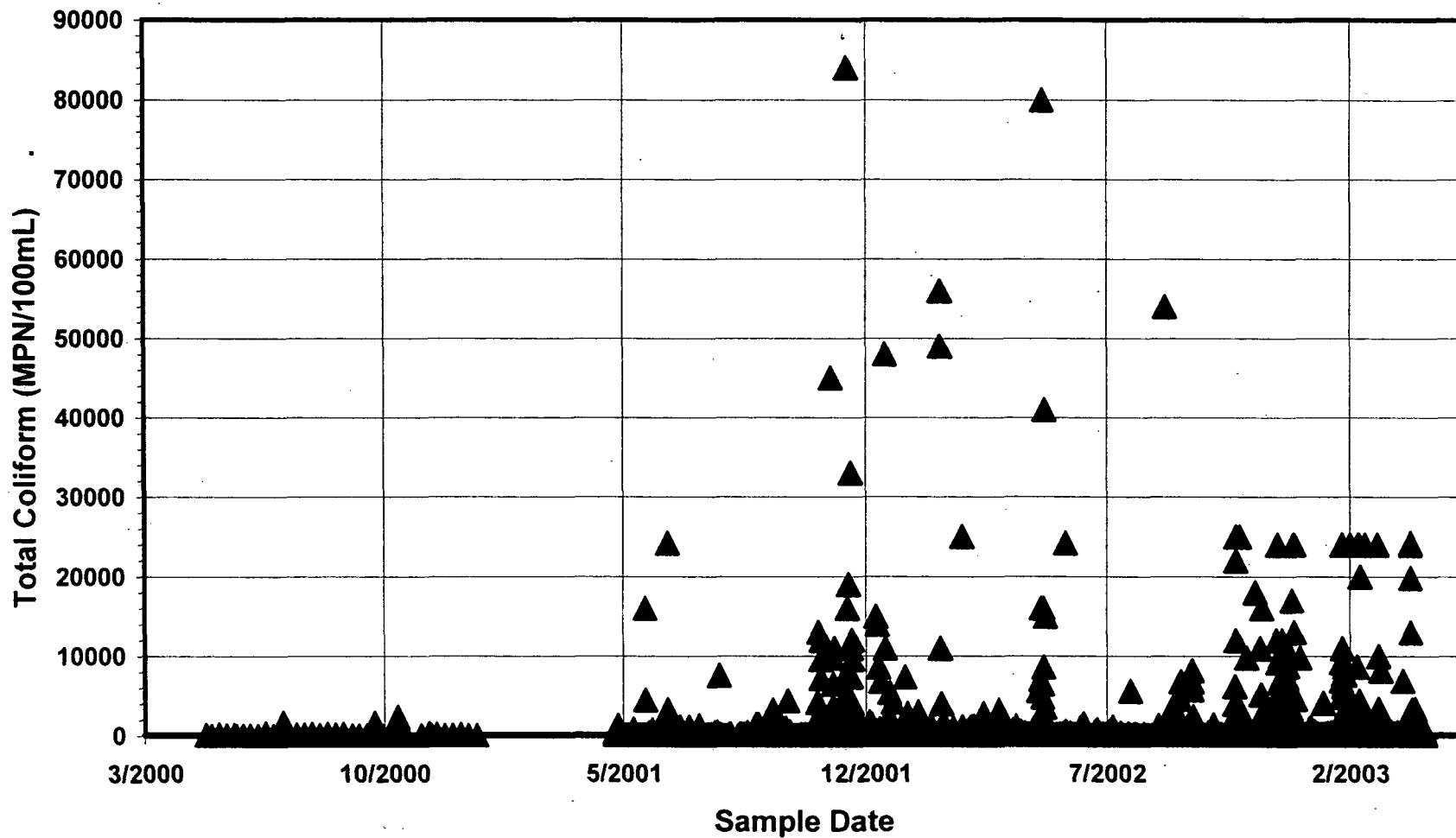
Triggering Water Quality Objective for Delisting

Not eligible for delisting.

References

Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994

Water Data Summary for Santa Monica Beach – Basin Plan SHELL 30-Day Median Objective



	QueriedRecords_Enterococcus_Water
	QueriedRecords_FecalColiform_Water
	QueriedRecords_TotalColiform_Water
	VeniceBeach_Enterococcus_Water
	VeniceBeach_Enterococcus_Water
	VeniceBeach_FecalColiform_Water
	VeniceBeach_FecalColiform_Water
	VeniceBeach_TotalColiform_Water
	VeniceBeach_TotalColiform_Water

Venice Beach Enterococcus - Water

Table 1. Data Summary Information

Waterbody Name	Venice Beach	Region	4
Hydrologic Unit	405.13	Total Waterbody Size	2.5 Miles
Pollutant/Stressor	Enterococcus	Size Affected	2.5 Miles
		Extent of Impairment	Entire Reach

Table 2. Summary of Enterococcus for Venice Beach

Dates of Sampling	1/2/1996 - 4/28/2003	Minimum Detected Value	1 MPN/100mL
Number of Samples	1085	Maximum Detected Value	24192 MPN/100mL
Number of Detected Samples	1085	Median Detected Value	10 MPN/100mL
Hardness			N/A
pH			N/A
WER			N/A
Temperature			N/A

Data Sources

Heal The Bay

Beneficial Uses for Venice Beach

§ NAV § REC2 § MAR § RARE § SPWN
 § REC1 § COMM § WILD § MIGR § SHELL

Applicable Water Quality Objectives	Out of 1085 Samples:	# Exceed	% Exceed	List	Delist
35 MPN/100mL Basin Plan RECI Marine 30-Day Minimum 5 samples		174/1081	16.1%	No	Yes
104 MPN/100mL Basin Plan RECI Marine Single sample		98	9%	No	Yes

Triggering Water Quality Objective for Listing

No objectives were exceeded.

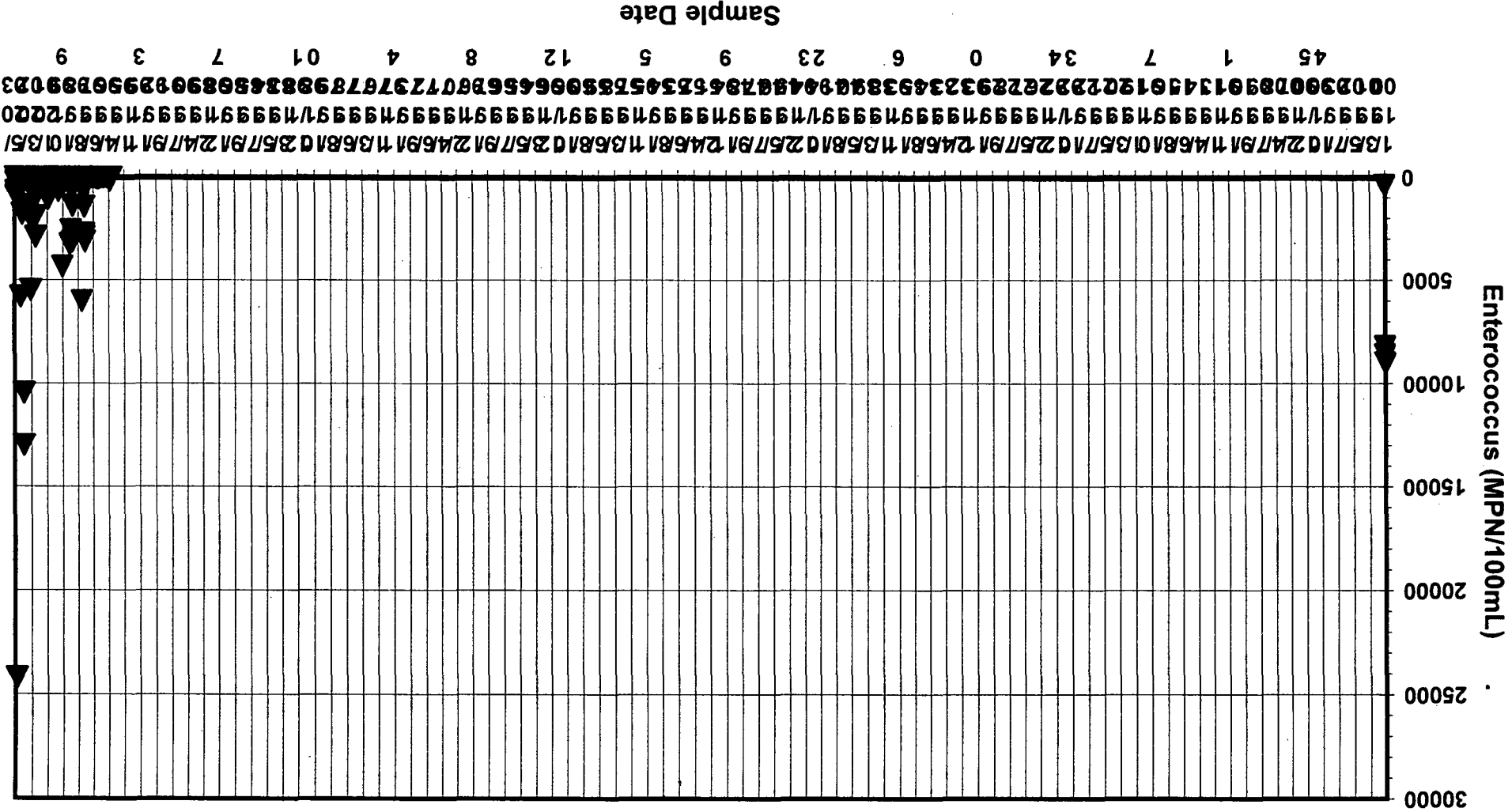
Triggering Water Quality Objective for Delisting

The Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994 contains water quality criteria for waterbodies in the Los Angeles Region. The most conservative applicable water quality criterion for enterococcus is 35 MPN/100mL for the Basin Plan RECI Marine 30-Day Minimum 5 samples objective. In Venice Beach, the criterion was exceeded in 174 of 1081 samples, which is 16.1% of the sample events. Under the state's listing policy, a waterbody is eligible for delisting for enterococcus if there are 179 or fewer exceedances out of the 1081 samples.

References

Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994

Water Data Summary for Venice Beach – Basin Plan REC1 Marine 30-Day Minimum 5 samples Objective



Raw Data

Venice Beach
Enterococcus - Water

4415	Venice Fishing Pier- 50 yards south	Venice Beach	Bacteriological	Enterococcus	=	20	MPN/100mL	30-Dec-02	Water		HTB-Heal the Bay EPA Request I
4418	Venice Fishing Pier- 50 yards south	Venice Beach	Bacteriological	Enterococcus	=	31	MPN/100mL	06-Jan-03	Water		HTB-Heal the Bay EPA Request I
4421	Venice Fishing Pier- 50 yards south	Venice Beach	Bacteriological	Enterococcus	=	10	MPN/100mL	13-Jan-03	Water		HTB-Heal the Bay EPA Request I
4424	Venice Fishing Pier- 50 yards south	Venice Beach	Bacteriological	Enterococcus	=	20	MPN/100mL	21-Jan-03	Water		HTB-Heal the Bay EPA Request I
4427	Venice Fishing Pier- 50 yards south	Venice Beach	Bacteriological	Enterococcus	=	10	MPN/100mL	27-Jan-03	Water		HTB-Heal the Bay EPA Request I
4430	Venice Fishing Pier- 50 yards south	Venice Beach	Bacteriological	Enterococcus	=	10	MPN/100mL	03-Feb-03	Water		HTB-Heal the Bay EPA Request I
4433	Venice Fishing Pier- 50 yards south	Venice Beach	Bacteriological	Enterococcus	=	10	MPN/100mL	10-Feb-03	Water		HTB-Heal the Bay EPA Request I
4436	Venice Fishing Pier- 50 yards south	Venice Beach	Bacteriological	Enterococcus	=	20	MPN/100mL	18-Feb-03	Water		HTB-Heal the Bay EPA Request I
4439	Venice Fishing Pier- 50 yards south	Venice Beach	Bacteriological	Enterococcus	=	10	MPN/100mL	24-Feb-03	Water		HTB-Heal the Bay EPA Request I
4442	Venice Fishing Pier- 50 yards south	Venice Beach	Bacteriological	Enterococcus	=	10	MPN/100mL	03-Mar-03	Water		HTB-Heal the Bay EPA Request I
4445	Venice Fishing Pier- 50 yards south	Venice Beach	Bacteriological	Enterococcus	=	10	MPN/100mL	10-Mar-03	Water		HTB-Heal the Bay EPA Request I
4448	Venice Fishing Pier- 50 yards south	Venice Beach	Bacteriological	Enterococcus	=	95	MPN/100mL	17-Mar-03	Water		HTB-Heal the Bay EPA Request I
4451	Venice Fishing Pier- 50 yards south	Venice Beach	Bacteriological	Enterococcus	=	10	MPN/100mL	24-Mar-03	Water		HTB-Heal the Bay EPA Request I
4454	Venice Fishing Pier- 50 yards south	Venice Beach	Bacteriological	Enterococcus	=	10	MPN/100mL	31-Mar-03	Water		HTB-Heal the Bay EPA Request I
4457	Venice Fishing Pier- 50 yards south	Venice Beach	Bacteriological	Enterococcus	=	10	MPN/100mL	07-Apr-03	Water		HTB-Heal the Bay EPA Request I
4460	Venice Fishing Pier- 50 yards south	Venice Beach	Bacteriological	Enterococcus	=	934	MPN/100mL	14-Apr-03	Water		HTB-Heal the Bay EPA Request I
4463	Venice Fishing Pier- 50 yards south	Venice Beach	Bacteriological	Enterococcus	=	10	MPN/100mL	21-Apr-03	Water		HTB-Heal the Bay EPA Request I
4466	Venice Fishing Pier- 50 yards south	Venice Beach	Bacteriological	Enterococcus	=	10	MPN/100mL	28-Apr-03	Water		HTB-Heal the Bay EPA Request I
4473	Venice Pavilion Storm Drain	Venice Beach	Bacteriological	Enterococcus	=	8600	MPN/100mL		Water	1 weekly grab sample from undiluted drain flow.	Hardcopy Data #20 Appendix 4
4474	Venice Pavilion Storm Drain	Venice Beach	Bacteriological	Enterococcus	=	410	MPN/100mL		Water	1 weekly grab sample from undiluted drain flow.	Hardcopy Data #20 Appendix 4
4475	Venice Pavilion Storm Drain	Venice Beach	Bacteriological	Enterococcus	=	9000	MPN/100mL		Water	1 weekly grab sample from undiluted drain flow.	Hardcopy Data #20 Appendix 4
4476	Venice Pavilion Storm Drain	Venice Beach	Bacteriological	Enterococcus	=	8200	MPN/100mL		Water	1 weekly grab sample from undiluted drain flow.	Hardcopy Data #20 Appendix 4

Venice Beach Fecal Coliform - Water

Table 1. Data Summary Information

Waterbody Name	Venice Beach	Region	4
Hydrologic Unit	405.13	Total Waterbody Size	2.5 Miles
Pollutant/Stressor	Fecal Coliform	Size Affected	2.5 Miles
		Extent of Impairment	Entire Reach

Table 2. Summary of Fecal Coliform for Venice Beach

Dates of Sampling	1/2/1996 - 4/28/2003	Minimum Detected Value	1 MPN/100mL
Number of Samples	1701	Maximum Detected Value	11199 MPN/100mL
Number of Detected Samples	1701	Median Detected Value	10 MPN/100mL
Hardness			N/A
pH			N/A
WER			N/A
Temperature			N/A

Data Sources

Heal The Bay

Beneficial Uses for Venice Beach

§ NAV § REC2 § MAR § RARE § SPWN
 § REC1 § COMM § WILD § MIGR § SHELL

Applicable Water Quality Objectives	Out of 1701 Samples:	# Exceed	% Exceed	List	Delist
200 MPN/100mL Basin Plan REC1 Marine 30-Day Minimum	5 samples	1	0.1%	No	Yes
400 MPN/100mL Basin Plan REC1 Marine Single sample		33	1.9%	No	Yes
2000 MPN/100mL Basin Plan REC2 30-Day Log Mean Minimum	4 samples	8	0.5%	No	Yes
4000 MPN/100mL Basin Plan REC2 30-Day Maximum 10%	samples	3	0.2%	No	Yes

Triggering Water Quality Objective for Listing

No objectives were exceeded.

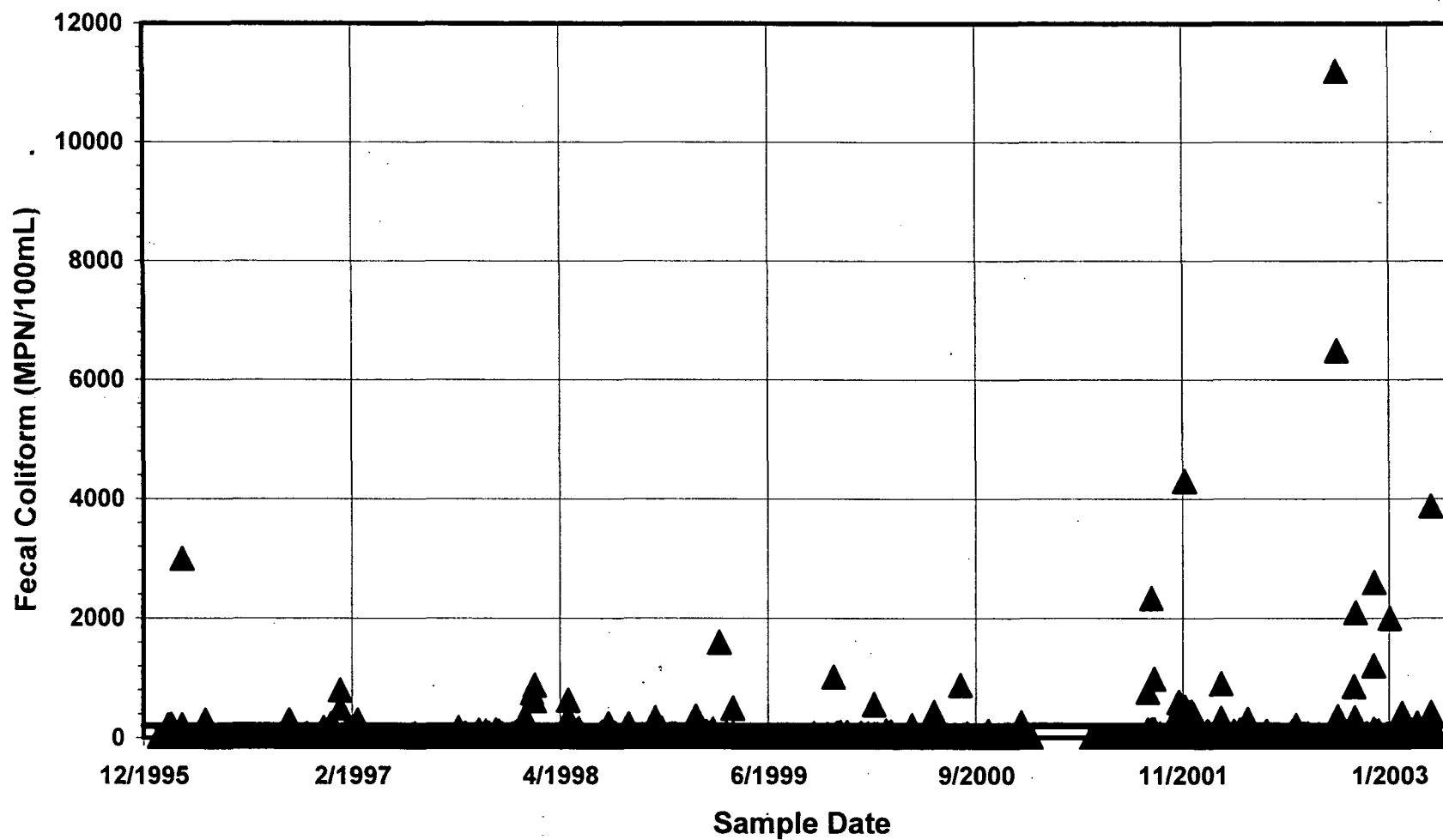
Triggering Water Quality Objective for Delisting

The Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994 contains water quality criteria for waterbodies in the Los Angeles Region. The most conservative applicable water quality criterion for fecal coliform is 200 MPN/100mL for the Basin Plan REC1 Marine 30-Day Minimum 5 samples objective. In Venice Beach, the criterion was exceeded in 1 of 1701 samples, which is 0.1% of the sample events. Under the state's listing policy, a waterbody is eligible for delisting for fecal coliform if there are 282 or fewer exceedances out of the 1701 samples.

References

Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994

Water Data Summary for Venice Beach – Basin Plan REC1 Marine 30-Day Minimum 5 samples Objective



Venice Beach Total Coliform - Water

Table 1. Data Summary Information

Waterbody Name	Venice Beach	Region	4
Hydrologic Unit	405.13	Total Waterbody Size	2.5 Miles
Pollutant/Stressor	Total Coliform	Size Affected	2.5 Miles
		Extent of Impairment	Entire Reach

Table 2. Summary of Total Coliform for Venice Beach

Dates of Sampling	1/2/1996 - 4/28/2003	Minimum Detected Value	4 MPN/100mL
Number of Samples	1690	Maximum Detected Value	210000 MPN/100mL
Number of Detected Samples	1690	Median Detected Value	41 MPN/100mL
Hardness			N/A
pH			N/A
WER			N/A
Temperature			N/A

Data Sources

Heal The Bay

Beneficial Uses for Venice Beach

§ NAV § REC2 § MAR § RARE § SPWN
 § RECI § COMM § WILD § MIGR § SHELL

Applicable Water Quality Objectives	Out of 1690 Samples:	# Exceed	% Exceed	List	Delist
70 MPN/100mL Basin Plan SHELL 30-Day Median		696	41.2%	Yes	No
230 MPN/100mL Basin Plan SHELL 30-Day Max 10% 5-tube decimal diluti		375	22.2%	Yes	No
330 MPN/100mL Basin Plan SHELL 30-Day Max 10% 3-tube decimal diluti		316	18.7%	Yes	No
1000 MPN/100mL Basin Plan RECI Marine Ratio Single sample		162	9.6%	No	Yes
1000 MPN/100mL Basin Plan RECI Marine 30-Day Minimum 5 samples		30/1686	1.8%	No	Yes
10000 MPN/100mL Basin Plan RECI Marine Single sample		32	1.9%	No	Yes

Triggering Water Quality Objective for Listing

The Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994 contains water quality criteria for waterbodies in the Los Angeles Region. The most conservative applicable water quality criterion for total coliform is 70 MPN/100mL for the Basin Plan SHELL 30-Day Median objective. In Venice Beach, the criterion was exceeded in 696 of 1690 samples, which is 41.2% of the sample events. Under the state's listing policy, a waterbody is considered to be impaired for total coliform if there are 281 or more exceedances out of the 1690 samples.

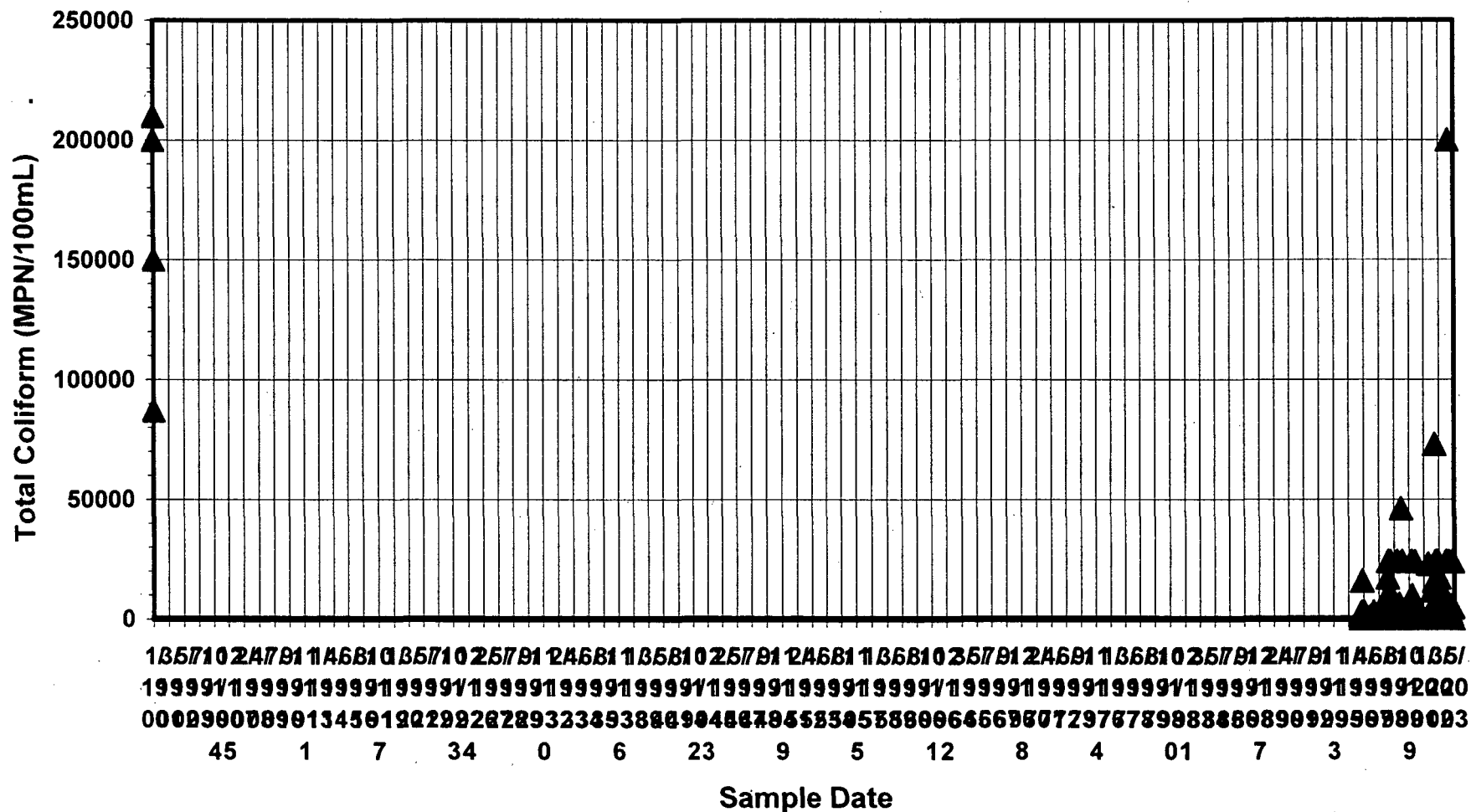
Triggering Water Quality Objective for Delisting









Not eligible for delisting.

References

Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994

Water Data Summary for Venice Beach – Basin Plan SHELL 30-Day Median Objective



-
-  QueriedRecords_Enterococcus_Water
 -  QueriedRecords_FecalColiform_Water
 -  QueriedRecords_TotalColiform_Water
 -  WillRogersBeach_Enterococcus_Water
 -  WillRogersBeach_Enterococcus_Water
 -  WillRogersBeach_FecalColiform_Water
 -  WillRogersBeach_FecalColiform_Water
 -  WillRogersBeach_TotalColiform_Water
 -  WillRogersBeach_TotalColiform_Water

Will Rogers Beach Enterococcus - Water

Table 1. Data Summary Information

Waterbody Name	Will Rogers Beach	Region	4
Hydrologic Unit	405.13	Total Waterbody Size	3 Miles
Pollutant/Stressor	Enterococcus	Size Affected	3 Miles
		Extent of Impairment	Entire Reach

Table 2. Summary of Enterococcus for Will Rogers Beach

Dates of Sampling	1/3/2000 - 4/28/2003	Minimum Detected Value	1 MPN/100mL
Number of Samples	706	Maximum Detected Value	6000 MPN/100mL
Number of Detected Samples	706	Median Detected Value	17 MPN/100mL
Hardness			N/A
pH			N/A
WER			N/A
Temperature			N/A

Data Sources

Heal The Bay

Beneficial Uses for Will Rogers Beach

§ NAV § REC2 § MAR § SPWN
 § REC1 § COMM § WILD § SHELL

Applicable Water Quality Objectives	Out of 706 Samples:	# Exceed	% Exceed	List	Delist
35 MPN/100mL Basin Plan REC1 Marine 30-Day Minimum 5 samples		203	28.8%	Yes	No
104 MPN/100mL Basin Plan REC1 Marine Single sample		93	13.2%	No	Yes

Triggering Water Quality Objective for Listing

The Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994 contains water quality criteria for waterbodies in the Los Angeles Region. The most conservative applicable water quality criterion for enterococcus is 35 MPN/100mL for the Basin Plan REC1 Marine 30-Day Minimum 5 samples objective. In Will Rogers Beach, the criterion was exceeded in 203 of 706 samples, which is 28.8% of the sample events. Under the state's listing policy, a waterbody is considered to be impaired for enterococcus if there are 118 or more exceedances out of the 706 samples.

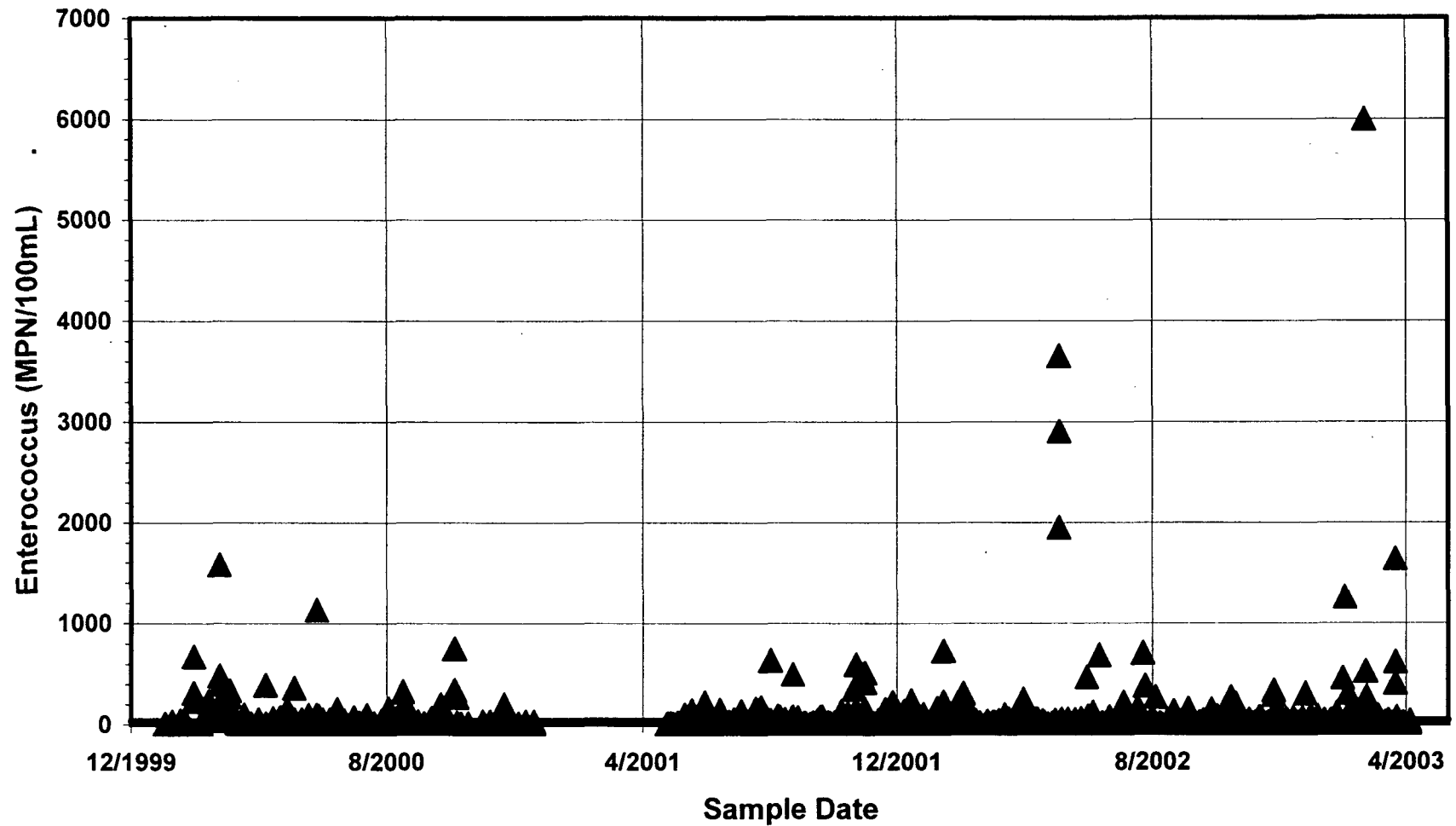
Triggering Water Quality Objective for Delisting

Not eligible for delisting.

References

Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994

Water Data Summary for Will Rogers Beach – Basin Plan REC1 Marine 30-Day Minimum 5 samples Objective



Will Rogers Beach Fecal Coliform - Water

Table 1. Data Summary Information

Waterbody Name	Will Rogers Beach	Region	4
Hydrologic Unit	405.13	Total Waterbody Size	3 Miles
Pollutant/Stressor	Fecal Coliform	Size Affected	3 Miles
		Extent of Impairment	Entire Reach

Table 2. Summary of Fecal Coliform for Will Rogers Beach

Dates of Sampling	1/3/2000 - 4/28/2003	Minimum Detected Value	1 MPN/100mL
Number of Samples	1993	Maximum Detected Value	8200 MPN/100mL
Number of Detected Samples	1993	Median Detected Value	20 MPN/100mL
Hardness			N/A
pH			N/A
WER			N/A
Temperature			N/A

Data Sources

Heal The Bay

Beneficial Uses for Will Rogers Beach

§ NAV § REC2 § MAR § SPWN
 § REC1 § COMM § WILD § SHELL

Applicable Water Quality Objectives	Out of 1993 Samples:	# Exceed	% Exceed	List	Delist
200 MPN/100mL Basin Plan REC1 Marine 30-Day Minimum 5 samples		0	0%	No	Yes
400 MPN/100mL Basin Plan REC1 Marine Single sample		65	3.3%	No	Yes
2000 MPN/100mL Basin Plan REC2 30-Day Log Mean Minimum 4 sample		6	0.3%	No	Yes
4000 MPN/100mL Basin Plan REC2 30-Day Maximum 10% samples		2	0.1%	No	Yes

Triggering Water Quality Objective for Listing

No objectives were exceeded.

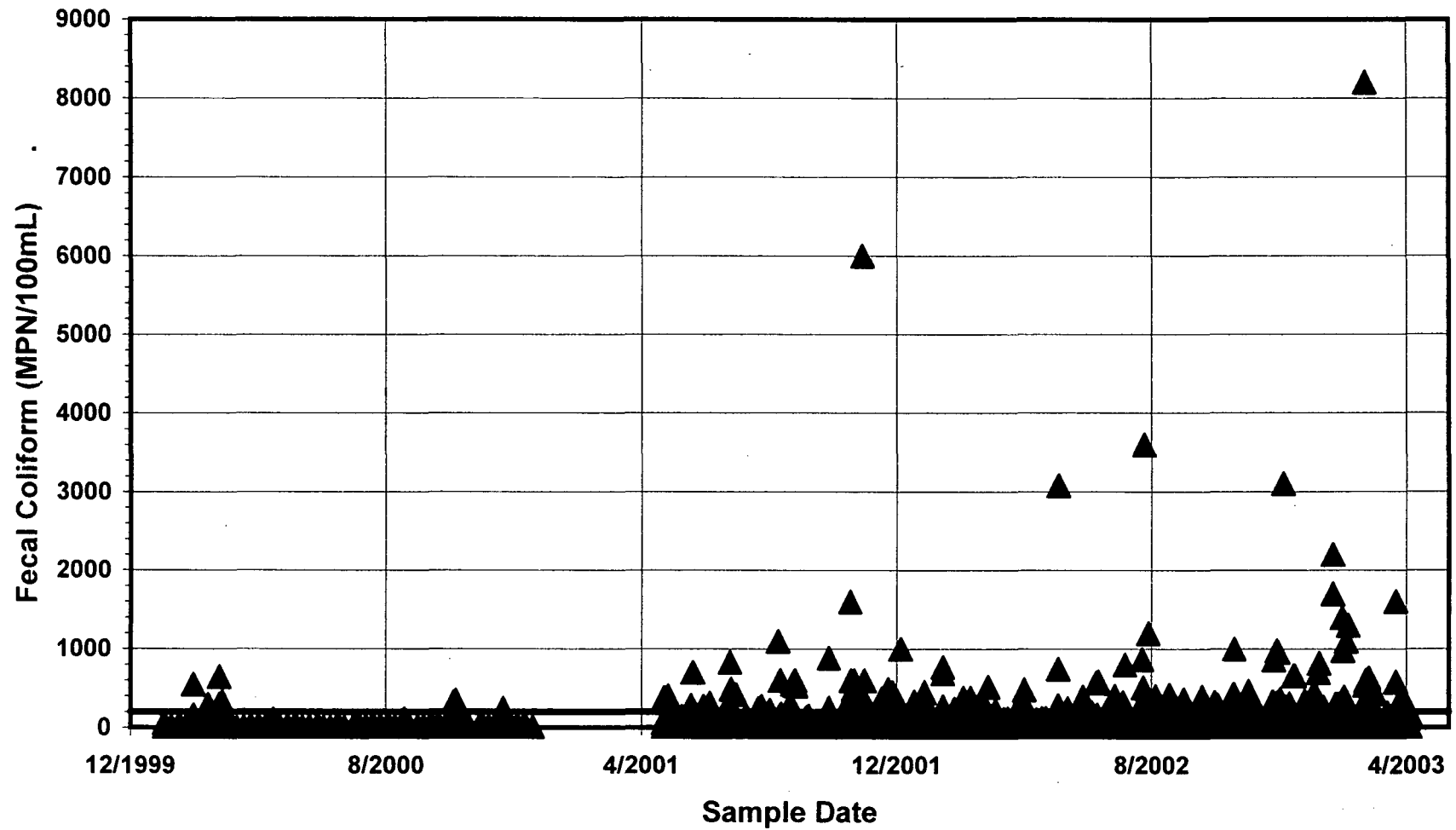
Triggering Water Quality Objective for Delisting

The Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994 contains water quality criteria for waterbodies in the Los Angeles Region. The most conservative applicable water quality criterion for fecal coliform is 200 MPN/100mL for the Basin Plan REC1 Marine 30-Day Minimum 5 samples objective. In Will Rogers Beach, the criterion was exceeded in 0 of 1993 samples, which is 0% of the sample events. Under the state's listing policy, a waterbody is eligible for delisting for fecal coliform if there are 330 or fewer exceedances out of the 1993 samples.

References

Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994

Water Data Summary for Will Rogers Beach – Basin Plan REC1 Marine 30-Day Minimum 5 samples Objective



Will Rogers Beach Total Coliform - Water

Table 1. Data Summary Information

Waterbody Name	Will Rogers Beach	Region	4
Hydrologic Unit	405.13	Total Waterbody Size	3 Miles
Pollutant/Stressor	Total Coliform	Size Affected	3 Miles
		Extent of Impairment	Entire Reach

Table 2. Summary of Total Coliform for Will Rogers Beach

Dates of Sampling	1/3/2000 - 4/28/2003	Minimum Detected Value	4 MPN/100mL
Number of Samples	1910	Maximum Detected Value	92000 MPN/100mL
Number of Detected Samples	1910	Median Detected Value	86 MPN/100mL
Hardness			N/A
pH			N/A
WER			N/A
Temperature			N/A

Data Sources

Heal The Bay

Beneficial Uses for Will Rogers Beach

§ NAV § REC2 § MAR § SPWN
 § REC1 § COMM § WILD § SHELL

Applicable Water Quality Objectives	Out of 1910 Samples:	# Exceed	% Exceed	List	Delist
70 MPN/100mL Basin Plan SHELL 30-Day Median		1061	55.5%	Yes	No
230 MPN/100mL Basin Plan SHELL 30-Day Max 10% 5-tube decimal dilu		562	29.4%	Yes	No
330 MPN/100mL Basin Plan SHELL 30-Day Max 10% 3-tube decimal dilu		440	23%	Yes	No
1000 MPN/100mL Basin Plan REC1 Marine Ratio Single sample		165	8.6%	No	Yes
1000 MPN/100mL Basin Plan REC1 Marine 30-Day Minimum 5 samples		3	0.2%	No	Yes
10000 MPN/100mL Basin Plan REC1 Marine Single sample		15	0.8%	No	Yes

Triggering Water Quality Objective for Listing

The Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994 contains water quality criteria for waterbodies in the Los Angeles Region. The most conservative applicable water quality criterion for total coliform is 70 MPN/100mL for the Basin Plan SHELL 30-Day Median objective. In Will Rogers Beach, the criterion was exceeded in 1061 of 1910 samples, which is 55.6% of the sample events. Under the state's listing policy, a waterbody is considered to be impaired for total coliform if there are 317 or more exceedances out of the 1910 samples.

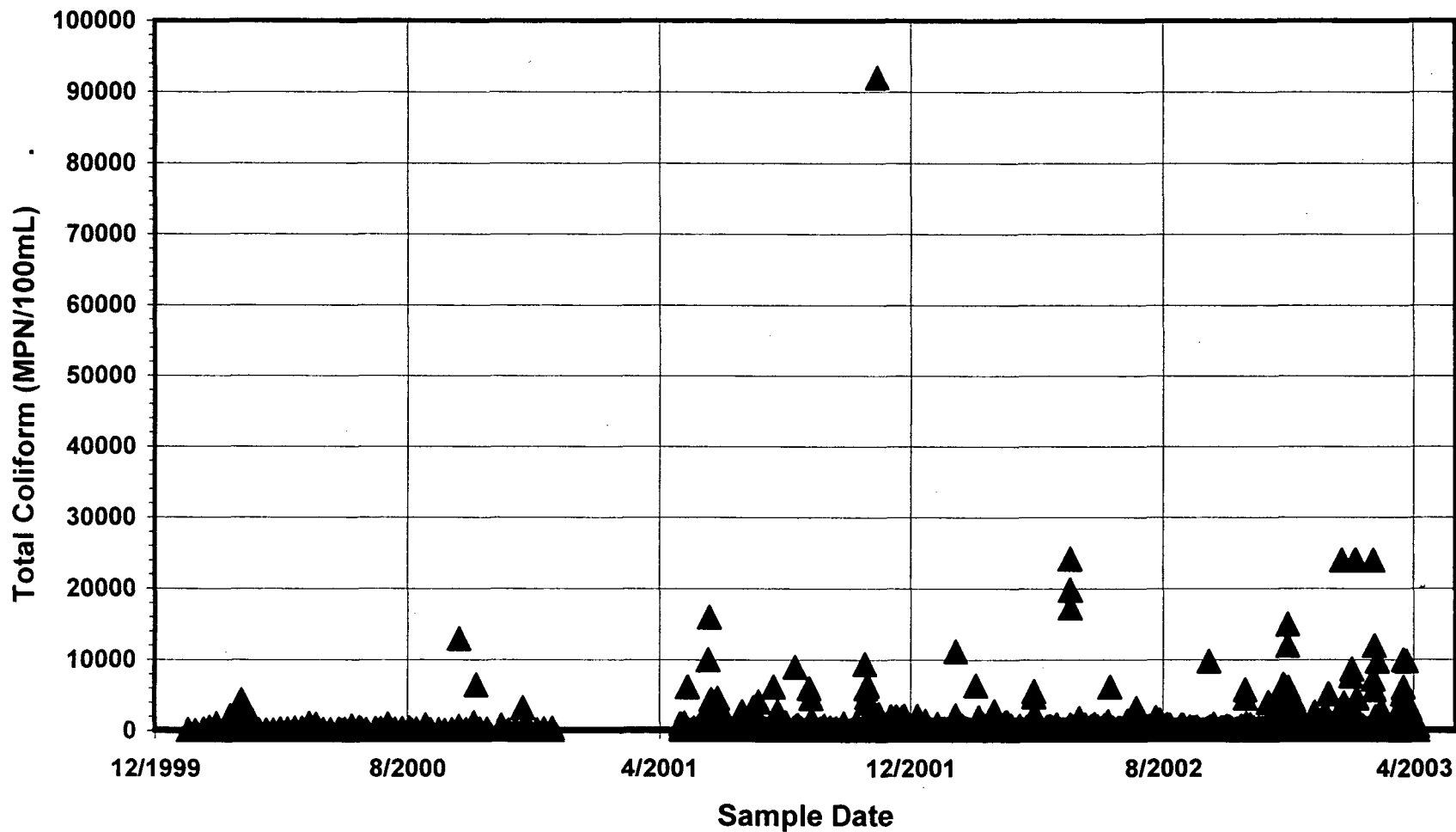
Triggering Water Quality Objective for Delisting

Not eligible for delisting.

References

Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994

Water Data Summary for Will Rogers Beach – Basin Plan SHELL 30-Day Median Objective






Raw Data

Will Rogers Beach
Total Coliform - Water

6440	Will Rogers State Beach-	Will Rogers Beach	Bacteriological	Total Coliform	=	528	MPN/100mL	02-Dec-02	Good	Water
6443	Will Rogers State Beach-	Will Rogers Beach	Bacteriological	Total Coliform	=	74	MPN/100mL	09-Dec-02	Good	Water
6446	Will Rogers State Beach-	Will Rogers Beach	Bacteriological	Total Coliform	=	624	MPN/100mL	16-Dec-02	Good	Water
6449	Will Rogers State Beach-	Will Rogers Beach	Bacteriological	Total Coliform	=	74	MPN/100mL	30-Dec-02	Good	Water
6452	Will Rogers State Beach-	Will Rogers Beach	Bacteriological	Total Coliform	=	52	MPN/100mL	06-Jan-03	Good	Water
6455	Will Rogers State Beach-	Will Rogers Beach	Bacteriological	Total Coliform	=	41	MPN/100mL	13-Jan-03	Good	Water
6458	Will Rogers State Beach-	Will Rogers Beach	Bacteriological	Total Coliform	=	86	MPN/100mL	21-Jan-03	Good	Water
6461	Will Rogers State Beach-	Will Rogers Beach	Bacteriological	Total Coliform	=	259	MPN/100mL	27-Jan-03	Good	Water
6464	Will Rogers State Beach-	Will Rogers Beach	Bacteriological	Total Coliform	=	30	MPN/100mL	03-Feb-03	Good	Water
6467	Will Rogers State Beach-	Will Rogers Beach	Bacteriological	Total Coliform	=	10	MPN/100mL	10-Feb-03	Good	Water
6470	Will Rogers State Beach-	Will Rogers Beach	Bacteriological	Total Coliform	=	364	MPN/100mL	18-Feb-03	Good	Water
6473	Will Rogers State Beach-	Will Rogers Beach	Bacteriological	Total Coliform	=	2382	MPN/100mL	24-Feb-03	Good	Water
6476	Will Rogers State Beach-	Will Rogers Beach	Bacteriological	Total Coliform	=	199	MPN/100mL	03-Mar-03	Good	Water
6479	Will Rogers State Beach-	Will Rogers Beach	Bacteriological	Total Coliform	=	85	MPN/100mL	10-Mar-03	Good	Water
6482	Will Rogers State Beach-	Will Rogers Beach	Bacteriological	Total Coliform	=	763	MPN/100mL	17-Mar-03	Good	Water
6485	Will Rogers State Beach-	Will Rogers Beach	Bacteriological	Total Coliform	=	175	MPN/100mL	24-Mar-03	Good	Water
6488	Will Rogers State Beach-	Will Rogers Beach	Bacteriological	Total Coliform	=	41	MPN/100mL	31-Mar-03	Good	Water
6491	Will Rogers State Beach-	Will Rogers Beach	Bacteriological	Total Coliform	=	51	MPN/100mL	07-Apr-03	Good	Water
6494	Will Rogers State Beach-	Will Rogers Beach	Bacteriological	Total Coliform	=	6131	MPN/100mL	14-Apr-03	Good	Water
6497	Will Rogers State Beach-	Will Rogers Beach	Bacteriological	Total Coliform	=	171	MPN/100mL	21-Apr-03	Good	Water
6500	Will Rogers State Beach-	Will Rogers Beach	Bacteriological	Total Coliform	=	10	MPN/100mL	28-Apr-03	Good	Water

	Heal The Bay	SWRCB	HTB-Heal the Bay EPA Request I
	Heal The Bay	SWRCB	HTB-Heal the Bay EPA Request I
	Heal The Bay	SWRCB	HTB-Heal the Bay EPA Request I
	Heal The Bay	SWRCB	HTB-Heal the Bay EPA Request I
	Heal The Bay	SWRCB	HTB-Heal the Bay EPA Request I
	Heal The Bay	SWRCB	HTB-Heal the Bay EPA Request I
	Heal The Bay	SWRCB	HTB-Heal the Bay EPA Request I
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	Heal The Bay	SWRCB	HTB-Heal the Bay EPA Request I
	Heal The Bay	SWRCB	HTB-Heal the Bay EPA Request I
	Heal The Bay	SWRCB	HTB-Heal the Bay EPA Request I
	Heal The Bay	SWRCB	HTB-Heal the Bay EPA Request I

 QueriedRecords_Cu_Total_Water
 WillmingtonDrain_Cu_Total_Water
 WillmingtonDrain_Cu_Total_Water

Wilmington Drain Total Copper - Water

Table 1. Data Summary Information

Waterbody Name	Wilmington Drain	Region	4
Hydrologic Unit	403.42	Total Waterbody Size	0.56 Miles
Pollutant/Stressor	Copper	Size Affected	0.56 Miles
		Extent of Impairment	Entire Reach

Table 2. Summary of Copper for Wilmington Drain

Dates of Sampling	3/6/2001 - 6/27/2001	Minimum Detected Value	16.4 µg/L
Number of Samples	2	Maximum Detected Value	16.4 µg/L
Number of Detected Samples	1	Median Detected Value	16.4 µg/L
Hardness - default value			200 mg/L
pH			N/A
WER			1
Temperature			N/A

Data Sources

Ken Malloy Harbor Regional Park Development Program Volume 1

Beneficial Uses for Wilmington Drain

§ RECI

Applicable Water Quality Objectives	Out of 2 Samples:	# Exceed	% Exceed	List	Delist
17 µg/L CTR Aquatic Life Freshwater Chronic (CCC)		0	0%	No	No
27 µg/L CTR Aquatic Life Freshwater Acute (CMC)		0	0%	No	No
1300 µg/L CTR Human Health Water & Organism		0	0%	No	No

Triggering Water Quality Objective for Listing

No objectives were exceeded.

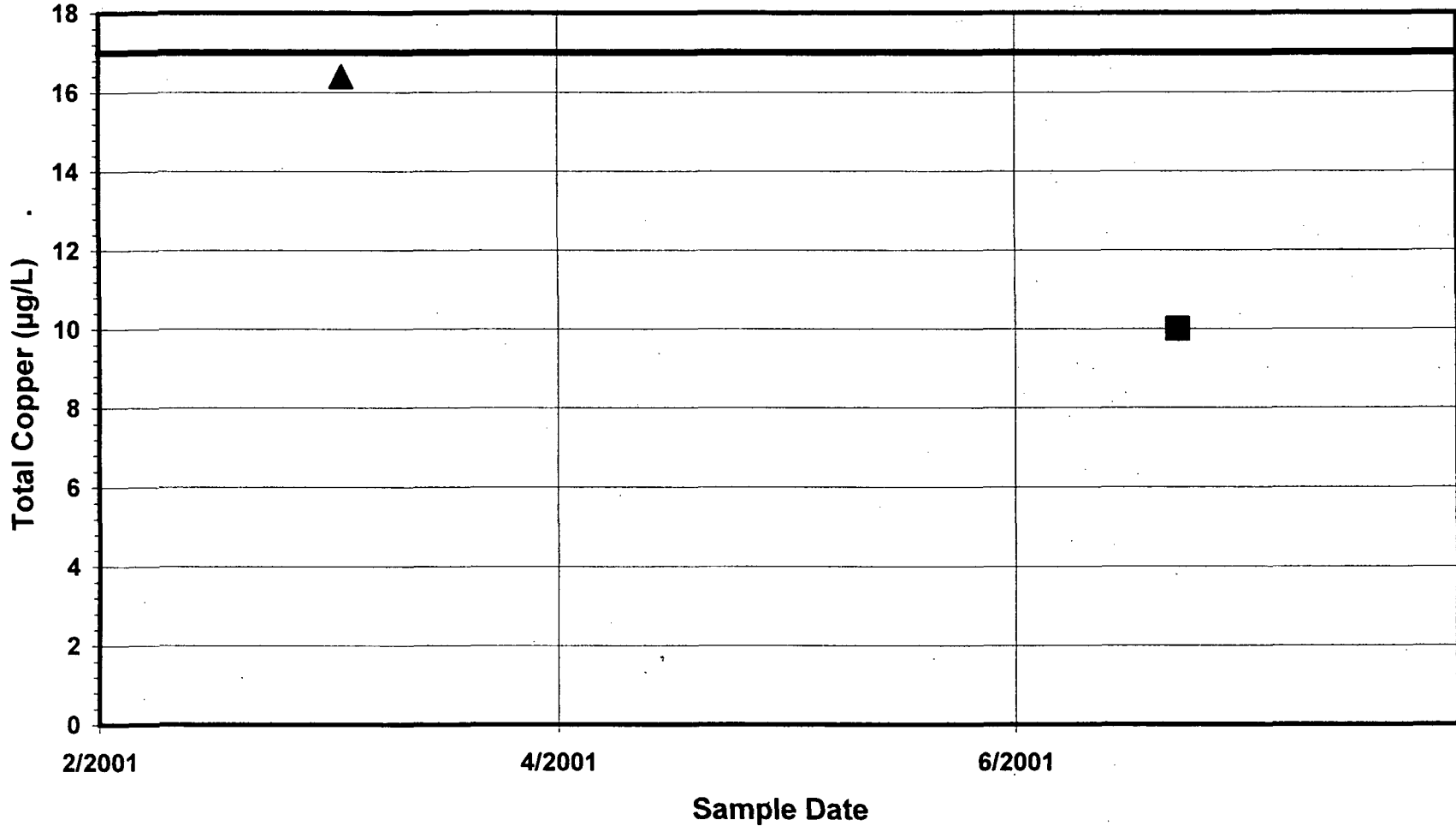
Triggering Water Quality Objective for Delisting

Not eligible for delisting.

References

California Toxics Rule






Water Data Summary for Wilmington Drain – CTR Aquatic Life Freshwater Chronic (CCC) Objective



Raw Data

Willmington Drain
Total Copper - Water

Record#	SiteID	Waterbody	Classification	Constituent	NumC	Result	Units	SampleDate	DataQual	Matrix	SampleE	MDL	ProjectName	DataSource	Filename	Spread	Hardness	pH	Temperature
38	A	Wilmington Drain	Metal	Copper	=	16.4	µg/L	06-Mar-01	Good	Water	Wet		Ken Malloy Harbor Regional Park	SWRCB	4-21	Hardcopy			
111	A	Wilmington Drain	Metal	Copper	<	10	µg/L	27-Jun-01	Good	Water	Dry		Ken Malloy Harbor Regional Park	SWRCB	4-21	Hardcopy			

-
-  QueriedRecords_Enterococcus_Water
 -  QueriedRecords_FecalColiform_Water
 -  QueriedRecords_TotalColiform_Water
 -  RoyalPalmsBeach_Total&FecalColiform&Enterococcus_Water
 -  RoyalPalmsBeach_Total&FecalColiform&Enterococcus_Water

Royal Palms Beach Enterococcus - Water

Table 1. Data Summary Information

Waterbody Name	Royal Palms Beach	Region	4
Hydrologic Unit	405.11	Total Waterbody Size	1.1 Miles
Pollutant/Stressor	Enterococcus	Size Affected	1.1 Miles
		Extent of Impairment	Entire Reach

Table 2. Summary of Enterococcus for Royal Palms Beach

Dates of Sampling	12/31/2001 - 4/29/2003	Minimum Detected Value	1 MPN/100mL
Number of Samples	82	Maximum Detected Value	3600 MPN/100mL
Number of Detected Samples	82	Median Detected Value	7 MPN/100mL
Hardness			N/A
pH			N/A
WER			N/A
Temperature			N/A

Data Sources

Heal The Bay

Beneficial Uses for Royal Palms Beach

§ NAV § REC2 § MAR § SPWN
 § REC1 § COMM § WILD § SHELL

Applicable Water Quality Objectives	Out of 82 Samples:	# Exceed	% Exceed	List	Delist
35 MPN/100mL Basin Plan REC1 Marine 30-Day Minimum 5 samples		3	3.7%	No	Yes
104 MPN/100mL Basin Plan REC1 Marine Single sample		5	6.1%	No	Yes

Triggering Water Quality Objective for Listing

No objectives were exceeded.

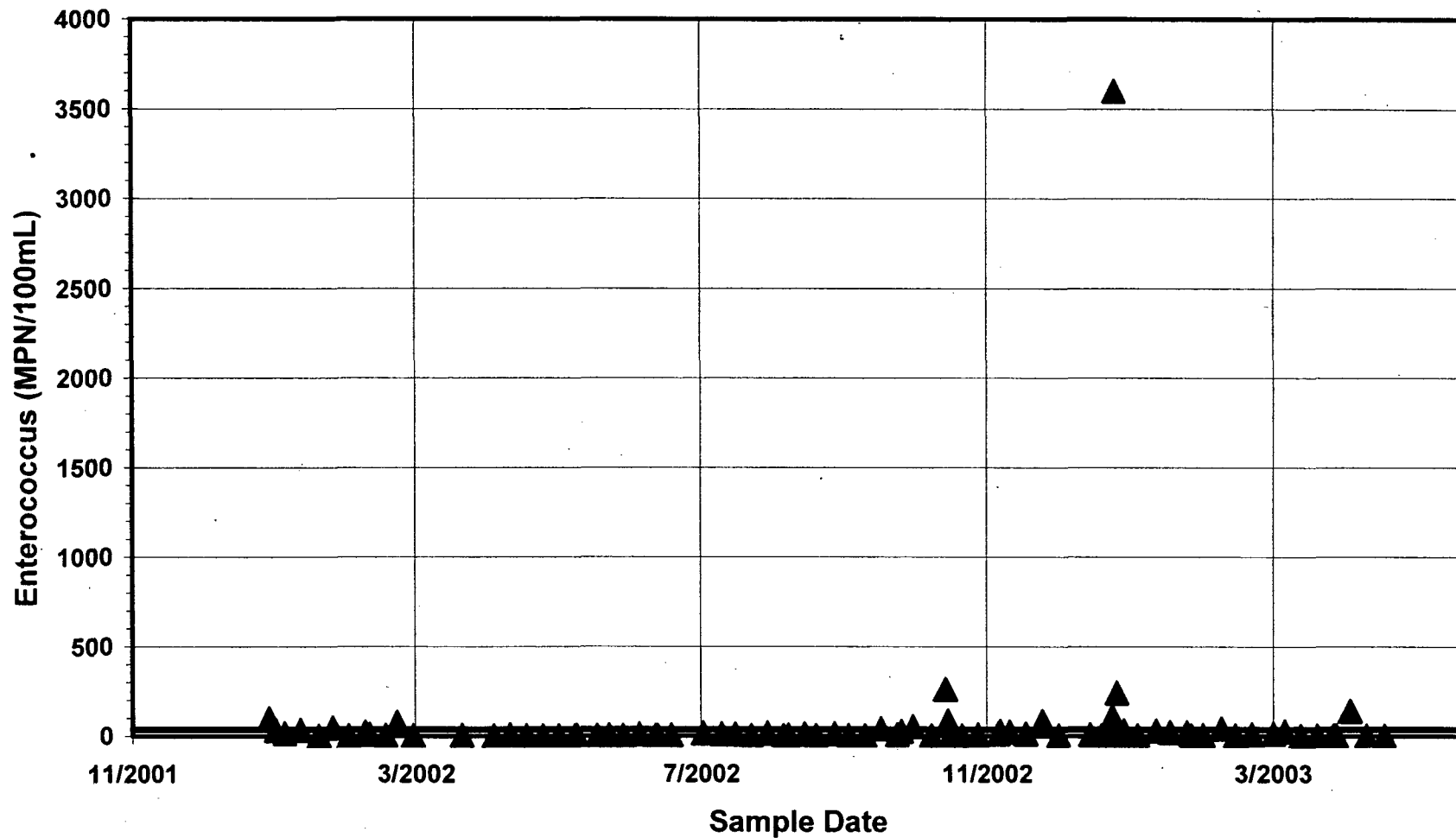
Triggering Water Quality Objective for Delisting

The Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994 contains water quality criteria for waterbodies in the Los Angeles Region. The most conservative applicable water quality criterion for enterococcus is 35 MPN/100mL for the Basin Plan REC1 Marine 30-Day Minimum 5 samples objective. In Royal Palms Beach, the criterion was exceeded in 3 of 82 samples, which is 3.7% of the sample events. Under the state's listing policy, a waterbody is eligible for delisting for enterococcus if there are 13 or fewer exceedances out of the 82 samples.

References

Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994

Water Data Summary for Royal Palms Beach – Basin Plan REC1 Marine 30-Day Minimum 5 samples Objective



Royal Palms Beach Fecal Coliform - Water

Table 1. Data Summary Information

Waterbody Name	Royal Palms Beach	Region	4
Hydrologic Unit	405.11	Total Waterbody Size	1.1 Miles
Pollutant Status	Fecal Coliform	Size Affected	1.1 Miles
		Extent of Impairment	Entire Reach

Table 2. Summary of Fecal Coliform for Royal Palms Beach

Dates of Sampling	12/31/2001 - 4/29/2003	Minimum Detected Value	1 MPN/100mL
Number of Samples	82	Maximum Detected Value	130 MPN/100mL
Number of Detected Samples	82	Median Detected Value	5 MPN/100mL
Hardness			N/A
pH			N/A
WER			N/A
Temperature			N/A

Data Sources

Heal The Bay

Beneficial Uses for Royal Palms Beach

§ NAV § REC2 § MAR § SPWN
 § REC1 § COMM § WILD § SHELL

Applicable Water Quality Objectives	Out of 82 Samples:	# Exceed	% Exceed	List	Delist
200 MPN/100mL Basin Plan REC1 Marine 30-Day Minimum 5 samples	5 samples	0	0%	No	Yes
400 MPN/100mL Basin Plan REC1 Marine Single sample	1 sample	0	0%	No	Yes
2000 MPN/100mL Basin Plan REC2 30-Day Log Mean Minimum 4 sample	4 sample	0	0%	No	Yes
4000 MPN/100mL Basin Plan REC2 30-Day Maximum 10% samples	10% samples	0	0%	No	Yes

Triggering Water Quality Objective for Listing

No objectives were exceeded.

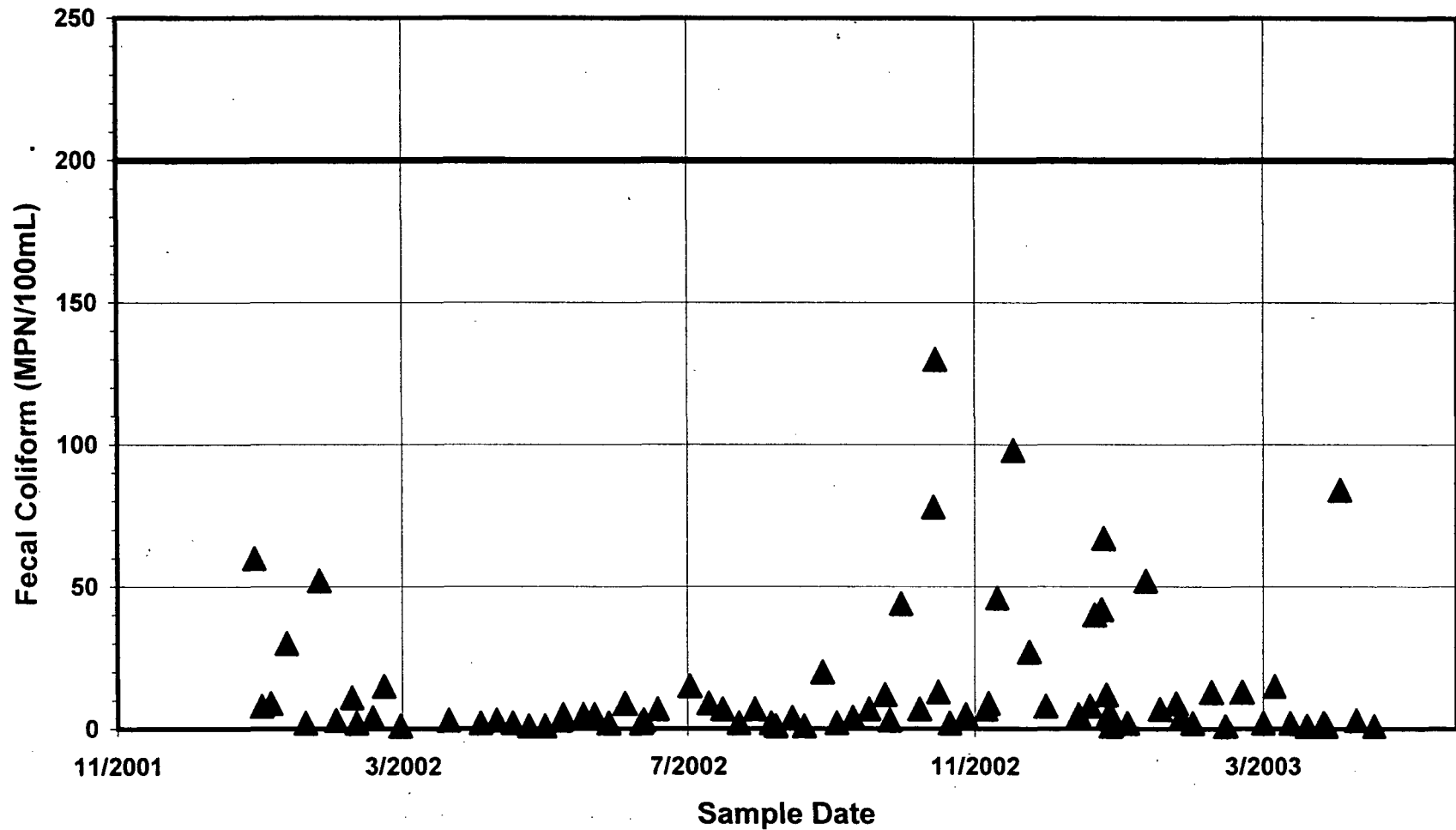
Triggering Water Quality Objective for Delisting

The Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994 contains water quality criteria for waterbodies in the Los Angeles Region. The most conservative applicable water quality criterion for fecal coliform is 200 MPN/100mL for the Basin Plan REC1 Marine 30-Day Minimum 5 samples objective. In Royal Palms Beach, the criterion was exceeded in 0 of 82 samples, which is 0% of the sample events. Under the state's listing policy, a waterbody is eligible for delisting for fecal coliform if there are 13 or fewer exceedances out of the 82 samples.

References

Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994

Water Data Summary for Royal Palms Beach – Basin Plan REC1 Marine 30-Day Minimum 5 samples Objective



Royal Palms Beach Total Coliform - Water

Table 1. Data Summary Information

Waterbody Name	Royal Palms Beach	Region	4
Hydrologic Unit	405.11	Total Waterbody Size	1.1 Miles
Pollutant/Stressor	Total Coliform	Size Affected	1.1 Miles
		Extent of Impairment	Entire Reach

Table 2. Summary of Total Coliform for Royal Palms Beach

Dates of Sampling	12/31/2001 - 4/29/2003	Minimum Detected Value	1 MPN/100mL
Number of Samples	459	Maximum Detected Value	8800 MPN/100mL
Number of Detected Samples	459	Median Detected Value	15 MPN/100mL
Hardness			N/A
pH			N/A
WER			N/A
Temperature			N/A

Data Sources

Heal The Bay

Beneficial Uses for Royal Palms Beach

§ NAV § REC2 § MAR § SPWN
 § REC1 § COMM § WILD § SHELL

Applicable Water Quality Objectives	Out of 459 Samples:	# Exceed	% Exceed	List	Delist
70 MPN/100mL Basin Plan SHELL 30-Day Median		68	14.8%	No	Yes
230 MPN/100mL Basin Plan SHELL 30-Day Max 10% 5-tube decimal dilu		21	4.6%	No	Yes
330 MPN/100mL Basin Plan SHELL 30-Day Max 10% 3-tube decimal dilu		18	3.9%	No	Yes
1000 MPN/100mL Basin Plan REC1 Marine 30-Day Minimum 5 samples		0	0%	No	Yes
1000 MPN/100mL Basin Plan REC1 Marine Ratio Single sample		5	1.1%	No	Yes
10000 MPN/100mL Basin Plan REC1 Marine Single sample		0	0%	No	Yes

Triggering Water Quality Objective for Listing

No objectives were exceeded.

Triggering Water Quality Objective for Delisting

The Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994 contains water quality criteria for waterbodies in the Los Angeles Region. The most conservative applicable water quality criterion for total coliform is 70 MPN/100mL for the Basin Plan SHELL 30-Day Median objective. In Royal Palms Beach, the criterion was exceeded in 68 of 459 samples, which is 14.8% of the sample events. Under the state's listing policy, a waterbody is eligible for delisting for total coliform if there are 76 or fewer exceedances out of the 459 samples.

References

Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994

Water Data Summary for Royal Palms Beach – Basin Plan SHELL 30-Day Median Objective

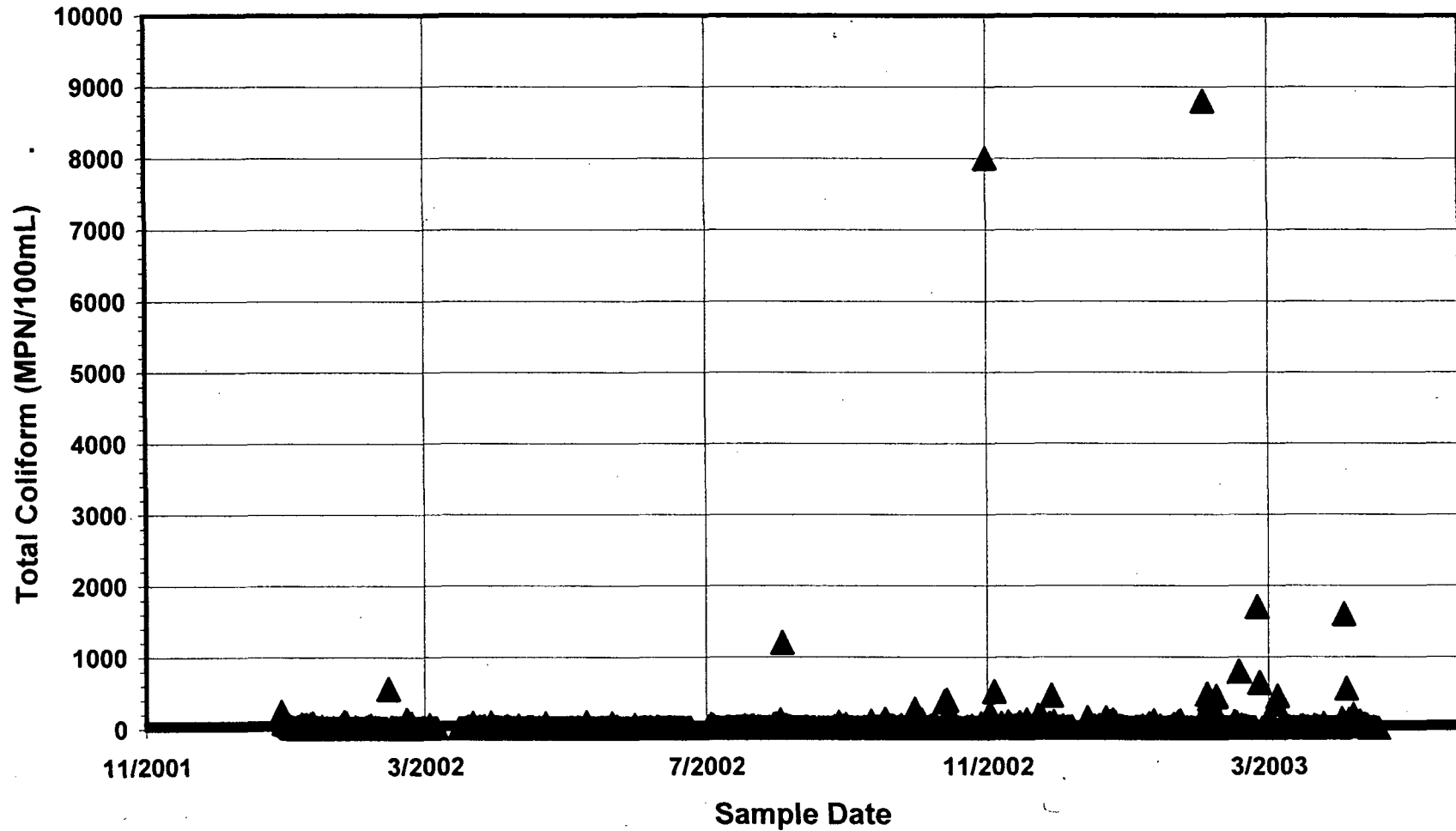


Table 1

**Review Unexamined
Water Quality Limited Segments**
(see Detailed Comment in Table 11)

Comments on the proposed 2006 303d List
City of Los Angeles
Bureau of Sanitation

Ref. No.	New Water Body Name	Pollutant/ Stressor	State specified Beneficial Use	RB Potential BU	RB Existing BU	State Comment	State decision
1	Aliso Canyon Wash	Selenium	None identified by the State	MUN	GWR, REC1, REC2, WARM, WILD	No Comment	Silent
2	Arroyo Seco Reach 1 (LA River to West Holly Ave.)	Trash	None identified by the State	MUN, WARM, WILD	REC1, REC2	No Comment	Silent
3	Arroyo Seco Reach 1 (LA River to West Holly Ave.)	High Coliform Count	None identified by the State	MUN, WARM, WILD	REC1, REC2	No Comment	Silent
4	Ashland Avenue Drain	Low Dissolved Oxygen	None identified by the State	None	None	No Comment	Silent
5	Ashland Avenue Drain	Toxicity	None identified by the State	None	None	No Comment	Silent
6	Ballona Creek	Toxicity	None identified by the State	MUN, REC1, WARM	REC2, WILD	No Comment	Silent
7	Ballona Creek	High Coliform Count	None identified by the State	MUN, REC1, WARM	REC2, WILD	No Comment	Silent
8	Ballona Creek	Enteric Viruses	None identified by the State	MUN, REC1, WARM	REC2, WILD	No Comment	Silent
9	Ballona Creek Estuary	Shellfish Harvesting Advisory	None identified by the State		NAV, REC1, REC2, COMM, EST, MAR, WILD, RARE, SPWN, SHELL	No Comment	Silent
10	Ballona Creek Estuary	Sediment Toxicity	None identified by the State		NAV, REC1, REC2, COMM, EST, MAR, WILD, RARE, SPWN, SHELL	No Comment	Silent
11	Ballona Creek Estuary	High Coliform Count	None identified by the State		NAV, REC1, REC2, COMM, EST, MAR, WILD, RARE, SPWN, SHELL	No Comment	Silent
12	Ballona Creek Estuary	PAHs (sediment)	None identified by the State		NAV, REC1, REC2, COMM, EST, MAR, WILD, RARE, SPWN, SHELL	No Comment	Silent
13	Ballona Creek Wetlands	Hydromodification	None identified by the State		REC1, REC2, EST, WILD, RARE, MIGR, SPWN, WET	No Comment	Silent
14	Ballona Creek Wetlands	Trash	None identified by the State		REC1, REC2, EST, WILD, RARE, MIGR, SPWN, WET	No Comment	Silent
15	Ballona Creek Wetlands	Reduced Tidal Flushing	None identified by the State		REC1, REC2, EST, WILD, RARE, MIGR, SPWN, WET	No Comment	Silent
16	Ballona Creek Wetlands	Habitat alterations	None identified by the State		REC1, REC2, EST, WILD, RARE, MIGR, SPWN, WET	No Comment	Silent
17	Ballona Creek Wetlands	Exotic Vegetation	None identified by the State		REC1, REC2, EST, WILD, RARE, MIGR, SPWN, WET	No Comment	Silent
18	Burbank Western Channel	Trash	None identified by the State	MUN, REC1, WARM, WILD	REC2	No Comment	Silent
19	Cabrillo Beach (Outer)	Beach Closures	None identified by the State		NAV, REC1, REC2, COMM, MAR, WILD, MIGR, SPWN, SHELL	No Comment	Silent
20	Castlerock Beach	Bacteria Indicators	None identified by the State			No Comment	Silent
21	Castlerock Beach	Beach Closures	None identified by the State			No Comment	Silent
22	Compton Creek	Copper	None identified by the State	MUN	GWR, REC1, REC2, WARM, WILD, WET	No Comment	Silent
23	Compton Creek	Lead	None identified by the State	MUN	GWR, REC1, REC2, WARM, WILD, WET	No Comment	Silent
24	Compton Creek	High Coliform Count	None identified by the State	MUN	GWR, REC1, REC2, WARM, WILD, WET	No Comment	Silent
25	Dominguez Channel (above Vermont)	Ammonia	None identified by the State	MUN, REC1, WARM, WILD	REC2, RARE	No Comment	Silent
26	Dominguez Channel (above Vermont)	Chromium (sediment)	None identified by the State	MUN, REC1, WARM, WILD	REC2, RARE	No Comment	Silent
27	Dominguez Channel (above Vermont)	Lead (tissue)	None identified by the State	MUN, REC1, WARM, WILD	REC2, RARE	No Comment	Silent
28	Dominguez Channel (above Vermont)	PAHs (sediment)	None identified by the State	MUN, REC1, WARM, WILD	REC2, RARE	No Comment	Silent

Table 1

**Review Unexamined
Water Quality Limited Segments**
(see Detailed Comment in Table 11)

Comments on the proposed 2006 303d List
City of Los Angeles
Bureau of Sanitation

29	Dominguez Channel (above Vermont)	PCBs (tissue)	None identified by the State	MUN, REC1, WARM, WILD	REC2, RARE	No Comment	Silent
30	Dominguez Channel (Estuary to Vermont)	Ammonia	None identified by the State		NAV, REC1, REC2, COMM, EST, MAR, WILD, RARE, MIGR, SPWN	No Comment	Silent
31	Dominguez Channel (Estuary to Vermont)	Benthic Community Effects	None identified by the State		NAV, REC1, REC2, COMM, EST, MAR, WILD, RARE, MIGR, SPWN	No Comment	Silent
32	Dominguez Channel (Estuary to Vermont)	High Coliform Count	None identified by the State		NAV, REC1, REC2, COMM, EST, MAR, WILD, RARE, MIGR, SPWN	No Comment	Silent
33	Echo Park Lake	Copper	None identified by the State		MUN, REC1, REC2, WARM, WILD	No Comment	Silent
34	Echo Park Lake	Lead	None identified by the State		MUN, REC1, REC2, WARM, WILD	No Comment	Silent
35	Echo Park Lake	Ammonia	None identified by the State		MUN, REC1, REC2, WARM, WILD	No Comment	Silent
36	Echo Park Lake	pH	None identified by the State		MUN, REC1, REC2, WARM, WILD	No Comment	Silent
37	Echo Park Lake	Eutrophic	None identified by the State		MUN, REC1, REC2, WARM, WILD	No Comment	Silent
38	Echo Park Lake	Odors	None identified by the State		MUN, REC1, REC2, WARM, WILD	No Comment	Silent
39	Echo Park Lake	Algae	None identified by the State		MUN, REC1, REC2, WARM, WILD	No Comment	Silent
40	Echo Park Lake	PCBs (tissue)	None identified by the State		MUN, REC1, REC2, WARM, WILD	No Comment	Silent
41	Lincoln Park Lake	Lead	None identified by the State		MUN, REC1, REC2, WARM, WILD	No Comment	Silent
42	Lincoln Park Lake	Ammonia	None identified by the State		MUN, REC1, REC2, WARM, WILD	No Comment	Silent
43	Lincoln Park Lake	Organic Enrichment/Low Dissolved Oxygen	None identified by the State		MUN, REC1, REC2, WARM, WILD	No Comment	Silent
44	Lincoln Park Lake	Eutrophic	None identified by the State		MUN, REC1, REC2, WARM, WILD	No Comment	Silent
45	Lincoln Park Lake	Odors	None identified by the State		MUN, REC1, REC2, WARM, WILD	No Comment	Silent
46	Los Angeles / Long Beach Inner Harbor	Sediment Toxicity	None identified by the State		IND, NAV, REC1, REC2, COMM, MAR, RARE, SHELL	No Comment	Silent
47	Los Angeles / Long Beach Inner Harbor	Beach Closures	None identified by the State		IND, NAV, REC1, REC2, COMM, MAR, RARE, SHELL	No Comment	Silent
48	Los Angeles / Long Beach Inner Harbor	PAHs (tissue & sediment)	None identified by the State		IND, NAV, REC1, REC2, COMM, MAR, RARE, SHELL	No Comment	Silent
49	Los Angeles / Long Beach Outer Harbor (inside breakwater)	PCBs	None identified by the State		NAV, REC1, REC2, COMM, MAR, RARE, SHELL	No Comment	Silent
50	Los Angeles Harbor - Inner Cabrillo Beach Area	Beach Closures (Coliform)	None identified by the State		NAV, REC1, REC2, COMM, MAR, WILD, MIGR, SPWN, SHELL	No Comment	Silent
51	Los Angeles Harbor Consolidated Slip	Sediment Toxicity	None identified by the State		REC1, REC2, COMM, MAR, RARE, EST, MIGR, SPWN, WILD, NAV	No Comment	Silent
52	Los Angeles Harbor Consolidated Slip	Benthic Community Effects	None identified by the State		REC1, REC2, COMM, MAR, RARE, EST, MIGR, SPWN, WILD, NAV	No Comment	Silent
53	Los Angeles River Reach 1 (Estuary to Carson Street)	Aluminum, Total	None identified by the State		MUN, IND, PROC, GWR, REC1, REC2, WARM, MAR, WILD, RARE, MIGR, SPWN, SHELL	No Comment	Silent
54	Los Angeles River Reach 1 (Estuary to Carson Street)	High Coliform Count	None identified by the State		MUN, IND, PROC, GWR, REC1, REC2, WARM, MAR, WILD, RARE, MIGR, SPWN, SHELL	No Comment	Silent
55	Los Angeles River Reach 2 (Carson to Figueroa Street)	High Coliform Count	None identified by the State	MUN, IND, WILD	GWR, REC1, REC2, WARM	No Comment	Silent

Table 1

**Review Unexamined
Water Quality Limited Segments**
(see Detailed Comment in Table 11)

Comments on the proposed 2006 303d List
City of Los Angeles
Bureau of Sanitation

56	Los Angeles River Reach 2 (Carson to Figueroa Street)	Oil	None identified by the State	MUN, IND, WILD	GWR, REC1, REC2, WARM	No Comment	Silent
57	Los Angeles River Reach 3 (Figueroa St. to Riverside Dr.)	Nutrients (Algae)	None identified by the State	MUN, IND	GWR, REC1, REC2, WARM, WILD, WET	No Comment	Silent
58	Los Angeles River Reach 3 (Figueroa St. to Riverside Dr.)	Odors	None identified by the State	MUN, IND	GWR, REC1, REC2, WARM, WILD, WET	No Comment	Silent
59	Los Angeles River Reach 3 (Figueroa St. to Riverside Dr.)	Scum/Foam-unnatural	None identified by the State	MUN, IND	GWR, REC1, REC2, WARM, WILD, WET	No Comment	Silent
60	Los Angeles River Reach 4 (Riverside Dr. to Sepulveda Dam)	Nutrients (Algae)	None identified by the State	MUN, IND	GWR, REC1, REC2, WARM, WILD, WET	No Comment	Silent
61	Los Angeles River Reach 4 (Riverside Dr. to Sepulveda Dam)	Odors	None identified by the State	MUN, IND	GWR, REC1, REC2, WARM, WILD, WET	No Comment	Silent
62	Los Angeles River Reach 4 (Riverside Dr. to Sepulveda Dam)	High Coliform Count	None identified by the State	MUN, IND	GWR, REC1, REC2, WARM, WILD, WET	No Comment	Silent
63	Los Angeles River Reach 4 (Riverside Dr. to Sepulveda Dam)	Scum/Foam-unnatural	None identified by the State	MUN, IND	GWR, REC1, REC2, WARM, WILD, WET	No Comment	Silent
64	Los Angeles River Reach 5 (within Sepulveda Basin)	Nutrients (Algae)	None identified by the State	MUN, IND	GRW, REC1, REC2, WARM, WILD, WET	No Comment	Silent
65	Los Angeles River Reach 5 (within Sepulveda Basin)	Oil	None identified by the State	MUN, IND	GRW, REC1, REC2, WARM, WILD, WET	No Comment	Silent
66	Los Angeles River Reach 5 (within Sepulveda Basin)	Odors	None identified by the State	MUN, IND	GRW, REC1, REC2, WARM, WILD, WET	No Comment	Silent
67	Los Angeles River Reach 5 (within Sepulveda Basin)	Scum/Foam-unnatural	None identified by the State	MUN, IND	GRW, REC1, REC2, WARM, WILD, WET	No Comment	Silent
68	Los Angeles River Reach 6 (Above Sepulveda Flood Control Basin)	High Coliform Count	None identified by the State	MUN, IND	GRW, REC1, REC2, WARM, WILD, WET	No Comment	Silent
69	Los Angeles River Reach 6 (Above Sepulveda Flood Control Basin)	Dichloroethylene / 1,1-DCE	None identified by the State	MUN, IND	GRW, REC1, REC2, WARM, WILD, WET	No Comment	Silent
70	Los Angeles River Reach 6 (Above Sepulveda Flood Control Basin)	Trichloroethylene / TCE	None identified by the State	MUN, IND	GRW, REC1, REC2, WARM, WILD, WET	No Comment	Silent
71	Machado Lake (Harbor Park Lake)	Ammonia	None identified by the State	MUN	REC1, REC2, WARM, WILD, RARE, WET	No Comment	Silent
72	Machado Lake (Harbor Park Lake)	Eutrophic	None identified by the State	MUN	REC1, REC2, WARM, WILD, RARE, WET	No Comment	Silent
73	Machado Lake (Harbor Park Lake)	Odors	None identified by the State	MUN	REC1, REC2, WARM, WILD, RARE, WET	No Comment	Silent
74	Machado Lake (Harbor Park Lake)	Trash	None identified by the State	MUN	REC1, REC2, WARM, WILD, RARE, WET	No Comment	Silent
75	Machado Lake (Harbor Park Lake)	Algae	None identified by the State	MUN	REC1, REC2, WARM, WILD, RARE, WET	No Comment	Silent
76	Machado Lake (Harbor Park Lake)	ChemA (tissue)	None identified by the State	MUN	REC1, REC2, WARM, WILD, RARE, WET	No Comment	Silent
77	Marina del Rey Harbor - Back Basins	Fish Consumption Advisory	None identified by the State	REC1	NAV, REC2, COMM, MAR, WILD, RARE, SHELL	No Comment	Silent
78	Marina del Rey Harbor - Back Basins	Sediment Toxicity	None identified by the State	REC1	NAV, REC2, COMM, MAR, WILD, RARE, SHELL	No Comment	Silent
79	Marina del Rey Harbor Beach	Beach Closures	REC1		NAV, REC1, REC2, COMM, MAR, WILD, RARE	No Comment	Silent
80	Pico Kenter Drain	Ammonia	None identified by the State	None	None	No Comment	Silent
81	Pico Kenter Drain	Copper	None identified by the State	None	None	No Comment	Silent
82	Pico Kenter Drain	Enteric Viruses	None identified by the State	None	None	No Comment	Silent
83	Pico Kenter Drain	Lead	None identified by the State	None	None	No Comment	Silent
84	Pico Kenter Drain	PAHs	None identified by the State	None	None	No Comment	Silent

Table 1

**Review Unexamined
Water Quality Limited Segments
(see Detailed Comment in Table 11)**

Comments on the proposed 2006 303d List
City of Los Angeles
Bureau of Sanitation

85	Pico Kenter Drain	Toxicity	None identified by the State	None	None	No Comment	Silent
86	Pico Kenter Drain	Trash	None identified by the State	None	None	No Comment	Silent
87	Royal Palms Beach	Beach Closures	None identified by the State	SPWN	NAV, REC1, REC2, COMM, MAR, WILD, SHELL	No Comment	Silent
88	San Pedro Bay Near/Offshore Zones	Chromium (sediment)	None identified by the State		IND, NAV, REC1, REC2, COMM, MAR, RARE, SHELL	No Comment	Silent
89	San Pedro Bay Near/Offshore Zones	Copper (sediment)			IND, NAV, REC1, REC2, COMM, MAR, RARE, SHELL	No Comment	Silent
90	San Pedro Bay Near/Offshore Zones	PAHs (sediment)			IND, NAV, REC1, REC2, COMM, MAR, RARE, SHELL	No Comment	Silent
91	San Pedro Bay Near/Offshore Zones	Sediment Toxicity			IND, NAV, REC1, REC2, COMM, MAR, RARE, SHELL	No Comment	Silent
92	San Pedro Bay Near/Offshore Zones	Zinc (sediment)			IND, NAV, REC1, REC2, COMM, MAR, RARE, SHELL	No Comment	Silent
93	Santa Monica Bay Offshore/Nearshore	Debris	None identified by the State		REC1, REC2, COMM, MAR, WILD, MIGR, RARE, SPWN, SHELL	No Comment	Silent
94	Santa Monica Bay Offshore/Nearshore	Fish Consumption Advisory	None identified by the State		REC1, REC2, COMM, MAR, WILD, MIGR, RARE, SPWN, SHELL	No Comment	Silent
95	Santa Monica Bay Offshore/Nearshore	Sediment Toxicity	None identified by the State		REC1, REC2, COMM, MAR, WILD, MIGR, RARE, SPWN, SHELL	No Comment	Silent
96	Santa Monica Bay Offshore/Nearshore	DDT (tissue & sediment)	None identified by the State		REC1, REC2, COMM, MAR, WILD, MIGR, RARE, SPWN, SHELL	No Comment	Silent
97	Santa Monica Canyon	Lead	None identified by the State	MUN, REC1, WARM, WILD	REC2	No Comment	Silent
98	Sepulveda Canyon	Lead	None identified by the State		WARM, WILD	No Comment	Silent
99	Sepulveda Canyon	Ammonia	None identified by the State			No Comment	Silent
100	Torrance Carson Channel	Copper	None identified by the State	NAV	REC1, REC2, COMM, EST, MAR, WILD, RARE, MIGR, SPWN	No Comment	Silent
101	Torrance Carson Channel	Lead	None identified by the State	NAV	REC1, REC2, COMM, EST, MAR, WILD, RARE, MIGR, SPWN	No Comment	Silent
102	Torrance Carson Channel	High Coliform Count	None identified by the State	NAV	REC1, REC2, COMM, EST, MAR, WILD, RARE, MIGR, SPWN	No Comment	Silent
103	Tujunga Wash (LA River to Hansen Dam)	Copper	None identified by the State	MUN, REC1, WARM, COLD, WILD	REC2, GWR	No Comment	Silent
104	Tujunga Wash (LA River to Hansen Dam)	Ammonia	None identified by the State	MUN, REC1, WARM, COLD, WILD	REC2, GWR	No Comment	Silent
105	Tujunga Wash (LA River to Hansen Dam)	Trash	None identified by the State	MUN, REC1, WARM, COLD, WILD	REC2, GWR	No Comment	Silent
106	Tujunga Wash (LA River to Hansen Dam)	High Coliform Count	None identified by the State	MUN, REC1, WARM, COLD, WILD	REC2, GWR	No Comment	Silent
107	Venice Beach	High Coliform Count	None identified by the State		NAV, REC1, REC2, COMM, MAR, WILD, RARE, MIGR, SPWN, SHELL	No Comment	Silent
108	Will Rogers Beach	High Coliform Count	None identified by the State	SPWN	NAV, REC1, REC2, COMM, MAR, WILD, SHELL	No Comment	Silent
109	Wilmington Drain	Copper	None identified by the State	MUN	REC1, REC2, WARM, RARE, WET, WILD	No Comment	Silent
110	Wilmington Drain	Lead	None identified by the State	MUN	REC1, REC2, WARM, RARE, WET, WILD	No Comment	Silent
111	Wilmington Drain	Ammonia	None identified by the State	MUN	REC1, REC2, WARM, RARE, WET, WILD	No Comment	Silent
112	Wilmington Drain	High Coliform Count	None identified by the State	MUN	REC1, REC2, WARM, RARE, WET, WILD	No Comment	Silent

Table 2

Use Primary LOE in conjunction with TMDL
(see Detailed Comment in Table 11)

Comments on the proposed 2006 303d List
City of Los Angeles
Bureau of Sanitation

Ref. No.	New Water Body Name	Pollutant/Stressor	State specified Beneficial Use	RB Potential BU	RB Existing BU	State Comment	TMDL as single LOE
1	Ashland Avenue Drain	Coliform Bacteria	REC1	None	None	One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation is expected to result in attainment of this standard.	x
2	Ballona Creek	Trash	REC2	MUN, REC1, WARM	REC2, WILD	One line of evidence is available in the administrative record. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. This water segment-pollutant combination was moved off the section 303(d) list during the 2002 listing cycle only because a TMDL had been completed. No substantial evidence in the record shows that standards are met. The weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list.	x
3	Cabrillo Beach (Outer)	High Coliform Count	REC1		NAV, REC1, REC2, COMM, MAR, WILD, MIGR, SPWN, SHELL	A TMDL is in place. Sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list.	x
4	Compton Creek	pH	REC2	MUN	GWR, REC1, REC2, WARM, WILD, WET	A TMDL is in place. Sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list.	x
5	Dockweiler Beach	High Coliform Count	REC1		IND, NAV, REC1, REC2, COMM, MAR, WILD, SPWN	One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation is expected to result in attainment of this standard.	x
6	Echo Park Lake	Trash	REC2		MUN, REC1, REC2, WARM, WILD	One line of evidence is available in the administrative record. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. This water segment-pollutant combination was moved off the section 303(d) list during the 2002 listing cycle only because a TMDL had been completed. No substantial evidence in the record shows that standards are met. Sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list.	x
7	Lincoln Park Lake	Trash	REC2		MUN, REC1, REC2, WARM, WILD	One line of evidence is available in the administrative record. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. This water segment-pollutant combination was moved off the section 303(d) list during the 2002 listing cycle only because a TMDL had been completed. No substantial evidence in the record shows that standards are met. Sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list.	x
8	Los Angeles River Reach 1 (Estuary to Carson Street)	Trash	REC2		MUN, IND, PROC, GWR, REC1, REC2, WARM, MAR, WILD, RARE, MIGR, SPWN, SHELL	One line of evidence is available in the administrative record. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. This water segment-pollutant combination was moved off the section 303(d) list during the 2002 listing cycle only because a TMDL had been completed. No substantial evidence in the record shows that standards are met. Sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list.	x
9	Los Angeles River Reach 1 (Estuary to Carson Street)	pH	WARM		MUN, IND, PROC, GWR, REC1, REC2, WARM, MAR, WILD, RARE, MIGR, SPWN, SHELL	One line of evidence is available in the administrative record. Sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard.	x
10	Los Angeles River Reach 1 (Estuary to Carson Street)	Nutrients (Algae)	WARM		MUN, IND, PROC, GWR, REC1, REC2, WARM, MAR, WILD, RARE, MIGR, SPWN, SHELL	Sufficient justification in favor of placing this water segment-pollutant combination on the 303(d) list. Other related lines of evidence are available in the administrative record to assess this pollutant. A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Los Angeles River Nitrogen TMDL was approved by RWQCB on August 19, 2003 and subsequently approved by USEPA on March 18, 2004.	x

Table 2

Use Primary LOE in conjunction with TMDL
(see Detailed Comment in Table 11)

Comments on the proposed 2006 303d List
City of Los Angeles
Bureau of Sanitation

11	Los Angeles River Reach 2 (Carson to Figueroa Street)	Trash	REC2, WARM, WILD, WET	MUN, IND, WILD	GWR, REC1, REC2, WARM	One line of evidence is available in the administrative record. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. This water segment-pollutant combination was moved off the section 303(d) list during the 2002 listing cycle only because a TMDL had been completed. No substantial evidence in the record shows that standards are met. sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list.	x
12	Los Angeles River Reach 2 (Carson to Figueroa Street)	Ammonia	WARM	MUN, IND, WILD	GWR, REC1, REC2, WARM	This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status. the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list.	x
13	Los Angeles River Reach 3 (Figueroa St. to Riverside Dr.)	Ammonia	REC2	MUN, IND	GWR, REC1, REC2, WARM, WILD, WET	One line of evidence is available in the administrative record. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list.	x
14	Los Angeles River Reach 3 (Figueroa St. to Riverside Dr.)	Trash	REC2, RARE, WARM, WET	MUN, IND	GWR, REC1, REC2, WARM, WILD, WET	One line of evidence is available in the administrative record. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. This water segment-pollutant combination was moved off the section 303(d) list during the 2002 listing cycle only because a TMDL had been completed. No substantial evidence in the record shows that standards are met. sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list.	x
15	Los Angeles River Reach 4 (Riverside Dr. to Sepulveda Dam)	Ammonia	REC2	MUN, IND	GWR, REC1, REC2, WARM, WILD, WET	A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. The nutrient(algae), foam, and odor listings are backed by ammonia data. Nutrient(algae), foam, and odor information should not be placed on the section 303(d) list because they are not pollutants or toxicity (section 2 of the Listing Policy). sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list.	x
16	Los Angeles River Reach 4 (Riverside Dr. to Sepulveda Dam)	Trash	REC2, WARM, WILD, WET	MUN, IND	GWR, REC1, REC2, WARM, WILD, WET	One line of evidence is available in the administrative record. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. This water segment-pollutant combination was moved off the section 303(d) list during the 2002 listing cycle only because a TMDL had been completed. No substantial evidence in the record shows that standards are met. sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list.	x
17	Los Angeles River Reach 5 (within Sepulveda Basin)	Ammonia	WARM	MUN, IND	GRW, REC1, REC2, WARM, WILD, WET	A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. The nutrient(algae), foam, and odor listings are backed by ammonia data. Nutrient(algae), foam, and odor information should not be placed on the section 303(d) list because they are not pollutants or toxicity (section 2 of the Listing Policy). sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list.	x
18	Los Angeles River Reach 5 (within Sepulveda Basin)	Trash	COLD, EST, MAR, MIG, REC2, RARE, SAL, SPWN, WARM, WET, WILD	MUN, IND	GRW, REC1, REC2, WARM, WILD, WET	One line of evidence is available in the administrative record. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. This water segment-pollutant combination was moved off the section 303(d) list during the 2002 listing cycle only because a TMDL had been completed. No substantial evidence in the record shows that standards are met. sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list.	x
19	Marina del Rey Harbor - Back Basins	High Coliform Count	REC1	REC1	NAV, REC2, COMM, MAR, WILD, RARE, SHELL	One line of evidence is available in the administrative record. After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan has been approved.	x

Table 2

Use Primary LOE in conjunction with TMDL
 (see Detailed Comment in Table 11)

Comments on the proposed 2006 303d List
 City of Los Angeles
 Bureau of Sanitation

20	Marina del Rey Harbor Beach	Beach Closures	REC1		NAV, REC1, REC2, COMM, MAR, WILD, RARE	No Comment	x
21	Marina del Rey Harbor Beach	High Coliform Count	REC1		NAV, REC1, REC2, COMM, MAR, WILD, RARE	Two lines of evidence are available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list.	x
22	Santa Monica Beach	High Coliform Count	REC1		NAV, REC1, REC2, COMM, MAR, WILD, MIGR, SPWN, SHELL	Sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list.	x
23	Santa Monica Canyon	High Coliform Count	MUN, REC1, REC2, WARM, WILD	MUN, REC1, WARM, WILD	REC2	Sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list.	x
24	Sepulveda Canyon	High Coliform Count	REC1		REC1, REC2	Sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list.	x

Table 3

**Impaired Water Listings
for Potential MUN
(see Detailed Comment in Table 11)**

Comments on the proposed 2006 303d List
City of Los Angeles
Bureau of Sanitation

Ref. No.	New Water Body Name	Pollutant/Stressor	State specified Beneficial Use	RB Potential BU	RB Existing BU	State decision
1	Burbank Western Channel	Cyanide	MUN	MUN, REC1, WARM, WILD	REC2	List
2	Burbank Western Channel	Nitrite	MUN	MUN, REC1, WARM, WILD	REC2	List
3	Dominguez Channel (above Vermont)	Aluminum	MUN, REC1, REC2, WARM, RARE, WILD	MUN, REC1, WARM, WILD	REC2, RARE	List
<p>The potential MUN designation cannot be used for listing decisions. This is the result of a lawsuit between the City of Los Angeles et al. v. U.S. EPA, filed in Federal District Court on December 18, 2001. The beneficial use of MU (or MUN) does not apply to the Arroyo Seco, Burbank Western Channel, Los Angeles River, Los Alisos Canyon Wash and Creek, Santa Monica Canyon Channel, Ballona Creek to Estuary, Ballona Creek, Dominguez Channel To Estuary, Compton Creek, Tujunga Wash, Echo Lake, Lincoln Park Lake, Bixby Slough and Harbor Lake (Wilmington Drain and Lake Machado). Region IX of the U.S. Environmental Protection Agency ("EPA") sent a letter to the State Water Resources Control Board on February 15, 2002 which states that waters identified in Table 2-1 of the 1994 Los Angeles Basin Plan with an asterisk (*) do not have municipal and domestic supply use (MUN) as a designated use until such time as the State undertakes additional study and modifies its Basin Plan. At this time, no such study or Basin Plan modification has taken place.</p>						

Table 4

**Beneficial Uses Assigned
by the SWRCB but not designated in the Basin Plan
(see Detailed Comment in Table 11)**

Comments on the proposed 2006 303d List
City of Los Angeles
Bureau of Sanitation

Ref. No.	New Water Body Name	Pollutant/ Stressor	State specified Beneficial Use	RB Potential BU	RB Existing BU	State decision
1	Los Angeles River Reach 1 (Estuary to Carson Street)	Zinc, Dissolved	EST, MAR, MIGR, MUN, RARE, SAL, SPWN, WARM, WILD		MUN, IND, PROC, GWR, REC1, REC2, WARM, MAR, WILD, RARE, MIGR, SPWN, SHELL	Do Not Delist
2	Los Angeles River Reach 2 (Carson to Figueroa Street)	Trash	REC2, WARM, WILD, WET	MUN, IND, WILD	GWR, REC1, REC2, WARM	List
3	Los Angeles River Reach 3 (Figueroa St. to Riverside Dr.)	Trash	REC2, RARE, WARM, WET	MUN, IND	GWR, REC1, REC2, WARM, WILD, WET	List
4	Los Angeles River Reach 5 (within Sepulveda Basin) -	Trash	COLD, EST, MAR, MIG, REC2, RARE, SAL, SPWN, WARM, WET, WILD	MUN, IND	GRW, REC1, REC2, WARM, WILD, WET	List
5	Machado Lake (Harbor Park Lake)	Chlordane (tissue)	COMM	MUN	REC1, REC2, WARM, WILD, RARE, WET	Do Not Delist
6	Machado Lake (Harbor Park Lake)	DDT (tissue)	COMM	MUN	REC1, REC2, WARM, WILD, RARE, WET	Do Not Delist
7	Machado Lake (Harbor Park Lake)	Dieldrin (tissue)	COMM	MUN	REC1, REC2, WARM, WILD, RARE, WET	Do Not Delist
8	Machado Lake (Harbor Park Lake)	PCBs (tissue)	COMM	MUN	REC1, REC2, WARM, WILD, RARE, WET	Do Not Delist

Table 5

**Impaired Waters Listing
without Beneficial Uses
(see Detailed Comment in Table 11)**

Comments on the proposed 2006 303d List
City of Los Angeles
Bureau of Sanitation

Ref No.	New Water Body Name	Pollutant/ Stressor	State specified Beneficial Use	RB Potential BU	RB Existing BU	State Comment	State decision	BOS Proposed Status
1	Aliso Canyon Wash	Selenium	None identified by the State	MUN	GWR, REC1, REC2, WARM, WILD	No Comment	Silent	Cannot verify impairment
2	Arroyo Seco Reach 1 (LA River to West Holly Ave.)	Trash	None identified by the State	MUN, WARM, WILD	REC1, REC2	No Comment	Silent	Cannot verify impairment
3	Arroyo Seco Reach 1 (LA River to West Holly Ave.)	High Coliform Count	None identified by the State	MUN, WARM, WILD	REC1, REC2	No Comment	Silent	Relist under appropriate pollutant
4	Ashland Avenue Drain	Low Dissolved Oxygen	None identified by the State	None	None	No Comment	Silent	Evaluate under Listing Policy
5	Ashland Avenue Drain	Toxicity	None identified by the State	None	None	No Comment	Silent	Evaluate under Listing Policy
6	Ballona Creek	Toxicity	None identified by the State	MUN, REC1, WARM	REC2, WILD	No Comment	Silent	Cannot verify impairment
7	Ballona Creek	High Coliform Count	None identified by the State	MUN, REC1, WARM	REC2, WILD	No Comment	Silent	Relist under appropriate pollutant
8	Ballona Creek	Enteric Viruses	None identified by the State	MUN, REC1, WARM	REC2, WILD	No Comment	Silent	Relist under appropriate pollutant
9	Ballona Creek Estuary	Shellfish Harvesting Advisory	None identified by the State		NAV, REC1, REC2, COMM, EST, MAR, WILD, RARE, SPWN, SHELL	No Comment	Silent	Cannot verify impairment
10	Ballona Creek Estuary	Sediment Toxicity	None identified by the State		NAV, REC1, REC2, COMM, EST, MAR, WILD, RARE, SPWN, SHELL	No Comment	Silent	Cannot verify impairment
11	Ballona Creek Estuary	High Coliform Count	None identified by the State		NAV, REC1, REC2, COMM, EST, MAR, WILD, RARE, SPWN, SHELL	No Comment	Silent	Relist under appropriate pollutant
12	Ballona Creek Estuary	PAHs (sediment)	None identified by the State		NAV, REC1, REC2, COMM, EST, MAR, WILD, RARE, SPWN, SHELL	No Comment	Silent	Relist under appropriate pollutant
13	Ballona Creek Wetlands	Hydromodification	None identified by the State		REC1, REC2, EST, WILD, RARE, MIGR, SPWN, WET	No Comment	Silent	Evaluate under Listing Policy
14	Ballona Creek Wetlands	Trash	None identified by the State		REC1, REC2, EST, WILD, RARE, MIGR, SPWN, WET	No Comment	Silent	Cannot verify impairment
15	Ballona Creek Wetlands	Reduced Tidal Flushing	None identified by the State		REC1, REC2, EST, WILD, RARE, MIGR, SPWN, WET	No Comment	Silent	Evaluate under Listing Policy
16	Ballona Creek Wetlands	Habitat alterations	None identified by the State		REC1, REC2, EST, WILD, RARE, MIGR, SPWN, WET	No Comment	Silent	Evaluate under Listing Policy
17	Ballona Creek Wetlands	Exotic Vegetation	None identified by the State		REC1, REC2, EST, WILD, RARE, MIGR, SPWN, WET	No Comment	Silent	Cannot verify impairment
18	Burbank Western Channel	Trash	None identified by the State	MUN, REC1, WARM, WILD	REC2	No Comment	Silent	Cannot verify impairment
19	Cabrillo Beach (Outer)	Beach Closures	None identified by the State		NAV, REC1, REC2, COMM, MAR, WILD, MIGR, SPWN, SHELL	No Comment	Silent	Evaluate under Listing Policy
20	Cabrillo Beach (Outer)	DDT	None identified by the State		NAV, REC1, REC2, COMM, MAR, WILD, MIGR, SPWN, SHELL	Fish consumption advisory for DDT.	Silent	Cannot verify impairment
21	Cabrillo Beach (Outer)	PCBs	None identified by the State		NAV, REC1, REC2, COMM, MAR, WILD, MIGR, SPWN, SHELL	Fish consumption advisory for PCBs.	Silent	Cannot verify impairment
22	Castlerock Beach	Bacteria Indicators	None identified by the State		NAV, REC1, REC2, COMM, MAR, WILD, SHELL	No Comment	Silent	Cannot verify impairment
23	Castlerock Beach	Beach Closures	None identified by the State		NAV, REC1, REC2, COMM, MAR, WILD, SHELL	No Comment	Silent	Evaluate under Listing Policy
24	Castlerock Beach	DDT	None identified by the State		NAV, REC1, REC2, COMM, MAR, WILD, SHELL	Fish Consumption Advisory for DDT.	Silent	Cannot verify impairment

Table 5

**Impaired Waters Listing
without Beneficial Uses
(see Detailed Comment in Table 11)**

Comments on the proposed 2006 303d List
City of Los Angeles
Bureau of Sanitation

25	Castlerock Beach	PCBs	None identified by the State		NAV, REC1, REC2, COMM, MAR, WILD, SHELL	Fish consumption advisory for PCBs.	Silent	Cannot verify impairment
26	Compton Creek	Copper	None identified by the State	MUN	GWR, REC1, REC2, WARM, WILD, WET	No Comment	Silent	Evaluate under Listing Policy
27	Compton Creek	Lead	None identified by the State	MUN	GWR, REC1, REC2, WARM, WILD, WET	No Comment	Silent	Cannot verify impairment
28	Compton Creek	High Coliform Count	None identified by the State	MUN	GWR, REC1, REC2, WARM, WILD, WET	No Comment	Silent	Cannot verify impairment
29	Dominguez Channel (above Vermont)	Ammonia	None identified by the State	MUN, REC1, WARM, WILD	REC2, RARE	No Comment	Silent	Evaluate under Listing Policy
30	Dominguez Channel (above Vermont)	Chromium (sediment)	None identified by the State	MUN, REC1, WARM, WILD	REC2, RARE	No Comment	Silent	Evaluate under Listing Policy
31	Dominguez Channel (above Vermont)	Lead (tissue)	None identified by the State	MUN, REC1, WARM, WILD	REC2, RARE	No Comment	Silent	Evaluate under Listing Policy
32	Dominguez Channel (above Vermont)	PAHs (sediment)	None identified by the State	MUN, REC1, WARM, WILD	REC2, RARE	No Comment	Silent	Relist under appropriate pollutant
33	Dominguez Channel (above Vermont)	PCBs (tissue)	None identified by the State	MUN, REC1, WARM, WILD	REC2, RARE	No Comment	Silent	Evaluate under Listing Policy
34	Dominguez Channel (Estuary to Vermont)	Ammonia	None identified by the State		NAV, REC1, REC2, COMM, EST, MAR, WILD, RARE, MIGR, SPWN	No Comment	Silent	Evaluate under Listing Policy
35	Dominguez Channel (Estuary to Vermont)	Benthic Community Effects	None identified by the State		NAV, REC1, REC2, COMM, EST, MAR, WILD, RARE, MIGR, SPWN	No Comment	Silent	Evaluate under Listing Policy
36	Dominguez Channel (Estuary to Vermont)	High Coliform Count	None identified by the State		NAV, REC1, REC2, COMM, EST, MAR, WILD, RARE, MIGR, SPWN	No Comment	Silent	Relist under appropriate pollutant
37	Echo Park Lake	Copper	None identified by the State		MUN, REC1, REC2, WARM, WILD	No Comment	Silent	Evaluate under Listing Policy
38	Echo Park Lake	Lead	None identified by the State		MUN, REC1, REC2, WARM, WILD	No Comment	Silent	Evaluate under Listing Policy
39	Echo Park Lake	Ammonia	None identified by the State		MUN, REC1, REC2, WARM, WILD	No Comment	Silent	Evaluate under Listing Policy
40	Echo Park Lake	pH	None identified by the State		MUN, REC1, REC2, WARM, WILD	No Comment	Silent	Evaluate under Listing Policy
41	Echo Park Lake	Eutrophic	None identified by the State		MUN, REC1, REC2, WARM, WILD	No Comment	Silent	Evaluate under Listing Policy
42	Echo Park Lake	Odors	None identified by the State		MUN, REC1, REC2, WARM, WILD	No Comment	Silent	Evaluate under Listing Policy
43	Echo Park Lake	Algae	None identified by the State		MUN, REC1, REC2, WARM, WILD	No Comment	Silent	Evaluate under Listing Policy
44	Echo Park Lake	PCBs (tissue)	None identified by the State		MUN, REC1, REC2, WARM, WILD	No Comment	Silent	Evaluate under Listing Policy
45	Lincoln Park Lake	Lead	None identified by the State		MUN, REC1, REC2, WARM, WILD	No Comment	Silent	Cannot verify impairment
46	Lincoln Park Lake	Ammonia	None identified by the State		MUN, REC1, REC2, WARM, WILD	No Comment	Silent	Evaluate under Listing Policy
47	Lincoln Park Lake	Organic Enrichment/Low Dissolved Oxygen	None identified by the State		MUN, REC1, REC2, WARM, WILD	No Comment	Silent	Evaluate under Listing Policy
48	Lincoln Park Lake	Eutrophic	None identified by the State		MUN, REC1, REC2, WARM, WILD	No Comment	Silent	Evaluate under Listing Policy
49	Lincoln Park Lake	Odors	None identified by the State		MUN, REC1, REC2, WARM, WILD	No Comment	Silent	Evaluate under Listing Policy
50	Los Angeles / Long Beach Inner Harbor	Sediment Toxicity	None identified by the State		IND, NAV, REC1, REC2, COMM, MAR, RARE, SHELL	No Comment	Silent	Evaluate under Listing Policy
51	Los Angeles / Long Beach Inner Harbor	Beach Closures	None identified by the State		IND, NAV, REC1, REC2, COMM, MAR, RARE, SHELL	No Comment	Silent	Relist under appropriate pollutant

Table 5

**Impaired Waters Listing
without Beneficial Uses
(see Detailed Comment in Table 11)**

Comments on the proposed 2006 303d List
City of Los Angeles
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52	Los Angeles / Long Beach Inner Harbor	PAHs (tissue & sediment)	None identified by the State		IND, NAV, REC1, REC2, COMM, MAR, RARE, SHELL	No Comment	Silent	Relist under appropriate pollutant
53	Los Angeles / Long Beach Outer Harbor (inside breakwater)	PCBs	None identified by the State		NAV, REC1, REC2, COMM, MAR, RARE, SHELL	No Comment	Silent	Cannot verify impairment
54	Los Angeles Harbor - Inner Cabrillo Beach Area	Beach Closures (Coliform)	None identified by the State		NAV, REC1, REC2, COMM, MAR, WILD, MIGR, SPWN, SHELL	No Comment	Silent	Relist under appropriate pollutant
55	Los Angeles Harbor Consolidated Slip	Sediment Toxicity	None identified by the State		REC1, REC2, COMM, MAR, RARE, EST, MIGR, SPWN, WILD, NAV	No Comment	Silent	Evaluate under Listing Policy
56	Los Angeles Harbor Consolidated Slip	Benthic Community Effects	None identified by the State		REC1, REC2, COMM, MAR, RARE, EST, MIGR, SPWN, WILD, NAV	No Comment	Silent	Evaluate under Listing Policy
57	Los Angeles River Estuary (Queensway Bay)	Zinc (sediment)	None identified by the State	SHELL	IND, NAV, REC1, REC2, COMM, EST, MAR, WILD, RARE, MIGR, SPWN, WET	Historical use of pesticides and lubricants.	Silent	Evaluate under Listing Policy
58	Los Angeles River Reach 1 (Estuary to Carson Street)	Aluminum, Total	None identified by the State		MUN, IND, PROC, GWR, REC1, REC2, WARM, MAR, WILD, RARE, MIGR, SPWN, SHELL	No Comment	Silent	Evaluate under Listing Policy
59	Los Angeles River Reach 1 (Estuary to Carson Street)	High Coliform Count	None identified by the State		MUN, IND, PROC, GWR, REC1, REC2, WARM, MAR, WILD, RARE, MIGR, SPWN, SHELL	No Comment	Silent	Relist under appropriate pollutant
60	Los Angeles River Reach 2 (Carson to Figueroa Street)	High Coliform Count	None identified by the State	MUN, IND, WILD	GWR, REC1, REC2, WARM	No Comment	Silent	Relist under appropriate pollutant
61	Los Angeles River Reach 2 (Carson to Figueroa Street)	Oil	None identified by the State	MUN, IND, WILD	GWR, REC1, REC2, WARM	No Comment	Silent	Evaluate under Listing Policy
62	Los Angeles River Reach 3 (Figueroa St. to Riverside Dr.)	Nutrients (Algae)	None identified by the State	MUN, IND	GWR, REC1, REC2, WARM, WILD, WET	No Comment	Silent	Evaluate under Listing Policy
63	Los Angeles River Reach 3 (Figueroa St. to Riverside Dr.)	Odors	None identified by the State	MUN, IND	GWR, REC1, REC2, WARM, WILD, WET	No Comment	Silent	Evaluate under Listing Policy
64	Los Angeles River Reach 3 (Figueroa St. to Riverside Dr.)	Scum/Foam-unnatural	None identified by the State	MUN, IND	GWR, REC1, REC2, WARM, WILD, WET	No Comment	Silent	Evaluate under Listing Policy
65	Los Angeles River Reach 4 (Riverside Dr. to Sepulveda Dam)	Nutrients (Algae)	None identified by the State	MUN, IND	GWR, REC1, REC2, WARM, WILD, WET	No Comment	Silent	Evaluate under Listing Policy
66	Los Angeles River Reach 4 (Riverside Dr. to Sepulveda Dam)	Odors	None identified by the State	MUN, IND	GWR, REC1, REC2, WARM, WILD, WET	No Comment	Silent	Evaluate under Listing Policy
67	Los Angeles River Reach 4 (Riverside Dr. to Sepulveda Dam)	High Coliform Count	None identified by the State	MUN, IND	GWR, REC1, REC2, WARM, WILD, WET	No Comment	Silent	Relist under appropriate pollutant
68	Los Angeles River Reach 4 (Riverside Dr. to Sepulveda Dam)	Scum/Foam-unnatural	None identified by the State	MUN, IND	GWR, REC1, REC2, WARM, WILD, WET	No Comment	Silent	Evaluate under Listing Policy
69	Los Angeles River Reach 5 (within Sepulveda Basin)	Nutrients (Algae)	None identified by the State	MUN, IND	GRW, REC1, REC2, WARM, WILD, WET	No Comment	Silent	Evaluate under Listing Policy
70	Los Angeles River Reach 5 (within Sepulveda Basin)	Oil	None identified by the State	MUN, IND	GRW, REC1, REC2, WARM, WILD, WET	No Comment	Silent	Evaluate under Listing Policy
71	Los Angeles River Reach 5 (within Sepulveda Basin)	Odors	None identified by the State	MUN, IND	GRW, REC1, REC2, WARM, WILD, WET	No Comment	Silent	Evaluate under Listing Policy
72	Los Angeles River Reach 5 (within Sepulveda Basin)	Scum/Foam-unnatural	None identified by the State	MUN, IND	GRW, REC1, REC2, WARM, WILD, WET	No Comment	Silent	Evaluate under Listing Policy

Table 5

**Impaired Waters Listing
without Beneficial Uses**
(see Detailed Comment in Table 11)

Comments on the proposed 2006 303d List
City of Los Angeles
Bureau of Sanitation

73	Los Angeles River Reach 6 (Above Sepulveda Flood Control Basin)	High Coliform Count	None identified by the State	MUN, IND	GRW, REC1, REC2, WARM, WILD, WET	No Comment	Silent	Relist under appropriate pollutant
74	Los Angeles River Reach 6 (Above Sepulveda Flood Control Basin)	Dichloroethylene / 1,1-DCE	None identified by the State	MUN, IND	GRW, REC1, REC2, WARM, WILD, WET	No Comment	Silent	Evaluate under Listing Policy
75	Los Angeles River Reach 6 (Above Sepulveda Flood Control Basin)	Trichloroethylene / TCE	None identified by the State	MUN, IND	GRW, REC1, REC2, WARM, WILD, WET	No Comment	Silent	Evaluate under Listing Policy
76	Machado Lake (Harbor Park Lake)	Ammonia	None identified by the State	MUN	REC1, REC2, WARM, WILD, RARE, WET	No Comment	Silent	Evaluate under Listing Policy
77	Machado Lake (Harbor Park Lake)	Eutrophic	None identified by the State	MUN	REC1, REC2, WARM, WILD, RARE, WET	No Comment	Silent	Evaluate under Listing Policy
78	Machado Lake (Harbor Park Lake)	Odors	None identified by the State	MUN	REC1, REC2, WARM, WILD, RARE, WET	No Comment	Silent	Evaluate under Listing Policy
79	Machado Lake (Harbor Park Lake)	Trash	None identified by the State	MUN	REC1, REC2, WARM, WILD, RARE, WET	No Comment	Silent	Cannot verify impairment
80	Machado Lake (Harbor Park Lake)	Algae	None identified by the State	MUN	REC1, REC2, WARM, WILD, RARE, WET	No Comment	Silent	Evaluate under Listing Policy
81	Machado Lake (Harbor Park Lake)	ChemA (tissue)	None identified by the State	MUN	REC1, REC2, WARM, WILD, RARE, WET	No Comment	Silent	Evaluate under Listing Policy
82	Marina del Rey Harbor - Back Basins	Fish Consumption Advisory	None identified by the State	REC1	NAV, REC2, COMM, MAR, WILD, RARE, SHELL	No Comment	Silent	Evaluate under Listing Policy
83	Marina del Rey Harbor - Back Basins	Sediment Toxicity	None identified by the State	REC1	NAV, REC2, COMM, MAR, WILD, RARE, SHELL	No Comment	Silent	Evaluate under Listing Policy
84	Pico Kenter Drain	Ammonia	None identified by the State	None	None	No Comment	Silent	Evaluate under Listing Policy
85	Pico Kenter Drain	Copper	None identified by the State	None	None	No Comment	Silent	Evaluate under Listing Policy
86	Pico Kenter Drain	Enteric Viruses	None identified by the State	None	None	No Comment	Silent	Evaluate under Listing Policy
87	Pico Kenter Drain	Lead	None identified by the State	None	None	No Comment	Silent	Evaluate under Listing Policy
88	Pico Kenter Drain	PAHs	None identified by the State	None	None	No Comment	Silent	Evaluate under Listing Policy
89	Pico Kenter Drain	Toxicity	None identified by the State	None	None	No Comment	Silent	Evaluate under Listing Policy
90	Pico Kenter Drain	Trash	None identified by the State	None	None	No Comment	Silent	Evaluate under Listing Policy
91	Point Fermin Park Beach	DDT	None identified by the State			Fish consumption advisory for DDT.	Silent	Cannot verify impairment
92	Point Fermin Park Beach	PCBs	None identified by the State			Fish consumption advisory for PCBs.	Silent	Cannot verify impairment
93	Royal Palms Beach	Beach Closures	None identified by the State	SPWN	NAV, REC1, REC2, COMM, MAR, WILD, SHELL	No Comment	Silent	Evaluate under Listing Policy
94	Royal Palms Beach	DDT	None identified by the State	SPWN	NAV, REC1, REC2, COMM, MAR, WILD, SHELL	Fish consumption advisory for DDT.	Silent	Cannot verify impairment
95	Royal Palms Beach	PCBs	None identified by the State	SPWN	NAV, REC1, REC2, COMM, MAR, WILD, SHELL	Fish consumption advisory for PCBs.	Silent	Cannot verify impairment
96	San Pedro Bay Near/Offshore Zones	Chromium (sediment)	None identified by the State		IND, NAV, REC1, REC2, COMM, MAR, RARE, SHELL	No Comment	Silent	Cannot verify impairment
97	San Pedro Bay Near/Offshore Zones	Copper (sediment)	None identified by the State		IND, NAV, REC1, REC2, COMM, MAR, RARE, SHELL	No Comment	Silent	Cannot verify impairment
98	San Pedro Bay Near/Offshore Zones	PAHs (sediment)	None identified by the State		IND, NAV, REC1, REC2, COMM, MAR, RARE, SHELL	No Comment	Silent	Cannot verify impairment
99	San Pedro Bay Near/Offshore Zones	Sediment Toxicity	None identified by the State		IND, NAV, REC1, REC2, COMM, MAR, RARE, SHELL	No Comment	Silent	Cannot verify impairment

Table 5

**Impaired Waters Listing
without Beneficial Uses
(see Detailed Comment in Table 11)**

Comments on the proposed 2006 303d List
City of Los Angeles
Bureau of Sanitation

100	San Pedro Bay Near/Offshore Zones	Zinc (sediment)	None identified by the State		IND, NAV, REC1, REC2, COMM, MAR, RARE, SHELL	No Comment	Silent	Cannot verify impairment
101	Santa Monica Bay Offshore/Nearshore	Debris	None identified by the State		REC1, REC2, COMM, MAR, WILD, MIGR, RARE, SPWN, SHELL	No Comment	Silent	Evaluate under Listing Policy
102	Santa Monica Bay Offshore/Nearshore	Fish Consumption Advisory	None identified by the State		REC1, REC2, COMM, MAR, WILD, MIGR, RARE, SPWN, SHELL	No Comment	Silent	Evaluate under Listing Policy
103	Santa Monica Bay Offshore/Nearshore	Sediment Toxicity	None identified by the State		REC1, REC2, COMM, MAR, WILD, MIGR, RARE, SPWN, SHELL	No Comment	Silent	Evaluate under Listing Policy
104	Santa Monica Bay Offshore/Nearshore	DDT (tissue & sediment)	None identified by the State		REC1, REC2, COMM, MAR, WILD, MIGR, RARE, SPWN, SHELL	No Comment	Silent	Cannot verify impairment
105	Santa Monica Canyon	Lead	None identified by the State	MUN, REC1, WARM, WILD	REC2	No Comment	Silent	Evaluate under Listing Policy
106	Sepulveda Canyon	Lead	None identified by the State		WARM, WILD	No Comment	Silent	Evaluate under Listing Policy
107	Sepulveda Canyon	Ammonia	None identified by the State			No Comment	Silent	Evaluate under Listing Policy
108	Torrance Carson Channel	Copper	None identified by the State	NAV	REC1, REC2, COMM, EST, MAR, WILD, RARE, MIGR, SPWN	No Comment	Silent	Evaluate under Listing Policy
109	Torrance Carson Channel	Lead	None identified by the State	NAV	REC1, REC2, COMM, EST, MAR, WILD, RARE, MIGR, SPWN	No Comment	Silent	Evaluate under Listing Policy
110	Torrance Carson Channel	High Coliform Count	None identified by the State	NAV	REC1, REC2, COMM, EST, MAR, WILD, RARE, MIGR, SPWN	No Comment	Silent	Cannot verify impairment
111	Tujunga Wash (LA River to Hansen Dam)	Copper	None identified by the State	MUN, REC1, WARM, COLD, WILD	REC2, GWR	No Comment	Silent	Evaluate under Listing Policy
112	Tujunga Wash (LA River to Hansen Dam)	Ammonia	None identified by the State	MUN, REC1, WARM, COLD, WILD	REC2, GWR	No Comment	Silent	Evaluate under Listing Policy
113	Tujunga Wash (LA River to Hansen Dam)	Trash	None identified by the State	MUN, REC1, WARM, COLD, WILD	REC2, GWR	No Comment	Silent	Evaluate under Listing Policy
114	Tujunga Wash (LA River to Hansen Dam)	High Coliform Count	None identified by the State	MUN, REC1, WARM, COLD, WILD	REC2, GWR	No Comment	Silent	Cannot verify impairment
115	Venice Beach	High Coliform Count	None identified by the State		NAV, REC1, REC2, COMM, MAR, WILD, RARE, MIGR, SPWN, SHELL	No Comment	Silent	Relist under appropriate pollutant
116	Whites Point Beach	DDT	None identified by the State	SPWN	NAV, REC1, REC2, COMM, MAR, WILD, SHELL	Fish Consumption Advisory for DDT.	Silent	Cannot verify impairment
117	Whites Point Beach	PCBs	None identified by the State	SPWN	NAV, REC1, REC2, COMM, MAR, WILD, SHELL	Fish Consumption Advisory for PCBs.	Silent	Cannot verify impairment
118	Will Rogers Beach	High Coliform Count	None identified by the State	SPWN	NAV, REC1, REC2, COMM, MAR, WILD, SHELL	No Comment	Silent	Relist under appropriate pollutant
119	Wilmington Drain	Copper	None identified by the State	MUN	REC1, REC2, WARM, RARE, WET, WILD	No Comment	Silent	Evaluate under Listing Policy
120	Wilmington Drain	Lead	None identified by the State	MUN	REC1, REC2, WARM, RARE, WET, WILD	No Comment	Silent	Evaluate under Listing Policy
121	Wilmington Drain	Ammonia	None identified by the State	MUN	REC1, REC2, WARM, RARE, WET, WILD	No Comment	Silent	Evaluate under Listing Policy
122	Wilmington Drain	High Coliform Count	None identified by the State	MUN	REC1, REC2, WARM, RARE, WET, WILD	No Comment	Silent	Cannot verify impairment

Table 6

**Pollutant Identification and
Chemical Category Listings**
(see Detailed Comment in Table 11)

Comments on the proposed 2006 303d List
City of Los Angeles
Bureau of Sanitation

Ref. No.	New Water Body Name	Pollutant/ Stressor	State specified Beneficial Use	RB Potential BU	RB Existing BU	State decision	BOS Proposed Status
1	Echo Park Lake	Algae	None identified by the State		MUN, REC1, REC2, WARM, WILD	Silent	Evaluate under Listing Policy
2	Machado Lake (Harbor Park Lake)	Algae	None identified by the State	MUN	REC1, REC2, WARM, WILD, RARE, WET	Silent	Evaluate under Listing Policy
3	Aliso Canyon Wash	Bacteria Indicators	REC1	MUN	GWR, REC1, REC2, WARM, WILD	List	Relist under appropriate pollutant
4	Castlerock Beach	Bacteria Indicators	None identified by the State		NAV, REC1, REC2, COMM, MAR, WILD, SHELL	Silent	Cannot verify impairment
5	Los Angeles Harbor - Inner Cabrillo Beach Area	Bacteria Indicators	REC1		NAV, REC1, REC2, COMM, MAR, WILD, MIGR, SPWN, SHELL	List	Relist under appropriate pollutant
6	Machado Lake (Harbor Park Lake)	ChemA (tissue)	None identified by the State	MUN	REC1, REC2, WARM, WILD, RARE, WET	Silent	Evaluate under Listing Policy
7	Ballona Creek	Enteric Viruses	None identified by the State	MUN, REC1, WARM	REC2, WILD	Silent	Relist under appropriate pollutant
8	Pico Kenter Drain	Enteric Viruses	None identified by the State	None	None	Silent	Evaluate under Listing Policy
9	Echo Park Lake	Eutrophic	None identified by the State		MUN, REC1, REC2, WARM, WILD	Silent	Evaluate under Listing Policy
10	Lincoln Park Lake	Eutrophic	None identified by the State		MUN, REC1, REC2, WARM, WILD	Silent	Evaluate under Listing Policy
11	Machado Lake (Harbor Park Lake)	Eutrophic	None identified by the State	MUN	REC1, REC2, WARM, WILD, RARE, WET	Silent	Evaluate under Listing Policy
12	Arroyo Seco Reach 1 (LA River to West Holly Ave.)	High Coliform Count	None identified by the State	MUN, WARM, WILD	REC1, REC2	Silent	Relist under appropriate pollutant
13	Ballona Creek	High Coliform Count	None identified by the State	MUN, REC1, WARM	REC2, WILD	Silent	Relist under appropriate pollutant
14	Ballona Creek Estuary	High Coliform Count	None identified by the State		NAV, REC1, REC2, COMM, EST, MAR, WILD, RARE, SPWN, SHELL	Silent	Relist under appropriate pollutant
15	Cabrillo Beach (Outer)	High Coliform Count	REC1		NAV, REC1, REC2, COMM, MAR, WILD, MIGR, SPWN, SHELL	Do Not Delist	Relist under appropriate pollutant
16	Compton Creek	High Coliform Count	None identified by the State	MUN	GWR, REC1, REC2, WARM, WILD, WET	Silent	Cannot verify impairment
17	Dockweiler Beach	High Coliform Count	REC1		IND, NAV, REC1, REC2, COMM, MAR, WILD, SPWN	Do Not Delist	Evaluate under Listing Policy
18	Dominguez Channel (Estuary to Vermont)	High Coliform Count	None identified by the State		NAV, REC1, REC2, COMM, EST, MAR, WILD, RARE, MIGR, SPWN	Silent	Relist under appropriate pollutant
19	Los Angeles River Reach 1 (Estuary to Carson Street)	High Coliform Count	None identified by the State		MUN, IND, PROC, GWR, REC1, REC2, WARM, MAR, WILD, RARE, MIGR, SPWN, SHELL	Silent	Relist under appropriate pollutant
20	Los Angeles River Reach 2 (Carson to Figueroa Street)	High Coliform Count	None identified by the State	MUN, IND, WILD	GWR, REC1, REC2, WARM	Silent	Relist under appropriate pollutant
21	Los Angeles River Reach 4 (Riverside Dr. to Sepulveda Dam)	High Coliform Count	None identified by the State	MUN, IND	GWR, REC1, REC2, WARM, WILD, WET	Silent	Relist under appropriate pollutant
22	Los Angeles River Reach 6 (Above Sepulveda Flood Control Basin)	High Coliform Count	None identified by the State	MUN, IND	GRW, REC1, REC2, WARM, WILD, WET	Silent	Relist under appropriate pollutant
23	Marina del Rey Harbor - Back Basins	High Coliform Count	REC1	REC1	NAV, REC2, COMM, MAR, WILD, RARE, SHELL	Do Not Delist	Relist under appropriate pollutant
24	Marina del Rey Harbor Beach	High Coliform Count	REC1		NAV, REC1, REC2, COMM, MAR, WILD, RARE	Do Not Delist	Relist under appropriate pollutant
25	Pico Kenter Drain	High Coliform Count	REC1	None	None	Do Not Delist	Evaluate under Listing Policy
26	Santa Monica Beach	High Coliform Count	REC1		NAV, REC1, REC2, COMM, MAR, WILD, MIGR, SPWN, SHELL	Do Not Delist	Relist under appropriate pollutant
27	Santa Monica Canyon	High Coliform Count	MUN, REC1, REC2, WARM, WILD	MUN, REC1, WARM, WILD	REC2	Do Not Delist	Relist under appropriate pollutant
28	Sepulveda Canyon	High Coliform Count	REC1		REC1, REC2	Do Not Delist	Relist under appropriate pollutant
29	Torrance Carson Channel	High Coliform Count	None identified by the State	NAV	REC1, REC2, COMM, EST, MAR, WILD, RARE, MIGR, SPWN	Silent	Cannot verify impairment
30	Tujunga Wash (LA River to Hansen Dam)	High Coliform Count	None identified by the State	MUN, REC1, WARM, COLD, WILD	REC2, GWR	Silent	Cannot verify impairment
31	Venice Beach	High Coliform Count	None identified by the State		NAV, REC1, REC2, COMM, MAR, WILD, RARE, MIGR, SPWN, SHELL	Silent	Relist under appropriate pollutant

Table 6

**Pollutant Identification and
Chemical Category Listings**
(see Detailed Comment in Table 11)

Comments on the proposed 2006 303d List
City of Los Angeles
Bureau of Sanitation

32	Will Rogers Beach	High Coliform Count	None identified by the State	SPWN	NAV, REC1, REC2, COMM, MAR, WILD, SHELL	Silent	Relist under appropriate pollutant
33	Wilmington Drain	High Coliform Count	None identified by the State	MUN	REC1, REC2, WARM, RARE, WET, WILD	Silent	Cannot verify impairment
34	Los Angeles River Reach 1 (Estuary to Carson Street)	Nutrients (Algae)	WARM		MUN, IND, PROC, GWR, REC1, REC2, WARM, MAR, WILD, RARE, MIGR, SPWN, SHELL	List	Evaluate under Listing Policy
35	Los Angeles River Reach 3 (Figueroa St. to Riverside Dr.)	Nutrients (Algae)	None identified by the State	MUN, IND	GWR, REC1, REC2, WARM, WILD, WET	Silent	Evaluate under Listing Policy
36	Los Angeles River Reach 4 (Riverside Dr. to Sepulveda Dam)	Nutrients (Algae)	None identified by the State	MUN, IND	GWR, REC1, REC2, WARM, WILD, WET	Silent	Evaluate under Listing Policy
37	Los Angeles River Reach 5 (within Sepulveda Basin)	Nutrients (Algae)	None identified by the State	MUN, IND	GRW, REC1, REC2, WARM, WILD, WET	Silent	Evaluate under Listing Policy
38	Echo Park Lake	Odors	None identified by the State		MUN, REC1, REC2, WARM, WILD	Silent	Evaluate under Listing Policy
39	Lincoln Park Lake	Odors	None identified by the State		MUN, REC1, REC2, WARM, WILD	Silent	Evaluate under Listing Policy
40	Los Angeles River Reach 3 (Figueroa St. to Riverside Dr.)	Odors	None identified by the State	MUN, IND	GWR, REC1, REC2, WARM, WILD, WET	Silent	Evaluate under Listing Policy
41	Los Angeles River Reach 4 (Riverside Dr. to Sepulveda Dam)	Odors	None identified by the State	MUN, IND	GWR, REC1, REC2, WARM, WILD, WET	Silent	Evaluate under Listing Policy
42	Los Angeles River Reach 5 (within Sepulveda Basin)	Odors	None identified by the State	MUN, IND	GRW, REC1, REC2, WARM, WILD, WET	Silent	Evaluate under Listing Policy
43	Machado Lake (Harbor Park Lake)	Odors	None identified by the State	MUN	REC1, REC2, WARM, WILD, RARE, WET	Silent	Evaluate under Listing Policy
44	Pico Kenter Drain	PAHs	None identified by the State	None	None	Silent	Evaluate under Listing Policy
45	Ballona Creek Estuary	PAHs (sediment)	None identified by the State		NAV, REC1, REC2, COMM, EST, MAR, WILD, RARE, SPWN, SHELL	Silent	Relist under appropriate pollutant
46	Dominguez Channel (above Vermont)	PAHs (sediment)	None identified by the State	MUN, REC1, WARM, WILD	REC2, RARE	Silent	Relist under appropriate pollutant
47	San Pedro Bay Near/Offshore Zones	PAHs (sediment)	None identified by the State		IND, NAV, REC1, REC2, COMM, MAR, RARE, SHELL	Silent	Cannot verify impairment
48	Santa Monica Bay Offshore/Nearshore	PAHs (sediment)	MAR		REC1, REC2, COMM, MAR, WILD, MIGR, RARE, SPWN, SHELL	Do Not Delist	Relist under appropriate pollutant
49	Los Angeles / Long Beach Inner Harbor	PAHs (tissue & sediment)	None identified by the State		IND, NAV, REC1, REC2, COMM, MAR, RARE, SHELL	Silent	Relist under appropriate pollutant
50	Los Angeles River Reach 3 (Figueroa St. to Riverside Dr.)	Scum/Foam-unnatural	None identified by the State	MUN, IND	GWR, REC1, REC2, WARM, WILD, WET	Silent	Evaluate under Listing Policy
51	Los Angeles River Reach 4 (Riverside Dr. to Sepulveda Dam)	Scum/Foam-unnatural	None identified by the State	MUN, IND	GWR, REC1, REC2, WARM, WILD, WET	Silent	Evaluate under Listing Policy
52	Los Angeles River Reach 5 (within Sepulveda Basin)	Scum/Foam-unnatural	None identified by the State	MUN, IND	GRW, REC1, REC2, WARM, WILD, WET	Silent	Evaluate under Listing Policy

Table 7

Listings for Trophic Status
(see Detailed Comment in Table 11)

Comments on the proposed 2006 303(d) List
City of Los Angeles
Bureau of Sanitation

Ref. No.	New Water Body Name
1	Machado Lake
2	Echo Park Lake
3	Lindon Park Lake

Table 8

Listing for Stormwater conveyance drains
(see Detailed Comment in Table 11)

Comments on the proposed 2006 303(d) List
City of Los Angeles
Bureau of Sanitation

Ref. No.	New Water Body Name
1	Ashland Avenue Drain
2	Pico Kenter Drain

Table 9

**Listing using
Mainly Stormwater data - no Seasonal Variation**
(see Detailed Comment in Table 11)

Comments on the proposed 2006 303d List
City of Los Angeles
Bureau of Sanitation

Ref. No.	New Water Body Name	Pollutant/ Stressor	State specified Beneficial Use	RB Potential BU	RB Existing BU	State decision
1	Aliso Canyon Wash	Bacteria Indicators	REC1	MUN	GWR, REC1, REC2, WARM, WILD	List
2	Burbank Western Channel	Zinc	MUN, WARM	MUN, REC1, WARM, WILD	REC2	List
3	Burbank Western Channel	Cyanide	MUN	MUN, REC1, WARM, WILD	REC2	List
4	Dominguez Channel (above Vermont)	Aluminum	MUN, REC1, REC2, WARM, RARE, WILD	MUN, REC1, WARM, WILD	REC2, RARE	List
5	Dominguez Channel (above Vermont)	Zinc (water)	MUN, REC1, REC2, WARM, RARE, WILD	MUN, REC1, WARM, WILD	REC2, RARE	List
6	Dominguez Channel (above Vermont)	Total Fecal Coliform	MUN, REC1, REC2, RARE, WARM, WILD	MUN, REC1, WARM, WILD	REC2, RARE	Do Not Delist
7	Los Angeles River Reach 1 (Estuary to Carson Street)	Copper, Dissolved	WARM, WILD		MUN, IND, PROC, GWR, REC1, REC2, WARM, MAR, WILD, RARE, MIGR, SPWN, SHELL	Do Not Delist
8	Los Angeles River Reach 1 (Estuary to Carson Street)	Zinc, Dissolved	EST, MAR, MIGR, MUN, RARE, SA, SPWN, WARM, WILD		MUN, IND, PROC, GWR, REC1, REC2, WARM, MAR, WILD, RARE, MIGR, SPWN, SHELL	Do Not Delist

QUALITY ASSURANCE MANUAL

Prepared for

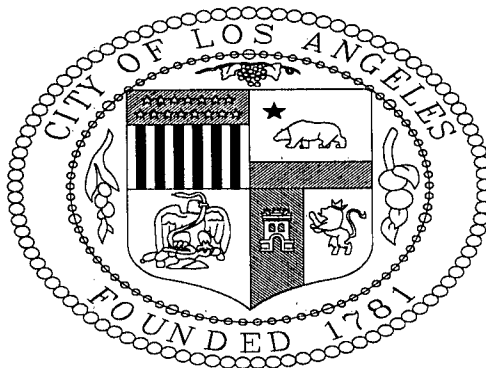
The Analysts, Supervisors, and Managers
of the Environmental Monitoring Division

ENVIRONMENTAL MONITORING DIVISION

BUREAU OF SANITATION

DEPARTMENT OF PUBLIC WORKS

CITY OF LOS ANGELES



12000 Vista del Mar
Playa del Rey, California 90293

November 2004

The Quality Assurance Manual, Revision No. 6, documents the QA Program at EMD. Revisions, prepared by the Quality Assurance Unit, reflect changes to the September 2003 edition of the QA Manual.

The signatures of all laboratory managers below indicate that the manual is being accepted individually and collectively, and that the contents shall be implemented in the division laboratories' daily activities.

Sumitra Roy-Burman
Laboratory Manager I

Lee L. Huang
Laboratory Manager I

Farhana Mohamed
Laboratory Manager I

Jeffrey D. Beller
Laboratory Manager III

Masahiro Dojiri
Laboratory Manager III

November 2004

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A. VISION AND MISSION OF EMD

Vision

The vision of Environmental Monitoring Division (EMD) is to set the standard for excellence in environmental monitoring and assessment with a total commitment to continuous improvement.

Mission and Objectives

EMD is a division in the Bureau of Sanitation, Department of Public Works, City of Los Angeles. It provides technical support to the operations of the Bureau. These operations include the collection, treatment, and disposal of over 400 million gallons per day of wastewater, and the disposal and treatment of solid waste. These operations are essential to the well-being of the citizens of the City of Los Angeles.

The mission of EMD is to provide quality and cost-effective environmental data, research, and assessment in support of the Bureau's operation, compliance, and source control activities to protect public health and the environment. The following are EMD objectives in providing services to support Bureau operations:

1. Assess the impact of the Bureau of Sanitation operations on the environment to minimize or avoid adverse environmental effects. The quality of influent and effluent of the wastewater treatment plants is monitored for conventional, non-conventional, and priority pollutants. The treatment plants serviced by EMD are the Hyperion Wastewater Treatment Plant, the Donald C. Tillman Water Reclamation Plant, the Terminal Island Wastewater Treatment Plant, and the Los Angeles-Glendale Water Reclamation Plant. In addition, toxicity tests are performed on plant effluents and receiving waters. The receiving waters of Santa Monica Bay, Los Angeles Harbor, Los Angeles River, Balboa and Wildlife Lakes are monitored for chemical, physical, and biological parameters to assess changes in the receiving environment that may be attributable to the discharges of the treatment plants. Non-point discharge sources, such as storm drains, are monitored microbiologically.
2. Perform legally required testing and reporting in a timely and efficient manner. The legal mandates include: the National Pollutant Discharge Elimination System (NPDES) permits issued by the US Environmental Protection Agency (EPA) and the California Regional Water Quality Control Board (RWQCB) for wastewater treatment plants; permits issued by the South Coast Air Quality Management District (SCAQMD) for both wastewater treatment plants and landfills, biosolids disposal and re-use in accordance with 40 CFR 503, tertiary and reversed osmosis-treated water use for ground water recharge in accordance with Waste Discharge Regulations; and other Federal, State, and local rules and

regulations.

3. Perform laboratory tests for plant process control in optimizing operational effectiveness to minimize the impact to the environment. Routine monitoring data are utilized to identify current or potential problem areas. Special tests are designed and performed to assist in troubleshooting.
4. Perform laboratory tests to assist the Industrial Waste Management Division in the pre-treatment management of various industries in the City of Los Angeles.
5. Perform laboratory tests to assist the Watershed Protection Division monitor the quality of inland receiving waters and enforce the provisions of the Stormwater NPDES permit.

B. PURPOSE OF THE QUALITY ASSURANCE MANUAL

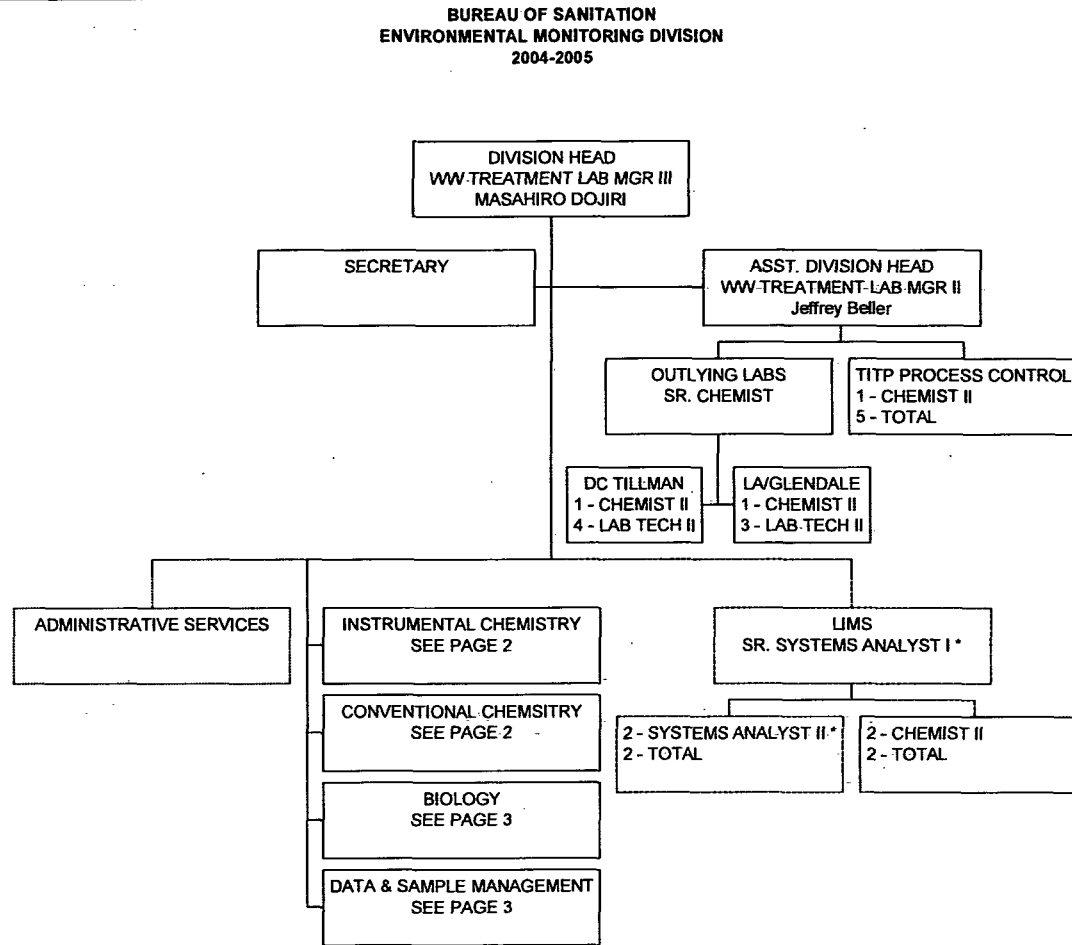
The purpose of this manual is to clearly describe the requirements of EMD's Quality Assurance Program. A quality assurance program based on a good quality assurance plan and applied to laboratory operations, is necessary to ensure that laboratory data meets predetermined quality assurance objectives and complies with the requirements of the US EPA, the California RWQCB, the California Department of Health Services (DHS), and the SCAQMD. A written quality assurance plan helps to ensure that consistent laboratory policies and operational procedures are followed by all laboratory personnel thereby assuring performance reliability of all sections in the laboratory. It provides a means for continuous assessment and improvement of the quality of data generated by laboratory personnel. Finally implementation of this plan ensures that laboratory staff produce analytical results that can withstand legal scrutiny.

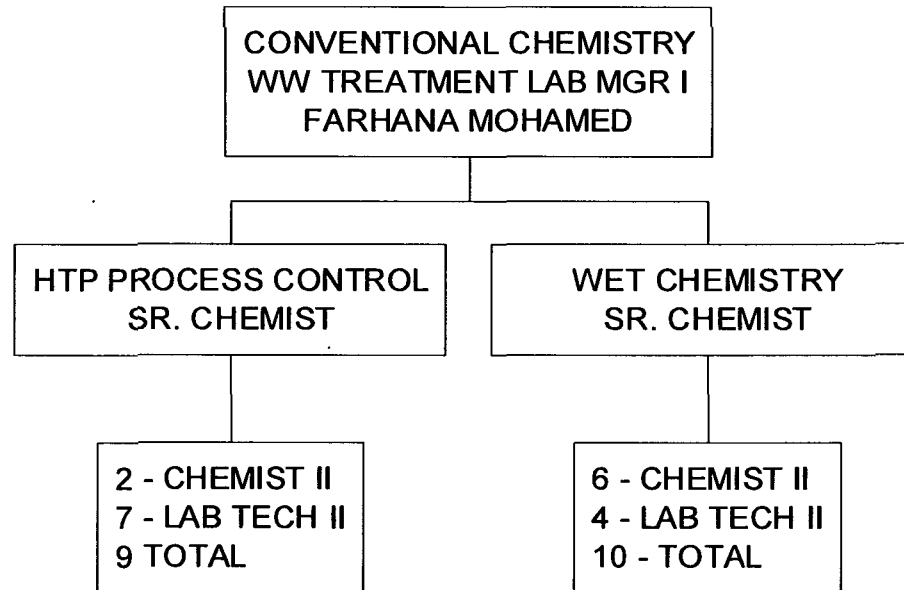
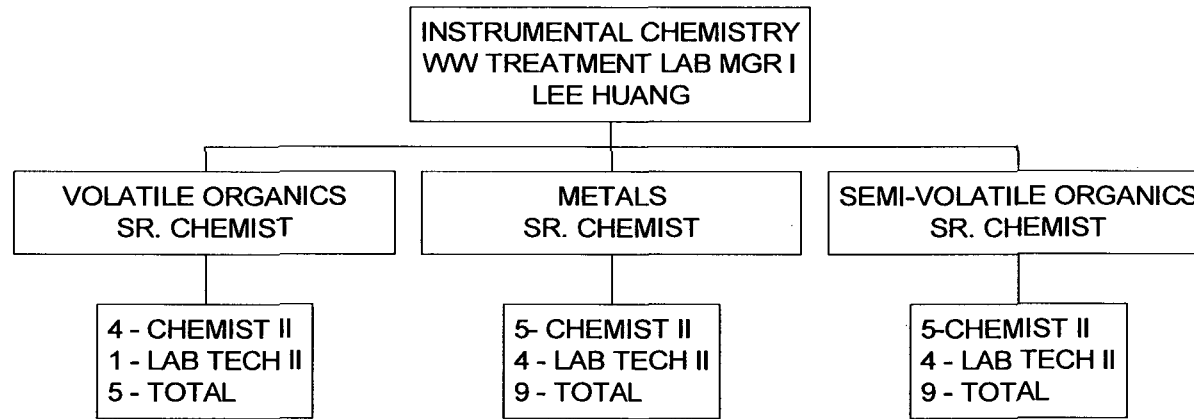
C. A STATEMENT OF THE DIVISION'S COMMITMENT TO QUALITY ASSURANCE

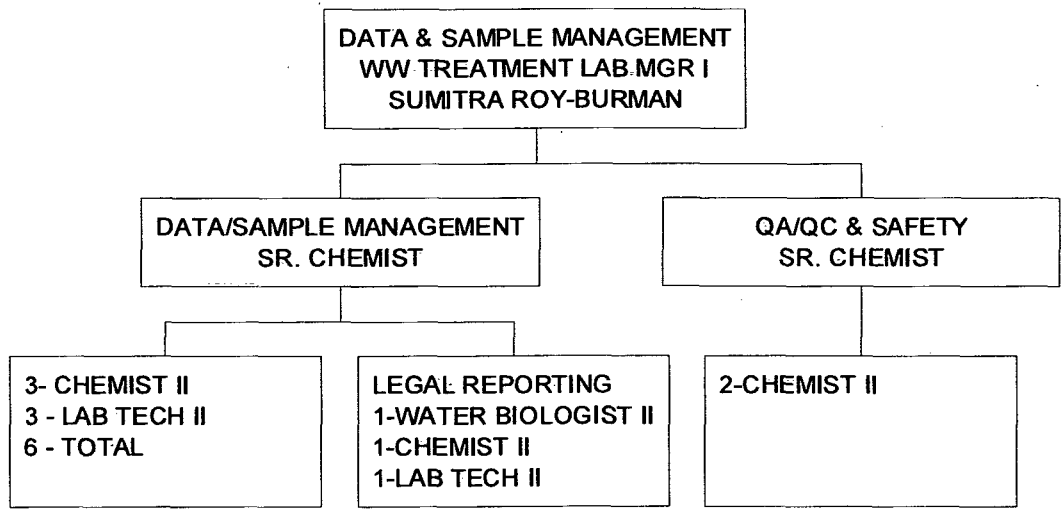
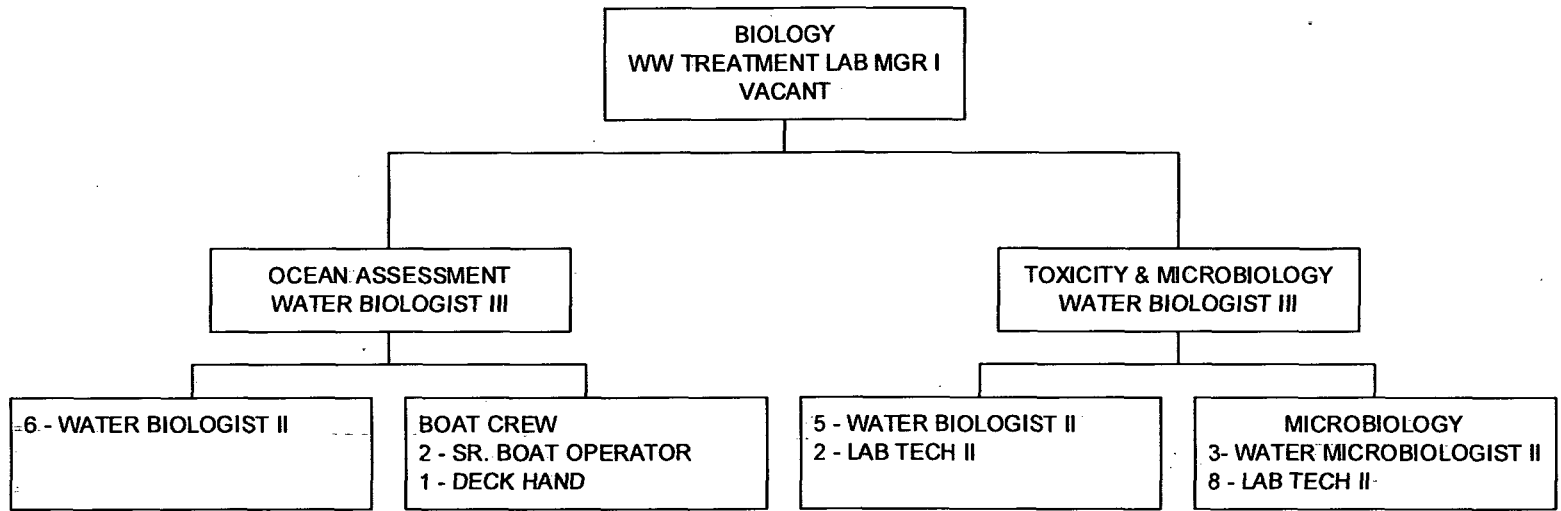
The Environmental Monitoring Division (EMD) of the Bureau of Sanitation, Department of Public Works, City of Los Angeles, provides laboratory services for the Bureau and other departments by performing legal and process control-related scientific monitoring and reporting. EMD is committed in providing quality data to its clients. EMD's policy of excellence in service is achieved through the active commitment of all levels of personnel within the division. It is the personnel within EMD that ensure the basic quality of service that EMD provides, and it is the Quality Assurance Program that assures the quality performance by our personnel. All personnel have been specifically instructed and are continuously reminded of the importance of strict adherence to the Quality Assurance Program. To this end, the Quality Assurance Manager takes the responsibility to ensure that personnel comply with the Quality Assurance Manual.

I.LABORATORY ORGANIZATION

A. ORGANIZATION CHART







B. DESCRIPTION OF THE LABORATORIES

The Environmental Monitoring Division (EMD) maintains four laboratories, one in each of the City's Wastewater Treatment/Reclamation Plants, namely Hyperion Wastewater Treatment Plant, Terminal Island Wastewater Treatment Plant, D.C. Tillman Water Reclamation Plant, and L.A.-Glendale Water Reclamation Plant. These laboratories are individually certified by the Environmental Laboratory Accreditation Program (ELAP) of the California Department of Health Services.

1. City of Los Angeles, Environmental Monitoring Laboratory
Hyperion Treatment Plant
12000 Vista Del Mar
Playa Del Rey, CA 90293
(310) 648-5610

2. City of Los Angeles, Environmental Monitoring Laboratory
Terminal Island Treatment Plant
445 Ferry Street
San Pedro, CA 90731
(310) 732-4713

3. City of Los Angeles, Environmental Monitoring Laboratory
Donald C. Tillman Water Reclamation Plant
6100 Woodley Avenue
Van Nuys, CA 91406
(818) 778-4217

4. City of Los Angeles, Environmental Monitoring Laboratory
L.A.-Glendale Water Reclamation Plant
4600 Colorado Blvd.
Los Angeles, CA 90039
(213) 972-1307

CITY OF LOS ANGELES ENVIRONMENTAL MONITORING LABORATORY HYPERION
WASTEWATER TREATMENT PLANT

12000 Vista Del Mar
Playa Del Rey, CA 90293
(310) 648-5610

Jeffrey Beller
Laboratory Director

ELAP REGISTRATION NO: 1723
DATE OF FIRST ISSUE: JANUARY 31, 1992
RENEWAL DATE: JANUARY 31, 2005
EPA LAB I.D. NO: CA00375 (CHEMISTRY & MICROBIOLOGY)
EPA LAB I.D. NO: CA01301 (TOXICITY)
NPDES PERMIT NO: CA0109991

The laboratory is divided into four sections: Instrumental Chemistry, Conventional Chemistry, Biology, and Data and Sample Management. The Fields of Testing (FoTs) which are currently certified are listed below with their corresponding Method Numbers. A list of the instruments and equipment available in the laboratory are also included in the FoT lists.

Field of Testing 101 : Microbiology of Drinking Water

SG Code	Analyte Code	Method	Analyte	Technology/ Medium
101.010	001	SM9215B	Heterotrophic Bacteria	Pour plate
101.060	002	SM9223	Total Coliform	Colilert ³
101.060	003	SM9223	E. coli	Colilert ³
			Enumeration in drinking water source	
101.140	001	SM9222A,B,C	Total Coliform (Enumeration)	MF/m-Endo ²
101.150	001	SM9222D	Fecal Coliform (Enumeration)	MF/m-FC
101.160	001	SM9223	Total Coliform (Enumeration)	Colilert ³

² m-Endo represents both m-Endo and m-Endo LES media.

³ Colilert represents both Colilert and Colilert 18 media.

Field of Testing 107: Microbiology of Wastewater

SG Code	Analyte Code	Method	Analyte	Technology/ Medium
107.010	001	SM9215B	Heterotrophic Bacteria	Pour plate
107.040	001	SM9221C,E (MTF/EC)	Fecal Coliform	MTF/EC
107.041	001	SM9221C,E (A-1)	Fecal Coliform	A-1 ⁴
107.060	001	SM9222B	Total Coliform	MF/m-Endo ²
107.080	001	SM9222D	Fecal Coliform	MF/m-FC
107.110	001	SM9230C (MF/ME)	Fecal Streptococci	MF/mE
107.110	002	SM9230C (MF/ME)	Enterococci	MF/mE

² m-Endo Represents both m-Endo and m-Endo LES media.

⁴ A-1 is a single step multiple tube fermentation test for Fecal Coliforms only.

Field of Testing 108: Inorganic Chemistry of Wastewater

SG Code	Analyte Code	Method	Analyte	Instrumentation/Sample Preparation
108.090	001	EPA 160.4	Residue, Volatile	
108.112	002	EPA 200.7	Calcium	Spectro Ciros, Varian Vista Pro
108.112	003	EPA 200.7	Hardness (calc.)	Spectro Ciros, Varian Vista Pro
108.112	004	EPA 200.7	Magnesium	Spectro Ciros, Varian Vista Pro
108.112	005	EPA 200.7	Potassium	Spectro Ciros, Varian Vista Pro
108.112	007	EPA 200.7	Sodium	Spectro Ciros, Varian Vista Pro
108.120	002	EPA 300.0	Chloride	Dionex DX 500, DX 320
108.120	003	EPA 300.0	Fluoride	Dionex DX 500, DX 320
108.120	004	EPA 300.0	Nitrate	Dionex DX 500, DX 320
108.120	005	EPA 300.0	Nitrite	Dionex DX 500, DX 320
108.120	008	EPA 300.0	Sulfate	Dionex DX 500, DX 320
108.183	001	EPA 335.4	Cyanide, Total	Lachat Quickchem FIA
108.200	001	EPA 350.1	Ammonia	Lachat Quickchem FIA
108.211	001	EPA 351.2	Kjeldahl Nitrogen	Lachat Quikchem FIA
108.360	001	EPA 420.1	Phenols, Total	Shimadzu UV 1601
108.380	001	EPA 1664	Oil and Grease	SPEX-DEX 3000XL
108.390	001	SM2130B	Turbidity	HACH 2100AN
108.410	001	SM2320B	Alkalinity	Orion EA 920
108.430	001	SM2510B	Conductivity	Orion 115
108.440	001	SM2540B	Residue, Total	
108.441	001	SM2540C	Residue, Filterable	
108.442	001	SM2540D	Residue, Non-filterable	
108.443	001	SM2540F	Residue, Settleable	

108.447	002	SM3120B	Calcium	Spectro Ciros, Varian Vista Pro
108.447	003	SM3120B	Hardness (calc.)	Spectro Ciros, Varian Vista Pro
108.447	004	SM3120B	Magnesium	Spectro Ciros, Varian Vista Pro
108.447	005	SM3120B	Potassium	Spectro Ciros, Varian Vista Pro
108.447	007	SM3120B	Sodium	Spectro Ciros, Varian Vista Pro
108.450	001	SM4500-Cl- B	Chloride	
108.465	001	SM4500-Cl G	Chlorine	HACH Colorimeter
108.472	001	SM4500-CN E	Cyanide, Total	Shimadzu UV 1601
108.473	001	SM4500-CN G	Cyanide, amenable	Shimadzu UV 1601
108.480	001	SM4500-F C	Fluoride	Orion EA 920
108.490	001	SM4500-H+ B	pH	Orion EA 920, BECKMAN 71
108.500	001	SM4500-NH3 C	Ammonia	Labconco Kjeldahl
108.501	001	SM4500-NH3 C	Kjeldahl Nitrogen	Labconco Kjeldahl
105.502	002	SM4500-NH3 D	Ammonia	Orion EA 940
108.506	001	SM4500-NH3 G	Ammonia	Skalar SanPlus
108.510	001	SM4500-NO2 B	Nitrite	BECKMAN 7400, Shimadzu UV 1601
108.520	001	SM4500-NO3 E	Nitrate-nitrite, Total	BECKMAN 7400, Shimadzu UV 1601
108.521	001	SM4500-NO3 E	Nitrate calc.	BECKMAN 7400, Shimadzu UV 1601
108.531	001	SM4500-O G	Dissolved Oxygen	Orion 083010 Probe
108.540	001	SM4500-P E	Phosphate, Ortho	BECKMAN 7400, Shimadzu UV 1601
108.541	001	SM4500-P E	Phosphorus, Total	BECKMAN 7400, Shimadzu UV 1601
108.580	001	SM4500-S= D	Sulfide	Shimadzu UV 1601
108.590	001	SM5210B	Biochemical Oxygen Demand	Skalar BOD Analyzer
108.591	001	SM5210B	Carbonaceous BOD	Skalar BOD Analyzer
108.602	001	SM5220D	Chemical Oxygen Demand	Hach DR/2500
108.610	001	SM5310B	Total Organic Carbon	Apollo 9000
108.620	001	SM5320B	Total Organic Halides	mitsubishi TOX-10E
108.640	001	SM5540C	Surfactants	Shimadzu UV 1601
108.903	001	SM4500-B B	Boron	Shimadzu UV 1601

Field of Testing 109: Toxic Chemical Elements of Wastewater

SG Code	Analyte Code	Method	Analyte	Instrumentation/Sample Preparation
109.010	001	EPA 200.7	Aluminum	Spectro Ciros, Varian Vista-Pro
109.010	002	EPA 200.7	Antimony	Spectro Ciros, Varian Vista-Pro
109.010	003	EPA 200.7	Arsenic	Spectro Ciros, Varian Vista-Pro
109.010	004	EPA 200.7	Barium	Spectro Ciros, Varian Vista-Pro

109.010	005	EPA 200.7	Beryllium	Spectro Ciros, Varian Vista-Pro
109.010	007	EPA 200.7	Cadmium	Spectro Ciros, Varian Vista-Pro
109.010	009	EPA 200.7	Chromium	Spectro Ciros, Varian Vista-Pro
109.010	010	EPA 200.7	Cobalt	Spectro Ciros, Varian Vista-Pro
109.010	011	EPA 200.7	Copper	Spectro Ciros, Varian Vista-Pro
109.010	012	EPA 200.7	Iron	Spectro Ciros, Varian Vista-Pro
109.010	013	EPA 200.7	Lead	Spectro Ciros, Varian Vista-Pro
109.010	015	EPA 200.7	Manganese	Spectro Ciros, Varian Vista-Pro
109.010	016	EPA 200.7	Molybdenum	Spectro Ciros, Varian Vista-Pro
109.010	017	EPA 200.7	Nickel	Spectro Ciros, Varian Vista-Pro
109.010	019	EPA 200.7	Selenium	Spectro Ciros, Varian Vista-Pro
109.010	021	EPA 200.7	Silver	Spectro Ciros, Varian Vista-Pro
109.010	023	EPA 200.7	Thallium	Spectro Ciros, Varian Vista-Pro
109.010	024	EPA 200.7	Tin	Spectro Ciros, Varian Vista-Pro
109.010	026	EPA 200.7	Vanadium	Spectro Ciros, Varian Vista-Pro
109.010	027	EPA 200.7	Zinc	Spectro Ciros, Varian Vista-Pro
109.020	002	EPA 200.8	Antimony	Perkin Elmer ELAN 9000
109.020	003	EPA 200.8	Arsenic	Perkin Elmer ELAN 9000
109.020	004	EPA 200.8	Barium	Perkin Elmer ELAN 9000
109.020	005	EPA 200.8	Beryllium	Perkin Elmer ELAN 9000
109.020	006	EPA 200.8	Cadmium	Perkin Elmer ELAN 9000
109.020	007	EPA 200.8	Chromium	Perkin Elmer ELAN 9000
109.020	008	EPA 200.8	Cobalt	Perkin Elmer ELAN 9000
109.020	009	EPA 200.8	Copper	Perkin Elmer ELAN 9000
109.020	010	EPA 200.8	Lead	Perkin Elmer ELAN 9000
109.020	011	EPA 200.8	Manganese	Perkin Elmer ELAN 9000
109.020	012	EPA 200.8	Molybdenum	Perkin Elmer ELAN 9000
109.020	013	EPA 200.8	Nickel	Perkin Elmer ELAN 9000
109.020	014	EPA 200.8	Selenium	Perkin Elmer ELAN 9000
109.020	015	EPA 200.8	Silver	Perkin Elmer ELAN 9000
109.020	016	EPA 200.8	Thallium	Perkin Elmer ELAN 9000
109.020	017	EPA 200.8	Vanadium	Perkin Elmer ELAN 9000
109.020	018	EPA 200.8	Zinc	Perkin Elmer ELAN 9000
109.400	001	SM3112B	Mercury	Varian CETAC M-6000A, PE 2380
109.420	001	SM3114B	Arsenic	PE 300
109.420	002	SM3114B	Selenium	PE 300
109.430	001	SM3120B	Aluminum	Spectro Ciros, Varian Vista-Pro
109.430	002	SM3120B	Antimony	Spectro Ciros, Varian Vista-Pro
109.430	003	SM3120B	Arsenic	Spectro Ciros, Varian Vista-Pro
109.430	004	SM3120B	Barium	Spectro Ciros, Varian Vista-Pro
109.430	005	SM3120B	Beryllium	Spectro Ciros, Varian Vista-Pro
109.430	007	SM3120B	Cadmium	Spectro Ciros, Varian Vista-Pro
109.430	009	SM3120B	Chromium	Spectro Ciros, Varian Vista-Pro
109.430	010	SM3120B	Cobalt	Spectro Ciros, Varian Vista-Pro

109.430	011	SM3120B	Copper	Spectro Ciros, Varian Vista-Pro
109.430	012	SM3120B	Iron	Spectro Ciros, Varian Vista-Pro
109.430	013	SM3120B	Lead	Spectro Ciros, Varian Vista-Pro
109.430	015	SM3120B	Manganese	Spectro Ciros, Varian Vista-Pro
109.430	016	SM3120B	Molybdenum	Spectro Ciros, Varian Vista-Pro
109.430	017	SM3120B	Nickel	Spectro Ciros, Varian Vista-Pro
109.430	019	SM3120B	Selenium	Spectro Ciros, Varian Vista-Pro
109.430	021	SM3120B	Silver	Spectro Ciros, Varian Vista-Pro
109.430	023	SM3120B	Thallium	Spectro Ciros, Varian Vista-Pro
109.430	024	SM3120B	Vanadium	Spectro Ciros, Varian Vista-Pro
109.430	025	SM3120B	Zinc	Spectro Ciros, Varian Vista-Pro
109.811	001	SM3500-Cr B	Chromium (VI)	Shimadzu UV 1601

Field of Testing 110: Volatile Organic Chemistry of Wastewater

SG Code	Analyte Code	Method	Analyte	Instrumentation
110.040	040	EPA 624	Halogenated Hydrocarbons	HP5890/5970, Agilent 6890N/5973
110.040	041	EPA 624	Aromatic Compounds	HP5890/5970, Agilent 6890N/5973
110.040	043	EPA 624	Other Volatile Organics	HP5890/5970, Agilent 6890N/5973

Field of Testing 111: Semi-volatile Organic Chemistry of Wastewater

SG Code	Analyte Code	Method	Analyte	Instrumentation
111.101	032	EPA 625	Polynuclear Aromatic Hydrocarbons	HP 5890/5972, 6890/5973
111.101	034	EPA 625	Phthalates	HP 5890/5972, 6890/5973
111.101	036	EPA 625	Other Extractables	HP 5890/5972, 6890/5973
111.170	030	EPA 608	Organochlorine Pesticides	Varian 3800, HP6890
111.170	031	EPA 608	PCBs	Varian 3800, HP6890

Field of Testing 113: Whole Effluent Toxicity of Wastewater

SubgroupCode	Species Code	Method	Species
		Freshwater Acute	
		<i>USEPA Fourth Edition</i>	
113.010	001B	EPA 600/4-90/027F, Static Renewal	Fathead Minnow (<i>P. promelas</i>)
113.020		EPA 600/4-85/013	Fathead Minnow (<i>P. promelas</i>)
		Freshwater Chronic	
113.040	001	EPA 1000 (EPA/600/4-91/002)	Fathead Minnow (<i>P. promelas</i>)
113.050	005	EPA 1002 (EPA/600/4-91/002)	Waterflea (<i>C. dubia</i>)
113.060	020	EPA 1003 (EPA/600/4-91/002)	Green algae (<i>S. capricornutum</i>)
		Saltwater Chronic	
113.080	009	EPA 1006 (EPA/600/4-91/003)	Silverside Minnow (<i>Menidia beryllina</i>)
113.120	008	EPA 600/R-95/136	Topsmelt (<i>A. affinis</i>)
113.120	022	EPA 600/R-95/136	Giant kelp (<i>M. pyrifera</i>)
113.120	023	EPA 600/R-95/136	Red abalone (<i>H. rufescens</i>)

Field of Testing 114: Inorganic Chemistry of Hazardous Waste

SG Code	Analyte Code	Method	Analyte	Instrumentation/Sample Preparation
114.010	001	EPA 6010B	Antimony	SPECTRO CIROS,VARIAN VISTA-PRO/3050B, 3010A
114.010	002	EPA 6010B	Arsenic	SPECTRO CIROS,VARIAN VISTA
114.010	003	EPA 6010B	Barium	SPECTRO CIROS,VARIAN VISTA
114.010	004	EPA 6010B	Beryllium	SPECTRO CIROS,VARIAN VISTA
114.010	005	EPA 6010B	Cadmium	SPECTRO CIROS,VARIAN VISTA
114.010	006	EPA 6010B	Chromium	SPECTRO CIROS,VARIAN VISTA
114.010	007	EPA 6010B	Cobalt	SPECTRO CIROS,VARIAN VISTA
114.010	008	EPA 6010B	Copper	SPECTRO CIROS,VARIAN VISTA
114.010	009	EPA 6010B	Lead	SPECTRO CIROS,VARIAN VISTA
114.010	010	EPA 6010B	Molybdenum	SPECTRO CIROS,VARIAN VISTA
114.010	011	EPA 6010B	Nickel	SPECTRO CIROS,VARIAN VISTA
114.010	012	EPA 6010B	Selenium	SPECTRO CIROS,VARIAN VISTA
114.010	013	EPA 6010B	Silver	SPECTRO CIROS,VARIAN VISTA
114.010	014	EPA 6010B	Thallium	SPECTRO CIROS,VARIAN VISTA
114.010	015	EPA 6010B	Vanadium	SPECTRO CIROS,VARIAN VISTA
114.010	016	EPA 6010B	Zinc	SPECTRO CIROS,VARIAN VISTA
114.140	001	EPA 7470A	Mercury	PE 2380, Varian CETAC M-6000A
114.141	001	EPA 7471A	Mercury	PE 2380, Varian CETAC M-6000A

Field of Testing 115: Extraction Test of Hazardous Waste

SG Code	Analyte Code	Method	Analyte
115.020	001	EPA 1311	Toxicity Characteristic Leaching Procedure (TCLP)
115.030	001	CCR Chapter11, Article 5, Appendix II	Waste Extraction Test (WET)

Field of Testing 116: Volatile Organic Chemistry of Hazardous Waste

SG Code	Analyte Code	Method	Analyte	Instrumentation/Sample Preparation
116.080	000	EPA 8260B	Volatile Organic Compounds	Agilent 6890N-5973/ 5035 3g in Methanol, 5030B 5 ml
116.080	120	EPA 8260B	Oxygenates	Agilent 6890N-5973/ 5035 3g in Methanol, 5030B 5 ml

Field of Testing 117: Semi-volatile Organic Chemistry of Hazardous Waste

SG Code	Analyte Code	Method	Analyte	Instrumentation/Sample Preparation
117.110	000	EPA 8270C	Extractable Organics	HP5890-5972, 6890-5973 / 3545(3g MethCl:Acetone), 3510C, 3520C(1L MethCl)-3620B
117.210	000	EPA 8081A	Organochlorine Pesticides	Varian 3800, HP6890 / 3545(3g MethCl:Acetone), 3510C, 3520C(1L MethCl)-3620B
117.220	000	EPA 8082	PCBs	Varian 3800, HP6890 / 3545(3g MethCl:Acetone), 3510C, 3520C(1L MethCl)-3620B
117.250	000	EPA 8151A	Chlorinated Herbicides	HP 6890 / 50g solid, 1L liq, Diethyl ether

Field of Testing 119: Toxicity Bioassay of Hazardous Waste

SubgroupCode	Species Code	Method	Species
119.010	001	Polisini & Miller (CDFG 1988)	Fathead Minnow (P. promelas)

Field of Testing 126: Microbiology of Recreational Water

SG Code	Analyte Code	Method	Analyte	Technology/Medium
			Enumeration in recreational marine water	
126.020	001	SM9222A,B	Total Coliform (Enumeration)	MF/m-Endo
126.040	001	SM9222D	Fecal Coliform (Enumeration)	MF/m-FC
126.050	001	SM9223	Total Coliform and E. coli	Colilert 18
126.060	001	SM9230C	Enterococci	ME
126.080	001	Idexx	Enterococci	Enterolert

CITY OF LOS ANGELES ENVIRONMENTAL MONITORING LABORATORY
 TERMINAL ISLAND WASTEWATER TREATMENT PLANT

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Aden Leonard
 Laboratory Director

ELAP REGISTRATION NO: 1546
 DATE OF FIRST ISSUE: JUNE 14, 1991
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 EPA LAB I.D. NO: CA00376
 NPDES PERMIT NO: CA0053856

The Process Control Laboratory provides support to plant operations. The Fields of Testing that are currently certified, including instrument and equipment, are listed below.

Field of Testing 101 : Microbiology of Drinking Water

SG Code	Analyte Code	Method	Analyte	Technology/ Medium
101.060	002	SM9223	Total Coliform	Colilert ³
101.060	003	SM9223	E. coli	Colilert ³
			Enumeration in drinking water source	
101.160	001	SM9223	Total Coliform (Enumeration)	Colilert ³

³ Colilert represents both Colilert and Colilert 18 media.

Field of Testing 108: Inorganic Chemistry of Wastewater

SG Code	Analyte Code	Method	Analyte	Instrumentation/ Sample Preparation
108.090	001	EPA 160.4	Residue, Volatile	Mettler-Toledo AB204-S
108.390	001	SM2130B	Turbidity	HACH 2100N
108.410	001	SM2320B	Alkalinity	Orion 720A
108.440	001	SM2540B	Residue, Total	Mettler AB204-S
108.441	001	SM2540C	Residue, Filterable	Mettler AB204-S
108.442	001	SM2540D	Residue, Non-filterable	Mettler AB204-S
108.443	001	SM2540F	Residue, Settleable	
108.450	001	SM4500-CI- B	Chloride	
108.460	001	SM4500-CI B	Chlorine	
108.465	001	SM4500-CI G	Chlorine	Thermo Orion AQ4000

108.472	001	SM4500-CN E	Cyanide, Total	Beckman DU64
108.490	001	SM4500-H+ B	pH	Orion 720A
108.502	001	SM4500-NH3 E	Ammonia	LABCONCO
108.503	001	SM4500-NH3 E	Kjeldahl Nitrogen	LABCONCO
108.531	001	SM4500-O G	Dissolved Oxygen	YSI 58
108.590	001	SM5210B	Biochemical Oxygen Demand	
108.591	001	SM5210B	Carbonaceous BOD	

CITY OF LOS ANGELES ENVIRONMENTAL MONITORING LABORATORY
DONALD C. TILLMAN WATER RECLAMATION PLANT

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ELAP REGISTRATION NO: 1477
DATE OF FIRST ISSUE: JUNE 14, 1991
RENEWAL DATE: March 31, 2005
EPA LAB I.D. NO: CA00377
NPDES PERMIT NO: CA0056227

The Process Control Laboratory provides support to plant operations. The Fields of Testing (FoTs) that are currently certified, including instrument and equipment, are listed below.

Field of Testing 101 : Microbiology of Drinking Water

SG Code	Analyte Code	Method	Analyte	Technology/ Medium
101.070	002	Colisure	Total Coliform	Colisure
101.070	003	Colisure	E. coli	Colisure
			Enumeration in drinking water source	
101.140	001	SM9222A,B,C	Total Coliform (Enumeration)	MF/m-Endo ²
101.150	001	SM9222D	Fecal Coliform (Enumeration)	MF/m-FC

² m-Endo represents both m-Endo and m-Endo LES media.

Field of Testing 107: Microbiology of Wastewater

SG Code	Analyte Code	Method	Analyte	Technology/ Medium
107.060	001	SM9222B	Total Coliform	MF/m-Endo ²
107.080	001	SM9222D	Fecal Coliform	MF/m-FC

² m-Endo Represents both m-Endo and m-Endo LES media.

Field of Testing 108: Inorganic Chemistry of Wastewater

SG Code	Analyte Code	Method	Analyte	Instrumentation/Sample Preparation
108.090	001	EPA 160.4	Residue, Volatile	Thermolyne 48000
108.390	001	SM2130B	Turbidity	HACH 2100N
108.410	001	SM2320B	Alkalinity	Corning 250
108.421	001	SM2340C	Hardness	
108.430	001	SM2510B	Conductivity	Orion 162A+F126
108.440	001	SM2540B	Residue, Total	Baxter DN 63 Oven
108.441	001	SM2540C	Residue, Filterable	Baxter DN 63 Oven
108.442	001	SM2540D	Residue, Non-filterable	Baxter DN 63 Oven
108.443	001	SM2540F	Residue, Settleable	Volumetric
108.465	001	SM4500-Cl G	Chlorine	HACH 46700-00
108.490	001	SM4500-H+ B	pH	Corning 250
108.500	001	SM4500-NH3 C	Ammonia	Labconco
108.501	001	SM4500-NH3 C	Kjeldahl Nitrogen	Labconco
108.531	001	SM4500-O G	Dissolved Oxygen	YSI Model 58
108.540	001	SM4500-P E	Phosphate, Ortho	Shimadzu 160U
108.541	001	SM4500-P E	Phosphorus, Total	Shimadzu 160U
108.560	001	SM4500-SO3 B	Sulfite	
108.590	001	SM5210B	Biochemical Oxygen Demand	YSI 58 DO Meter

CITY OF LOS ANGELES ENVIRONMENTAL MONITORING LABORATORY
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Mei Yu
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ELAP REGISTRATION NO: 1451
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 RENEWAL DATE: FEBRUARY 28, 2005
 EPA LAB I.D. NO: CA00374
 NPDES PERMIT NO: CA0053953

The laboratory is ELAP certified for two Fields of Testing (FoTs); FoT 107, Microbiology of Wastewater and FoT 108, Inorganic Chemistry of Wastewater. The analytes for each field of testing based on the 2003 Recertification and the Method Numbers are listed below. A list of instruments is also provided.

Field of Testing 107: Microbiology of Wastewater

SG Code	Analyte Code	Method	Analyte	Technology/ Medium
107.060	001	SM9222B	Total Coliform	MF/m-Endo ²
107.080	001	SM9222D	Fecal Coliform	MF/m-FC

² m-Endo Represents both m-Endo and m-Endo LES media.

Field of Testing 108: Inorganic Chemistry of Wastewater

SG Code	Analyte Code	Method	Analyte	Instrumentation/Sample Preparation
108.442	001	SM2540D	Residue, Non-filterable	Mettler AT 200
108.443	001	SM2540F	Residue, Settleable	Volumetric
108.465	001	SM4500-CI G	Chlorine	HACH DR 2500
108.490	001	SM4500-H+ B	pH	Orion 720A+
108.531	001	SM4500-O G	Dissolved Oxygen	Orion EA 940
108.590	001	SM5210B	Biochemical Oxygen Demand	Orion EA 940

II. PERSONNEL RESPONSIBILITIES

All laboratory personnel in the division are responsible for the implementation of the Quality Assurance Program. Quality assurance starts with sample collection and extends to the Division Manager who, through the Quality Assurance Manager, oversees the management of the program. It is only through the combined efforts of technical staff and management that quality assurance is achievable.

A. DIVISION MANAGER

1. Assumes final responsibility and authority of the Quality Assurance Program.
2. Assures proper implementation of the Quality Assurance Program by reviewing the activities of the Quality Assurance Manager and laboratory managers.
3. Reviews and approves the Quality Assurance Manual.

B. QUALITY ASSURANCE MANAGER

1. Reports to the Division Manager (or designee) directly and is independent of all laboratory operations.
2. Monitors and coordinates division-wide quality assurance activities to meet requirements of regulatory agencies and the division's quality assurance policy; conducts system audits and inspections; and submits reports, including recommended corrective actions and follow-through.
3. Submits performance evaluation and blind samples when needed. Evaluates test results statistically and issues performance reports. Discusses with laboratory managers appropriate/required corrective actions and reports to the Division Manager.
4. Reviews and updates the Quality Assurance Manual for the Division Manager's approval.

5. Interprets quality assurance requirements. Recommends changes in quality assurance protocols to the Division Manager for approval.
6. Ensures proper documentation and record-keeping; ensures maintenance of records including control charts, calibration records, performance evaluations, and system audits.
7. Trains the QA staff to perform quality assurance functions.
8. Disseminates QA information, as well as the importance and relevancy of analyses, to laboratory personnel.
9. Keeps abreast of new practices and procedures in quality assurance; recommends changes to the Division Manager to ensure a dynamic and efficient operation.
10. Provides annual review and assessment of QA/QC staff activities for EMD management.
11. Coordinates communication with regulatory agencies.
12. Reviews requests from laboratory managers for compliance with regulatory requirements and record-keeping to formally bring new equipment on-line. Provides Performance Package for new equipment.
13. Reviews regulatory requirements and record-keeping data packages for compliance when submitted by laboratory managers to change testing methodology. Provides Performance Package for new method.
14. Acts as the official source on the status of QA/QC-related information by closely communicating with laboratory managers and unit supervisors.

C. LABORATORY MANAGERS

1. Review quality control programs of each unit, provide a plan for improvement, and implement the improvement plan.
2. Ensure that unit supervisors adhere to guidelines listed under "UNIT SUPERVISORS" in this chapter of the Quality Assurance Manual.

3. Review with unit supervisors the unit's quality control performance and confer with the QA manager to provide assessments and recommendations to unit supervisors.
4. Receive corrective action recommendations from the QA Manager and work with unit supervisors and the QA Manager to resolve the problems.
5. Review unit supervisor's evaluation of methodologies and provide input.
6. Work with the QA Manager to provide policy direction and interpretation on quality assurance matters to personnel in the section.
7. Periodically report to the Division Manager and the QA Manager on the status of their section's quality control practices and performances.
8. In conjunction with the QA Manager, maintain communication with regulatory agencies.
9. Evaluate for completeness data packages submitted by unit supervisors to bring new equipment on-line and submit these to the QA Manager for compliance- checking and record-keeping.
10. Evaluate for complete data packages submitted by unit supervisors to change testing methodology and submit these to the QA Officer for compliance-checking and record-keeping.
11. Inform the QA Manager of all QA/QC program changes.

D. QUALITY ASSURANCE STAFF MEMBERS

1. Assist the QA Manager in developing, revising, and coordinating quality assurance/control programs.
2. Assist in the management, documentation, and record-keeping of the established QA Program.
3. Prepare an annual report of QA activities and submit to QA Manager for approval.
4. Review and monitor QC data and inform the QA Manager of long-term trends.

5. Periodically assist the QA Manager to inspect laboratories and evaluate compliance with Good Laboratory Practices (GLP) criteria.
6. Assist the QA Manager in certification programs and related performance evaluation program management.

E. UNIT SUPERVISORS

1. Ensure that all analysts adhere to guidelines listed under "ANALYSTS" in this chapter of the Quality Assurance Manual.
2. Ensure that all staff members are trained to perform each assigned analytical task with good analytical technique.
3. Ensure that unit Standard Operating Procedures (SOP's) have been written and are available to the analysts; review SOP's and recommend modifications to laboratory managers.
4. Ensure that analyses are conducted according to the protocols described in the QA Manual and approved SOP's.
5. Ensure proper sample collection, receiving, preservation, handling, and disposal.
6. Provide day-to-day supervision of unit laboratory operations to ensure that GLP and all safety rules are met.
7. Review and evaluate unit QA/QC activities; take corrective action when necessary.
8. Review data for correctness, proper documentation, and compliance with QC criteria established for each method; validate data.
9. Periodically evaluate all methods currently being used in the unit to assess the need for method modifications.
10. Implement specific changes required by corrective action recommendations to assist laboratory managers in resolving QA/QC problems.
11. Promote staff understanding of each analytical methodology: its theory, purpose for each step, and key factors affecting the results of the analysis.

12. Implement specific changes in QA requirements received from the QA Manager or laboratory manager.
13. Conduct new equipment start-up evaluation procedures, prepare data packages, and submit to laboratory managers for review.
14. Conduct new methodology evaluations and parallel studies, prepare data packages, and submit to laboratory managers for review.
15. Inform laboratory managers of QA/QC program changes that have been implemented.

F. ANALYSTS

1. Have a clear understanding of, and strictly adhere to, the guidelines outlined in the Quality Assurance Manual.
2. Understand the theory behind each analytical method to be performed.
3. Perform each analysis according to approved protocols and SOP's.
4. Follow QC requirements for each analysis to provide clear and traceable documentation; review QC results.
5. Notify the supervisor of all QC problems, equipment malfunctions, and safety hazards.
6. Develop the ability to identify potential analytical problems, communicate them to the supervisor, and suggest corrective actions.
7. Respond to and/or implement corrective action.
8. Subscribe to good laboratory practices, including general housekeeping, and observe all safety rules.

III. QUALITY ASSURANCE OBJECTIVES FOR MEASUREMENT OF DATA

The quality assurance objectives for measurement of data are unique to the particular program for which the data are collected and utilized. They describe the overall uncertainty that the data user is willing to accept in order to make decisions for environmental or other concerns. This uncertainty describes the data quality that is needed, which are usually expressed in terms of precision, bias, representativeness, comparability, and completeness. Prior to starting, the project should define the data quality objectives and how they will be attained in order for all laboratory and field personnel involved to make informed decisions during the course of the project.

The laboratory staff at EMD use approved and recognized test methods, and comply with uncertainty requirements of the methods. Quality control samples are measured and uncertainties are assessed, which need to be within the method prescribed limits. Internal acceptance criteria are established by analyzing laboratory control samples on a daily basis. Therefore, EMD can attest to the quality of the measured data being provided to the client. If EMD personnel conducts the sampling, the laboratory will also be able to attest to the integrity of the sampling process.

IV. SAMPLE MANAGEMENT

This section covers two sample management elements defined by the Environmental Laboratory Accreditation Program (ELAP): 1) sampling procedures when the laboratory performs the sampling and 2) custody, holding, and disposal of samples.

A. SAMPLING PROCEDURES

Laboratory personnel follow each unit's sampling plan to collect samples. Samples are usually site-specific for a predetermined location, routinely scheduled, or dictated by emergency response procedures. Only trained laboratory staff are assigned to collect samples using proper sampling procedures, appropriate sampling equipment, required containers, and proper preservation techniques. For those samples requiring wastewater operators to perform collections, EMD staff works closely with operators to ensure proper sampling procedures are followed.

Selection of containers, application of preservative, and holding times specification is based on EPA guidelines. Refer to Appendix A for specific requirements. This section also includes the sample size ordinarily required for analyses.

General guidelines for sample collection by laboratory staff are as follows:

1. Care will be taken to prevent contamination of the sample by using appropriately cleaned sample jars. For routine process operations, jars are pre-assigned to a specific site and a specific parameter.
2. Samples must be uniquely identified. At a minimum, they should be labeled with sample date, sample time, sampling point, and the name of the sampler. This information, as well as other pertinent information such as sample type, preservative added, and analyses need should be recorded in the chain of custody.
3. Once received, samples are logged into the laboratory system as soon as possible, assigned a unique number, and properly stored.
4. Sample preparation steps done prior to analysis, such as sample sieving, blending, filtration, grinding, compositing, mixing, subsampling, and preservation are described in individual test SOP's.

B. CUSTODY, HOLDING AND DISPOSAL

1. CHAIN-OF-CUSTODY

Samples submitted to EMD for analysis are delivered to Harry Pregerson Building (HPB) Room 550, EMD's sample receiving area. A Chain-of-Custody (COC) must accompany each sample submitted to EMD. If a COC has not been filled out prior to delivery of the sample, a form will be provided to the delivery person prior to EMD acceptance of said sample. The COC will be reviewed to make sure that all of the needed information has been supplied. The Chain-of-Custody Form being used at EMD is shown in Figure 2.

The purpose of the chain-of-custody is to establish detailed written and legal documentation of all transactions in which samples are transferred from the custody of one individual to another. The custody procedure is also used whenever samples are submitted to a laboratory within the division or to a contract laboratory. The chain-of-custody begins at the sample collection site and includes couriers or messengers who handle the sample in transit. It follows the sample in the laboratory until its ultimate disposal. It is a form of proof used to establish the authenticity and integrity of the sample, since there is always the possibility that the chain-of-custody will be used in litigation.

According to EPA's National Enforcement Investigation Center, a sample is under custody if one of the following situations is applicable:

- a. It is in your possession, or
- b. It is in your view, after being in your possession, or
- c. It is in your possession and you locked it up, or
- d. It is in a designated secure area, or
- e. It is in your possession and you document the transfer of custody to the receiving party.

2. HOLDING

Analyses of samples must meet EPA holding time requirements for each parameter. The holding times and/or sample preservation are crucial to some analyses (e.g., BOD, cyanide, sulfide, and oil and grease). If the sample requires preservation and it was not performed in the field, EMD personnel will preserve the sample in accordance with the analysis requested of that sample. Some tests, e.g. toxicity, require cooling to 4°C during transport.

For tests with such requirement, temperature must be measured at the time of arrival at the laboratory and recorded in the chain of custody. All samples must be stored under the right conditions (e.g., refrigeration may be required) and free from contamination. See Appendix A for specific requirements.

2. SAMPLE LOGGING AND HANDLING

The sample information will be inputted into the EMD Laboratory Information Management System (LIMS) and a unique laboratory registration number will be generated for that sample. The sample will then be split into different aliquots as dictated by the requested analysis and sent to the appropriate operating laboratories for testing within the holding specified per analysis. A portion of the sample will be retained in the sample receiving area (under proper storage conditions) for archiving purposes. If the sample is split into different aliquots, each aliquot will be uniquely identified.

3. DISPOSAL

After the analyses are completed the sample will be retained as legal evidence or legally disposed of as determined by the chemical or biological analysis of the sample. Analyzed samples and standards used in analyses are disposed of according to EMD's Chemical Hygiene Plan.

V. ANALYTICAL PROCEDURES

A. ANALYTICAL PROCEDURES

1. ANALYSES

- a. Analyses performed at EMD laboratories are generally driven by regulatory concerns and plant operations' requirements. There are many different analytical methods applicable to environmental analyses. Our methods are generally based on those specified by EPA, Federal and State regulatory agencies, or professional organizations.
- b. EMD laboratories also use methods that are adopted from scientific literature, developed internally, or acquired with the purchase of instruments or reagent kits. Results from these methods are for in-house (internal) information only. Occasionally, we are required by permits to perform certain types of analyses where official methods are not yet available. Under these circumstances, data from the best methods available are used to fulfill the regulatory requirements.
- c. The choice of methodology depends on regulatory requirements, the intended use of the generated values by the data user, sample matrix, availability of equipment (e.g., GC, GC/MS, ICP, ICP/MS), quantitative sensitivity, sample size, turn-around time, accuracy, precision, and cost.

2. REFERENCES

Typical methodology references available at EMD are listed below:

- a. "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, revised March 1983.
- b. "Test Methods for Evaluating Solid Waste" (SW 846), 3rd edition (Nov. 1986) to Update III (Dec. 1996), Office of Solid Waste and Emergency Response, U.S. EPA.

- c. "Standard Methods for the Examination of Water and Wastewater", several editions, APHA, AWWA, WPCF, Washington, DC. Official use of a particular edition for legal reporting requires EPA sanction. As of the revision date of this manual, the 18th, 19th, and 20th editions were approved for use.
- d. "Guidelines Establishing Test Procedures for the Analysis of Pollutants Under the Clean Water Act", 40 CFR, Part 136.
- e. "Determination of Inorganic Anions in Water by Ion Chromatography", Method 300.0, EPA, version 2.1, rev. Aug. 1993.
- f. "Determination of Trace Elements in Water and Wastes by Inductively Coupled Plasma – Mass Spectrometry", Method 200.8, EPA, version 5.4, May 1994.
- g. "Determination of Metals and Trace Elements in Water and Wastes by Inductively Coupled Plasma – Atomic Emission Spectrometry", Method 200.7, EPA, version 4.4, May 1994.
- h. "Annual Book of ASTM Standards", Volumes 11.01, 11.02, 14.01, and 14.02, ASTM, Philadelphia, PA, 1990 and 1997.
- i. "Official Methods of Analysis", 13th edition, AOAC, Arlington, VA., 1980.
- j. "Microbiological Methods for Monitoring the Environment, Water, and Wastes", EPA-600/8-78-017.
- k. "Static Acute Bioassay Procedures for Hazardous Waste Samples", Polisini and Miller (CDFG), 1998, Title 22, CCR 66261.24.
- l. "Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms", EPA/600/4-85/013.
- m. "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms", EPA/600/4-90/027F.

- n. "Short-term Methods of Estimating the Chronic Toxicity of Effluents and Receiving Water to Freshwater Organisms", EPA-600/4-91-002.
- o. "Short-term Methods of Estimating the Chronic Toxicity of Effluents and Receiving Water to Marine and Estuarine Organisms", EPA/600/4-91-003.
- p. "Procedures Manual for Conducting Toxicity Tests Developed by the Marine Bioassay Project", State of California Water Resources Board, 90-10WQ, Anderson, B.S. et al., 1990.
- q. "Short-term Methods of Estimating the Chronic Toxicity of Effluents and Receiving Water to West Coast Marine and Estuarine Organisms", EPA/600R/95/136.
- r. "Methods for Aquatic Toxicity Identification Evaluation, Phase I Characterization Procedures", EPA 600/6-91/003.
- s. "Methods for Aquatic Toxicity Identification Evaluation, Phase II Toxicity Identification Procedures", EPA 600/3-88/035.
- t. "Methods for Aquatic Toxicity Identification Evaluation, Phase III Toxicity Confirmation Procedures", EPA 600/3-88/036.

B. STANDARD OPERATING PROCEDURES (SOP's)

Routine analyses are defined in Standard Operating Procedures (SOP's) which are detailed descriptions of how to use and what to expect from a method. They contain method-specific QC criteria (i.e., instrument calibration, reagent blank, method blank, calibration standards, etc.), and QC requirements such as duplicate analysis, spike recoveries, holding time, etc. EMD follows a standardized SOP format, its content and application is presented in Appendix D.

C. ANALYSES PERFORMED IN EMD LABORATORIES

Analyses performed in the laboratories are grouped under the following general classifications:

1. WET CHEMICAL METHODS

- a. Colorimetric Analyses - Tests include cyanide, phenols, nitrogen (nitrate, nitrite), MBAS, hexavalent chromium, dissolved sulfide, boron, residual chlorine, and phosphate, etc.
- b. Titrimetric Analyses - Hardness, alkalinity, chloride, ammonia, and organic nitrogen, and biological oxygen demand (BOD) are typical analyses.
- c. Gravimetric Analyses - Oil and grease, solids, moisture, sulfate, etc.
- d. Miscellaneous Tests - A meter or probe is used to measure conductivity, turbidity, temperature, DO, ammonia, and pH.
- e. Inorganic Analyses (Anions and Cations) - Ion chromatograph (IC) is used primarily to analyze for anions such as chloride, sulfate, fluoride, nitrate, and nitrite.

2. INSTRUMENTAL ANALYSES

Analyses in this group require complex, sophisticated instrumentation and the training of analysts in instrument operation. Analytes fall into two major categories: organic and inorganic (metals). There are common elements associated with the selection of an instrument which include application, sensitivity, initial and continuing instrument calibration, dynamic linear range, detection limits, matrix effects, and instrument limitations.

a. Organic Analyses

Instruments used for organic analyses are gas chromatograph (GC) or gas chromatograph/mass spectrometer (GC/MS). Gas chromatographs are equipped with detectors specific to the analytes of interest. Gas chromatographic identification requires a secondary column to confirm measurements made by the primary column. Individual organic compounds are generally grouped into these categories:

- * Herbicides (chlorinated)
- * Pesticides (organochlorine) and PCB's

- * Semivolatile Organic Compounds

- * Volatile Organic Compounds

b. Inorganic Analyses - Trace Metals

Instruments for metal analysis include an atomic absorption spectrophotometer equipped with a cold vapor generator/analyzer or a hydride generator (HGAA), inductively-coupled plasma (ICP), and inductively-coupled plasma mass spectroscopy (ICP/MS).

3. MICROBIOLOGICAL ANALYSES

The analysis performed depends upon the matrix of the sample and/or the bacterial organisms of interest.

a. Membrane Filtration

- * Total coliform

- * Fecal coliform

- * *Enterococcus*

b. Multiple-tube Fermentation

- * Fecal coliform

- * *Salmonella*

c. Chromogenic Substrate

- * Total coliform

- * *E.coli*

- * *Enterococcus*

d. Heterotrophic Plate Count

e. Double-agar Overlay

- * Bacteriophage

4. BIOASSESSMENT ANALYSES

a. Toxicity Testing

- * Acute toxicity tests
- * Hazardous waste toxicity tests
- * Marine chronic toxicity tests
- * Freshwater chronic toxicity tests

b. Ocean Assessment

- * Water quality monitoring is performed using a conductivity-temperature-depth (CTD) profiler to measure salinity, temperature, transmissivity, density, dissolved oxygen, and pH, and chlorophyll.
- * Benthic sorting and taxonomic identification are done using dissecting and compound microscopes. Identifications are confirmed using peer-reviewed published literature, as needed. Species name, abundance, biomass, and locality of collection are recorded.
- * Taxonomic identifications of trawled organisms are performed using peer-reviewed published literature, as needed. Species name, abundance, standard length for fish, biomass, and locality of collection are recorded.
- * Rig-fishing data include species name, number collected, weight, standard length, and locality of collection.

**D. START-UP TEST (INITIAL DEMONSTRATION OF TEST PROFICIENCY),
ALTERNATE TEST PROCEDURES, METHOD MODIFICATION,
AMENDMENT TO AN ELAP CERTIFIED FIELD OF TESTING**

There are similarities and differences in the requirements for a start-up test, obtaining approval for alternate test methods, modifications to a method, and amendment to an ELAP-certified field of testing. For this reason, it is recommended that the plan of action be discussed with and concurred by the QA Manager before initiating the project. Furthermore, when all the required validation tests are completed, laboratory managers must submit to the QA Manager a formal request to officially adopt new start-ups or modifications. The QA Manager shall review the data package and submit it to the Division Manager for final approval. Upon the Division Manager's approval, the QA Manager shall record the date of approval and notify laboratories for implementation.

1. START-UP TEST (INITIAL DEMONSTRATION OF TEST PROFICIENCY)

EPA, as well as ELAP, requires the laboratory to perform a start-up test prior to using a promulgated/approved method for routine analysis. The start-up test must be documented. This requirement is applicable to chemical analyses, microbiological analyses, bioassay analyses, and any other non-chemical procedures.

2. ALTERNATE TEST PROCEDURES

EPA defines an alternate test procedure as "one that differs from a method previously approved for determining the constituent of interest in National Pollutant Discharge Elimination System (NPDES) monitoring". EPA has established criteria that must be met before an alternate test procedure can be approved for use.

3. METHOD MODIFICATION

- a. The EPA Office of Water permits limited flexibility within the promulgated wastewater methods to improve method performance and has guidelines for method modification.
- b. The Office of Solid Waste has defined general measures for modifying SW-846.

4: AMENDMENT TO ELAP-CERTIFIED FIELD OF TESTING

The Environmental Laboratory Accreditation Program of the California Department of Health Services allows the addition of one or more subgroups from a certified field of testing provided certain requirements are met.

VI. CALIBRATION PROCEDURES AND FREQUENCY

All analytical systems/instruments are calibrated at the time of use, or as often as each method requires, with standards traceable to the National Institute of Standards and Technology (NIST), EPA, or other certified standard sources. Each instrument is calibrated within its dynamic linear range bracketing the concentration of the target analyte, and for spectrophotometers, within the optimum performance range. Some instruments may require final calibration at the end of a test analysis. Calibration processes should comply with method-specific requirements and must be documented.

A. STANDARDS

1. Reagents are analytical grade or better, properly stored, and discarded after the expiration date.
2. All analytical reagents/solvents received in the laboratory are labeled with the following information:
 - a. Date received
 - b. Date opened
 - c. Expiration date

B. STANDARD SOLUTIONS

Calibration standard solutions are prepared from neat compounds/solutions, concentrates, or raw material of documented purity. The most appropriate measuring devices and techniques are used in preparing calibration standards. Prepared reagents are properly stored. Some calibration standards are cross referenced with standards or check samples from a different source or lot number and are ultimately traceable to an NIST-certified source.

1. STANDARD PREPARATION LOG

A standard preparation log is maintained by each lab unit. A logbook entry includes the following information:

- a. Source of the standard
- b. Lot number
- c. Cross check
- d. Dilutions, final concentrations (units)
- e. Preparer
- f. Date prepared
- g. Expiration date

2. LABELLING

Prepared solutions are labeled indicating the following information:

- a. Identity of the solution
- b. Concentration (with units of measurement)
- c. Date prepared
- d. Expiration date
- e. Preparer's identity

3. EXPIRATION DATE

The expiration date of the prepared solution is established based on the information below:

- a. Analyte concentration of the solution

- b. Stability of chemical/solution under specified conditions
- c. Manufacturer's recommendation
- d. Method-specific requirement
- e. In no case is the expiration date established by the laboratory later than the expiration date certified by the manufacturer.

C. VOLUMETRIC ANALYSIS

The frequency of re-standardizing a titrant against a primary standard is based on method-specific requirements and the stability (shelf-life) of the solution.

D. STANDARD CURVE

- 1. The standard curve is constructed with the minimum of standards specified in the method and may include a reagent blank. The range of the standards encompasses the entire linear range or the range of interest.
- 2. All samples quantified must be within the calibration curve. Calculation by extrapolation is not acceptable to EPA or ELAP. Subsequent sample dilution or the construction of a new curve is required.
- 3. Some manufacturers suggest single point calibration, excluding the blank, for daily use of their instruments (e.g., TOC Analyzer, ICP, and ICP/MS). In this case, a reagent blank and a high standard may be used provided low and mid-range solutions are run as unknown samples and the results are within the acceptance limits.

E. INSTRUMENT CALIBRATION

- 1. Instruments are calibrated before use with documentation to support the calibration process. Documentation includes name of person who performed the calibration, date, the specific test or instrument, and linearity such as correlation coefficient. State of the art instruments are capable of drawing the calibration curve.
- 2. Each instrument is calibrated with standard solutions specific to the analysis and appropriate to the instrument.

Generally, the frequency of calibration, as well as the concentration and number of standards, are based on instrument manufacturer's guidelines, analytical method, or requirements of clients.

3. Initial instrument calibration is performed with three to six calibration points, depending on method-specific requirements. The calibration curve is verified with at least one standard during the course of sample analysis. The linear range of the standards should be determined and should bracket the expected concentration of the samples with the lowest standard near the detection limit.
4. Specific calibration procedures for each analytical method are described in the SOP for that particular method.

VII. ACQUISITION, REDUCTION, VALIDATION, AND REPORTING OF DATA

The analyst who generates the data has the initial and primary responsibility for the completeness and correctness of the data. The data are then checked by the unit supervisor (or designee).

A. ACQUISITION

Both raw and calculated data are acquired in the laboratory by manual or electronic (direct computer) acquisition. Acquired data are properly and securely stored for the duration specified by regulatory agencies or the customer.

Guidelines for documentation and recording of information are as follows:

1. MANUAL DATA ENTRY

a. Hand-written in Worksheet

- * Data are entered directly into the notebook or worksheet with non-erasable ink.
- * Data entries are initialled and dated by the analyst making the entry. If the entry is more than one page, each page is initialled and dated.
- * Mistakes are canceled by drawing a line through the entry, entering the correct value, and initialling and dating the correction. The use of correction fluid is not acceptable.
- * Blank pages or substantial portions of pages with no entries are marked with a large "X" to indicate that they were intentionally left blank.

b. Manual Entry in Computer

The program/software used to generate results is prepared internally. A designated staff member of the Information & Control System Division (ICSD) at Hyperion has the responsibility of preparing the program and maintaining the supporting documents.

2. ELECTRONIC DATA ACQUISITION (Spectra, chromatogram, or hard-copy read-outs from instruments)

a. Printouts contain the laboratory sample ID/number, analyst initials, date, time, etc.

b. Clear identification on the printout for each peak of interest.

B. REDUCTION

Data reduction, where applicable, is described in specific SOP's. It involves reporting values with the appropriate significant figures in the concentration units established by the regulatory agency or the data user.

1. USE OF SIGNIFICANT FIGURES

The following three guidelines should be taken into consideration when determining the number of significant figures to include in reporting of results:

a. Method constraints – Some methods constrain the number of significant figures that can be reported. Analysis of bacteria by methods that generate a most probable number (MPN) is one example of this.

b. Accuracy of the MDL – Data should not be reported that is more accurate than the MDL.

c. In most if not all cases, data should contain no more than three significant figures.

2. RULES OF ROUNDING OFF

When results need to be rounded off in order to conform to the number of significant figures necessary to be reported for the result, the following guidelines should be used:

- a. When a number to be rounded off is followed by the digits 6, 7, 8, or 9, increase the number to be rounded off by 1; e.g., 23.7 when rounded off to the nearest digit becomes 24.
- b. When a number to be rounded off is followed by the digits 0, 1, 2, 3, or 4, retain the number to be rounded off; e.g., 23.4 when rounded off to the nearest digit becomes 23.
- c. When a number to be rounded off is followed by the digit 5, retain the number to be rounded off if the number to be rounded off is even, while increase the number to be rounded off by one if the number to be rounded off is odd; e.g., 22.5 when rounded off to the nearest digit becomes 22, while 23.5 when rounded off to the nearest digit becomes 24.

C. REVIEW AND VALIDATION

1. REVIEW

- a. Data review is the process of comparing results to all available information, such as sample preparation and QC sample data, to evaluate the validity of the results. It supports the contention that the data are
 - * reasonable (experience with similar situations, common sense), and
 - * capable of supporting a defensible decision.
- b. The analyst and the unit supervisor (or designee) are responsible for reviewing the data relative to the following:
 - * Instrument calibration
 - * Standard preparation

- * Method blanks and QC samples
- * Raw data
- * Calculations
- * Transcription

2. VALIDATION

- a. Data validation is the systematic procedure of reviewing data against a set of criteria to provide assurance of its validity before reporting the data. It is accomplished through routine examination of data collection, flow procedures, and QC sample results. It uses QC criteria to reject or accept specific data.
- b. Validation includes the following:
 - * Dated and signed entries by analysts on the worksheets and logbooks used for all samples.
 - * Use of QC criteria to reject or accept specific data.
 - * Checking of LIMS data entry and reporting
- c. Validation Guidelines include the following:
 - * Calibration requirements as defined in the method.
 - * Documented traceability of instrument and spiking standards.
 - * Documentation of methods used and QC applied.
 - * Maintenance performed on instruments.
 - * Documentation of sample preservation, transport, and storage.
 - * Review of QC sample data.

- c. Data validation is performed, signed, and dated by the analyst, the unit supervisor (or designee), and where applicable, the laboratory manager.

D. REPORTING

1. The format and content of a data report depends on the project needs, client or customer requirements, or the specific government agency's established reporting format. The reporting format conforms to the requirements of the data user.
2. Data prepared for external release are checked and approved by the unit supervisor (or designee). The final report is signed by the unit supervisor and/or laboratory manager before distribution and may include the following:
 - a. Sample ID used by the laboratory and the client (if available).
 - b. Sample matrix type, description, and method number.
 - c. The chemical/physical/biological parameters analyzed with the reported values and units of measurement.
 - d. Minimum levels or reporting limits used for the analytes.
 - e. Method detection limits of the analytes.
 - f. Data for all parameters reported with consistent number of significant figures.
 - f. Results of QC samples, if appropriate.
 - g. Footnotes referenced to specific data, if required, to explain reported values.
 - h. Discussion on non-compliance data.
 - i. Report transmittal letter or memorandum identifying the person sending the report and the person(s) receiving the data.

3. Where required by the regulatory agency, the following reporting protocol will be used:
 - a. Sample results greater than or equal to the minimum level (ML) will be reported as the measured concentration.
 - b. Sample results less than the ML but greater than or equal to MDL will be reported as "Detected but not Quantified" or DNQ. The estimated concentration of the sample will be reported next to DNQ with the words "Estimated Concentration" or "Est. Conc.".
 - c. Sample results less than MDL shall be reported as "Not Detected" or ND.

VIII. INTERNAL QUALITY CONTROL CHECKS

The laboratories monitor data quality with internal QC checks. These checks are method-specific. Regulatory agencies have additional requirements for meeting acceptable data quality criteria. The QC checks are used to ensure that the data was generated correctly and is reliable.

The generation of data is checked by method-specific requirements described in the Standard Operating Procedure for each test. The reliability of data is addressed through Statistical Process Control (SPC). The unit supervisor has the responsibility to ensure that internal QC checks are documented and followed.

A. TYPICAL METHOD-SPECIFIC CHECKS

1. GENERAL APPLICATIONS

a. Sampling

- * Procedures - Samples are collected according to each unit's sampling plan.
- * Preparation - Each unit ensures that adequate sample volume/weight and appropriate digestion/extraction techniques are used.
- * Sample Storage - EPA guidelines on holding time are observed.

b. Blanks

Where applicable, blanks are included in each batch of samples collected and/or analyzed.

- * Method (Reagent) blanks are analyzed with each batch of samples and are carried through the analytical scheme like a regular sample. Blank corrections are not applied to analytical data unless stated in the method.

- * Calibration blanks are prepared with standards to create a calibration curve. The blank may provide the "zero point" for the curve.
- * Travel/Field Blanks may be included during sample collection and analysis to comply with project or customer requirements. They undergo the complete analytical measurement process.
- * Sample blanks are run only when necessary. They are used when certain sample characteristics, such as color or turbidity, may interfere with the analysis.

c. Initial Demonstration of Laboratory Proficiency

The analyst must demonstrate test proficiency after being trained. Test proficiency is also required prior to the use of a new method by the laboratory, with a newly purchased instrument, or after a prolonged instrument down-time requiring major repair.

d. Laboratory Control Sample

When appropriate, a laboratory control sample is included in each batch of samples. The sample is subjected to the same preparation/extraction procedure and measurement process as the routine samples. It may be prepared from the calibration stock solution or purchased as a neat reference material. When the stock solution is used, the laboratory control sample is prepared separately from the calibration standards.

2. CHEMICAL ANALYSES

a. Calibration with Standards (Calibration Curve)

Initial calibration with the appropriate number of standards is performed and a calibration curve is generated at the start of an analysis. Sample results are usually quantified based on the initial calibration curve.

- b. Continuing (verification) calibration may be required during the course of some analyses to verify instrument stability. The result must be within specifications before the analysis can proceed without recalibration.

c. System Monitoring (Surrogate) Compound Performance

A surrogate is a compound similar in chemical behavior to the analyte of interest, but it is not present in the sample. It is used as an indicator of sample-specific preparation efficiency and accuracy. The amount of surrogate recovered, expressed as Percent Recovery (% Recovery), indicates possible preparation or extraction problems due to sample matrix.

d. Matrix-Spike Analysis

Samples are spiked based on method requirements. Matrix-spike analysis provides a measure of accuracy for the target analytes/compounds in the specific matrix of the sample. A known amount of analyte is added to one of the samples in the batch and is processed through the entire analytical procedure. The results are calculated as % Recovery.

e. Sample (Matrix) Duplicate/Matrix-Spike Duplicate

Where applicable, duplicate analysis is included in each sample batch at the frequency specified in the method. Duplicate analysis may be on a sample or a matrix-spiked sample. It provides a measure of analytical precision.

When the analyte concentration is suspected to be below the method detection limit, duplicate spikes are substituted for sample duplicates. The degree of agreement is expressed as Relative Percent Difference (RPD).

f. Minimum Level (ML)

In some cases the State Water Resources Control Board (SWRCB) requires the use of MLs as reporting limits for NPDES-related data. ML represents the lowest calibration standard used in analysis after the application of a method-specific factor. The SWRCB established ML requirements for some organic and inorganic analytes that need to be met for reporting effluent data. See the table for this list.

g. Reporting Limit (RL)

Reporting Limit is the lowest concentration that can be analyzed within specified accuracy and precision. Generally it is established as 5 to 10 times the MDL. Reporting limit is verified by spiking a solid or liquid sample at the reporting level in duplicate.

g. Method Detection Limits (MDL)

Method detection limits have been established for most analyses. MDL is defined by EPA as "the minimum concentration of a substance that can be measured and reported with a 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix containing the analyte".

It is determined by multiplying the standard deviation, from a minimum of 7 replicate analyses, by the Student t-value at the desired 99% confidence level.

"The Procedure for the Determination of Method Detection Limits" - Revision 1.11 is published in CFR 40, Part 136, Appendix B. See Appendix B of this manual for the procedure. ELAP's "Procedure to Determine Method Detection Limits" is in Appendix C of this manual.

h. Mass Tuning Checks

EPA requires tuning of mass analyzers with specific standards to verify instrument sensitivity every 12-hour working shift.

i. Internal Standard (Organic Analysis)/Post-Digestion Spike (Inorganic Analysis) Checks

This procedure is practiced when necessary to determine instrument measurement integrity and capability, and overcome matrix interference. Standard solutions of known concentrations are added after sample preparation or extraction and just before instrument measurement.

j. Method of Standard Addition (Interference Check) Analysis

The use of this procedure is recommended to verify the absence of matrix effects. Usually, when a new matrix type is to be analyzed, the amount of interference is determined. Its use is also suggested when the analyte of interest is at a very high or low level or suspected to be absent.

A sample is fortified with a series of known amounts of an analyte in increasing concentrations. The fortified samples are analyzed and may be calculated as % Recovery.

3. MICROBIOLOGICAL ANALYSES

Microbiological SOP's comply with the special quality control criteria regulated by California Department of Health Services that includes the following:

- a. Sterility QC checks
- b. Laboratory environment QC checks
- c. Analyst intracomparison checks
- d. Incubation time checks
- e. Specific equipment temperature requirements (e.g., incubators, water baths, autoclaves)
- f. Duplicate analysis on 10% of samples as a measure of analytical precision
- g. Positive and negative bacterial control cultures checks
- h. Monitoring of media-preparation deionized water

4. BIOASSESSMENT ANALYSES (OCEAN ASSESSMENT)

The Standard Operating Procedures for Ocean Assessment (Benthic Ecology/Taxonomy and Water Quality) follows protocol described in the most current edition of the Field Operations Manual for Marine Water Column, Benthic, and Trawl Monitoring in Southern California.

* Benthic and Trawling Program

** Sorting efficiency

Ten percent of each sorter's samples are resorted by an outside consultant.

** Identification efficiency
Ten percent of each identifier's samples are reidentified by an outside consultant.

* Water Quality Program

** Scheduled CTD instrument calibration and preventive maintenance

** Specific acclimation time and depth for instrument packages

5. Toxicity Testing

The Standard Operating Procedures for Toxicity Testing include special guidelines provided by the California Department of Fish & Game and/or EPA.

* Specific test organisms, sample dilutions/volumes including controls

* Water quality test parameters

* Reference Toxicant/Parallel Test

* Statistical analyses parameters

* Precise requirements for specific organisms

* Acclimation period/temperature for test specimens

* Mortality rate of test control specimens

* Test Acceptability Criteria (TAC) for all methods.

B. STATISTICAL PROCESS CONTROL

Control charts/tables are established for precision (sample and spike duplicate analyses) as RPD and for accuracy (spiked analysis and laboratory control samples) as % Recovery. A minimum of 15 analyses is recommended before a statistical mean and standard deviation are calculated and a control chart is constructed.

A chart is constructed with the mean as the center line. Lines above or below the center line signify the warning or control limits, depending upon the confidence limits chosen. Warning limits are established at ± 2 standard deviations from the mean (95% confidence interval). Upper limits correspond to ± 3 standard deviations from the mean (99% confidence interval).

Control charts are evaluated by the laboratory staff for trends. Statistical values based on laboratory results are also compared to published data established by EPA or other regulatory agencies, where applicable.

1. PRECISION CONTROL CHARTS/TABLES

a. Laboratory Control (QC Check) Samples

A standard of known concentration is analyzed with each batch of samples. The calculated results for the parameter of interest may be plotted and statistically evaluated. Statistical values for the mean and standard deviation may be compared to the manufacturer's certified values for precision of the control sample.

b. Duplicate Analysis - Range (R) Charts

Running duplicate analyses is one way of establishing control charts for precision. To construct the chart, relative percent difference (RPD) is calculated and plotted with zero (no difference between control samples) as the expected value.

Warning and control limits are calculated based on a distribution table of "Factors for Use in Duplicate Range Charts and Other Sets of Replicates". Warning limits (95% confidence limit) are calculated by multiplying the mean range or mean RPD by a factor of 2.512. Upper limits (99% confidence limit) are calculated by multiplying the mean range or mean RPD by a factor of 3.267.

2. ACCURACY (BIAS) CONTROL CHARTS

Laboratory control samples analyzed and calculated as % Recovery and spike sample results are used to measure accuracy or bias of a measurement.

a. Laboratory Control (QC check) Samples

When charts are plotted with % Recovery values, the results represent accuracy.

b. Spiked Samples

The percent recovery is calculated and plotted on the chart. The lines on the spiked-sample chart correspond to mean recovery and the 95 and 99 percent confidence limits which are calculated by multiplying the standard deviation by 2 and 3, respectively.

3. IMPORTANCE OF CONTROL CHARTS

Control charts are used to monitor the system in its day-to-day operations. These charts not only indicate serious immediate problems, but can also act as early warning signs by indicating potentially bad trends.

Out-of-control situations are investigated. An analytical system is considered out-of-control when any one of the following occurs:

- a. One or more points are outside the control limits.
- b. Two or more consecutive points are outside the warning limits.
- c. Seven or more consecutive points are on the same side of the mean.
- d. Cyclic (non-random) patterns are observed.
- e. Six or more consecutive points are in the same direction.

IX. PERFORMANCE AND SYSTEM AUDITS

An audit is a periodic check to ensure that the laboratory operates according to the policies and procedures described in the Quality Assurance Manual, complies with good laboratory practices, and meets the requirements of regulatory agencies. It may be either a system or performance audit.

A. SYSTEM AUDIT

A system audit is a review of laboratory operations conducted to verify that the laboratory has the necessary facilities, equipment, staff, and procedures in place to generate acceptable data. It is an on-site inspection of the laboratory's system of operations. It may be an internal or external audit. Internal inspections may be performed by quality assurance personnel. External audits are generally laboratory certification related activities.

1. INTERNAL

Periodically, the QA Manager (or designee) audits the laboratories and reports the results to the Division Manager, laboratory managers, and unit supervisors.

2. EXTERNAL

EMD laboratories are site visited every two years by auditors from the Environmental Laboratory Accreditation Program (ELAP) of the California Department of Health Services (CA DHS). Accreditation is by scientific discipline or field of testing. Non-compliances with good laboratory practices are identified and reported as deficiencies and are subject to corrective action before accreditation is renewed.

B. PERFORMANCE AUDIT

A performance audit is a review to evaluate the laboratory's analytical activities as well as the data produced by analysts. It verifies the ability of the laboratory to correctly identify and quantitate compounds in unknown samples submitted by the auditing entity. The purpose of these audits is to determine the laboratory's capability to generate scientifically sound data.

1. INTERNAL

Periodically, the QA staff submits unknown samples to the laboratories. These samples are usually from the inventory of previous Performance Evaluation (PE) samples from EPA or National Institute of Science and Technology (NIST)-accredited providers. Analysis of these samples is also a corrective action requirement for external performance evaluation (PE) results evaluated as "unacceptable". The QA staff may also conduct intra- and inter-comparison studies.

2. EXTERNAL

All laboratory units at EMD participate in mandatory QA Performance Evaluation (PE) Study Programs.

- a. Discharge Monitoring Report (DMR) QA Study is NPDES permit related. It consists of chemistry and whole effluent toxicity analyses. The PE samples are obtained from commercial providers which have been accredited by the National Institute of Standards and Technology (NIST). These samples are submitted for analysis on an annual basis to confirm the analytical capabilities of the laboratories used by permittees. EMD, as the provider of laboratory services to plant operations, performs testings for all the parameters listed in the permit as defined in the DMR program.
- b. Water Pollution (WP) Study Program serves a dual purpose. It satisfies EPA's wastewater testing laboratory requirements and meets one of ELAP's laboratory certification criteria. Test samples are analyzed for parameters listed under each field of testing on EMD certifications and are specified in the WP Program following certified procedures. A laboratory can participate in a WP Study twice a year.
- c. Hazardous Waste (HW) Study is also an ELAP requirement for certification. Test samples of solid or non-aqueous matrices are analyzed for organic and inorganic constituents using all methods that are listed in EMD hazardous waste fields of testing certification. Like the WP Study, the laboratory can participate in up to two study series.
- d. Microbiology Performance Evaluation (PE) Study, Drinking Water/Source Water-Wastewater Enumeration is also required for ELAP certification. Like all the other PE programs, the samples are acquired from NIST-approved vendors and analyses are done for certified analytes and methods. The laboratory can also participate in up to two study series.

X. PREVENTIVE MAINTENANCE

Preventive maintenance is the process of taking positive actions to minimize the occurrence of equipment and instrument failure. It ensures that equipment and instruments are calibrated and operated with the reliability required for quality results.

To minimize downtime and interruption of analytical work, preventive maintenance is routinely performed on each analytical instrument. Designated laboratory personnel are trained in routine maintenance procedures for major instruments. When repairs are necessary, they are performed by either trained staff or trained service engineers through commercial service contracts.

Complete or abbreviated operating instructions are kept with each instrument. Each laboratory unit has detailed SOP's or manuals describing preventive maintenance procedures and frequencies for routine inspection, cleaning, testing, calibration, and/or standardization after instrument failure. Information documenting the preventive maintenance and repairs performed on each analytical instrument is also maintained. Documentation may include date, description of maintenance (scheduled maintenance or instrument malfunction/failure), actual findings, probable cause, name of person who performed the service, and calibration or standardization procedures that were performed with acceptable results or that were within performance criteria.

XI. ASSESSMENT OF PRECISION AND ACCURACY

Data quality may be assessed in terms of precision, accuracy, representativeness, comparability, and completeness. The first two are assessed in quantitative terms, while the latter three are generally expressed as qualitative characteristics. Moreover, the latter three are usually determined outside of the laboratory operations and with limited involvement of laboratory staff. These measures are not included in this section. The internal quality control measures (i.e., precision and accuracy) that are performed in the laboratory to evaluate data quality are described in this section. Precision and accuracy data are documented and assessed through quality control charts as discussed in Chapter VIII, INTERNAL QUALITY CONTROL CHECKS.

A. PRECISION

Precision is the agreement among a set of replicate measurements without knowledge of the true value. It is the degree to which a measurement is reproducible. Precision, expressed as Relative Percent Difference (RPD), is determined for each laboratory unit by analyzing a number of duplicate pairs, or matrix-spiked duplicate samples. It can also be expressed as Relative Standard Deviation (RSD) when replicates of the same sample are analyzed, or laboratory control samples are routinely analyzed.

B. ACCURACY

Accuracy is a measurement of how close the result is to the true value. Each laboratory unit establishes its accuracy of measurement by analyzing QC check samples (spiked samples, standard reference materials from a reliable source, etc). The results of the QC samples are correlated to documented, certified values. Results of spiked samples are calculated as Percent Recovery. Actual Percent Recovery is compared to established reference data. The degree of closeness of the QC check sample contributes to the general assurance that the accuracy of the data is within acceptable limits.

XII. CORRECTIVE ACTION

Laboratory events and data that fall outside established acceptance criteria may require investigation or corrective action. The corrective action implemented depends on the type of analysis, the extent of the error, and whether the error can be determined and corrected. The purpose of the corrective action is to resolve the problem and to restore the system to proper operation. Investigative steps and corrective actions implemented are documented.

A. CORRECTIVE ACTION PROCEDURES

1. The initial corrective action procedures may be handled at the bench level. The unit supervisor is immediately notified of the deviation. The analyst reviews the sample preparation or extraction procedure for possible errors and checks the instrument calibration, calibration and spike solutions, instrument sensitivity, etc.
2. If the error cannot be resolved by the analyst, the unit supervisor has the responsibility of resolving the problem with assistance, if needed, from the laboratory manager and/or the QA Manager.
3. The corrective action adopted may be determined by the analyst, the unit supervisor, the laboratory manager, the QA Manager, or through a consensus. If needed, the final decision for corrective action rests on the laboratory manager after consultation with the QA Manager.
4. The unit supervisor shall maintain an accurate and up-to-date record of corrective actions taken in the unit. A corrective action report form (Figure I) is available for use.
5. The laboratory manager shall periodically review corrective action records and plan for system improvement by involving analysts, unit supervisors, and QA personnel.

B. GENERAL GUIDELINES FOR INITIATING A CORRECTIVE ACTION

1. Identify/define the problem.
2. Assign responsibility for investigating the problem.

3. Investigate and determine the causes.
4. Develop corrective action to eliminate the problem.
5. Measure the effectiveness of the corrective action.
6. Analyst, unit supervisor, laboratory manager, and the QA Manager meet to review and evaluate the process, if necessary.
7. Document the process by filling out the Corrective Action Report Form.

XIII. QUALITY ASSURANCE REPORTS

The QA Manager keeps the Division Manager, laboratory managers, and unit supervisors abreast of quality assurance issues in laboratory operations through meetings, memos, and reports. Typical reports may include internal system audit findings with recommended corrective actions, annual assessment of the Quality Assurance Program, and summary of laboratory proficiency in external Performance Evaluation QA Study Programs. Additional information is also provided through ongoing discussions and dialogues with laboratory staff and the QA Manager.

The internal system audit report issued by the QA Manager is a summary of a specific laboratory operation. Included are a summary of deficiencies, corrective actions required, and recommendations. A copy of this report is sent from the QA Manager to the unit supervisor, laboratory manager, and the Division Manager.

A division-wide annual assessment of the Quality Assurance Program is a progress report of the QA Program. This progress report is sent by the QA Manager to all unit supervisors, laboratory managers, and the Division Manager.

In addition, laboratory managers periodically perform operational system assessments based on information collected with the assistance of unit supervisors and staff. Such reports focus on systematic improvement of the quality of laboratory operations. These reports are submitted by laboratory managers to the Division Manager.

Laboratory proficiency in external Performance Evaluation QA Study Programs include test results, acceptable ranges, corrective actions required, if any, and recommendations. A copy of this report is sent from the QA Manager to the unit supervisors and laboratory managers.

XIV. QUALITY ASSURANCE MANUAL MANAGEMENT

A. RESPONSIBILITY FOR MANUAL MANAGEMENT

The QA Manager has the responsibility for reviewing, updating, and distributing the QA Manual. The QA Manual is distributed to all EMD laboratory staff after each revision. A distribution list is maintained and the revised pages are archived by the QA Manager. The QA Manual is a dynamic document that will be reviewed annually to comply with ELAP certification regulation and revised to meet new conditions and requirements.

B. GENERAL PROCEDURE FOR REVISION

1. Any laboratory personnel may suggest revisions to the manual.
2. Suggestions, brought to the attention of a QA Manager, should include reasons for the revision and a proposal for the revised statements.
3. The QA Manager will review on the merits of the proposed revision. If necessary, the QA Manager may discuss the proposal with the laboratory manager, unit supervisor, analysts, and any other personnel affected by the changes, including the person proposing the revision. As a result of the discussion, the suggestion may either be adopted, modified, or rejected.
4. When the manual is revised, the QA Manager will have the affected pages rewritten, reproduced, and distributed so that all copies of the QA Manual are revised.

**ENVIRONMENTAL MONITORING DIVISION
QUALITY ASSURANCE MANUAL**

REVISION NO. 7
DATE OF REVISION: NOVEMBER 2004

APPENDIX A

REQUIRED CONTAINERS, PRESERVATION TECHNIQUES, AND HOLDING TIMES*

PARAMETER NAME	CONTAINER ¹	PRESERVATION ^{2,3}	HOLDING TIME ⁴	MINIMUM SAMPLE SIZE (mL)/g
<u>Aquatic Toxicity Tests</u>				
Toxicity, acute and chronic	P, G	Cool, 4°C ¹⁶	36 hours	10000 or 20000
<u>Bacterial Tests:</u>				
Coliforms, Total and Fecal	P, G (Sterile)	Cool, 4°C, 0.008% Na ₂ S ₂ O ₃ ⁵	6 hours	100
Fecal streptococci/Enterococci	P, G (Sterile)	Cool, 4°C, 0.008% Na ₂ S ₂ O ₃ ⁵	6 hours	100
Salmonella	P, G (Sterile)	Cool, 4°C	6 hours	500
<u>Inorganic tests:</u>				
Alkalinity	P, G	Cool, 4°C	14 days	200
Ammonia	P, G	Cool, 4°C, H ₂ SO ₄ to pH <2	28 days	500/10
Biochemical Oxygen Demand	P, G	Cool, 4°C	48 hours	500
Boron	P, PFTE, or Quartz	HNO ₃ to pH <2	6 months	50/250
Biochemical Oxygen Demand, carb.	P, G	Cool, 4°C	48 hours	500
Bromide	P, G	None required	28 days	100
Chemical Oxygen Demand	P, G	Cool, 4°C, H ₂ SO ₄ to pH <2	28 days	250
Chloride	P, G	None required	28 days	50/250
Chlorine, Total Residual	P, G	None required	Analyze Immediately	100
Cyanide, total & amenable to chlorination	P, G	Cool, 4°C, NaOH to pH >12, 0.6g ascorbic acid ⁵	14 days ⁶	250/10
Fluoride	P	None required	28 days	50/250
Hardness	P, G	HNO ₃ to pH <2, H ₂ SO ₄ to pH <2	6 months	150
Hydrogen ion (pH)	P, G	None required	Analyze Immediately	50/50
Kjeldahl & organic nitrogen	P, G	Cool, 4°C, H ₂ SO ₄ to pH <2	28 days	500/10
Nitrate	P, G	Cool, to 4°C	48 hours	50/250
Nitrate-nitrite	P, G	Cool, to 4°C, H ₂ SO ₄ to pH <2	28 days	50/250
Nitrite	P, G	Cool, to 4°C	48 hours	50/250
Oil & Grease	G	Cool, to 4°C, HCl or H ₂ SO ₄ to pH <2	28 days	1000/250
Organic carbon	P, G	Cool, to 4°C, HCl or H ₂ SO ₄ or H ₃ PO ₄ to pH <2	28 days	100/10
Orthophosphate	P, G	Filter immediately, Cool to 4°C	48 hours	100
Oxygen, Dissolved Probe	Glass Bottle & Top	None required	Analyze Immediately	500
Oxygen, Winkler	Glass Bottle & Top	Fix on-site and store in dark	8 hours	500
Phenols	G only	Cool, 4°C, H ₂ SO ₄ to pH <2,	28 days	500
Phosphorous, (Elemental)	G	Cool, 4°C	48 hours	100
Phosphorus, Total	P, G	Cool, 4°C, H ₂ SO ₄ to pH <2	28 days	100/10
Residue, Total	P, G	Cool, 4°C	7 days	500
Residue, Filterable	P, G	Cool, 4°C	7 days	500
Residue, Nonfilterable (TSS)	P, G	Cool, 4°C	7 days	1000
Residue, Settleable	P, G	Cool, 4°C	48 hours	2000
Residue, Volatile	P, G	Cool, 4°C	7 days	500
Silica	P, PFTE, or Quartz	Cool, 4°C	28 days	200
Specific Conductance	P, G	Cool, 4°C	28 days	500
Sulfate	P, G	Cool, 4°C	28 days	50/250
Sulfide	P, G	Cool, 4°C add Zn acetate + NaOH to pH >9	7 days	500
Sulfite	P, G	None required	Analyze immediately	250
Surfactants	P, G	Cool, 4°C	48 hours	250
Temperature	P, G	None required	Analyze Immediately	
Turbidity	P, G	Cool, 4°C	48 hours	125

PARAMETER NAME	CONTAINER ¹	PRESERVATION ^{2,3}	HOLDING TIME ⁴ MIN.	SAMPLE SIZE (mL)/g ⁶
<u>Metals</u>				
Chromium VI	P, G	Cool, 4°C	24 hours	250
Hg ¹⁷	P, G	HNO ₃ to pH <2,	28 days	1000/10
Al, Sb, As, Ba, Be, Cd, Ca, Cr (total)	P, G	HNO ₃ to pH <2,	6 months	
1000/10 Co, Cu, Au, Ir, Fe, Pb, Mg, Mn, Mo, Ni, Os, Pd, Pt, K, Rh, Ru, Se, Ag, Na, Tl, Sn, Ti, V, Zn ⁷				
<u>Organic Tests⁸</u>				
Purgeable Halocarbons ⁷	G, Teflon-lined septum	Cool, 4°C, 0.008% Na ₂ S ₂ O ₃ ⁵	14 days	40/10
Purgeable Aromatic Hydrocarbons (Benzene, Ethylbenzene, Toluene)	G, Teflon-lined septum	Cool, 4°C, 0.008% Na ₂ S ₂ O ₃ ⁵ , HCl to pH 2 ⁹	14 days	40/10
Acrolein and acrylonitrile	G, Teflon-lined septum	Cool, 4°C, 0.008% Na ₂ S ₂ O ₃ ⁵ , adjust pH 4-5 ¹⁰	14 days	40/10
Nitrosoamines ^{4,11,14} , Nitroaromatics & Isophorone ^{4,11} , PAHs ^{4,11}	G, teflon-lined cap	Cool, 4°C, store in dark, 0.008% Na ₂ S ₂ O ₃ ⁵	7 days until extraction, 40 days after extraction	1000/50
Phenols ^{8,11} , Haloethers ^{8,11} , TCDD ^{8,11}	G, teflon-lined cap	Cool, 4°C, 0.008% Na ₂ S ₂ O ₃ ⁵	7 days until extraction, 40 days after extraction	1000/50
Benzidines ¹¹ (Benzidine, 3,3'-Dichlorobenzidine)	G, teflon-lined cap	Cool, 4°C, 0.008% Na ₂ S ₂ O ₃ ⁵	7 days until extraction ¹³	1000/50
Chlorinated Hydrocarbons ^{4,11} , Phenoxy Acid, Herbicides, Phthalate Esters ^{4,11} , PCBs ^{4,11} , Acrylonitrile	G, teflon-lined cap	Cool, 4°C,	7 days until extraction, 40 days after extraction	1000/50
Pesticides (§136.3 Table ID) ¹¹	G, teflon-lined cap	Cool, 4°C, pH 5 - 9 ¹⁵	7 days until extraction, 40 days after extraction	1000/50
<u>Radiological Tests</u>				
Alpha, Beta, Radium	P, G	HNO ₃ to pH <2	6 months	2000

- * 40 CFR Ch 1 (11-19-2002 ed), Part 136.3, Table II.
- 1 Polyethylene (P) or Glass (G). For microbiology, plastic sample containers must be made of sterilizable materials (polypropylene or other autoclavable plastic), except for samples collected for trace-level mercury (see footnote 17).
- 2 Sample preservation should be performed immediately upon collection. For composite chemical samples, each aliquot should be preserved at the time of collection. When use of an automated sampler makes it impossible to preserve each aliquot, then chemical samples may be preserved by maintaining at 4°C until compositing and sample splitting is completed, except for samples collected for trace-level mercury (see footnote 17).
- 3 When any sample is to be shipped common carrier or sent through the US Mails, it must comply with the Dept. of Transportation Hazardous Materials Regulations (49 CFR part 172). The person offering such material for transportation is responsible for ensuring such compliance. For the preservation requirements of this table, the Office of Hazardous Materials, Materials Transportation Bureau, Department of Transportation has determined that the Hazardous Materials Regulations do not apply to the following materials: Hydrochloric Acid (HCl) in water solutions at concentrations of 0.04% by weight or less (pH about 1.96 or greater); Nitric Acid (HNO₃) in water solutions at a concentration of 0.15% by weight or less (pH about 1.62 or greater); Sulfuric acid (H₂SO₄) in water solutions at concentrations of 0.35% by weight or less (pH about 1.15 or greater); and Sodium Hydroxide (NaOH) in water solutions at concentrations of 0.080% by weight or less (pH about 12.30 or less).
- 4 Samples should be analyzed as soon as possible after collection. The times listed are the maximum times that samples may be held before analysis and still be considered valid. (See footnote 17 for samples collected for trace level mercury). Samples may be held for longer periods only if the permittee, or monitoring laboratory, has data on file to show that for the specific types of samples under study, the analytes are stable for a longer time, and has received a variance from the Regional Administrator §136.3 (e). Some samples may not be stable for the maximum time period given in the table. A permittee, or monitoring laboratory, is obligated to hold the sample for a shorter time if knowledge exists that this is necessary to maintain sample stability. See § 136.3(e) for details. The term "analyze immediately" usually means within 15 minutes or less of sample collection.
- 5 Should be used only in the presence of chlorine.
- 6 Maximum holding time is 24 hours when sulfide is present. Optionally, all samples may be tested with lead acetate before pH adjustments in order to determine if sulfide is present. If sulfide is present, it can be removed by the addition of cadmium nitrate powder until a negative spot is obtained. The sample is filtered and then NaOH is added to pH 12.
- 7 Samples should be filtered immediately on-site before adding preservative for dissolved metals, except for samples collected for trace-level mercury (see footnote 17).

- 8 Guidance applies to samples to be analyzed by GC, LC, or CG/MS for specific compounds.
 9 Samples receiving no pH adjustment must be analyzed within 7 days of sampling.
 10 The pH adjustment is not required if acrolein will not be measured. Samples for acrolein receiving no pH adjustment must be analyzed within 3 days of sampling.
 11 When the extractable analysis of concern fall within a single chemical category, the specified preservative and maximum holding times should be observed for optimum safeguard of sample integrity. When the analytes of concern fall within two or more chemical categories, the sample may be preserved by cooling to 4°C, reducing residual chlorine with 0.008% sodium thiosulfate, storing in the dark, and adjusting the pH to 6-9; samples preserved in this manner may be held for seven days before extraction and for forty days after extraction. Exceptions to this optional preservation and holding time procedure are noted in footnote 5 (re the requirement for thiosulfate reduction of residual chlorine), and footnotes 12, 13 (re the analysis of benzidine).
 12. If 1,2-diphenylhydrazine is likely to be present, adjust the pH of the sample to 4.0-0.2 to prevent rearrangement to benzidine.
 13. Extracts may be stored up to 7 days before analysis if storage is conducted under an inert (oxidant-free) atmosphere.
 14. For the analysis of diphenylnitrosamine, add 0.008% Na₂S₂O₃ and adjust pH to 7 - 10 with NaOH within 24 hours of sampling.
 15. The pH adjustment may be performed upon receipt at the laboratory and maybe omitted if the samples are extracted within 72 hours of collection. For the analysis of aldrin, add 0.008% Na₂S₂O₃.
 16. Sufficient ice should be placed with the samples in the shipping container to ensure that ice is still present when the samples arrive at the laboratory. However, even if ice is present when the samples arrive, it is necessary to immediately measure the temperature of the samples and confirm that the 4C temperature maximum has not been exceeded. In the isolated cases where it can be documented that this holding temperature can not be met, the permittee can be given the option of on-site testing or can request a variance. The request for a variance should include supportive data which show that the toxicity of the effluent samples is not reduced because of the increased holding temperature.
 17. Samples collected for the determination of trace level mercury (100 ng/L) using EPA Method 1631 must be collected in tightly-capped fluoropolymer or glass bottles and preserved with BrCl or HCl solution within 48 hours of sample collection. The time to preservation may be extended to 28 days if a sample is oxidized in the sample bottle. Samples collected for dissolved trace level mercury should be filtered in the laboratory. However, if circumstances prevent overnight shipment, samples should be filtered in a designated clean area in the field in accordance with procedures given in Method 1669. Samples that have been collected for determination of total or dissolved trace level mercury must be analyzed within 90 days of sample collection.
 † Benzyl chloride, Bromodichloromethane, Bromoform, Bromomethane, Carbon tetrachloride, Chlorobenzene, Chloroethane, 2-Chloroethyl vinyl ether, Chloroform, Chloromethane, Dibromochloromethane, 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, Dichlorodifluoromethane, 1,1-Dichloroethane, 1,2-Dichloroethane, 1,1-Dichloroethene, trans-1,2-Dichloroethene, 1,2-Dichloropropane, cis-1,3-Dichloropropene, trans-1,3-Dichloropropene, Epichlorohydrin, Methylene chloride, 1,1,2,2-Tetrachloroethane, Tetrachloroethene, 1,1,1-Trichloroethane, 1,1,2-Trichloroethane, Trichloroethene, Trichlorofluoromethane, Vinyl chloride.
 ‡ Nitrosamines: N-Nitrosodimethylamine, N-Nitroso-di-n-propylamine, N-Nitrosodiphenylamine.
 Nitroaromatics and isophorone: 2,4-Dinitrotoluene, 2,6-Dinitrotoluene, Isophorone, Nitrobenzene.
 PAHs (Polynuclear Aromatic Hydrocarbons): Acenaphthene, Acenaphthylene, Anthracene, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(g,h,i)perylene, Benzo(k)fluoranthene, Chrýsene, Dibenzo(a,h)anthracene, Fluoranthene, Fluorene, Indeno(1,2,3-cd) pyrene, Naphthalene, Phenanthrene, Pyrène.
 § Phenols: 4-Chloro-3-methylphenol, 2-Chlorophenol, 2,4-Dichlorophenol, 2,4-Dimethylphenol, 2,3-Dinitrophenol, 2-Methyl-4,6-dinitrophenol, 2-Nitrophenol, 4-Nitrophenol, Pentachlorophenol, Phenol, 2,4,6-Trichlorophenol.
 Haloethers: Bis(2-chloroethoxy) methane, Bis(2-chloroethyl) ether, 4-Bromophenylphenyl ether, 4-Chlorophenylphenyl ether, 2,2-Oxybis(1-chloropropane).
 # Chlorinated hydrocarbons: 2-Chloronaphthalene, 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, Hexachlorobenzene, Hexachlorobutadiene, Hexachlorocyclopentadiene, Hexachloroethane, 1,2,4-Trichlorobenzene.
 Phthalate esters: Benzyl butyl phthalate, Bis(2-ethylhexyl) phthalate, Diethyl phthalate, Dimethyl phthalate, Di-n-butyl phthalate, Di-n-octyl phthalate.
 PCBs: PCB-1016, PCB-1221, PCB-1232, PCB-1242, PCB-1248, PCB-1254, PCB-1260.

APPENDIX B

PROCEDURE FOR THE DETERMINATION OF THE METHOD DETECTION LIMIT - REVISION 1.11, (40 CFR Ch.1 (7-1-93 Edition) Part 136, Appendix B]

A. SCOPE AND APPLICATION

This procedure is designed for applicability to a wide variety of sample types ranging from reagent (blank) water containing analyte to wastewater containing analyte. The MDL for an analytical procedure may vary as a function of sample type. The procedure requires a complete, specific, and well-defined analytical method. It is essential that all sample processing steps of the analytical method be included in the determination of the method detection limit.

The MDL obtained by this procedure is used to judge the significance of a single measurement of a future sample. This MDL procedure is designed for applicability to a broad variety of physical and chemical methods. To accomplish this, the procedure is device or instrument independent.

B. PROCEDURE

1. MAKE AN ESTIMATE OF THE DETECTION LIMIT USING ONE OF THE FOLLOWING:
 - a. The concentration value that corresponds to an instrument signal/noise in the range of 2.5 to 5.
 - b. The concentration equivalent of three times the standard deviation of replicate instrumental measurements of the analyte in reagent water.
 - c. The region of the standard curve where there is a significant change in sensitivity, i.e., a break in the slope of the standard curve.
 - d. Instrument limitations
It is recognized that the experience of the analyst is important to this process.

However, the analyst must include the above considerations in the initial estimate of the detection limit.
2. Prepare reagent (blank) water that is as free of analyte as possible. Reagent or interference-

free water is defined as a water sample in which analyte and interferent concentrations are not detected at the method detection limit of each analyte of interest. Interferences are defined as systematic errors in the measured analytical signal of an established procedure caused by the presence of interfering species (interferent). The interferent concentration is presupposed to be normally distributed in representative samples of a given matrix.

- 3a. If the MDL is to be determined in reagent (blank) water, prepare a laboratory standard (analyte in reagent water) at a concentration that is at least equal to or in the same concentration range as the estimated method detection limit. (Recommended between one and five times the estimated method detection limit.) Proceed to Step 4.
- 3b. If the MDL is to be determined in another sample matrix, analyze the sample. If the measured level of the analyte is in the recommended range of one to five times the estimated detection limit, proceed to Step 4.

If the measured level of the analyte is less than the estimated detection limit, add a known amount of the analyte to bring it to a concentration which is between one and five times the estimated detection limit.

If the measured level of analyte is greater than five times the estimated detection limit, there are two options:

- 1) Obtain another sample with a lower level of analyte in the same matrix, if possible.
 - 2) The sample may be used for determining the method detection limit if the analyte level does not exceed 10 times the MDL of the analyte in reagent water. The variance of the analytical method changes as the analyte concentration increases from the MDL hence, the MDL determined under these circumstances may not truly reflect method variances at lower analyte concentrations.
- 4a. Take a minimum of seven aliquots of the sample to be used to calculate the method detection limit and process each through the entire analytical method. Make all computations according to the defined method with final results in the method reporting units. If a blank measurement is required to calculate the measured level of analyte, obtain a separate blank measurement for each sample aliquot analyzed. The average blank measurement is subtracted from the respective sample measurements.

4b. It may be economically and technically desirable to evaluate the estimated method detection limit before proceeding with 4a. This will prevent repeating this entire procedure when the costs of analyses are high and insure that the procedure is being conducted at the correct concentration. It is quite possible that an inflated MDL will be calculated from data obtained at many times the real MDL, even though the level of analyte is less than five times the calculated method detection limit. To insure that the estimate of the method detection limit is a good estimate, it is necessary to determine that a lower concentration of analyte will not result in a significantly lower method detection limit. Take two aliquots of the sample to be used to calculate the method detection limit and process each through the entire method, including blank measurements as describe above in 4a. Evaluate these data.

- 1) If these measurements indicate the sample is in desirable range for determination of the MDL, take five additional aliquots and proceed. Use all seven measurements for calculation of the MDL.
- 2) If these measurements indicate the sample is not in correct range, re-estimate the MDL, obtain a new sample as in 3 and repeat either 4a or 4b.

5. Calculate the variance (S^2) and standard deviation (S) of the replicate measurements, as follows:

$$S^2 = 1/(n - 1) * [\sum X_i^2 - (\sum X_j)^2/n]$$

$$S = (S^2)^{1/2}$$

Where: X_i ; $i = 1$ to n , are the analytical results in the final method reporting units obtained from n sample aliquots and \sum refers to the sum of the X values from $i = 1$ to n .

6a. Compute the MDL as follows:

$$MDL = t_{(n-i, 1-\alpha=0.99)} (S)$$

Where: MDL = the method detection limit.

$t_{(n-i, 1-\alpha=0.99)}$ = the Students' t value appropriate for a 99% confidence level and a standard deviation estimate with $n-i$ degrees of freedom. See Table on page B-5.

S = standard deviation of the replicate analyses

6b. The 95% confidence interval estimates for the MDL derived in 6a are computed

according to the following equations derived from percentiles of the chi square over the degrees of freedom distribution ($\chi^2 Idf$).

$$\begin{aligned} \text{LCL} &= 0.64 \text{ MDL} \\ \text{UCL} &= 2.20 \text{ MDL} \end{aligned}$$

where: LCL and UCL are the lower and upper 95% confidence limits, respectively, based on seven aliquots.

7. OPTIONAL ITERATIVE PROCEDURE TO VERIFY THE REASONABLENESS OF THE ESTIMATE OF THE MDL AND SUBSEQUENT MDL DETERMINATIONS

- a. If this is the initial attempt to compute MDL based on the estimate of MDL formulated in Step 1, take the MDL as calculated in Step 6, spike the matrix at this calculated MDL, and proceed through the procedure starting with Step 4.
- b. If this is the second or later iteration of the MDL calculation, use S^2 from the current MDL calculation and S^2 from the previous MDL calculation to compute the F-ratio. The F-ratio is calculated by substituting the larger S^2 into the numerator S^2_A and the other into the denominator S^2_B . The computed F-ratio is then compared with the F-ratio found in the table which is 3.05 as follows:

If $S^2_A / S^2_B < 3.05$, then compute the pooled standard deviation by the following equation:

$$S_{\text{pooled}} = \sqrt{\left[\frac{6S_A^2 + 6S_B^2}{12} \right]}$$

If $S^2_A / S^2_B > 3.05$, re-spike at the most recent calculated MDL and process the samples through the procedure starting with Step 4. If the most recent calculated MDL does not permit qualitative identification when samples are spiked at that level, report the MDL as a concentration between the current and previous MDL which permits qualitative identification.

- c. Use the S_{pooled} as calculated in 7b to compute the final MDL according to the following equation:

$$\text{MDL} = 2.681 (S_{\text{pooled}})$$

where: 2.681 is equal to $t_{(12, 1-\alpha)} = 0.99$

- d. The 95% confidence limits for MDL derived in 7c are computed according to the following equations derived from percentiles of the chi squared over degrees of freedom distribution.

$$\text{LCL} = 0.72$$

$$\text{UCL} = 1.65$$

Where LCL and UCL are the lower and upper 95% confidence limits, respectively, based on 14 aliquots.

TABLE OF STUDENTS' t VALUES AT THE 99% CONFIDENCE LEVEL

NUMBER OF REPLICATES	Degrees of freedom (n-1)	t(en-1, 0.99)
7	6	3.143
8	7	2.998
9	8	2.896
10	9	2.821
11	10	2.764
16	15	2.602
21	20	2.588
26	25	2.485
31	30	2.457
61	60	2.390
∞	∞	2.326

C. Outliers in Data Set: An outlier in a data set can result from analyst error, malfunction of an instrument, inconsistent use of the SOP, unusual losses in sample preparation and/or contamination. If outliers occur too often, this could indicate that there may be deficiencies in the application or the analytical method used. These can be corrected to improve the measurement process. [One should always search diligently for causes of outliers before data are rejected. Whenever an outlier is suspected, the analyst should look for a reason for its occurrence]. This will help the laboratory to improve quality control procedures.

EMD will apply Grubbs Test for determination of outliers and data rejection while determining MDL and also when multiple measurements are done to achieve confidence on an analysis. If more than seven aliquots are prepared and analyzed, results from all aliquots must be used in the MDL determination unless the presence of an outlier is determined.

D. Grubbs Test for Outlying Observations:

This test is useful for making statistical decisions on the identification of outliers. The procedure for using it is as follows:

1. Arrange the data in the order of increasing numerical value.
 $X_1 < X_2 < X_3 < \dots < X_{n-1} < X_n$
2. Decide weather the smallest, X_1 , or the largest, X_n , is suspected to be an outlier.
3. Calculate the standard deviation (s) and Mean (\bar{X}) of the data set using all data.
4. Calculate appropriate value of T as follows:

$$T_1 = (\bar{X} - X_1) / s \quad \text{or} \quad T_n = (X_n - \bar{X}) / s$$

5. Choose the larger of T_1 and T_n value.
6. Refer to the Table of Critical Values for T in Grubbs test.
7. If either T_1 or T_n value is higher than the tabulated T value the tested data confirms to be an outlier and hence is rejected.

TABLE: CRITICAL VALUES FOR T IN THE GRUBBS TEST

Number of Data Points (n)	Critical Values of T
7	2.020
8	2.126
9	2.215
10	2.290
11	2.355
12	2.412

13	2.462
14	2.507
15	2.549

E. REPORTING

The analytical method used must be specifically identified by number or title and the MDL for each analyte expressed in the appropriate method reporting units. If the analytical method permits options which affect the method detection limit, these conditions must be specified with the MDL value. The sample matrix used to determine the MDL must also be identified with MDL value. Report the mean analyte level with the MDL and indicate if the MDL procedure was iterated. If a laboratory standard or a sample that contained a known amount of analyte was used for this determination, also report the mean recovery. If the level of analyte in the sample was below the determined MDL or exceeds 10 times the MDL of the analyte in reagent water, do not report a value for the MDL.

APPENDIX C

PROCEDURE TO DETERMINE METHOD DETECTION LIMIT (MDL) (PROVIDED BY ELAP)

A. DEFINITION

The Method Detection Limit (MDL) is defined as the minimum concentration of a substance that can be identified, measured, and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix containing analyte.

1. Make an estimate of the detection limit using one of the following methods:
 - a. A concentration value that corresponds to an instrument signal/noise ratio in the range of 2.5 to 5:1.
 - b. A low concentration value showing a break in the slope of the calibration curve.
2. Prepare reagent (blank) water that is as free of analyte as possible.
- 3a. If the MDL is to be determined in reagent water (blank), prepare a laboratory standard (analyte in reagent water) at a concentration which is between 1 and 5 times the estimated MDL. Proceed to step 4.
- 3b. If the MDL is to be determined in another sample matrix, analyze the sample. If the measured level of the analyte is in the recommended range of 1 to 5 times the estimated MDL, proceed to step 4.
4. Take a minimum of seven aliquots and process each through the entire analytical method.

5. Calculate the Standard Deviation of the replicate measurements.

$$S^2 = 1/(n - 1) * [\sum X_i^2 - (\sum X_i)^2/n]$$

$$S = (S^2)^{1/2}$$

Where: X_i ($i = 1$ to 7) are the analytical results from the seven sample aliquots.

$$MDL = S \times (3.143)$$

6. A lower concentration of the analyte will not result in a significantly lower calculated MDL.

Example of the MDL Calculation:

Run #1	X_i	X_i^2
True Value = 1.5 mg/L		
1.	1.2310	1.515
2.	1.3620	1.855
3.	1.5192	2.292
4.	1.5776	2.488
5.	1.6621	2.762
6.	1.7226	2.962
7.	1.7383	3.021
	$\sum X_i = 10.807$	$\sum X_i^2 = 16.895$
	$(\sum X_i)^2 = 116.79$	$S^2 = 0.215/6$
	$S = 0.189$	

$$(\sum X_i)^2/n = 16.68$$

$$MDL = (3.143) \times S$$

$$MDL = 0.594 \text{ mg/L}$$

Reference Glaser, J.A., Forest, D.L., McKee, G.d. Quave, S.A. and Budde, W.L., "Trace Analysis for Waste Waters," Environmental Science and Technology, 15, 1426, 1981.

APPENDIX D

STANDARD OPERATING PROCEDURES CONTENT AND FORMAT

The laboratories of EMD develop and maintain written documents that clearly and completely delineate the exact steps followed in performing every test method and procedure used in the laboratory. EMD managers, the QA/QC manager, and the division manager in conjunction with laboratory staff develop and maintain Standard Operation Procedures (SOPs)

A reference to a book of standard analytical test methods, guides, and practices published by a reputable organization such as the EPA, Standard Methods, ASTM, etc. is not sufficient to guarantee acceptable results. A significant part of the variability or results generated by different laboratories analyzing the same samples and citing the same general reference is due to differences in the way the analytical test methods and procedures are actually performed in each laboratory. These differences are often caused by the slight changes or adjustments allowed by the general reference, but that can affect the final results. Therefore the importance of SOPs lies in their impact on maintaining uniformity of test method performance and the utility of data generated by our laboratories.

SOPs contain step-by-step description of how every test method and procedure is performed in the laboratory to help guarantee uniform performance among different analysts using them. Those SOPs become the cornerstone of a laboratory's (EMD's) credibility.

EMD SOPs procedures are written, practiced, and maintained within the technical allowances of the mandated procedures (e.g. EPA Method 624) on which they are based.

The final version of the SOP is annotated with an effective date, revision number, and total number of pages. The effective date is the date when it was first approved to be used to produce actual data. The final version and all subsequent revisions are approved and signed by the laboratory manager, the quality assurance manager or their designees before being distributed to all analysts for bench use.

A master copy of all of EMD's SOPs will be kept in a database by the QA/QC unit. Therefore whenever a procedure or test method is modified, a Revised Version will be issued by the QA/QC and the master copy will be updated and archived along with the original version.

A very important factor in the use of SOPs is that the actual performance of each analyst while performing a test method or procedure is audited by the responsible supervisor or the quality assurance manager on a periodic basis, ideally not less than once per year.

The format to be used for EMD's SOPs is as follows:

Format for EMD SOPs:

1) Title

Name of the Laboratory
Name of the Test
Method Number
EMD SOP #
Revision Number and Effective Date
Name and Signature of the Laboratory Manager
Name and Signature of the Quality Assurance Manager
Total # of Pages and Pages Revised

Emd follows an SOP numbering system based on each unit, as follows:

1000 – Microbiology
2000 – Toxicity and Ocean Assessment
 2100 – Toxicity
 2200 – Ocean Assessment
3000 – LAG, DCTWRP, and TITP
 3100 – LAG
 3200 – DCTWRP
 3300 – TITP
4000 – Wet Chemistry
5000 – HTP Process Control
6000 – Metals
7000 – Organics
 7100 – Volatiles
 7200 – Semi-Volatiles
 7300 – Air
8000 – Sample Receiving

Normally, each unit assigns SOP numbers in chronological order followed by letters to reflect revisions numbers.

2) Scope and Application

Type of sample matrices and the analytical range to which this method can be applied

3) Summary of the Test Method

A short description highlighting the definitive chemical and procedural elements of the test method.

4) Interferences

A general overview of the kinds of matrices that can cause unacceptable performance and the general mechanisms for compensating for them.

5) Sample Collection, Preservation, and Handling

A description of the proper sampling procedure needed for this SOP. The description of the procedure must include: the type of sample container needed, types of preservatives to add, conditions under which the sample is to be transported, etc. Itemize any concerns relating to proper handling of samples after they are received for analysis. Specifically indicate holding times, storage procedures, and preservation procedures (applied at or prior to receipt).

6) Apparatus

Instruments and Labware used in the method or procedure.

7) Chemicals and Reagents

A listing of required chemicals, purity, grade, instructions for reagent makeup, standardizing, storing, and disposing of reagents, reagent and chemical shelf life.

8) Safety

Identify at each point in the test method where safety precautions are to be observed.

9) Procedure

A detailed description of each step considered essential to the reproducibility and accuracy of the test method as actually carried out in the laboratory. Include calibration procedures. Re-analysis sample preparation steps should be specified.

10) Calculation

A description of the mathematical steps required to complete the analysis. Include sample calculations and the number of significant figures to report. (Also include a sample of the analytical bench form.)

11) Data Management

Specific instruction on how and where data should be reported, and on what, how, and where data should be stored.

12) Quality Assurance and Quality Control

Itemize desirable and mandatory quality assurance procedures specific to this test method, especially equipment and reagent checks, recalibrations, and other system checks that should be done routinely. This section should be referenced in the procedure section.

Specify statistical quality control parameters: batch size, reference materials, frequencies, and data handling. This section should be referenced in the procedure section.

- 13) **Lowest Reporting Level**
The concentration below which all results are reported as “less than”, based on the specified procedure and sample size.
- 14) **Precision and Bias Statement**
A tabulation of these statistics as determined using this test method in your laboratory, by matrix and concentration level.
- 15) **References**
A listing of published documents supporting the specifics of this test method.
- 16) **Appendices**
Copies of documents, tables, or graphs that would be useful to have appended to the test method.

The standardized EMD cover page format is presented below:

City of Los Angeles
ENVIRONMENTAL MONITORING DIVISION
Name of Laboratory Unit
STANDARD OPERATING PROCEDURE for

Name of Analyte

(EPA Method XXX.X)SOP# XXXX

EffectiveDate: _____
Version No.: _____
Total Number of pages: _____
Pages Revised: _____

APPROVAL:

Laboratory Manager:

Signature: _____

Quality Assurance Officer

Signature: _____

Quality Assurance Manager:

Signature: _____

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APPENDIX E

TERMINOLOGY

Accreditation - A formal process by which a laboratory is evaluated by an authoritative body, with respect to established criteria, for its competence to perform a specified kind(s) of measurement

Accreditation Criteria - For laboratory accreditation, a set of requirements used by an accrediting body that a testing laboratory must meet to be accredited.

Accuracy - The degree of agreement of a measured value with the true or expected value of the quantity of concern. It is the closeness of agreement between an observed value and an accepted reference value. When applied to a set of observed values, accuracy is a measure of the combination of a random component and of a common systematic error (or bias) component.

Analyte - The specific component measured in a chemical analysis; also called analyte.

Assessment (of a laboratory) - The on-site examination of a laboratory's compliance with accreditation criteria.

Assessor (of a laboratory) - An individual who carries out some or all functions related to laboratory assessment.

Assignable cause - A cause believed to be responsible for an identifiable change of precision or accuracy of a measurement process.

Audit - A systematic and independent examination to determine whether quality activities and related results comply with planned arrangements and whether these arrangements are implemented effectively and are, suitable to achieve objectives.

Batch - Environmental samples, which are prepared and/or analyzed together with the same process and personnel, using the same lot(s) of reagents. Preparation Batch is composed of one to 20 environmental samples of the same NELAP- defined matrix, meeting the "Batch" criteria and with a maximum of 24 hours between the start of processing of the first and last sample in the batch. Analytical Batch is composed of prepared environmental samples (extracts, digestates or concentrates), which are analyzed together as a group. An analytical batch can include prepared samples originating from various environmental matrices and can exceed 20 samples.

Bias - A systematic error inherent in a method or caused by some artifact or idiosyncrasy of the measurement system. Temperature effects and extraction inefficiencies are examples of systematic error. Blanks, contamination, mechanical losses, and calibration errors are some artifacts of a measurement system. Or it is a deviation due to matrix effects of the measured value from a known spiked sample. It may be assessed by comparing a measured value to an accepted reference value in a sample of known concentration or by determining the recovery of a known amount, of contaminant spiked into a sample.

Blank - A synthetic sample which does not contain the analyte of interest. Or it is a material made up to contain all the components of a product other than the analyte. It is the measured value obtained when a specified component of a sample is not present during the measurement.

Blind Sample - A sample submitted for analysis whose composition is known to the submitter, but unknown to the analyst. It is a way to test the proficiency of a measurement process.

Calibration - Comparison of a measurement standard or instrument with another standard or instrument to report or eliminate by adjustment any variation (deviation) in the accuracy of the item being compared.

Certification - A process by which a third party gives written assurance (certificate of conformity) that a product, process, or service conforms to specified requirements.

Central Line - The long-term expected value of a variable displayed on a control chart.

Certified Reference Material (CRM) - A reference material, one or more of whose property values are certified by a technically valid procedure, accompanied by or traceable to a certificate or other document which a certifying body issues.

Certified Value - The value that appears in a certificate as the best estimate of the value for a property of a reference material.

Chain of Custody - A detailed written and legal document of all transactions in which the samples are transferred from the custody of one individual to another.

Check Standard - In physical calibration, an artifact measured periodically, the results of which typically are plotted on a control chart to evaluate the measurement process.

Coefficient of Variation - The standard deviation divided by the value of the parameter measured.

Composite Sample - A sample composed of two or more increments selected to represent a population of interest. A mixture of grab samples collected at the same sampling point at different times.

Confidence Interval - That range of values, calculated from an estimate of the mean and the standard deviation, which is expected to include the population mean with a stated level of confidence. Confidence intervals in the same context may also be calculated for standard deviations, lines, slopes, and points.

Control Chart - A graphical plot of test results with respect to time or sequence of measurement, together with limits within which they are expected to lie when the system is in a state of statistical control.

Control Limit - The limits shown on a control chart beyond which it is highly improbable that a point could lie while the system remains in a state of statistical control.

Control Sample - A material of known composition analyzed with test samples to monitor the performance of the system.

Corrective Action - Action taken to eliminate the causes of an existing nonconformity, defect, or other undesirable situation in order to prevent recurrence. It may involve changes, such as in procedures and systems, to achieve quality improvement.

Data Quality Objectives (DQO's) - A statement of the overall level of uncertainty that a decision-maker is willing to accept in results derived from environmental data. It is usually expressed in terms of objectives for precision, bias, and detection limit.

Deficiency - A departure from, or noncompliance with, specified accreditation criteria. It describes a situation which exists, but does not comply with requirements.

Detection Limit - The smallest concentration/amount of some component of interest that can be measured by a single measurement with a stated level of confidence.

Double Blind - A sample whose composition is known to the submitter, but neither its composition nor its identification as a check sample is known to the analyst.

Duplicate Measurement - A second measurement made on the same (or identical) sample of material to assist in the evaluation of measurement variance.

Duplicate Sample - A second sample randomly selected from a population of interest to assist in the evaluation of sample variance.

Environmental Laboratory Accreditation Program (ELAP) - The California Department of Health Services' accrediting agency for laboratories which perform analyses of drinking water, wastewater, hazardous waste, contaminated soils or sediments, or any combination of these for regulatory purposes.

Error - Difference between the true or expected value and the measured value of a quantity or parameter.

Field Blank - independent samples which are collected as close as possible to the same point in space and time. They are two separate samples taken from the same source, stored in separate containers, and analyzed independently. Duplicates are useful in documenting the precision of the sampling process.

Grab Sample - A sample collected at a specific time and place.

Good Laboratory Practice (GLP) - An acceptable way to perform some basic operation or activity in a laboratory that is known or believed to influence the quality of its outputs. GLP's ordinarily are independent of the measurement techniques used.

Homogeneity - The degree to which a property or substance is randomly distributed throughout a material.

Implementation - A process for introducing a new system into the mainstream of a company or laboratory and the individual work places and jobs.

Informational Value - Value of a property not certified, but provided because it is believed to be reliable and to provide information important to the certified material.

Intercalibration - The process, procedures, and activities used to ensure that the several laboratories engaged in a monitoring program can produce comparable data. When comparable data outputs are achieved and this situation is maintained, the laboratories are said to be intercalibrated.

Laboratory Control Sample - A known matrix spiked with compound(s) representative of the target analytes. It is used to document laboratory performance.

Laboratory Information Management System (LIMS) - A database tailored to the analytical laboratory so that it can handle data generated by the analysis of samples and integrates sample information with results obtained from analytical instruments, reducing administrative tasks and increasing the production of final reports. It provides tracking, database query, integrated graphics, data archiving, audit trails, and report formatting.

Limit of Linearity (LOL) - The upper limit of concentration or amount of substance for which incremental additions produce constant increments of response.

Matrix- The component or substrate that contains the analyte of interest. For purposes of batch and QC requirement definitions, the following matrix distinctions shall be used:

- **Aqueous:** Any aqueous sample excluded from the definition of Drinking Water matrix or Saline/Estuarine source. Includes surface water, groundwater, effluent, industrial waste, and Toxicity Characteristic Leaching Procedure (TCLP) or other extracts.
- **Drinking Water:** Any aqueous sample that has been designated a potable or potential potable water source.

- **Saline/Estuarine:** An aqueous sample from an ocean or estuary, or other salt water sources such as the Great Salt Lake.
- **Non-aqueous Liquid:** Any organic liquid with <15% settleable solids.
- **Biological Tissue:** Any sample of a biological origin such as fish tissue, shellfish, or plant material. Such samples shall be grouped according to origin.
- **Solids:** Includes soils, sediments, sludges, and other matrices with >15% settleable solids.
- **Chemical Waste:** A product or by-product of an industrial process that results in a matrix not previously defined.
- **Air:** Whole gas or vapor samples including those contained in flexible or rigid wall containers and the extracted concentrated analytes of interest from a gas or vapor that are collected with a sorbent tube, impinger solution, filter, or other device.

Matrix Duplicate - An intralaboratory split sample that is used to document the precision of a method in a given sample matrix.

Matrix Spike - An aliquot of sample spiked with a known concentration of target analyte(s). The spiking occurs prior to sample preparation and analysis. A matrix spike is used to document the bias of a method in a given sample matrix.

Matrix Spike Duplicate - Intralaboratory split samples spiked with identical concentrations of target analyte(s). The spiking occurs prior to sample preparation and analysis. They are used to document the precision and bias of a method in a given sample matrix.

Method - A series of measurement techniques and the order in which they are used.

Method Blank - An analyte-free matrix to which all reagents are added in the same volumes or proportions as used in sample processing. The method blank is carried through the complete sample preparation and analytical procedure. The method blank is used to document contamination resulting from the analytical process.

Method Detection Limit - The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero; determined by analysis of a sample in a given matrix type containing the analyte.

Method Validation - A process of determining and evaluating the attributes or figures of merit of a method.

Minimum Level (ML) - The concentration at which the entire analytical system must give a recognizable signal and acceptable calibration point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all the method-specific sample weights, volume and processing steps have been followed.

Organic-Free Water - Water in which an interferent is not observed at the method

detection limit of the compounds of interest.

Outlier - An individual measurement, from a set of replicates, which differs so markedly from the other replicates as to raise the question of measurement error.

Performance Audit - A process to evaluate the proficiency of an analyst or laboratory by evaluation of the results obtained on known test materials.

Population - A generic term denoting any finite or infinite collection of individual things, objects, or events; in the broadest concept, an aggregate determined by some property that distinguishes things that do not belong.

Precision - The agreement among a set of replicate measurements without knowledge of the true value. Usually expressed by standard deviation, coefficient of variation, or range. It is a degree of mutual agreement characteristic of independent measurements as a result of repeated application of the process under specified conditions.

Preventive Maintenance - Positive action taken to limit failure of equipment or eliminate the causes of a potential instrument/equipment malfunction in order to ensure fewer and shorter equipment breakdowns and increase measurement system reliability.

Primary Standard - A substance having one or more values which can be accepted (within specific limits) without question for use in standardizing or measuring the same property in another material.

Procedure - A set of systematic instructions for using a method of measurement or sampling or of the steps or operations associated with them.

Proficiency Testing - Determination of the laboratory calibration or testing performance by means of interlaboratory intercomparisons.

Project - Single or multiple data collection activities that are related through the same planning sequence.

Protocol - A procedure specified to be used when performing a measurement or related operation as a condition to obtain results that could be acceptable to the specifier.

Protocol for a Specific Purpose (PSP) - Detailed instructions for the performance of all aspects of a specific measurement program; sometimes referred to as the project QA plan.

Quality - An estimation of acceptability or suitability for a given purpose of an object, item, or tangible or intangible thing. It is the totality of characteristics of an entity that bears on its ability to satisfy stated and implied needs.

Quality Assessment - The overall system of activities whose purpose is to provide assurance that the quality control activities are done effectively. It involves a continuing

evaluation of the performance of the production system and the quality of the products produced.

Quality Assurance - A system of activities whose purpose is to provide to the producer or user of a product or service the assurance that it meets defined standards of quality. It is all the planned and systematic actions implemented within the quality system, and demonstrated as needed, to provide adequate confidence that an entity will fulfill requirements for quality. It consists of two separate but related activities, quality control and quality assessment.

Quality Assurance Plan - A document setting out the specific quality practices, resources and sequence of activities relevant to a particular product, project, or contract. It usually makes reference to the parts of the quality assurance manual applicable to a specific case.

Quality Assurance Project Plan - An orderly assemblage of detailed procedures designed to produce data of sufficient quality to meet the data quality objectives for a specific data collection activity.

Quality Assurance Program - The decisions and actions required to attain and maintain the quality of performance and output that meet quality standards.

Quality Assurance Program Manual - A document stating the quality assurance policy and describing the quality system of an organization or a laboratory. It informs laboratory management and staff, regulatory agencies, and data users about the program.

Quality Audit - A systematic and independent examination to determine whether quality activities and related results comply with planned arrangements and whether these arrangements are implemented effectively and are suitable to achieve objectives. It is carried out by staff not having direct responsibility in the areas being audited but, preferably, working in cooperation with the relevant personnel.

Quality Control - The overall system of activities whose purpose is to control the quality of a product or service so that it meets the needs of users. The aim is to provide quality that is satisfactory, adequate, dependable, and economical. It involves operational techniques and activities aimed both at monitoring a process and at eliminating causes of unsatisfactory performance in order to achieve economic effectiveness. Some quality control and quality assurance actions are interrelated.

Quality Policy - Overall intentions and direction of an organization with regard to quality, as formally expressed by top management.

Quality System - Comprehensive organizational structure, procedures, processes, and resources needed to implement quality management in order to meet quality objectives.

Random Sample - A sample selected from a population by a randomization process.

Reference Material - A substance of known composition, usable as an analytical standard, for equipment calibration or for assessment of accuracy of a test procedure.

Reference Method - A method which has been specified as capable, by virtue of recognized accuracy, of providing primary reference data.

Relative Standard Deviation - The coefficient of variation expressed as a percentage.

Replicate - A counterpart of another, usually referring to an analytical sample or a measurement. It is the general term for one of several identical samples or measurements; whereas duplicate is the specific term for two samples or measurements.

Reproducibility - The demonstration that a method can be performed by multiple operators in multiple laboratories.

Routine Method - A method used in recurring analytical problems.

Sample - A portion of a population or lot. It may consist of an individual or groups of individuals. It may refer to objects, materials, or measurements, conceivably as part of a larger group that could have been considered.

Secondary Standard - A substance for which one or more values has been determined by comparison with a primary standard.

Selectivity - The ability of methodology or instrumentation to respond to a desired substance or constituent and not to others.

Sensitivity - The ability of a procedure or instrument to discriminate between samples having different concentrations or containing different amounts of an analyte.

Significant Figures - Digits known to be accurate plus one that is uncertain. It indicates the accuracy limitations of an analytical measurement due to the chemical nature of the procedure, instrumentation, and/or methodology.

Special Cause - A cause of variance or bias that is external (not inherent) to the measurement system.

Specificity - The ability of a procedure or instrument to respond only to the analyte, without interference from other materials that may or may not be present.

Split Sample - A replicate portion or subsample of a total sample obtained in such a manner that it is not believed to differ significantly from other portions of the same sample. It is an aliquot of sample taken from the same container and analyzed independently. These are usually taken after mixing or compositing and are used to document intra- or interlaboratory precision.

Standard - A substance or material with properties believed to be known with sufficient accuracy to permit its use to evaluate the same property of another. In chemical measurements, it often describes a solution or substance commonly prepared by the analyst to establish a calibration curve or the analytical response function of an instrument.

Standard Addition - A method in which small increments of the substance under measurement are added to the sample being tested to establish a response function, or to determine by extrapolation the amount of the constituent originally present in the test sample. It is the practice of adding a known amount of an analyte to a sample immediately prior to analysis. It is typically used to evaluate interferences.

Standard Curve - A plot of concentrations of known analyte standards versus the instrument response to the analyte.

Standardization - The process whereby the value of a potential standard is fixed by measurement with respect to a standard(s) of known value.

Standard Method - A method (or procedure) of test developed by a standards writing organization, based on consensus opinion or other criteria, and often evaluated for its reliability by a collaborative testing procedure.

Standard Operations Procedure (SOP) - A procedure adopted for repetitive use when performing a specific measurement or sampling operation. It may be a standard method or one developed by the user.

Standard Reference Material - A reference material distributed and certified by the National Institute for Standards Technology (NIST), formerly the National Bureau of Standards (NBS).

Statistical Process Control (SPC) - The application of statistical techniques for measuring and analyzing the variation in processes.

Subsample - A portion taken from a sample. A laboratory sample may be a subsample of a gross sample; similarly, a test portion may be a subsample of a laboratory sample.

Surrogate - An organic compound that is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but that is not present in the sample.

Technique - A physical or chemical operation (or instrument) applied within a test procedure, such as titration, high-pressure liquid chromatography, or atomic absorption spectroscopy, to determine the composition (analysis) of materials.

Tolerance Interval - Range of values calculated from an estimate of the mean and standard deviation within which a specified percentage of individual values of a population (measurements or sample) are expected to lie with a stated level of confidence.

Traceability - The ability to trace the origin of materials, parts, calculation process, data, and/or primary standards by means of recorded identifications or documentation. It is also the ability to trace the source of uncertainty of a measurement or a measured value.

Training - Formal or informal instruction designed to provide competence of a specific nature.

Uncertainty - The range of values within which the true value is estimated to lie. It is a best estimate of possible inaccuracy due to both random and systematic error.

Validation - The process by which a sample, measurement method, or a piece of data is deemed useful for a specified purpose. It is the process of assuring that a procedure or technique provides acceptable results for a particular purpose.

Variance - The value approached by the average of the sum of the squares of deviations of individual measurements from the limiting mean.

Warning Limits - The limits shown on a control chart within which most of the test results are expected to lie (within a 95% probability) while most of the system remains in a state of statistical control.

TABLE

SWRCB MINIMUM LEVELS IN PPB (ug/L)¹⁴

Table 1 - VOLATILE SUBSTANCES*	GC	GCMS
1,1 Dichloroethane	0.5	1
1,1 Dichloroethene	0.5	2
1,1,1 Trichloroethane	0.5	2
1,1,2 Trichloroethane	0.5	2
1,1,2,2 Tetrachloroethane	0.5	1
1,2 Dichlorobenzene (volatile)	0.5	2
1,2 Dichloroethane	0.5	2
1,2 Dichloropropane	0.5	1
1,3 Dichlorobenzene (volatile)	0.5	2
1,3 Dichloropropene (volatile)	0.5	2
1,4 Dichlorobenzene (volatile)	0.5	2
Acrolein	2.0	5
Acrylonitrile	2.0	2
Benzene	0.5	2
Bromoform	0.5	2
Bromomethane	1.0	2
Carbon Tetrachloride	0.5	2
Chlorobenzene	0.5	2
Chlorodibromo-methane	0.5	2
Chloroethane	0.5	2
Chloroform	0.5	2
Chloromethane	0.5	2
Dichlorobromo-methane	0.5	2
Dichloromethane	0.5	2
Ethylbenzene	0.5	2
Tetrachloroethene	0.5	2
Toluene	0.5	2
trans-1,2 Dichloroethylene	0.5	1
Trichloroethene	0.5	2
Vinyl Chloride	0.5	2

*The normal method-specific factor for these substances is 1, therefore, the lowest standard concentration in the calibration curve is equal to the above ML value for each substance.

Table Ib - SEMI-VOLATILE SUBSTANCES*	GC	GCMS	LC	COLOR
1,2 Benanthracene	10	5		
1,2 Dichlorobenzene (semivolatile)	2	2		
1,2 Diphenylhydrazine		1		
1,2,4 Trichlorobenzene	1	5		
1,3 Dichlorobenzene (semivolatile)	2	1		
1,4 Dichlorobenzene (semivolatile)	2	1		
2 Chlorophenol	2	5		
2,4 Dichlorophenol	1	5		
2,4 Dimethylphenol	1	2		
2,4 Dinitrophenol	5	5		
2,4 Dinitrotoluene	10	5		
2,4,6 Trichlorophenol	10	10		
2,6 Dinitrotoluene		5		
2- Nitrophenol		10		
2-Chloroethyl vinyl ether	1	1		
2-Chloronaphthalene		10		
3,3' Dichlorobenzidine		5		
3,4 Benzofluoranthene		10	10	
4 Chloro-3-methylphenol	5	1		
4,6 Dinitro-2-methylphenol	10	5		
4- Nitrophenol	5	10		
4-Bromophenyl phenyl ether	10	5		
4-Chlorophenyl phenyl ether		5		
Acenaphthene	1	1	0.5	
Acenaphthylene		10	0.2	
Anthracene		10	2	
Benzidine		5		
Benzo(a) pyrene(3,4 Benzopyrene)		10	2	
Benzo(g,h,i)perylene		5	0.1	
Benzo(k)fluoranthene		10	2	
bis 2-(1-Chloroethoxyl) methane		5		
bis(2-chloroethyl) ether	10	1		
bis(2-Chloroisopropyl) ether	10	2		
bis(2-Ethylhexyl) phthalate	10	5		
Butyl benzyl phthalate	10	10		
Chrysene		10	5	
di-n-Butyl phthalate		10		
di-n-Octyl phthalate		10		
Dibenzo(a,h)-anthracene		10	0.1	
Diethyl phthalate	10	2		

Dimethyl phthalate	10	2	
Fluoranthene	10	1	0.05
Fluorene		10	0.1
Hexachloro-cyclopentadiene	5	5	

Table Ib - SEMI-VOLATILE SUBSTANCES*	GC	GCMS	LC	COLOR
Hexachlorobenzene	5	1		
Hexachlorobutadiene	5	1		
Hexachloroethane	5	1		
Indeno(1,2,3,cd)-pyrene		10	0.05	
Isophorone	10	1		
N-Nitroso diphenyl amine	10	1		
N-Nitroso-dimethyl amine	10	5		
N-Nitroso -di n-propyl amine	10	5		
Naphthalene	10	1	0.2	
Nitrobenzene	10	1		
Pentachlorophenol	1	5		
Phenanthrene		5	0.05	
Phenol **	1	1		50
Pyrene		10	0.05	

* With the exception of phenol by colorimetric technique, the normal method-specific factor for these substances is 1000, therefore, the lowest standard concentration in the calibration curve is equal to the above ML value for each substance multiplied by 1000.

** Phenol by colorimetric technique has a factor of 1.

Table Ic - INORGANICS*

	FAA	GFAA	ICP	ICPMS	SPGFAA	HYDRIDE	CVAA	COLOR	DCP
Antimony	10		5	50	0.5	5		0.5	1000
Arsenic			2	10	2	2		1	20
Beryllium	20		0.5	2	0.5	1			1000
Cadmium	10		0.5	10	0.25	0.5			1000
Chromium (total)	50		2	10	0.5	1			1000
Chromium VI	5								10
Copper	25		5	10	0.5	2			1000
Cyanide									5
Lead	20		5	5	0.5	2			10,000
Mercury					0.5			0.2	
Nickel	50		5	20	1	5			1000
Selenium			5	10	2	5		1	1000

	FAA	GFAA	ICP	ICPMS	SPGFAA	HYDRIDE	CVAA	COLOR	DCP
Silver	10	1	10	0.25	2				1000
Thallium	10	2	10	1	5				1000
Zinc	20		20	1	10				1000

* The normal method-specific factor for these substances is 1, therefore, the lowest standard concentration in the calibration curve is equal to the above ML value for each substance.

Table Id - PESTICIDES – PCBs*	GC
4,4'-DDD	0.05
4,4'-DDE	0.05
4,4'-DDT	0.01
a-Endosulfan	0.02
a-Hexachloro-cyclohexane	0.01
Aldrin	0.005
b-Endosulfan	0.01
b-Hexachloro-cyclohexane	0.005
Chlordane	0.1
d-Hexachloro-cyclohexane	0.005
Dieldrin	0.01
Endosulfan Sulfate	0.05
Endrin	0.01
Endrin Aldehyde	0.01
Heptachlor	0.01
Heptachlor Epoxide	0.01
Lindane(g-Hexachloro-cyclohexane)	0.02
PCB 1016	0.5
PCB 1221	0.5
PCB 1232	0.5
PCB 1242	0.5
PCB 1248	0.5
PCB 1254	0.5
PCB 1260	0.5
Toxaphene	0.5

* The normal method-specific factor for these substances is 100, therefore, the lowest standard concentration in the calibration curve is equal to the above ML value for each substance multiplied by 100.

Techniques:

GC - Gas Chromatography

GCMS - Gas Chromatography/Mass Spectrometry

HRGCMS - High Resolution Gas Chromatography/Mass Spectrometry (i.e., EPA 1613, 1624, or 1625)

LC - High Pressure Liquid Chromatography

FAA - Flame Atomic Absorption

GFAA - Graphite Furnace Atomic Absorption

HYDRIDE - Gaseous Hydride Atomic Absorption

CVAA - Cold Vapor Atomic Absorption

ICP - Inductively Coupled Plasma

ICPMS - Inductively Coupled Plasma/Mass Spectrometry

SPGFAA - Stabilized Platform Graphite Furnace Atomic Absorption (i.e., EPA 200.9)

DCP - Direct Current Plasma

COLOR – Colorimetric

CAR No.: _____

Results of the Corrective Action:

Data Corrected:

Date Corrected: _____

Acceptance of the Corrective Action:

Lab Manager (date)

QA Officer or Lab Director(date)

Note: Lab retains the original record and provides a copy to QAU.

FIGURE 1 - 2

REFERENCES

1. American Association for Laboratory Accreditation, (A2LA), "General Requirements for Accreditation", Gaithersburg, MD 20878, 1993.
2. California Code of Regulations, (CCR), Title 22, Social Security
 - a. Division 4, Chapter 19, "Certification of Environmental Laboratories".
 - b. Division 1, Part 2, Chapter 7.5, "Health and Safety Code".
 - c. Division 4.5, Chapter 11, "Criteria for Identification of Hazardous and Extremely Hazardous Wastes".
3. California Ocean Plan, SWRCB, CAEPA, 2001.
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Done

Good 2

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Table 10

Region 4
TMDL Consent Decree Schedule
Listed by Watershed

Comments on the proposed 2006 303d List
City of Los Angeles
Bureau of Sanitation

TMDL Analytical Unit Number	Watershed / Segments	303 (d) Listed Pollutants	REQUIRED COMPLETION DATE OF TMDLs (Effective Date March 1999)						YEAR
			2001	2002	2003	2004	2005	2006	
LA River									
1	11	Los Angeles River Reach 1 - 5 plus tributaries			X				
2	12	Los Angeles River Reach 1 - 5 plus tributaries	trash	X					
3	13	Los Angeles River Reach 2, 4 plus tributaries	Pb, Cu, Cd, Se				X		
4	14	Los Angeles River Reach 5 (within Sepulveda Basin)	chlorpyrifos						X
5	15	Los Angeles River Reach 2, 4, 6 plus tributaries	coliform						2012
6	18	Los Angeles River Reach 5 (within Sepulveda Basin)	ChemA						2012
7	21	Los Angeles River Reach 2, 5	oil						2012
8	22	Los Angeles River Reach 6 (u/s of Sepulveda Basin)	Volatile organics						2012
9	16	Echo Park Lake	trash						2012
10	17	Echo Park Lake	pH, NH3, eutroph., algae, odors						2012
11	19	Echo Park Lake	PCBs						2012
12	20	Echo Park Lake	Cu, Pb						2012
13	16	Lincoln Park Lake	trash						2012
14	17	Lincoln Park Lake	NH3, low DO, org. enrichment, Eutroph., odors						2012
15	20	Lincoln Park Lake	Pb						2012
Santa Monica Bay WMA									
16	48	SMB	beach closures, coliform		X				
17	46	Marina Del Rey Harbor Beach & Back Basins	beach closures, coliform					X	
18	56	Marina Del Rey Harbor - Back Basins	Pb, Cu, Zn			X			
19	49	Ballona Creek and Estuary	coliform, enteric viruses, shellfish harvesting adv.						X
20	51	Ballona Creek and Wetland	trash	X					
21	55	Ballona Creek and Estuary	PCBs, DDT, ChemA, chlordane, dieldrin, sediment toxicity, PAHs				X		
22	57	Ballona Creek, Estuary, and Wetland	Pb, Ag, As, Cu, Cd, Zn, toxicity				X		
23	70	Ballona Creek	TBT						2012
24	65	Ballona Wetland	exotic vegetation, habitat alteration, hydromodification, reduced tidal flushing						2012
25	52	Santa Monica Bay Nearshore and Offshore Zone	Hg, Cd, Cu, Pb, Ni, Ag, Zn				X		
26	53	Santa Monica Bay Nearshore and Offshore Zone	chlordane						X
27	58	Santa Monica Bay Nearshore and Offshore Zone	DDT, PCBs, PAHs, sediment toxicity, fish consumption advisory						2012
28	66	Santa Monica Bay Nearshore and Offshore Zone	debris						2012
29	58	Cabrillo Beach (outer)	DDT, PCBs						2012
30	59	Sepulveda Canyon	NH3						2012
31	60	Sepulveda Canyon	Pb						2012
32	59	Pico Kenter Drain	NH3						2012
33	60	Pico Kenter Drain	Pb, Cu, toxicity						2012
34	64	Pico Kenter Drain	trash						2012
35	60	Topanga Cyn Creek	Pb						2012
36	60	Santa Monica Canyon	Pb						2012
37	62	Ashland Avenue Drain	low DO, org. enrichment						2012
38	62	Ashland Avenue Drain	toxicity						2012




Table 10

**Region 4
TMDL Consent Decree Schedule
Listed by Watershed**

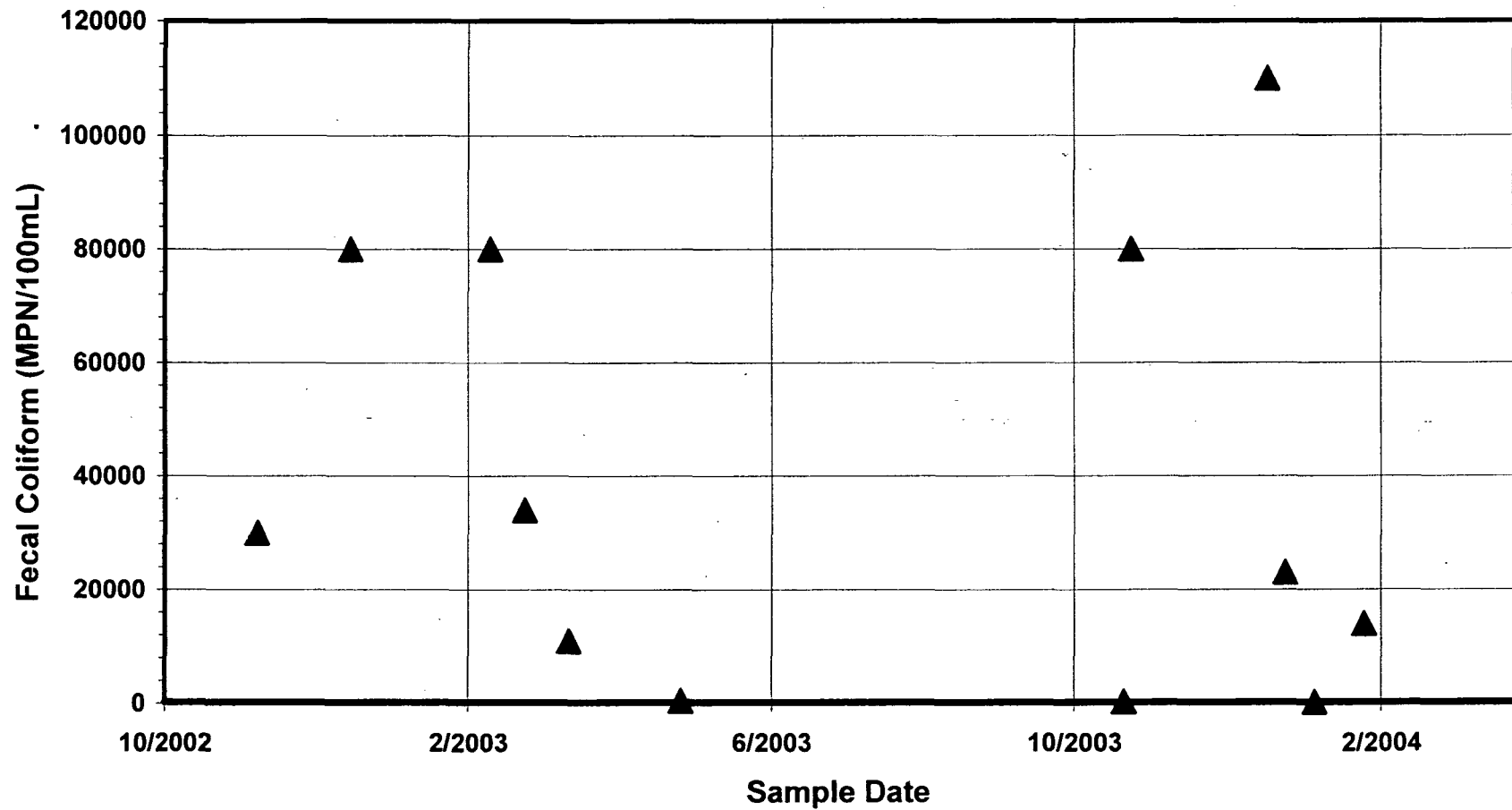
Comments on the proposed 2006 303d List
City of Los Angeles
Bureau of Sanitation

TMDL Analytical Unit Number	Watershed / Segments	303 (d) Listed Pollutants	REQUIRED COMPLETION DATE OF TMDLs (Effective Date March 1999)						YEAR
			2001	2002	2003	2004	2005	2006	
Dominguez Channel & LA/LB Harbors WMA									
39	72	Los Angeles Harbor (part. Main Ch., Fish Hbr, and breakwater)	beach closure				X		
40	73	Los Angeles Harbor (all inclusive)	DDT, PCBs, sediment toxicity, benthic comm. Effects, chlordane						2012
41	74	Los Angeles Harbor (part. Main Ch., Fish Hbr, breakwater, consol. slip)	PAHs						2012
42	75	Los Angeles Harbor (part. Main Ch., Fish Hbr, breakwater, consol. slip)	Cu, Zn, Pb, Cr						2012
43	79	Los Angeles Harbor (part. Main Ch., Fish Hbr, breakwater, consol. slip)	TBT						2012
44	78	San Pedro Bay nearshore and offshore zone: Cabrillo Pier area	Zn, Cu, Cr						2012
45	73	San Pedro Bay nearshore and offshore zone: Cabrillo Pier area	DDT, PCBs, sediment toxicity						2012
46	74	San Pedro Bay nearshore and offshore zone: Cabrillo Pier area	PAHs						2012
47	72	Cabrillo Beach (Inner) LA Harbor	beach closure				X		
48	73	Cabrillo Beach (Inner) LA Harbor	DDT, PCBs						2012
49	76	Machado Lake (Harbor Lake)	algae, eutroph., NH3, odors						2012
50	81	Machado Lake (Harbor Lake)	trash						2012
51	73	Machado Lake (Harbor Lake)	DDT, PCBs, Chem A, chlordane, dieldrin						2012
52	77	Wilmington Drain	NH3						2012
53	75	Wilmington Drain	Cu, Pb						2012
54	81	Wilmington Drain	coliforms						2012
55	77	Dominguez Channel and Estuary	NH3						2012
56	80	Dominguez Channel and Estuary	coliforms						2012
57	75	Dominguez Channel and Estuary	Cu, Pb, Cr, Zn						2012
58	74	Dominguez Channel and Estuary	PAHs						2012
59	73	Dominguez Channel and Estuary	DDT, PCBs, Chem A, chlordane, aldrin, dieldrin, & benthic community effects						2012
Total									

**NOTE: The required completion dates are according to the TMDL Consent Decree Schedule.
The SMB was de-listed for metals by LACWQCB and removed from the Consent Decree.**

 AlisoCanyonWash_FecalColiform_Water
 AlisoCanyonWash_FecalColiform_Water
 QueriedRecords_FecalColiform_Water

Water Data Summary for Aliso Canyon Wash – Basin Plan REC1 Freshwater 30-Day Minimum 5 samples Objective



Aliso Canyon Wash Fecal Coliform - Water

Table 1. Data Summary Information

Waterbody Name	Aliso Canyon Wash	Region	4
Hydrologic Unit	405.21	Total Waterbody Size	10 Miles
Pollutant/Stressor	Fecal Coliform	Size Affected	10 Miles
		Extent of Impairment	Entire Reach

Table 2. Summary of Fecal Coliform for Aliso Canyon Wash

Dates of Sampling	11/8/2002 - 2/2/2004	Minimum Detected Value	200 MPN/100mL
Number of Samples	12	Maximum Detected Value	110000 MPN/100mL
Number of Detected Samples	12	Median Detected Value	26500 MPN/100mL
Hardness			N/A
pH			N/A
WER			N/A
Temperature			N/A

Data Sources

LACSD

Beneficial Uses for Aliso Canyon Wash

§ MUN § REC1 § WARM
§ GWR § REC2 § WILD

Applicable Water Quality Objectives	Out of 12 Samples:	# Exceed	% Exceed	List	Delist
200 MPN/100mL Basin Plan REC1 Freshwater 30-Day Minimum	5 samples	12	100%	Yes	No
400 MPN/100mL Basin Plan REC1 Freshwater Single sample		10	83.3%	Yes	No
2000 MPN/100mL Basin Plan REC2 30-Day Log Mean Minimum	4 samples	9	75%	Yes	No
4000 MPN/100mL Basin Plan REC2 30-Day Maximum 10% samples		9	75%	Yes	No

Triggering Water Quality Objective for Listing

The Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994 contains water quality criteria for waterbodies in the Los Angeles Region. The most conservative applicable water quality criterion for fecal coliform is 200 MPN/100mL for the Basin Plan REC1 Freshwater 30-Day Minimum 5 samples objective. In Aliso Canyon Wash, the criterion was exceeded in 12 of 12 samples, which is 100% of the sample events. Under the state's listing policy, a waterbody is considered to be impaired for fecal coliform if there are 5 or more exceedances out of the 12 samples.

Triggering Water Quality Objective for Delisting

Not eligible for delisting.




References

Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994

Raw Data

Aliso Canyon Wash
Fecal Coliform - Water

RecordID	SiteID	Waterbody	Classification	Constituent	NumQual	Result	Units	SampleDate	DataQuality	Matrix	SampleType	SampleEvent	Organism	Fraction	AnalyticalMethod	MDL	SampleComment	ProjectID	ProjectName	DataSource	FilenameSpreadsheet	TableName
60	TS01	Aliso Canyon Wash	Bacteriological	Fecal Coliform	=	30000	MPN/100ml	08-Nov-02		Water	Grab	Wet			SM9230B	20	0203-01		LACSD	LACSD	LACSD/02-03.xls/Aliso TS01	LACSDAlisoCanyon_Data_303d
200	TS01	Aliso Canyon Wash	Bacteriological	Fecal Coliform	=	80000	MPN/100ml	16-Dec-02		Water	Grab	Wet			SM9230B	20	0203-02		LACSD	LACSD	LACSD/02-03.xls/Aliso TS01	LACSDAlisoCanyon_Data_303d
353	TS01	Aliso Canyon Wash	Bacteriological	Fecal Coliform	=	80000	MPN/100ml	11-Feb-03		Water	Grab	Wet			SM9230B	20	0203-03		LACSD	LACSD	LACSD/02-03.xls/Aliso TS01	LACSDAlisoCanyon_Data_303d
487	TS01	Aliso Canyon Wash	Bacteriological	Fecal Coliform	=	34000	MPN/100ml	25-Feb-03		Water	Grab	Wet			SM9230B	20	0203-04		LACSD	LACSD	LACSD/02-03.xls/Aliso TS01	LACSDAlisoCanyon_Data_303d
627	TS01	Aliso Canyon Wash	Bacteriological	Fecal Coliform	=	11000	MPN/100ml	15-Mar-03		Water	Grab	Wet			SM9230B	20	0203-05		LACSD	LACSD	LACSD/02-03.xls/Aliso TS01	LACSDAlisoCanyon_Data_303d
782	TS01	Aliso Canyon Wash	Bacteriological	Fecal Coliform	=	500	MPN/100ml	30-Apr-03		Water	Grab	Dry			SM9230B	20	0203-02		LACSD	LACSD	LACSD/02-03.xls/Aliso TS01	LACSDAlisoCanyon_Data_303d
1557	TS01	Aliso Canyon Wash	Bacteriological	Fecal Coliform	=	200	MPN/100ml	13-Jan-04		Water	Grab	Dry			SM9230B	20	0304-02		LACSD	LACSD	LACSD/03-04.xls/Aliso TS01	LACSDAlisoCanyon_Data_303d
937	TS01	Aliso Canyon Wash	Bacteriological	Fecal Coliform	=	300	MPN/100ml	28-Oct-03		Water	Grab	Dry			SM9230B	20	0304-01		LACSD	LACSD	LACSD/03-04.xls/Aliso TS01	LACSDAlisoCanyon_Data_303d
1712	TS01	Aliso Canyon Wash	Bacteriological	Fecal Coliform	=	14000	MPN/100ml	02-Feb-04		Water	Grab	Wet			SM9230B	20	0304-01		LACSD	LACSD	LACSD/03-04.xls/Aliso TS01	LACSDAlisoCanyon_Data_303d
1402	TS01	Aliso Canyon Wash	Bacteriological	Fecal Coliform	=	23000	MPN/100ml	01-Jan-04		Water	Grab	Wet			SM9230B	20	0304-03		LACSD	LACSD	LACSD/03-04.xls/Aliso TS01	LACSDAlisoCanyon_Data_303d
1092	TS01	Aliso Canyon Wash	Bacteriological	Fecal Coliform	=	80000	MPN/100ml	31-Oct-03		Water	Grab	Wet			SM9230B	20	0304-01		LACSD	LACSD	LACSD/03-04.xls/Aliso TS01	LACSDAlisoCanyon_Data_303d
1247	TS01	Aliso Canyon Wash	Bacteriological	Fecal Coliform	=	110000	MPN/100ml	25-Dec-03		Water	Grab	Wet			SM9230B	20	0304-02		LACSD	LACSD	LACSD/03-04.xls/Aliso TS01	LACSDAlisoCanyon_Data_303d

-
-  ArroyoSecoR1_FecalColiform_Water
 -  ArroyoSecoR1_FecalColiform_Water
 -  QueriedRecords_FecalColiform_Water

Arroyo Seco Reach 1 (LA River to West Holly Ave.) Fecal Coliform - Water

Table 1. Data Summary Information

Waterbody Name	Arroyo Seco Reach 1 (LA River to West Holly Ave.)	Region	4
Hydrologic Unit	405.15	Total Waterbody Size	5.2 Miles
Pollutant/Stressor	Fecal Coliform	Size Affected	5.2 Miles
		Extent of Impairment	Entire Reach

Table 2. Summary of Fecal Coliform for Arroyo Seco Reach 1 (LA River to West Holly Ave.)

Dates of Sampling	11/8/2002 - 2/2/2004	Minimum Detected Value	300 MPN/100mL
Number of Samples	12	Maximum Detected Value	300000 MPN/100mL
Number of Detected Samples	12	Median Detected Value	85000 MPN/100mL
Hardness			N/A
pH			N/A
WER			N/A
Temperature			N/A

Data Sources

LACSD

Beneficial Uses for Arroyo Seco Reach 1 (LA River to West Holly Ave.)

§ MUN § REC2 § WILD
§ REC1 § WARM

Applicable Water Quality Objectives	Out of 12 Samples:	# Exceed	% Exceed	List	Delist
200 MPN/100mL Basin Plan REC1 Freshwater 30-Day Minimum 5 samples	12	12	100%	Yes	No
400 MPN/100mL Basin Plan REC1 Freshwater Single sample	11	11	91.7%	Yes	No
2000 MPN/100mL Basin Plan REC2 30-Day Log Mean Minimum 4 samples	9	9	75%	Yes	No
4000 MPN/100mL Basin Plan REC2 30-Day Maximum 10% samples	9	9	75%	Yes	No

Triggering Water Quality Objective for Listing

The Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994 contains water quality criteria for waterbodies in the Los Angeles Region. The most conservative applicable water quality criterion for fecal coliform is 200 MPN/100mL for the Basin Plan REC1 Freshwater 30-Day Minimum 5 samples objective. In Arroyo Seco Reach 1 (LA River to West Holly Ave.), the criterion was exceeded in 12 of 12 samples, which is 100% of the sample events. Under the state's listing policy, a waterbody is considered to be impaired for fecal coliform if there are 5 or more exceedances out of the 12 samples.

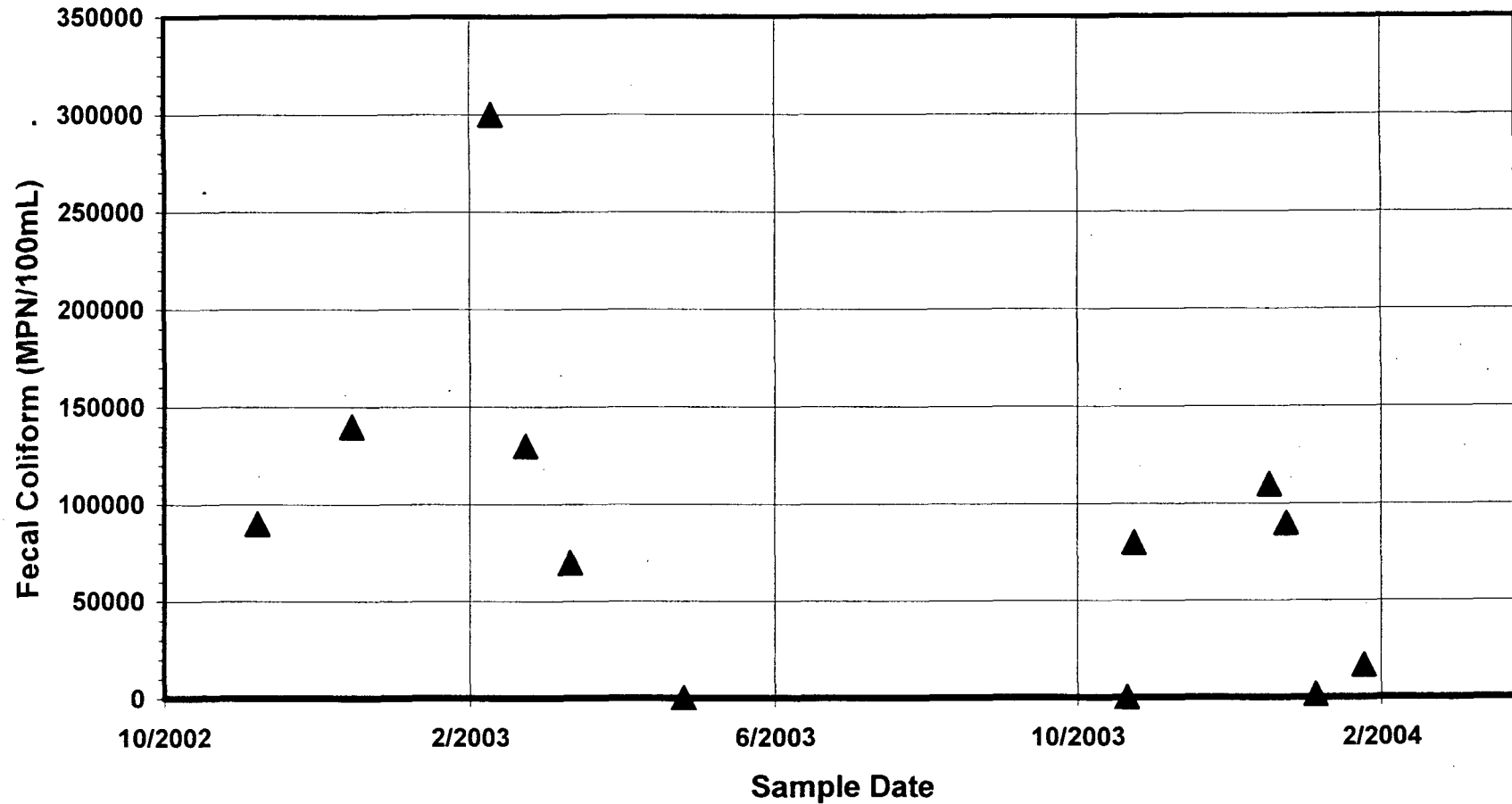
Triggering Water Quality Objective for Delisting

Not eligible for delisting.

References

Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, 1994










**Water Data Summary for Arroyo Seco Reach 1 (LA River to West Holly Ave.) – Basin Plan REC1 Freshwater
30-Day Minimum 5 samples Objective**



Raw Data

Arroyo Seco Reach 1 (LA River to West Holly Dr.)
Fecal Coliform - Water

RecordID	SiteID	Waterbody	Classification	Constituent	NumQua	Result	Units	SampleDate	Matrix	SampleType	SampleEvent	AnalyticalMethod	MDL	SampleComments	ProjectName	DataSource	FilenameSpreadsheet	TableName
60	TS05	Arroyo Seco Reach 1	Bacteriological	Fecal Coliform	=	90000	MPN/100ml	08-Nov-02	Water	Grab	Wet	SM9230B	20	Event Number 0203-01	LACSD	LACSD	LACSD/02-03.xls/Arroyo TS05	LACSDArroyoSeco_Data_303d
200	TS05	Arroyo Seco Reach 1	Bacteriological	Fecal Coliform	=	140000	MPN/100ml	16-Dec-02	Water	Grab	Wet	SM9230B	20	Event Number 0203-02	LACSD	LACSD	LACSD/02-03.xls/Arroyo TS05	LACSDArroyoSeco_Data_303d
351	TS05	Arroyo Seco Reach 1	Bacteriological	Fecal Coliform	=	300000	MPN/100ml	11-Feb-03	Water	Grab	Wet	SM9230B	20	Event Number 0203-03	LACSD	LACSD	LACSD/02-03.xls/Arroyo TS05	LACSDArroyoSeco_Data_303d
490	TS05	Arroyo Seco Reach 1	Bacteriological	Fecal Coliform	=	130000	MPN/100ml	25-Feb-03	Water	Grab	Wet	SM9230B	20	Event Number 0203-04	LACSD	LACSD	LACSD/02-03.xls/Arroyo TS05	LACSDArroyoSeco_Data_303d
628	TS05	Arroyo Seco Reach 1	Bacteriological	Fecal Coliform	=	70000	MPN/100ml	15-Mar-03	Water	Grab	Wet	SM9230B	20	Event Number 0203-05	LACSD	LACSD	LACSD/02-03.xls/Arroyo TS05	LACSDArroyoSeco_Data_303d
783	TS05	Arroyo Seco Reach 1	Bacteriological	Fecal Coliform	=	300	MPN/100ml	30-Apr-03	Water	Grab	Dry	SM9230B	20	Event Number 0203-02	LACSD	LACSD	LACSD/02-03.xls/Arroyo TS05	LACSDArroyoSeco_Data_303d
938	TS05	Arroyo Seco Reach 1	Bacteriological	Fecal Coliform	=	500	MPN/100ml	28-Oct-03	Water	Grab	Dry	SM9230B	20	Event Number 0304-01	LACSD	LACSD	LACSD/03-04.xls/Arroyo TS05	LACSDArroyoSeco_Data_303d
1558	TS05	Arroyo Seco Reach 1	Bacteriological	Fecal Coliform	=	1700	MPN/100ml	13-Jan-04	Water	Grab	Dry	SM9230B	20	Event Number 0304-02	LACSD	LACSD	LACSD/03-04.xls/Arroyo TS05	LACSDArroyoSeco_Data_303d
1713	TS05	Arroyo Seco Reach 1	Bacteriological	Fecal Coliform	=	17000	MPN/100ml	02-Feb-04	Water	Grab	Wet	SM9230B	20	Event Number 0304-01	LACSD	LACSD	LACSD/03-04.xls/Arroyo TS05	LACSDArroyoSeco_Data_303d
1093	TS05	Arroyo Seco Reach 1	Bacteriological	Fecal Coliform	=	80000	MPN/100ml	31-Oct-03	Water	Grab	Wet	SM9230B	20	Event Number 0304-01	LACSD	LACSD	LACSD/03-04.xls/Arroyo TS05	LACSDArroyoSeco_Data_303d
1403	TS05	Arroyo Seco Reach 1	Bacteriological	Fecal Coliform	=	90000	MPN/100ml	01-Jan-04	Water	Grab	Wet	SM9230B	20	Event Number 0304-03	LACSD	LACSD	LACSD/03-04.xls/Arroyo TS05	LACSDArroyoSeco_Data_303d
1248	TS05	Arroyo Seco Reach 1	Bacteriological	Fecal Coliform	=	110000	MPN/100ml	25-Dec-03	Water	Grab	Wet	SM9230B	20	Event Number 0304-02	LACSD	LACSD	LACSD/03-04.xls/Arroyo TS05	LACSDArroyoSeco_Data_303d

-
-  BallonaCreek_Cu_Dissolved_Water
 -  BallonaCreek_Cu_Dissolved_Water
 -  BallonaCreek_FecalColiform_Water
 -  BallonaCreek_FecalColiform_Water
 -  BallonaCreek_ph_Water
 -  BallonaCreek_pH_Water
 -  QueriedRecords_Cu_Dissolved_Water
 -  QueriedRecords_FecalColiform_Water
 -  QueriedRecords_pH_Water

Ballona Creek Dissolved Copper - Water

Table 1. Data Summary Information

Waterbody Name	Ballona Creek	Region	4
Hydrologic Unit	405.13	Total Waterbody Size	6.5 Miles
Pollutant/Stressor	Copper	Size Affected	6.5 Miles
		Extent of Impairment	Entire Reach

Table 2. Summary of Copper for Ballona Creek

Dates of Sampling	10/12/2000 - 3/9/2005	Minimum Detected Value	1.71 µg/L
Number of Samples	93	Maximum Detected Value	23 µg/L
Number of Detected Samples	82	Median Detected Value	7.28 µg/L
Hardness - actual and/or default values (capped at 400 mg/L)			200-400 mg/L
pH			N/A
WER			1
Temperature			N/A

Data Sources

WPD

Beneficial Uses for Ballona Creek

§ MUN § REC2 § WILD
§ REC1 § WARM

Applicable Water Quality Objectives	Out of 93 Samples:	# Exceed	% Exceed	List	Delist
16-29 µg/L CTR Aquatic Life Freshwater Chronic (CCC)	5	5	5.4%	No	Yes
26-50 µg/L CTR Aquatic Life Freshwater Acute (CMC)	0	0	0%	No	Yes
1300 µg/L CTR Human Health Water & Organism	0	0	0%	No	Yes

OK

Triggering Water Quality Objective for Listing

No objectives were exceeded.

Triggering Water Quality Objective for Delisting

The California Toxics Rule contains water quality criteria for waterbodies in California. The most conservative applicable water quality criterion for dissolved copper is 16 µg/L for the CTR Aquatic Life Freshwater Chronic (CCC) objective. In Ballona Creek, the criterion was exceeded in 5 of 93 samples, which is 5.4% of the sample events. Under the state's listing policy, a waterbody is eligible for delisting for dissolved copper if there are 7 or fewer exceedances out of the 93 samples.

References

California Toxics Rule

Raw Data

Ballona Creek
Dissolved Copper - Water

RecordID	SiteID	Waterbody	Classification	Constituent	NumQual	Result	Units	SampleDate	DataQuality	Matrix	SampleType	SampleEvent	Fraction	AnalyticalMe	MDL	SampleComme	ProjectNa	DataSou	FilenameS	Spreadsheet	Hardness	pH	Temp	TableName
8515	SO1	Ballona Creek	Metal	Copper	=	12.1	µg/L	16-Nov-04		Water	Dry		Dissolved			Dry Weather Se	LACSD	LACSD	LACSD/Dry_1_11-02-04.xls/BC (S01)					LACSDBallonaCreek_Data_303d
5510	SO1	Ballona Creek	Metal	Copper	=	10.1	µg/L	12-Oct-00		Water	Composite	Wet	Dissolved	A220.1	5	Storm Number	LACSD	LACSD	LACSD/2000-01.xls/Table B-1					LACSDBallonaCreek_Data_303d
1144	Centinela Ave.	Ballona Creek	Metal	Copper	=	6.5	µg/L	24-Sep-02	Good	Water			Dissolved				WPD	WPD	Revised compilation of LARBCDC 2002-2004 (BC 2002)					
1066	Centinela Ave.	Ballona Creek	Metal	Copper	=	8	µg/L	28-May-02	Good	Water			Dissolved				WPD	WPD	Revised compilation of LARBCDC 2002-2004 (BC 2002)					
1121	Centinela Ave.	Ballona Creek	Metal	Copper	=	20	µg/L	27-Aug-02	Good	Water			Dissolved				WPD	WPD	Revised compilation of LARBCDC 2002-2004 (BC 2002)					
1164	Centinela Ave.	Ballona Creek	Metal	Copper	=	4.4	µg/L	22-Oct-02	Good	Water			Dissolved				WPD	WPD	Revised compilation of LARBCDC 2002-2004 (BC 2002)					
1236	Centinela Ave.	Ballona Creek	Metal	Copper	=	7.2	µg/L	25-Feb-03	Good	Water			Dissolved				WPD	WPD	Revised compilation of LARBCDC 2002-2004 (BC 2003)					
1255	Centinela Ave.	Ballona Creek	Metal	Copper	=	4.8	µg/L	25-Mar-03	Good	Water			Dissolved				WPD	WPD	Revised compilation of LARBCDC 2002-2004 (BC 2003)					
1275	Centinela Ave.	Ballona Creek	Metal	Copper	=	6	µg/L	22-Apr-03	Good	Water			Dissolved				WPD	WPD	Revised compilation of LARBCDC 2002-2004 (BC 2003)					
1294	Centinela Ave.	Ballona Creek	Metal	Copper	=	4.5	µg/L	27-May-03	Good	Water			Dissolved				WPD	WPD	Revised compilation of LARBCDC 2002-2004 (BC 2003)					
1311	Centinela Ave.	Ballona Creek	Metal	Copper	=	8.5	µg/L	24-Jun-03	Good	Water			Dissolved				WPD	WPD	Revised compilation of LARBCDC 2002-2004 (BC 2003)					
1333	Centinela Ave.	Ballona Creek	Metal	Copper	=	4.5	µg/L	22-Jul-03	Good	Water			Dissolved		1.5		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (BC 2003)					
1399	Centinela Ave.	Ballona Creek	Metal	Copper	=	7.9	µg/L	21-Oct-03	Good	Water			Dissolved		1.5		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (BC 2003)					
1423	Centinela Ave.	Ballona Creek	Metal	Copper	=	12.8	µg/L	13-Nov-03	Good	Water			Dissolved		1.5		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (BC 2003)					
1447	Centinela Ave.	Ballona Creek	Metal	Copper	=	4.9	µg/L	23-Dec-03	Good	Water			Dissolved		1.5		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (BC 2003)					638
1470	Centinela Ave.	Ballona Creek	Metal	Copper	=	8.9	µg/L	27-Jan-04	Good	Water			Dissolved		1.5		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (BC 2004)					345
1496	Inglewood Blvd	Ballona Creek	Metal	Copper	=	6	µg/L	25-May-04	Good	Water			Dissolved		1.5	Original site cox	WPD	WPD	Revised compilation of LARBCDC 2002-2004 (BC 2004)					288
1520	Inglewood Blvd	Ballona Creek	Metal	Copper	=	15	µg/L	27-Jul-04	Good	Water			Dissolved		4	Original site cox	WPD	WPD	Revised compilation of LARBCDC 2002-2004 (BC 2004)					342
1546	Inglewood Blvd	Ballona Creek	Metal	Copper	=	5	µg/L	24-Aug-04	Good	Water			Dissolved		4	Original site cox	WPD	WPD	Revised compilation of LARBCDC 2002-2004 (BC 2004)					271
1572	Inglewood Blvd	Ballona Creek	Metal	Copper	<	4	µg/L	28-Sep-04	Good	Water			Dissolved		4	Original site cox	WPD	WPD	Revised compilation of LARBCDC 2002-2004 (BC 2004)					325
1596	Inglewood Blvd	Ballona Creek	Metal	Copper	=	6	µg/L	26-Oct-04	Good	Water			Dissolved		4	Original site cox	WPD	WPD	Revised compilation of LARBCDC 2002-2004 (BC 2004)					345
1616	Inglewood Blvd	Ballona Creek	Metal	Copper	<	10	µg/L	23-Nov-04	Good	Water			Dissolved		4	Original site cox	WPD	WPD	Revised compilation of LARBCDC 2002-2004 (BC 2004)					332
1687	National Blvd.	Ballona Creek	Metal	Copper	=	10.4	µg/L	23-Apr-02	Good	Water			Dissolved		4		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (BC 2002)					
1707	National Blvd.	Ballona Creek	Metal	Copper	=	10	µg/L	28-May-02	Good	Water			Dissolved		4		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (BC 2002)					
1746	National Blvd.	Ballona Creek	Metal	Copper	=	8.7	µg/L	23-Jul-02	Good	Water			Dissolved		4		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (BC 2002)					
1786	National Blvd.	Ballona Creek	Metal	Copper	=	20.2	µg/L	24-Sep-02	Good	Water			Dissolved		4		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (BC 2002)					
1840	National Blvd.	Ballona Creek	Metal	Copper	<	4	µg/L	23-Dec-02	Good	Water			Dissolved		4		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (BC 2002)					
1875	National Blvd.	Ballona Creek	Metal	Copper	=	8.1	µg/L	25-Feb-03	Good	Water			Dissolved		1		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (BC 2003)					
1895	National Blvd.	Ballona Creek	Metal	Copper	=	5.43	µg/L	25-Mar-03	Good	Water			Dissolved		1		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (BC 2003)					
1940	National Blvd.	Ballona Creek	Metal	Copper	=	7.5	µg/L	27-May-03	Good	Water			Dissolved		1		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (BC 2003)					
1959	National Blvd.	Ballona Creek	Metal	Copper	=	7.16	µg/L	24-Jun-03	Good	Water			Dissolved		1		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (BC 2003)					
1980	National Blvd.	Ballona Creek	Metal	Copper	=	5.9	µg/L	22-Jul-03	Good	Water			Dissolved		1.5		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (BC 2003)					
2021	National Blvd.	Ballona Creek	Metal	Copper	=	12.1	µg/L	23-Sep-03	Good	Water			Dissolved		1.5		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (BC 2003)					
2044	National Blvd.	Ballona Creek	Metal	Copper	=	5.4	µg/L	21-Oct-03	Good	Water			Dissolved		1.5		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (BC 2003)					
2069	National Blvd.	Ballona Creek	Metal	Copper	=	9.9	µg/L	13-Nov-03	Good	Water			Dissolved		1.5		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (BC 2003)					
2096	National Blvd.	Ballona Creek	Metal	Copper	=	6	µg/L	23-Dec-03	Good	Water			Dissolved		1.5		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (BC 2003)					370
2120	National Blvd.	Ballona Creek	Metal	Copper	=	7.1	µg/L	27-Jan-04	Good	Water			Dissolved		1.5		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (BC 2004)					353
2147	National Blvd.	Ballona Creek	Metal	Copper	=	5.2	µg/L	25-May-04	Good	Water			Dissolved		1.5	Original site cox	WPD	WPD	Revised compilation of LARBCDC 2002-2004 (BC 2004)					266
2173	National Blvd.	Ballona Creek	Metal	Copper	=	12	µg/L	27-Jul-04	Good	Water			Dissolved		4	Original site cox	WPD	WPD	Revised compilation of LARBCDC 2002-2004 (BC 2004)					237
2198	National Blvd.	Ballona Creek	Metal	Copper	<	4	µg/L	24-Aug-04	Good	Water			Dissolved		4	Original site cox	WPD	WPD	Revised compilation of LARBCDC 2002-2004 (BC 2004)					236
2223	National Blvd.	Ballona Creek	Metal	Copper	<	4	µg/L	28-Sep-04	Good	Water			Dissolved		4	Original site cox	WPD	WPD	Revised compilation of LARBCDC 2002-2004 (BC 2004)					248
2249	National Blvd.	Ballona Creek	Metal	Copper	=	6	µg/L	26-Oct-04	Good	Water			Dissolved		4	Original site cox	WPD	WPD	Revised compilation of LARBCDC 2002-2004 (BC 2004)					268
2269	National Blvd.	Ballona Creek	Metal	Copper	=	8	µg/L	23-Nov-04	Good	Water			Dissolved		4	Original site cox	WPD	WPD	Revised compilation of LARBCDC 2002-2004 (BC 2004)					333
2341	Overland Ave.	Ballona Creek	Metal	Copper	=	12	µg/L	23-Apr-02	Good	Water			Dissolved		4		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (BC 2002)					
2423	Overland Ave.	Ballona Creek	Metal	Copper	=	23	µg/L	27-Aug-02	Good	Water			Dissolved		4		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (BC 2002)					
2445	Overland Ave.	Ballona Creek	Metal	Copper	=	5.3	µg/L	24-Sep-02	Good	Water			Dissolved		4		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (BC 2002)					
2537	Overland Ave.	Ballona Creek	Metal	Copper	=	7.3	µg/L	25-Feb-03	Good	Water			Dissolved		1		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (BC 2003)					
2382	Overland Ave.	Ballona Creek	Metal	Copper	=	5	µg/L	25-Jun-02	Good	Water			Dissolved		4	Original site cox	WPD	WPD	Revised compilation of LARBCDC 2002-2004 (BC 2002)					
2362	Overland Ave.	Ballona Creek	Metal	Copper	<	4	µg/L	28-May-02	Good	Water			Dissolved		4		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (BC 2002)					
2578	Overland Ave.	Ballona Creek	Metal	Copper	=	4.4	µg/L	22-Apr-03	Good	Water			Dissolved		1		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (BC 2003)					
2599	Overland Ave.	Ballona Creek	Metal	Copper	=	4.1	µg/L	27-May-03	Good	Water			Dissolved		1		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (BC 2003)					
2641	Overland Ave.	Ballona Creek	Metal	Copper	=	7.7	µg/L	22-Jul-03	Good	Water			Dissolved		1.5		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (BC 2003)					
2700	Overland Ave.	Ballona Creek	Metal	Copper	=	4	µg/L	21-Oct-03	Good	Water			Dissolved		1.5		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (BC 2003)					
2724	Overland Ave.	Ballona Creek	Metal	Copper	=	11.2	µg/L	13-Nov-03	Good	Water			Dissolved		1.5		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (BC 2003)					
2749	Overland Ave.	Ballona Creek	Metal	Copper	=	6.6	µg/L	23-Dec-03	Good	Water			Dissolved		1.5		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (BC 2003)					390
2773	Overland Ave.	Ballona Creek	Metal	Copper	=	5.2	µg/L	27-Jan-04	Good	Water			Dissolved		1.5		WPD	WPD	Revised compilation of LARBCDC 2002-2004 (BC 2004)					396
2797	Overland Ave.	Ballona Creek	Metal	Copper	=	4.9	µg/L	25-May-04	Good	Water			Dissolved		1.5	Original site cox	WPD	WPD	Revised compilation of LARBCDC 2002-2004 (BC 2004)					269
2819	Overland Ave.	Ballona Creek	Metal	Copper	=	13	µg/L	27-Jul-04	Good	Water			Dissolved		4	Original site cox	WPD	WPD						

Raw Data

Ballona Creek
Dissolved Copper - Water

2868	Overland Ave.	Ballona Creek	Metal	Copper	<	4	µg/L	28-Sep-04	Good	Water			Dissolved		4	Original site co/WPD	WPD	Revised compilation of LARBCDC 2002-2004 (BC 2004)	287	
5585	S01	Ballona Creek	Metal	Copper	=	5.28	µg/L	31-Oct-00		Water	Composite	Wet	Dissolved	A220.1	5	Storm Number (LACSD)	LACSD	LACSD/2000-01.xls/Table B-1		LACSDBallonaCreek_Data_303d
2890	Overland Ave.	Ballona Creek	Metal	Copper	=	6	µg/L	26-Oct-04	Good	Water			Dissolved		4	Original site co/WPD	WPD	Revised compilation of LARBCDC 2002-2004 (BC 2004)	295	
2912	Overland Ave.	Ballona Creek	Metal	Copper	<	10	µg/L	23-Nov-04	Good	Water			Dissolved		4	Original site co/WPD	WPD	Revised compilation of LARBCDC 2002-2004 (BC 2004)	268	
8622	S01	Ballona Creek	Metal	Copper	=	7.36	µg/L	11-Jan-05		Water		Wet	Dissolved			Storm 6 for Mas	LACSD	LACSD/Storm_6_ME_01-07-05.xls/BC (S01)		LACSDBallonaCreek_Data_303d
6753	S01	Ballona Creek	Metal	Copper	=	9.14	µg/L	10-Oct-02		Water	Composite	Dry	Dissolved	EPA200.8	5	Event Number (LACSD)	LACSD	LACSD/02-03.xls/Ballona S01		LACSDBallonaCreek_Data_303d
6908	S01	Ballona Creek	Metal	Copper	=	8.76	µg/L	08-Nov-02		Water	Composite	Wet	Dissolved	EPA200.8	5	Event Number (LACSD)	LACSD	LACSD/02-03.xls/Ballona S01		LACSDBallonaCreek_Data_303d
7063	S01	Ballona Creek	Metal	Copper	=	9.44	µg/L	16-Dec-02		Water	Composite	Wet	Dissolved	EPA200.8	5	Event Number (LACSD)	LACSD	LACSD/02-03.xls/Ballona S01		LACSDBallonaCreek_Data_303d
7217	S01	Ballona Creek	Metal	Copper	=	2.56	µg/L	11-Feb-03		Water	Composite	Wet	Dissolved	EPA200.8	5	Event Number (LACSD)	LACSD	LACSD/02-03.xls/Ballona S01		LACSDBallonaCreek_Data_303d
7372	S01	Ballona Creek	Metal	Copper	=	7.26	µg/L	15-Mar-03		Water	Composite	Wet	Dissolved	EPA200.8	5	Event Number (LACSD)	LACSD	LACSD/02-03.xls/Ballona S01		LACSDBallonaCreek_Data_303d
7528	S01	Ballona Creek	Metal	Copper	=	5.5	µg/L	30-Apr-03		Water	Composite	Dry	Dissolved	EPA200.8	5	Event Number (LACSD)	LACSD	LACSD/02-03.xls/Ballona S01		LACSDBallonaCreek_Data_303d
5653	S01	Ballona Creek	Metal	Copper	=	12.1	µg/L	04-Jan-01		Water	Composite	Wet	Dissolved	A220.1	5	Storm Number (LACSD)	LACSD	LACSD/2000-01.xls/Table B-1		LACSDBallonaCreek_Data_303d
8568	S01	Ballona Creek	Metal	Copper	=	1.71	µg/L	05-Dec-04		Water		Wet	Dissolved			Storm 3 - Decer	LACSD	LACSD/Storm_3_12-05-04.xls/BC (S01)		LACSDBallonaCreek_Data_303d
8460	S01	Ballona Creek	Metal	Copper	=	5.86	µg/L	26-Oct-04		Water		Wet	Dissolved			Storm 2 - Octob	LACSD	LACSD/Storm_2_10-26-04.xls/BC (S01)		LACSDBallonaCreek_Data_303d
8404	S01	Ballona Creek	Metal	Copper	=	10.2	µg/L	17-Oct-04		Water		Wet	Dissolved			Storm 1 - 10/17	LACSD	LACSD/Storm_1_10-17-04.xls/BC (S01)		LACSDBallonaCreek_Data_303d
5730	S01	Ballona Creek	Metal	Copper	=	8.12	µg/L	17-Jan-01		Water	Composite	Wet	Dissolved	A220.1	5	Storm Number (LACSD)	LACSD	LACSD/2000-01.xls/Table B-1		LACSDBallonaCreek_Data_303d
5805	S01	Ballona Creek	Metal	Copper	=	8.52	µg/L	25-Jan-01		Water	Composite	Wet	Dissolved	A220.1	5	Storm Number (LACSD)	LACSD	LACSD/2000-01.xls/Table B-1		LACSDBallonaCreek_Data_303d
5882	S01	Ballona Creek	Metal	Copper	=	7.34	µg/L	30-Jan-01		Water	Composite	Wet	Dissolved	A220.1	5	Storm Number (LACSD)	LACSD	LACSD/2000-01.xls/Table B-1		LACSDBallonaCreek_Data_303d
5958	S01	Ballona Creek	Metal	Copper	<	5	µg/L	15-Feb-01		Water	Composite	Wet	Dissolved	A220.1	5	Storm Number (LACSD)	LACSD	LACSD/2000-01.xls/Table B-1		LACSDBallonaCreek_Data_303d
6034	S01	Ballona Creek	Metal	Copper	=	6.39	µg/L	20-Feb-01		Water	Composite	Wet	Dissolved	A220.1	5	Storm Number (LACSD)	LACSD	LACSD/2000-01.xls/Table B-1		LACSDBallonaCreek_Data_303d
6099	S01	Ballona Creek	Metal	Copper	=	6.28	µg/L	28-Feb-01		Water	Composite	Wet	Dissolved	A220.1	5	Storm Number (LACSD)	LACSD	LACSD/2000-01.xls/Table B-1		LACSDBallonaCreek_Data_303d
6175	S01	Ballona Creek	Metal	Copper	<	5	µg/L	07-Mar-01		Water	Composite	Wet	Dissolved	A220.1	5	Storm Number (LACSD)	LACSD	LACSD/2000-01.xls/Table B-1		LACSDBallonaCreek_Data_303d
6251	S01	Ballona Creek	Metal	Copper	=	3.05	µg/L	12-Nov-01		Water	Composite	Wet	Dissolved	EPA200.8	0.5	Storm Number (LACSD)	LACSD	LACSD/01-02.xls/Table B-1 S1		LACSDBallonaCreek_Data_303d
6550	S01	Ballona Creek	Metal	Copper	=	6.06	µg/L	20-Dec-01		Water	Composite	Wet	Dissolved	EPA200.8	0.5	Storm Number (LACSD)	LACSD	LACSD/01-02.xls/Table B-1 S1		LACSDBallonaCreek_Data_303d
6629	S01	Ballona Creek	Metal	Copper	=	7.45	µg/L	28-Jan-02		Water	Composite	Wet	Dissolved	EPA200.8	0.5	Storm Number (LACSD)	LACSD	LACSD/01-02.xls/Table B-1 S1		LACSDBallonaCreek_Data_303d
6400	S01	Ballona Creek	Metal	Copper	=	10.2	µg/L	29-Nov-01		Water	Composite	Wet	Dissolved	EPA200.8	0.5	Storm Number (LACSD)	LACSD	LACSD/01-02.xls/Table B-1 S1		LACSDBallonaCreek_Data_303d
6322	S01	Ballona Creek	Metal	Copper	=	11.9	µg/L	24-Nov-01		Water	Composite	Wet	Dissolved	EPA200.8	0.5	Storm Number (LACSD)	LACSD	LACSD/01-02.xls/Table B-1 S1		LACSDBallonaCreek_Data_303d
6480	S01	Ballona Creek	Metal	Copper	=	20.5	µg/L	03-Dec-01		Water	Composite	Wet	Dissolved	EPA200.8	0.5	Storm Number (LACSD)	LACSD	LACSD/01-02.xls/Table B-1 S1		LACSDBallonaCreek_Data_303d
7682	S01	Ballona Creek	Metal	Copper	=	7.11	µg/L	28-Oct-03		Water	Composite	Dry	Dissolved	EPA200.8	5	Event Number (LACSD)	LACSD	LACSD/03-04.xls/Ballona S01		LACSDBallonaCreek_Data_303d
7837	S01	Ballona Creek	Metal	Copper	=	4.58	µg/L	31-Oct-03		Water	Composite	Wet	Dissolved	EPA200.8	5	Event Number (LACSD)	LACSD	LACSD/03-04.xls/Ballona S01		LACSDBallonaCreek_Data_303d
7993	S01	Ballona Creek	Metal	Copper	=	18.4	µg/L	25-Dec-03		Water	Composite	Wet	Dissolved	EPA200.8	5	Event Number (LACSD)	LACSD	LACSD/03-04.xls/Ballona S01		LACSDBallonaCreek_Data_303d
8147	S01	Ballona Creek	Metal	Copper	=	12.6	µg/L	01-Jan-04		Water	Composite	Wet	Dissolved	EPA200.8	5	Event Number (LACSD)	LACSD	LACSD/03-04.xls/Ballona S01		LACSDBallonaCreek_Data_303d
8303	S01	Ballona Creek	Metal	Copper	=	6.11	µg/L	13-Jan-04		Water	Composite	Dry	Dissolved	EPA200.8	5	Event Number (LACSD)	LACSD	LACSD/03-04.xls/Ballona S01		LACSDBallonaCreek_Data_303d
8673	S01	Ballona Creek	Metal	Copper	=	9.01	µg/L	09-Mar-05		Water		Dry	Dissolved			Dry Weather Se	LACSD	LACSD/Dry_2_03-17-05.xls/BC (S01)		LACSDBallonaCreek_Data_303d

Table 11

Detailed Comment on Specific Listings and Delistings

Comments on the proposed 303d List
City of Los Angeles
Bureau of Sanitation

Ref. No.	New Water Body Name	Pollutant/Stressor	State specified Beneficial Use	RB Potential BU	RB Existing BU	State Comment	City Comment	State Decision	BOS Proposed Status	Agree w/State	Samples (N) x/d/tot	2002 Listing	Data runs req'd	TMDL as single LOE	New data	State Response
1	Aliso Canyon Wash	Bacteria Indicators	REC1	MUN	GWR, REC1, REC2, WARM, WILD	Based on section 3.3 the site exceeds the Total and Fecal coliform WQO for the protection of REC1 beneficial Uses.	This listing should be for fecal coliform. The most conservative applicable water quality criterion for fecal coliform is 200 MPN/100mL for the Basin Plan REC1 Freshwater 30-Day Minimum 5 samples objective. In Aliso Canyon Wash, the criterion was exceeded in 12 of 12 samples, which is 100% of the sample events. Under the state's listing policy, a waterbody is considered to be impaired for fecal coliform if there are 5 or more exceedances out of the 12 samples. There is no data available for E. coli.	List	Relist under appropriate pollutant	Revise and agree	6/6 fc 6/6 tc (12/12) fc		x			x
2	Aliso Canyon Wash	Selenium	None identified by the State	MUN	GWR, REC1, REC2, WARM, WILD	No Comment NO F.S.	The available dissolved and total selenium data do not support the listing for selenium. There are one exceedances of the CTR Aquatic Life Criteria of 5 µg/L for total selenium of the WQO out of 12 samples. Selenium is becoming a recognized issue in developed coastal watersheds, though the sources are usually seleniferous groundwater basins rather than non anthropogenic above-ground sources. There may be a need for further studies to better understand the difference between the various forms of selenium, and for future monitoring to distinguish between the two forms, selenate and selenite. Because of the regional nature of this issue, the State should coordinate study efforts with other entities facing similar selenium issues. This listing is being addressed by the TMDLs for Metals in the Los Angeles River and its Tributaries.	Silent	Cannot verify impairment	Disagree	(1/12)	x				
3	Arroyo Seco Reach 1 (LA River to West Holly Ave.)	Trash	None identified by the State	MUN, WARM, WILD	REC1, REC2	No Comment NO F.S.	TMDL is in place. Use of an existing TMDL as a sole source of a line of evidence is inadequate. All relevant data included in the TMDL should be included in the report as separate line(s) of evidence to determine if WQS are not attained. There are no water quality objectives or guidelines to evaluate a waterbody for trash impairment that meet the requirements of Section 3.7 or 6.1.3 of the Listing Policy. Additionally there are no criteria identified in the Report.	Silent	Cannot verify impairment	Disagree	No Data	x				
4	Arroyo Seco Reach 1 (LA River to West Holly Ave.)	High Coliform Count	None identified by the State	MUN, WARM, WILD	REC1, REC2	No Comment NO F.S.	The State has not identified a beneficial use for protection or impairment. This listing should be for fecal coliform. The most conservative applicable water quality criterion for fecal coliform is 200 MPN/100mL for the Basin Plan REC1 Freshwater 30-Day Minimum 5 samples objective. In Arroyo Seco Reach 1 (LA River to West Holly Ave.), the criterion was exceeded in 12 of 12 samples, which is 100% of the sample events. Under the state's listing policy, a waterbody is considered to be impaired for fecal coliform if there are 5 or more exceedances out of the 12 samples. There is no data available for E. coli.	Silent	Relist under appropriate pollutant	Disagree	(12/12) fc	x	x			
5	Ashland Avenue Drain	Coliform Bacteria	REC1	None	None	One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation is expected to result in attainment of this standard.	Evaluate for consistency with the Clean Water Act. Enclosed stormwater conveyance drains are not swimmable/fishable surface waterbodies and "Waters of the United States." Enclosed stormwater conveyance drains do not have designated beneficial uses in the Basin Plan, and therefore, no criteria apply to waters within the drain itself and as such, should not be listed as impaired. Furthermore, the Los Angeles County Municipal NPDES Stormwater Permit (Order 01-182) covers discharges from the drain, along with the Standard Urban Storm Water Mitigation Plans and the County's Storm Water Quality Management Program, all of which have been approved by our Regional Board. Identifying enclosed drains as waterbodies subject to a §305(b) evaluation and §303(d) listing is a confusing precedent, which extends the Clean Water Act beyond its intended scope. TMDL is in place. Use of an existing TMDL as a sole source of a line of evidence is inadequate. All relevant data included in the TMDL should be included in the report as separate line(s) of evidence to determine if WQS are not attained.	Do Not Delist	Evaluate under Listing Policy	Disagree	No Data	x		x		

Table 11

Detailed Comment on Specific Listings and Delistings

Comments on the proposed 303d List
City of Los Angeles
Bureau of Sanitation


6	Ashland Avenue Drain	Low Dissolved Oxygen	None identified by the State	None	None	No Comment <i>NO F.S.</i>	Evaluate for consistency with the Clean Water Act. Enclosed stormwater conveyance drains are not swimmable/fishable surface waterbodies and "Waters of the United States." Enclosed stormwater conveyance drains do not have designated beneficial uses in the Basin Plan, and therefore, no criteria apply to waters within the drain itself and as such, should not be listed as impaired. Furthermore, the Los Angeles County Municipal NPDES Stormwater Permit (Order 01-182) covers discharges from the drain, along with the Standard Urban Storm Water Mitigation Plans and the County's Storm Water Quality Management Program, all of which have been approved by our Regional Board. Identifying enclosed drains as waterbodies subject to a §305(b) evaluation and §303(d) listing is a confusing precedent, which extends the Clean Water Act beyond its intended scope. The State has not assigned a Beneficial Use to storm pipe.	Silent	Evaluate under Listing Policy	Disagree		x					
7	Ashland Avenue Drain	Toxicity	None identified by the State	None	None	No Comment <i>NO F.S.</i>	Evaluate for consistency with the Clean Water Act. Enclosed stormwater conveyance drains are not swimmable/fishable surface waterbodies and "Waters of the United States." Enclosed stormwater conveyance drains do not have designated beneficial uses in the Basin Plan, and therefore, no criteria apply to waters within the drain itself and as such, should not be listed as impaired. Furthermore, the Los Angeles County Municipal NPDES Stormwater Permit (Order 01-182) covers discharges from the drain, along with the Standard Urban Storm Water Mitigation Plans and the County's Storm Water Quality Management Program, all of which have been approved by our Regional Board. Identifying enclosed drains as waterbodies subject to a §305(b) evaluation and §303(d) listing is a confusing precedent, which extends the Clean Water Act beyond its intended scope. The State has not assigned a Beneficial Use to storm pipe.	Silent	Evaluate under Listing Policy	Disagree		x					
8	Ballona Creek	Trash	REC2	MUN, REC1, WARM	REC2, WILD	One line of evidence is available in the administrative record. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. This water segment-pollutant combination was moved off the section 303(d) list during the 2002 listing cycle only because a TMDL had been completed. No substantial evidence in the record shows that standards are met. The weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list.	TMDL is in place. Use of an existing TMDL as a sole source of a line of evidence is inadequate. All relevant data included in the TMDL should be included in the report as separate line(s) of evidence to determine if WQS are not attained. There are no water quality objectives or guidelines to evaluate a waterbody for trash impairments that meet the requirements of Section 3.7 or 6.1.3 of the Listing Policy. Additionally there are no criteria identified in the Report.	List	Cannot verify impairment	Disagree	No Data			x			
9	Ballona Creek	pH	WARM	MUN, REC1, WARM	REC2, WILD	Five of 40 samples exceeded the pH WQO in one line of evidence and 1 of 22 exceeded in the other. The first line of evidence does not exceed the allowable frequency listed in Table 4.2 of the Listing Policy and there were insufficient number of samples taken in the other data set to make an appropriate determination.	The Basin Plan requires a pH range between 6.5 to 8.5. In Ballona Creek, 18 of 86 samples were above this range, which is 20.9% of the sample events. Under the state's listing policy, a waterbody is considered to be impaired for pH if there are 15 values above the required range.	Delist	Evaluate under Listing Policy	Disagree	6/62 (18/86)	x	x				
10	Ballona Creek	Toxicity	None identified by the State	MUN, REC1, WARM	REC2, WILD	No Comment	Toxicity data are available but were not reviewed because there is no adopted WQO for toxicity. There are no water quality objectives or guidelines to evaluate sediment toxicity that meet the requirements of Section 6.1.3 of the Listing Policy and there are no data that associate a pollutant contributing to toxicity. Nor has the State provided any toxicity data in their Line of Evidence to support a listing determination.	Silent	Cannot verify impairment	Disagree	No Data	x					
11	Ballona Creek	High Coliform Count	None identified by the State	MUN, REC1, WARM	REC2, WILD	No Comment <i>NO F.S.</i>	The State has not identified a beneficial use for protection or impairment. This listing should be for fecal coliform. The most conservative applicable water quality criterion for fecal coliform is 200 MPN/100mL for the Basin Plan REC1 Freshwater 30-Day Minimum 5 samples objective. In Ballona Creek, the criterion was exceeded in 102 of 131 samples, which is 77.9% of the sample events. Under the state's listing policy, a waterbody is considered to be impaired for fecal coliform if there are 22 or more exceedances out of the 131 samples. There is no data available for E. coli.	Silent	Relist under appropriate pollutant	Disagree	(102/131)	x	x				

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12	Ballona Creek	Enteric Viruses	None identified by the State	MUN, REC1, WARM	REC2, WILD	No Comment	This listing should be for fecal coliform or E. coli. Currently there are no standards for enteric viruses. Currently this waterbody is listed under other bacterial indicators.	Silent	Relist under appropriate pollutant	Disagree	No Data	x						
13	Ballona Creek	Copper, Dissolved	WARM	MUN, REC1, WARM	REC2, WILD	30 of 138 samples exceeded the dissolved copper CTR-CCC guidelines for copper and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy. 2200	It cannot be determined if the data the State used in its analysis Total Metals data or Dissolved Metals data or if the Hardness values were present and utilized. Using hardness correlated dissolved metal samples 5 of 93 exceed the CTR CCC, which makes this water body eligible for delisting. The average hardness value for this water body during this time period, October 2000 to March 2005, is 316. The State line of evidence used an average hardness value of 100. This listing is currently being addressed in the TMDL for Metals in the Ballona Creek and Ballona Creek Estuary.	Do Not Delist	Evaluate under Listing Policy	Disagree	30/138 (5/93)	x	x		x			
14	Ballona Creek Estuary	Chlordane (tissue & sediment)	MAR, COMM		NAV, REC1, REC2, COMM, EST, MAR, WILD, RARE, SPWN, SHELL	This pollutant is considered for removal under sections 4.5 and 4.6 of the Listing Policy. Under 4.5 a single line of evidence is necessary to assess delisting status while under 4.6, a minimum of two lines of evidence are needed to assess listing status. Three lines of evidence are available. Based on 4.5, the site shows that this pollutant probably has not accumulated in fish and shellfish to levels that are of concern. The assessments are over 10 years old and may not be representative of current conditions and a newer tissue guideline was used. The sediments in this water have been found to be toxic and concentrations of the pollutant in the water body in a vicinity of the water body exceed the sediment guideline. Eighteen of 20 samples exceeded the sediment guideline and 4 of 4 samples exhibit toxicity. A minimum of 212 samples would be needed in order for 18 exceedances to result in a delisting. None of 4 measurements exceed the applicable tissue guideline. 2918	Delist for tissue. The tissue data are limited and outdated and are not representative of current conditions. The only tissue data are from 1993 were not evaluated under the appropriate guideline and are not representative of current conditions. The draft TMDL for Toxic Pollutants in Ballona Creek Estuary, issued by the Los Angeles Regional Water Board on May 30, 2005, States that the tissue data used by the State and Regional Water Board in the 1996 and 1998 listing cycles was insufficient for listing purposes.	Do Not Delist	Relist under appropriate pollutant	Disagree	No Data	x						
15	Ballona Creek Estuary	DDT (sediment)	MAR, COMM		NAV, REC1, REC2, COMM, EST, MAR, WILD, RARE, SPWN, SHELL	Three lines of evidence are available in the administrative record to assess this pollutant. Based on section 4.6, the site has significant sediment toxicity but it is unknown if the pollutant is likely to cause or contribute to any toxic effect because there is no guideline to interpret the data. In addition, there is one exceedance for the pollutant in tissue. One of 4 samples exceeded the tissue guideline and this is not enough information to consider removal of the pollutant from the list using the Policy's delisting factors. 2919	This waterbody/pollutant segment should be evaluated for DDT sediment due to the fact that there are no current State guidelines or objectives for total DDTs in sediment. Sediment toxicity has not been documented. There are no available sediment data. This listing is being addressed by the TMDLs for Toxic Pollutants in Ballona Creek Estuary.	Do Not Delist	Evaluate under Listing Policy	Disagree	No Data	x						
16	Ballona Creek Estuary	Shellfish Harvesting Advisory	None identified by the State		NAV, REC1, REC2, COMM, EST, MAR, WILD, RARE, SPWN, SHELL	No Comment	There are no supporting data in the report to evaluate. The State has not identified a Beneficial use to protect. According to the Listing Policy, Section 3.4 a health advisory must be posted, a beneficial use for consumption identified, and the supporting data must be available indicating the evaluation guideline for tissue has been exceeded. The Shellfish Harvesting Advisory should be reevaluated.	Silent	Cannot verify impairment	Disagree	No Data	x						
17	Ballona Creek Estuary	Sediment Toxicity	None identified by the State		NAV, REC1, REC2, COMM, EST, MAR, WILD, RARE, SPWN, SHELL	No Comment	There are no water quality objectives or guidelines to evaluate sediment toxicity that meet the requirements of Section 6.1.3 of the Listing Policy and there are no data that associate a pollutant contributing to toxicity. Nor has the State provided any toxicity data in their Line of Evidence to support a listing determination. This listing is being addressed by the TMDLs for Toxic Pollutants in Ballona Creek Estuary.	Silent	Cannot verify impairment	Disagree	No Data	x						

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18	Ballona Creek Estuary	High Coliform Count	None identified by the State	NAV, REC1, REC2, COMM, EST, MAR, WILD, RARE, SPWN, SHELL	No Comment	The State has not identified a beneficial use for protection or impairment. This listing should be for fecal coliform or E. coli. There are no available data in the database.	Silent	Relist under appropriate pollutant	Disagree	No Data	x						
19	Ballona Creek Estuary	PAHs (sediment)	None identified by the State	NAV, REC1, REC2, COMM, EST, MAR, WILD, RARE, SPWN, SHELL	No Comment	The State has not identified a beneficial use for protection or impairment. There are no available sediment data provided by the State to evaluate this listing decision. The Bureau requests relisting PAH sediment-pollutant combination by replacing this general PAH listing as appropriate with the individually listings of Pyrene, Phenanthrene, Chrysene, or Benzo (a) pyrene or Total PAHs on the section 303(d) list in the Water Quality Limited Segments category.	Silent	Relist under appropriate pollutant	Disagree	No Data	x						
20	Ballona Creek Wetlands	Hydromodification	None identified by the State	REC1, REC2, EST, WILD, RARE, MIGR, SPWN, WET	No Comment	The State has not identified a beneficial use for protection or impairment. This is a condition, not a pollutant or toxicity. Therefore, according to Section 2 of the Listing policy this should not be on the 303(d) list	Silent	Evaluate under Listing Policy	Disagree	No Data	x						
21	Ballona Creek Wetlands	Trash	None identified by the State	REC1, REC2, EST, WILD, RARE, MIGR, SPWN, WET	No Comment	TMDL is in place. Use of an existing TMDL as a sole source of a line of evidence is inadequate. All relevant data included in the TMDL should be included in the report as separate line(s) of evidence to determine if WQS are not attained. There are no water quality objectives or guidelines to evaluate a waterbody for trash impairment that meet the requirements of Section 3.7 or 6.1.3 of the Listing Policy. Additionally there are no criteria identified in the Report.	Silent	Cannot verify impairment	Disagree	No Data	x						
22	Ballona Creek Wetlands	Reduced Tidal Flushing	None identified by the State	REC1, REC2, EST, WILD, RARE, MIGR, SPWN, WET	No Comment	This is a condition, not a pollutant or toxicity. This is a condition, not a pollutant or toxicity. Therefore, according to Section 2 of the Listing policy this should not be on the 303(d) list	Silent	Evaluate under Listing Policy	Disagree	No Data	x						
23	Ballona Creek Wetlands	Habitat alterations	None identified by the State	REC1, REC2, EST, WILD, RARE, MIGR, SPWN, WET	No Comment	This is a condition, not a pollutant or pollution. This is a condition, not a pollutant or toxicity. Therefore, according to Section 2 of the Listing policy this should not be on the 303(d) list	Silent	Evaluate under Listing Policy	Disagree	No Data	x						
24	Ballona Creek Wetlands	Exotic Vegetation	None identified by the State	REC1, REC2, EST, WILD, RARE, MIGR, SPWN, WET	No Comment	For the 2006 303(d) List the State considers exotic species as pollutants. However, the State has provided no data to support this listing or to verify impairment.	Silent	Cannot verify impairment	Disagree	No Data	x						

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25	Burbank Western Channel	Zinc	MUN, WARM	MUN, REC1, WARM, WILD	REC2	<p>Two lines of evidence are available in the administrative record to assess this pollutant. One line of evidence pertains to the dissolved portion of zinc and the other pertains to the total fraction in water. Three of six samples exceedances of CTR guidelines were recorded in the dissolve zinc data set. The total zinc data set was compared to secondary MCLs and none were in exceedances.</p> <p>Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment on the section 303(d) list for dissolved zinc but not for total Zinc in the Water Quality Limited Segments category.</p> <p>1912 (X)</p>	<p>Not all available data was considered in the state's analysis. Although the TMDL includes 96 samples extending through 2003, the fact sheet lists only six sampling events. When the 96 samples are combined with the 6 samples on the fact sheet there would be only 3 exceedances in 102 samples. The available dissolved zinc data do not support a listing.</p>	List	Evaluate under Listing Policy	Disagree	3/6 (0/10)							
26	Burbank Western Channel	Cyanide	MUN	MUN, REC1, WARM, WILD	REC2	<p>One line of evidence is available in the administrative record to assess this pollutant. Two samples exceeded the CTR Criteria Continuous Concentration of 0.0052 mg/l which is the highest concentration of Cyanide to which aquatic life can be exposed for an extended period of time (four days) without deleterious effects applicable to protect aquatic life BUs.</p>	<p>The State has incorrectly identified MUN as the BU to protect for. The correct beneficial use to protect for should be WARM.</p>	List	List	Revise and agree	2/6 (6/6)							
27	Burbank Western Channel	Ammonia	REC2	MUN, REC1, WARM, WILD	REC2	<p>Two lines of evidence are available in the administrative record to assess this pollutant. It was not possible to determine any exceedances in the first line of evidence because of insufficient data. However, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the nutrient standard. Sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list.</p>	<p>This is a 2002 listing that the State is incorrectly seeking to add. Also, the State is protecting for REC2 instead of WARM, WILD, or WET.</p> <p>This listing has been addressed by the TMDL for Nitrogen Compounds and Related Effects in the Los Angeles River and its Tributaries.</p> <p>The most conservative applicable water quality criterion for ammonia as n is 2.235 mg/L for the Basin Plan Freshwater Not SPWN Inland 30-Day Average objective. In Burbank Western Channel, the criterion was exceeded in 30 of 75 samples, which is 40% of the sample events. Under the State's listing policy, a waterbody is considered to be impaired for ammonia as n if there are 7 or more exceedances out of the 75 samples.</p>	List	Evaluate under Listing Policy	Revise and agree	0/27 (30/75)	x	x				<p>Don't see zinc data for BWC (or cyanide)</p>	
28	Burbank Western Channel	Nitrite	MUN	MUN, REC1, WARM, WILD	REC2	<p>Three lines of evidence are available in the administrative record. A sufficient number of samples exceed the water quality objective. In addition, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard for Nitrite. Four of 33 samples exceeded the water quality standard and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. Sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments being addressed portion of the section 303(d) list.</p>	<p>*MUN are designated under SB 88-63 and RB 89-03. As a result of a court decision, *MUN bodies are not subject to MUN criteria. The court decision requires USEPA to approve or disapprove the basin plan in such a way that MUN criteria could not be used for 303(d) listing decisions for waters designated as potential MUN.</p>	List	Evaluate under Listing Policy	Disagree	4/33 (8/66)							
29	Burbank Western Channel	Trash	None identified by the State	MUN, REC1, WARM, WILD	REC2	<p>No Comment</p>	<p>TMDL is in place. Use of an existing TMDL as a sole source of a line of evidence is inadequate. All relevant data included in the TMDL should be included in the report as separate line(s) of evidence to determine if WQS are not attained.</p> <p>There are no water quality objectives or guidelines to evaluate a waterbody for trash impairment that meet the requirements of Section 6.1.3 of the Listing Policy.</p>	Silent	Cannot verify impairment	Disagree	No Data	x						

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30	Cabrillo Beach (Outer)	High Coliform Count	REC1	NAV, REC1, REC2, COMM, MAR, WILD, MIGR, SPWN, SHELL	A TMDL is in place. Sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list.	This listing should be for total coliform. The most conservative applicable water quality criterion for total coliform is 70 MPN/100mL for the Basin Plan SHELL 30-Day Median objective. In Cabrillo Beach (Outer), the criterion was exceeded in 321 of 1920 samples, which is 16.7% of the sample events. Under the state's listing policy, a waterbody is considered to be impaired for total coliform if there are 319 or more exceedances out of the 1920 samples. The most conservative applicable water quality criterion for enterococcus is 35 MPN/100mL for the Basin Plan REC1 Marine 30-Day Minimum 5 samples objective. In Cabrillo Beach (Outer), the criterion was exceeded in 2 of 397 samples, which is 0.5% of the sample events. Under the state's listing policy, a waterbody is eligible for delisting for enterococcus if there are 65 or fewer exceedances out of the 397 samples. The most conservative applicable water quality criterion for fecal coliform is 200 MPN/100mL for the Basin Plan REC1 Marine 30-Day Minimum 5 samples objective. In Cabrillo Beach (Outer), the criterion was exceeded in 0 of 365 samples, which is 0% of the sample events. Under the state's listing policy, this is a condition, not a pollutant or pollution. Therefore, according to Section 2 of the policy this should not be listed.	Do Not Delist	Relist under appropriate pollutant	Revise and agree	(321/1920) tc (2/397) ent (0/365) fc	x	x	x		
31	Cabrillo Beach (Outer)	Beach Closures	None identified by the State	NAV, REC1, REC2, COMM, MAR, WILD, MIGR, SPWN, SHELL	No Comment	No beneficial use identified.	Silent	Evaluate under Listing Policy	Disagree	No Data	x				
32	Cabrillo Beach (Outer)	DDT	None identified by the State	NAV, REC1, REC2, COMM, MAR, WILD, MIGR, SPWN, SHELL	Fish consumption advisory for DDT.	The State has not identified a beneficial use for protection or impairment. The State should provide in the record the supporting data and required information to list or not list using the listing criteria. According to Section 3.4 of the Listing Policy a health advisory must be posted, a beneficial use for consumption identified, and the supporting data must be available indicating the evaluation guideline for tissue has been exceeded. The Fish Consumption Advisory for DDT should be reevaluated.	Silent	Cannot verify impairment	Disagree	No Data	x				
33	Cabrillo Beach (Outer)	PCBs	None identified by the State	NAV, REC1, REC2, COMM, MAR, WILD, MIGR, SPWN, SHELL	Fish consumption advisory for PCBs.	The State has not identified a beneficial use for protection or impairment. According to Section 3.4 of the Listing Policy a health advisory must be posted, a beneficial use for consumption identified, and the supporting data must be available indicating the evaluation guideline for tissue has been exceeded. The Fish Consumption Advisory for PCBs should be reevaluated.	Silent	Cannot verify impairment	Disagree	No Data	x				
34	Castlerock Beach	Bacteria Indicators	None identified by the State	NAV, REC1, REC2, COMM, MAR, WILD, SHELL	No Comment	The State has not identified a beneficial use for protection or impairment. There are no available data in the record to support a listing determination. This listing should be for total coliform, fecal coliform, or enterococcus.	Silent	Cannot verify impairment	Disagree	No Data	x				
35	Castlerock Beach	Beach Closures	None identified by the State	NAV, REC1, REC2, COMM, MAR, WILD, SHELL	No Comment	This is a condition, not a pollutant or toxicity. Therefore, according to Section 2 of the policy this should not be listed. No beneficial use identified.	Silent	Evaluate under Listing Policy	Disagree	No Data	x				
36	Castlerock Beach	DDT	None identified by the State	NAV, REC1, REC2, COMM, MAR, WILD, SHELL	Fish Consumption Advisory for DDT.	The State has not identified a beneficial use for protection or impairment. The State should provide in the record the supporting data and required information to list or not list using the listing criteria. According to Section 3.4 of the Listing Policy a health advisory must be posted, a beneficial use for consumption identified, and the supporting data must be available indicating the evaluation guideline for tissue has been exceeded. The Fish Consumption Advisory for DDT should be reevaluated.	Silent	Cannot verify impairment	Disagree	No Data	x				

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37	Castlerock Beach	PCBs	None identified by the State		NAV, REC1, REC2, COMM, MAR, WILD, SHELL	Fish consumption advisory for PCBs.	The State has not identified a beneficial use for protection or impairment. According to Section 3.4 of the Listing Policy a health advisory must be posted, a beneficial use for consumption identified, and the supporting data must be available indicating the evaluation guideline for tissue has been exceeded. The Fish Consumption Advisory for PCBs should be reevaluated.	Silent	Cannot verify impairment	Disagree	No Data	x					
38	Compton Creek	pH	REC2	MUN	GWR, REC1, REC2, WARM, WILD, WET	A TMDL is in place. Sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list.	Although a TMDL is in place, the use of an existing TMDL as a sole source of a line of evidence is inadequate. All relevant data included in the TMDL should be included in the report as separate line(s) of evidence to determine if WQS are not attained.	Do Not Delist	Cannot verify impairment	Disagree	No Data	x		x			
39	Compton Creek	Copper	None identified by the State	MUN	GWR, REC1, REC2, WARM, WILD, WET	No Comment	The State has not identified a beneficial use for protection or impairment. There are no available data in the report to support a listing decision.	Silent	Evaluate under Listing Policy	Disagree	No Data	x					
40	Compton Creek	Lead	None identified by the State	MUN	GWR, REC1, REC2, WARM, WILD, WET	No Comment	The State has not identified a beneficial use for protection or impairment. There are no available data in the report to support a listing decision.	Silent	Cannot verify impairment	Disagree	No Data	x					
41	Compton Creek	High Coliform Count	None identified by the State	MUN	GWR, REC1, REC2, WARM, WILD, WET	No Comment	The State has not identified a beneficial use for protection or impairment. This listing should be for fecal coliform or E. coli. The tributary rule applies with data from Los Angeles River Reach 1. There are no available data in the report to support a listing decision.	Silent	Cannot verify impairment	Disagree	No Data	x					
42	Dockweiler Beach	High Coliform Count	REC1		IND, NAV, REC1, REC2, COMM, MAR, WILD, SPWN	One line of evidence is available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation is expected to result in attainment of this standard. #1981	There is no available data in the report to evaluate this listing decision. The readily available data provided by the state indicate no impairment for bacterial indicators. The most stringent criteria for REC1 for enterococcus was exceeded in 115 of 815 samples, this meets the frequency requirements for the maximum number of measured exceedances allowed to remove a water segment from the 303(d) list for conventional or other pollutants.	Do Not Delist	Evaluate under Listing Policy	Disagree	(3/2671) fc (115/815) ent (326/3283) tc	x	x	x			
43	Dominguez Channel (above Vermont)	Aluminum	MUN, REC1, REC2, WARM, RARE, WILD	MUN, REC1, WARM, WILD	REC2, RARE	Two lines of evidence are available in the administrative record to assess this pollutant. One line of evidence from sampling station S23 showed two exceedances, the other line of evidence from sampling station S28 showed one exceedance of the primary MCL. Three of 18 samples exceeded the primary MCL for aluminum of and this exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.	*MUN are designated under SB 88-63 and RB 89-03. As a result of a court decision, *MUN bodies are not subject to MUN criteria. The court decision requires USEPA to approve or disapprove the basin plan in such a way that MUN criteria could not be used for 303(d) listing decisions for waters designated as potential MUN.	List	Evaluate under Listing Policy	Disagree	1/6						
44	Dominguez Channel (above Vermont)	Zinc (water)	MUN, REC1, REC2, WARM, RARE, WILD	MUN, REC1, WARM, WILD	REC2, RARE	Three lines of evidence are available in the administrative record. A number of samples exceed the CTR criteria for the protection of aquatic life. This water body pollutant was placed in the 2002 303(d) list for zinc in tissue in both segments (S23 and S28) of Dominguez Channel sampling stations. Twelve of 12 samples at sampling station S23 and two of six samples in 2002-2003 at sampling station S28 exceeded the CTR criteria and both lines of evidence exceed the allowable frequency listed in Table 3.1 of the Listing Policy. #2855	The most conservative applicable water quality criterion for dissolved zinc is 50 ug/L for the CTR Aquatic Life Freshwater Chronic (CCC) objective. In Dominguez Channel (above Vermont), the criterion was exceeded in 6 of 73 samples, which is 8.2% of the sample events. Under the State's listing policy, a waterbody is eligible for delisting for dissolved zinc if there are 6 or fewer exceedances out of the 73 samples.	List	Evaluate under Listing Policy	Disagree	14/18 (6/73)		x		x		

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45	Dominguez Channel (above Vermont)	Total Fecal Coliform	MUN, REC1, REC2, RARE, WARM, WILD	MUN, REC1, WARM, WILD	REC2, RARE	Three lines of evidence from different sampling years are available in the administrative record to assess this pollutant. In all sample sets a number of samples exceeded bacterial water quality objective. Eleven out of 12 samples exceeded the fecal coliform bacteria water quality objective. Although this is not enough samples to determine with the confidence and power of the Listing Policy, a minimum of 67 samples would be needed in order for eleven exceedances to result in a delisting.	This listing should be for fecal coliform and E. coli. The most conservative applicable water quality criterion for fecal coliform is 200 MPN/100mL for the Basin Plan REC1 Freshwater 30-Day Minimum 5 samples objective. In Dominguez Channel (above Vermont), the criterion was exceeded in 54 of 59 samples, which is 91.5% of the sample events. Under the state's listing policy, a waterbody is considered to be impaired for fecal coliform if there are 10 or more exceedances out of the 59 samples. The most conservative applicable water quality criterion for e. coli is 126 MPN/100mL for the Basin Plan REC1 Freshwater 30-Day Minimum 5 samples objective. In Dominguez Channel (above Vermont), the criterion was exceeded in 26 of 36 samples, which is 72.2% of the sample events. Under the state's listing policy, a waterbody is considered to be impaired for e. coli if there are 6 or more exceedances out of the 36 samples.	Do Not Delist	Relist under appropriate pollutant	Revise and agree	11/12 (54/59) fc (26/36) ec	x	x			
46	Dominguez Channel (above Vermont)	Ammonia	None identified by the State	MUN, REC1, WARM, WILD	REC2, RARE	No Comment	The State has not identified a beneficial use for protection or impairment. This should be WARM. The most conservative applicable water quality criterion for ammonia as N is 2.235 mg/L for the Basin Plan Freshwater Not SPWN Inland 30-Day Average objective. In Dominguez Channel (above Vermont), the criterion was exceeded in 3 of 35 samples, which is 8.6% of the sample events. Under the State's listing policy, a waterbody is considered to be impaired for ammonia as n if there are 3 or more exceedances out of the 35 samples.	Silent	Evaluate under Listing Policy	Revise and agree	(3/35)	x				
47	Dominguez Channel (above Vermont)	Chromium (sediment)	None identified by the State	MUN, REC1, WARM, WILD	REC2, RARE	No Comment	The State has not identified a beneficial use for protection or impairment. The State has provided no data to evaluate the listing decision. There are four sediment data samples readily available with one exceedance from 1997 of the State guideline PEC of 111 mg/kg DW. The two samples from 2002 were 44 and 18 mg/kg. The water quality samples indicate zero exceedances in 153 samples showing no new loading and a trend of decreasing sediment concentrations. Request a review of this listing decision using the 2004 Listing Policy listing criteria.	Silent	Evaluate under Listing Policy	Disagree	(0/2)	x	x		x	
48	Dominguez Channel (above Vermont)	Lead (tissue)	None identified by the State	MUN, REC1, WARM, WILD	REC2, RARE	No Comment	The State has not identified a beneficial use for protection or impairment. There are no lead tissue data available for this reach. There are two sediment data samples with zero exceedances of the State guideline PEC of 128 ppb. Request a review of this listing decision using the 2004 Listing Policy listing criteria.	Silent	Evaluate under Listing Policy	Disagree	(0/2)	x				
49	Dominguez Channel (above Vermont)	PAHs (sediment)	None identified by the State	MUN, REC1, WARM, WILD	REC2, RARE	No Comment	The State has not identified a beneficial use for protection or impairment. The Bureau requests relisting PAH sediment-pollutant combination by replacing this general PAH listing as appropriate with the individually listings of Pyrene, Phenanthrene, Chrysene, or Benzo (a) pyrene or Total PAHs on the section 303(d) list in the Water Quality Limited Segments category.	Silent	Relist under appropriate pollutant	Disagree	No Data	x				
50	Dominguez Channel (above Vermont)	PCBs (tissue)	None identified by the State	MUN, REC1, WARM, WILD	REC2, RARE	No Comment	The State has not identified a beneficial use for protection or impairment. There are no tissue data for PCBs available for this reach. However, the sediment data shows zero exceedances out of 2 samples.	Silent	Evaluate under Listing Policy	Disagree	No tissue data	x				
51	Dominguez Channel (Estuary to Vermont)	Ammonia	None identified by the State	NAV, REC1, REC2, COMM, EST, MAR, WILD, RARE, MIGR, SPWN		No Comment	The State has not identified a beneficial use for protection or impairment. The available data do not support a listing for this waterbody based on the binomial test. Zero out of 10 exceedances. Request a review of this listing decision using the 2004 Listing Policy listing criteria.	Silent	Evaluate under Listing Policy	Disagree	(0/10)	x	x			

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52	Dominguez Channel (Estuary to Vermont)	Benthic Community Effects	None identified by the State	NAV, REC1, REC2, COMM, EST, MAR, WILD, RARE, MIGR, SPWN	No Comment	This is a condition, not a pollutant or toxicity. There is no link established between the pollutant and the condition. Therefore, according to Section 2 of the policy this should not be listed. There are no secondary Line of evidence or reference condition identified in the report in accordance with Listing Policy Section 3.8.	Silent	Evaluate under Listing Policy	Disagree	No Data	x					
53	Dominguez Channel (Estuary to Vermont)	High Coliform Count	None identified by the State	NAV, REC1, REC2, COMM, EST, MAR, WILD, RARE, MIGR, SPWN	No Comment	The State has not identified a beneficial use for protection or impairment. This listing should be for fecal coliform and E. coli. The available fecal coliform data shows 14 out of 24 exceedances under the most stringent criteria. The E. coli data shows 10 out of 14 exceedances under the most stringent criteria. Although the listing is supported by the binomial test when applied to fecal coliform data, there are only a few sampling dates. To better determine if there is impairment, samples should be taken across a larger date range. In addition, coliform is not an adequate indicator for of the waterbody's ability to support recreational uses. To determine if there is an issue of concern, E. coli or enterococcus data should be used. In this case, the available E. coli data support a bacteria listing.	Silent	Relist under appropriate pollutant	Disagree	(14/24) fc (10/14) ec	x	x				
54	Dominguez Channel (Estuary to Vermont)	Lead (tissue)	EST, MAR, COMM	NAV, REC1, REC2, COMM, EST, MAR, WILD, RARE, MIGR, SPWN	Replace the lead in tissue listing with lead in sediment. Considered for removal under section 4 of Listing Policy. Lead in tissue was used in 2002 to list, based on EDLs or MTRL and these guidelines don't meet requirements of Listing Policy. Only one tissue sample was taken in 1992 at one site and this is not representative of the water segment. Sediment samples exceeded between 1994 and 2004. Listing Policy requires that pollutant be linked with observed toxicity or benthic community impacts for segment to be listed. one toxicity sample + one benthic community sample collected in 1996. Although total number of samples not sufficient to establish required linkage, benthic community sample indicated a linkage between pollutant and benthic community impacts. Weight of evidence indicates there is sufficient justification for replacing lead in tissue listing with lead in sediment. Insufficient data available to assess status of water body for lead in tissue because there are no applicable tissue guidelines. 29 of 93 core grab sediment samples exceeded PEL 112.18 ug/l for lead. Benthic community	Replace the listing for lead in tissue with lead in sediment. Only one tissue data sample is available for lead. State line of evidence #1 uses one tissue sample collected in 1992 and utilized a MTRL guideline (not permissible under policy). State line of evidence #2 utilizes 93 sediment samples with a PEL of 112.18 ug/g and compares to a basin plan objective for surface waters. State line of evidence #3 uses one toxicity sample from 1996. Therefore this listing for lead in tissue is inaccurate and should be delisted. The most conservative applicable water quality criterion for total lead is 128 ug/g for the objective. In Dominguez Channel (Estuary to Vermont), the criterion was exceeded in 28 of 108 samples, which is 25.9% of the sample events. Under the state's listing policy, a waterbody is considered to be impaired for total lead if there are 10 or more exceedances out of the 108 samples.	Do Not Delist	Relist under appropriate pollutant	Revise and agree	(28/108)	x	x				
55	Echo Park Lake	Trash	REC2	MUN, REC1, REC2, WARM, WILD	One line of evidence is available in the administrative record. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. This water segment-pollutant combination was moved off the section 303(d) list during the 2002 listing cycle only because a TMDL had been completed. No substantial evidence in the record shows that standards are met. Sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list.	TMDL is in place. Use of an existing TMDL as a sole source of a line of evidence is inadequate. All relevant data included in the TMDL should be included in the report as separate line(s) of evidence to determine if WQS are not attained. There are no water quality objectives or guidelines to evaluate a waterbody for trash impairment that meet the requirements of Section 3.7 or 6.1.3 of the Listing Policy. Additionally there are no criteria identified in the Report.	List	Cannot verify impairment	Disagree	No Data			x			
56	Echo Park Lake	Copper	None identified by the State	MUN, REC1, REC2, WARM, WILD	No Comment	The State has not identified a beneficial use for protection or impairment. There are no available data in the report to support a listing decision.	Silent	Evaluate under Listing Policy	Disagree	No Data	x					
57	Echo Park Lake	Lead	None identified by the State	MUN, REC1, REC2, WARM, WILD	No Comment	The State has not identified a beneficial use for protection or impairment. There are no available data in the report to support a listing decision.	Silent	Evaluate under Listing Policy	Disagree	No Data	x					

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58	Echo Park Lake	Ammonia	None identified by the State	MUN, REC1, REC2, WARM, WILD	No Comment	The State has not identified a beneficial use for protection or impairment. There are no available data in the report to support a listing decision.	Silent	Evaluate under Listing Policy	Disagree	No Data	x					
59	Echo Park Lake	pH	None identified by the State	MUN, REC1, REC2, WARM, WILD	No Comment	The State has not identified a beneficial use for protection or impairment. No data in the report to evaluate impairment decision.	Silent	Evaluate under Listing Policy	Disagree	No Data	x					
60	Echo Park Lake	Eutrophic	None identified by the State	MUN, REC1, REC2, WARM, WILD	No Comment	The listing does not identify a pollutant but rather, a condition (eutrophic). Currently no criteria exists for US waterways to determine impairment. Eutrophic is not a pollutant or toxicity in accordance with Section 2 of the policy and should not be listed. This Listing does not meet the requirements of Section 3.7 of the Listing Policy. There are no data in the record to evaluate. Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of removing these listing from the 303 (d) Water Quality Limited Segment list because the segment pollutant combinations is not a pollutant. The state has not identified a beneficial use for protection or impairment.	Silent	Evaluate under Listing Policy	Disagree	No Data	x					
61	Echo Park Lake	Odors	None identified by the State	MUN, REC1, REC2, WARM, WILD	No Comment	The State has not identified a beneficial use for protection or impairment. Odor should not be placed on the 303(d) list because there is no evidence in the State report to evaluate the presence of or to determine impairment. Odor is not a pollutant or toxicity in accordance with Section 2 of the policy and should not be listed. This Listing does not meet the requirements of Section 3.7 of the Listing Policy.	Silent	Evaluate under Listing Policy	Disagree	No Data	x					
62	Echo Park Lake	Algae	None identified by the State	MUN, REC1, REC2, WARM, WILD	No Comment	There are no data in the record to evaluate. The listing does not identify a pollutant but rather, a condition caused by a pollutant(s) (algae). Currently no criteria exists for US waterways to determine impairment. Algae is not a pollutant or toxicity in accordance with Section 2 of the policy and should not be listed. This Listing does not meet the requirements of Section 3.7 of the Listing Policy. There are no data in the record to evaluate. Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of removing these listing from the 303 (d) Water Quality Limited Segment list because the segment pollutant combinations is not a pollutant. The state has not identified a beneficial use for protection or impairment.	Silent	Evaluate under Listing Policy	Disagree	No Data	x					
63	Echo Park Lake	PCBs (tissue)	None identified by the State	MUN, REC1, REC2, WARM, WILD	No Comment	The State has not identified a beneficial use for protection or impairment. There are no tissue data for PCBs available for review.	Silent	Evaluate under Listing Policy	Disagree	No Data	x					
64	Lincoln Park Lake	Trash	REC2	MUN, REC1, REC2, WARM, WILD	One line of evidence is available in the administrative record. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. This water segment-pollutant combination was moved off the section 303(d) list during the 2002 listing cycle only because a TMDL had been completed. No substantial evidence in the record shows that standards are met. sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list.	TMDL is in place. Use of an existing TMDL as a sole source of a line of evidence is inadequate. All relevant data included in the TMDL should be included in the report as separate line(s) of evidence to determine if WQS are not attained. There are no water quality objectives or guidelines to evaluate a waterbody for trash impairment that meet the requirements of Section 3.7 or 6.1.3 of the Listing Policy. Additionally there are no criteria identified in the Report.	List	Cannot verify impairment	Disagree	No Data					x	

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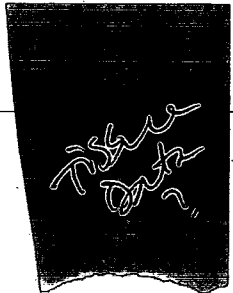
65	Lincoln Park Lake	Lead	None identified by the State	MUN, REC1, REC2, WARM, WILD	No Comment	The State has not identified a beneficial use for protection or impairment. There are no available data in the report to support a listing decision.	Silent	Cannot verify impairment	Disagree	No Data	x					
66	Lincoln Park Lake	Ammonia	None identified by the State	MUN, REC1, REC2, WARM, WILD	No Comment	The State has not identified a beneficial use for protection or impairment. There are no available data in the record to support a listing determination.	Silent	Evaluate under Listing Policy	Disagree	No Data	x					
67	Lincoln Park Lake	Organic Enrichment/ Low Dissolved Oxygen	None identified by the State	MUN, REC1, REC2, WARM, WILD	No Comment	The State has not identified a beneficial use for protection or impairment. There is no data in the report to support a listing for low dissolved oxygen.	Silent	Evaluate under Listing Policy	Disagree	No Data	x					
68	Lincoln Park Lake	Eutrophic	None identified by the State	MUN, REC1, REC2, WARM, WILD	No Comment	The listing does not identify a pollutant but rather, a condition (eutrophic). Currently no criteria exists for US waterways to determine impairment. Eutrophic is not a pollutant or toxicity in accordance with Section 2 of the policy and should not be listed. This Listing does not meet the requirements of Section 3.7 of the Listing Policy. There are no data in the record to evaluate. Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of removing these listing from the 303 (d) Water Quality Limited Segment list because the segment pollutant combinations is not a pollutant. The state has not identified a beneficial use for protection or impairment.	Silent	Evaluate under Listing Policy	Disagree	No Data	x					
69	Lincoln Park Lake	Odors	None identified by the State	MUN, REC1, REC2, WARM, WILD	No Comment	The State has not identified a beneficial use for protection or impairment. Odor should not be placed on the 303(d) list because there is no evidence in the State report to evaluate the presence of or to determine impairment. Odor is not a pollutant or toxicity in accordance with Section 2 of the policy and should not be listed. This Listing does not meet the requirements of Section 3.7 of the Listing Policy. There are no data in the record to evaluate.	Silent	Evaluate under Listing Policy	Disagree	No Data	x					
70	Los Angeles / Long Beach Inner Harbor	Copper (tissue & sediment)	MAR	IND, NAV, REC1, REC2, COMM, MAR, RARE, SHELL	Two lines of evidence are available in the administrative record. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. One hundred three of 605 sediment samples exceeded the sediment quality guideline and 9 of 84 sediment samples were toxic and these data exceeds the allowable frequency listed in Table 3.1 of the Listing Policy. 3029 	18 out of 627 sediment samples exceed the ERM of 270 ppb which does not exceed the allowable frequency of the Listing Policy. There are no state objectives for total copper in tissue. The most conservative applicable water quality criterion for total copper is 270 µg/g for the objective. In Los Angeles Harbor Main Channel, the criterion was exceeded in 3 of 57 samples, which is 5.3% of the sample events. Under the state's listing policy, a waterbody is eligible for delisting for total copper if there are 4 or fewer exceedances out of the 57 samples. In Los Angeles Harbor Southwest Slip, the criterion was exceeded in 6 of 24 samples, which is 25% of the sample events. Under the state's listing policy, a waterbody is considered to be impaired for total copper if there are 2 or more exceedances out of the 24 samples. In Long Beach Harbor Main Channel, SE, W Basin, Pier J, Breakwater, the criterion was exceeded in 5 of 266 samples, which is 1.9% of the sample events. Under the state's listing policy, a waterbody is eligible for delisting for total copper if there are 22 or fewer exceedances out of the 266 samples. In Los	List	Evaluate under Listing Policy	Disagree	103/605 (18/627)	x	x				
71	Los Angeles / Long Beach Inner Harbor	DDT (tissue & sediment)	COMM	IND, NAV, REC1, REC2, COMM, MAR, RARE, SHELL	Two lines of evidence are available in the administrative record. Fish Consumption Advisory for DDT. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. 714 sediment samples were taken between 1992 and 2001, DDT was detected in the majority of samples.	This Waterbody/pollutant segment should be evaluated for DDT sediment impairment due to the fact that there are no current state guidelines or objectives for total DDTs in sediment. Additionally, sediment toxicity associated with DDT has not been documented. The available tissue data do not support the listing, with zero of 463 samples exceeding the OEHHA screening value of 100 µg/kg. The fish consumption advisory should be reevaluated as most of the original advisories were conducted in the mid-1990's.	List	Evaluate under Listing Policy	Disagree	(0/463)	x	x				

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72	Los Angeles / Long Beach Inner Harbor	PCBs (tissue & sediment)	COMM, MAR	IND, NAV, REC1, REC2, COMM, MAR, RARE, SHELL	One line of evidence is available in the administrative record. Fish Consumption Advisory for PCBs. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. Of the 626 core and grab sediment samples, 31 exceeded the sediment quality guideline.	The available tissue data support a listing with many samples exceeding the OEHHA screening value of 0.020 µg/g. The State data indicate that the sediment listing should be evaluated under the Listing criteria.	List	Relist under appropriate pollutant	Revise and agree	31/626 c&g	x						
73	Los Angeles / Long Beach Inner Harbor	Sediment Toxicity	None identified by the State	IND, NAV, REC1, REC2, COMM, MAR, RARE, SHELL	No Comment	There are no water quality objectives or guidelines to evaluate sediment toxicity that meet the requirements of Section 6.1.3 of the Listing Policy and there are no data that associate a pollutant contributing to toxicity. Nor has the State provided any toxicity data in their Line of Evidence to support a listing determination.	Silent	Evaluate under Listing Policy	Disagree	No Data	x						
74	Los Angeles / Long Beach Inner Harbor	Beach Closures	None identified by the State	IND, NAV, REC1, REC2, COMM, MAR, RARE, SHELL	No Comment	This is a condition, not a pollutant or toxicity. Therefore, according to Section 2 of the policy this should not be listed. The database has limited coliform data available. This listing is addressed by the LA Harbor Main Channel Cabrillo Beach Bacterial TMDL. This impairment listing should be for total coliform, fecal coliform, or enterococcus. No beneficial use identified.	Silent	Relist under appropriate pollutant	Disagree	No Data	x						
75	Los Angeles / Long Beach Inner Harbor	Zinc (tissue & sediment)	COMM, MAR	IND, NAV, REC1, REC2, COMM, MAR, RARE, SHELL	Two lines of evidence are available in the administrative record. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. Sixty nine of 654 sediment samples exceeded the sediment quality guideline and nine of 84 sediment samples were toxic and these data exceeds the allowable frequency listed in Table 3.1 of the Listing Policy.	Currently there are no state guidelines for zinc in tissue and the available tissue data do not support the listing, with no data exceeding even the PEL of 3200 µg/g. The sediment data at the Los Angeles/Long Beach Inner Harbor do not support the listing, with 35 out of 716 sediment samples exceeding the ERM of 410 µg/g. Sediment toxicity may or may not be associated with presence of zinc in sediment. The most conservative applicable water quality criterion for total zinc is 410 µg/g for the objective. In Los Angeles Harbor E, W Basin, Slip No 1, Slip No 5, Turning Basin, Cerritos Channel, the criterion was exceeded in 10 of 315 samples, which is 3.2% of the sample events. Under the state's listing policy, a waterbody is eligible for delisting for total zinc if there are 26 or fewer exceedances out of the 315 samples. In Los Angeles Harbor Main Channel, the criterion was exceeded in 1 of 59 samples, which is 1.7% of the sample events. Under the state's listing policy, a waterbody is eligible for delisting for total zinc if there are 4 or fewer exceedances out of the 59 samples. In Los Angeles Harbor S	List	Evaluate under Listing Policy	Disagree	69/654 (35/716)	x	x					
76	Los Angeles / Long Beach Inner Harbor	PAHs (tissue & sediment)	None identified by the State	IND, NAV, REC1, REC2, COMM, MAR, RARE, SHELL	No Comment	The sediment data at the Main Channel do not support the sediment listing with zero of 1113 samples exceeding the sediment guideline of 1800 ppm. However, the available tissue data show exceedances of the EPA screening values of 0.0057 ppm. The Bureau requests relisting PAH sediment-pollutant combination by replacing this general PAH listing as appropriate with the individually listings of Pyrene, Phenanthrene, Chrysene, or Benzo (a) pyrene or Total PAHs on the section 303(d) list in the Water Quality Limited Segments category. The most conservative applicable water quality criterion for PAHs (total) is 1800 µg/g for the objective. In Los Angeles Harbor Main Channel, the criterion was exceeded in 0 of 121 samples, which is 0% of the sample events. Under the state's listing policy, a waterbody is eligible for delisting for pahs (total) if there are 10 or fewer exceedances out of the 121 samples. In Los Angeles Harbor E, W Basin, Slip No 1, Slip No 5, Turning Basin, Cerritos Channel, the criterion was exceeded in 0 of 591 samples, which is 0% of the sample events. Under the state's listing policy, a waterbody is eligible for delisting for pahs (total) if there are	Silent	Relist under appropriate pollutant	Disagree	(644/648) t (0/1113) s	x						



3034 (X)

3031 (X)

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77	Los Angeles / Long Beach Outer Harbor (inside breakwater)	PCBs	None identified by the State	NAV, REC1, REC2, COMM, MAR, RARE, SHELL	No Comment	The State has not identified a beneficial use for protection or impairment. According to the Listing Policy, Section 3.4 a health advisory must be posted, a beneficial use for consumption identified, and the supporting data must be available indicating the evaluation guideline for tissue has been exceeded. The State indicated that PCBs have been detected in sediments in the Cabrillo Beach area. Sediment toxicity has not been documented. The Fish Consumption advisory for PCBs should be reevaluated.	Silent	Cannot verify impairment	Disagree	No Data	x						
78	Los Angeles Fish Harbor	DDT	COMM	IND, NAV, REC1, REC2, COMM, MAR, RARE, SHELL	The weight of evidence indicates there is sufficient justification in favor of not removing this water segment from the section 303(d) list. OEHHA fish consumption advisory for the Los Angeles/Long Beach Harbor area, no new information indicating this health advisory has been removed or is not applicable to this specific water segment. There is no sediment quality guideline available to assess exceedances of DDT in sediment. In this case, there are no current tissue data available for evaluation, it is unknown whether pollutant concentrations exceed sediment quality guidelines, and in the absence of more current information, a health advisory remains in place and is applicable to this water body segment.	The State should provide in the record the supporting data and required information to list or not list using the listing criteria. According to Section 3.4 of the Listing Policy a health advisory must be posted, a beneficial use for consumption identified, and the supporting data must be available indicating the evaluation guideline for tissue has been exceeded. The fish consumption advisory should be reevaluated as most of the original advisories were conducted in the mid-1990's.	Do Not Delist	Cannot verify impairment	Disagree	No Data	x						
79	Los Angeles Harbor - Cabrillo Marina	DDT (tissue)	COMM	IND, NAV, REC1, REC2, COMM, MAR, RARE, SHELL	One line of evidence is available in the administrative record. Fish Consumption Advisory for DDT.	The State should provide in the record the supporting data and required information to list or not list using the listing criteria. According to Section 3.4 of the Listing Policy a health advisory must be posted, a beneficial use for consumption identified, and the supporting data must be available indicating the evaluation guideline for tissue has been exceeded. The fish consumption advisory should be reevaluated as most of the original advisories were conducted in the mid-1990's.	List	Cannot verify impairment	Disagree	(0/4)							
80	Los Angeles Harbor - Cabrillo Marina	PCBs (tissue & sediment)	COMM	IND, NAV, REC1, REC2, COMM, MAR, RARE, SHELL	Fish Consumption Advisory for PCBs. Of the 11 sediment core samples, zero exceeded sediment quality guideline of 400 ug/g.	The available data does not support a sediment listing. The State should provide in the record the supporting data and required information to list or not list using the listing criteria. According to Section 3.4 of the Listing Policy a health advisory must be posted, a beneficial use for consumption identified, and the supporting data must be available indicating the evaluation guideline for tissue has been exceeded. The fish consumption advisory should be reevaluated as most of the original advisories were conducted in the mid-1990's.	List	Relist under appropriate pollutant	Disagree	0/11	x						
81	Los Angeles Harbor - Inner Cabrillo Beach Area	Beach Closures (Coliform)	None identified by the State	NAV, REC1, REC2, COMM, MAR, WILD, MIGR, SPWN, SHELL	No Comment	This is a condition, not a pollutant or pollution. Therefore, according to Section 2 of the policy this should not be listed. This listing should be for total coliform and enterococcus. See Bacteria Indicators listing.	Silent	Relist under appropriate pollutant	Disagree	(1484/2992) tc (668/2963) ent	x						

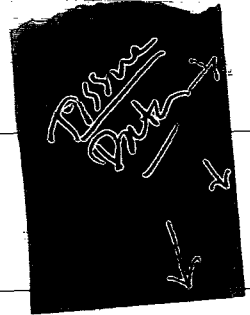


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82	Los Angeles Harbor - Inner Cabrillo Beach Area	Bacteria Indicators	REC1	NAV, REC1, REC2, COMM, MAR, WILD, MIGR, SPWN, SHELL	Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. Of the 3,362 samples, 1,729 exceeded the bacteriological standard and this exceeds the allowable frequency of the Listing Policy.	This listing should be for total coliform and enterococcus. Total coliform shows impairment for the SHELL not REC1, however, enterococcus shows impairment for REC1 which is the State identified beneficial use. The most conservative applicable water quality criterion for total coliform is 70 MPN/100mL for the Basin Plan SHELL 30-Day Median objective. In Cabrillo Beach (Inner) LA Harbor Area, the criterion was exceeded in 1484 of 2993 samples, which is 49.6% of the sample events. Under the state's listing policy, a waterbody is considered to be impaired for total coliform if there are 497 or more exceedances out of the 2993 samples. The most conservative applicable water quality criterion for enterococcus is 35 MPN/100mL for the Basin Plan REC1 Marine 30-Day Minimum 5 samples objective. In Cabrillo Beach (Inner) LA Harbor Area, the criterion was exceeded in 668 of 2963 samples, which is 22.5% of the sample events. Under the state's listing policy, a waterbody is considered to be impaired for enterococcus if there are 492 or more exceedances out of the 2963 samples.	List	Relist under appropriate pollutant	Revise and agree	1729/3362 (1484/2993) tc (668/2963) ent	x	x				
83	Los Angeles Harbor - Inner Cabrillo Beach Area	DDT (sediment)	COMM	NAV, REC1, REC2, COMM, MAR, WILD, MIGR, SPWN, SHELL	One line of evidence is available in the administrative record. Fish consumption advisory for DDT. Eighteen grab samples are available but no sediment quality guideline available that satisfies the requirements of Section 6.1.3 of the Listing Policy.	This waterbody/pollutant segment should be evaluated under the listing Policy for DDT sediment due to the fact that there are no current State guidelines or objectives for total DDTs in sediment. Sediment toxicity may or may not be associated with this pollutant and is not documented in the report. Additionally, the tissue data in the record does not support the sediment listing.	List	Evaluate under Listing Policy	Disagree	No Data	x					
84	Los Angeles Harbor - Inner Cabrillo Beach Area	DDT (tissue)	COMM	NAV, REC1, REC2, COMM, MAR, WILD, MIGR, SPWN, SHELL	An OEHHA fish consumption advisory has been established for this pollutant. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met. The weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list.	The State should provide in the record the supporting data and required information to list or not list using the listing criteria. According to Section 3.4 of the Listing Policy a health advisory must be posted, a beneficial use for consumption identified, and the supporting data must be available indicating the evaluation guideline for tissue has been exceeded. The fish consumption advisory should be reevaluated as most of the original advisories were conducted in the mid-1990's.	List	Cannot verify impairment	Disagree	No Data	x					
85	Los Angeles Harbor - Inner Cabrillo Beach Area	PCBs	COMM	NAV, REC1, REC2, COMM, MAR, WILD, MIGR, SPWN, SHELL	One line of evidence is available in the administrative record. An OEHHA Fish Consumption Advisory has been established for this pollutant. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.	According to the Listing Policy, Section 3.4 a health advisory must be posted, a beneficial use for consumption identified, and the supporting data must be available indicating the evaluation guideline for tissue has been exceeded. The State indicated that PCBs have been detected in sediments in the Cabrillo Beach area. The Fish Consumption advisory for PCBs should be reevaluated.	List	Cannot verify impairment	Disagree	No Data	x					
86	Los Angeles Harbor Consolidated Slip	Sediment Toxicity	None identified by the State	REC1, REC2, COMM, MAR, RARE, EST, MIGR, SPWN, WILD, NAV	No Comment	There are no water quality objectives or guidelines to evaluate sediment toxicity that meet the requirements of Section 6.1.3 of the Listing Policy and there are no data that associate a pollutant contributing to toxicity. Nor has the State provided any toxicity data in their line of evidence to support a listing determination.	Silent	Evaluate under Listing Policy	Disagree	No Data	x					
87	Los Angeles Harbor Consolidated Slip	Benthic Community Effects	None identified by the State	REC1, REC2, COMM, MAR, RARE, EST, MIGR, SPWN, WILD, NAV	No Comment	This is a condition, not a pollutant or toxicity. There is no link established between the pollutant and the condition. Therefore, according to Section 2 of the policy this should not be listed. There are no secondary Line of evidence or reference condition identified in the report in accordance with Listing Policy Section 3.8.	Silent	Evaluate under Listing Policy	Disagree	No Data	x					

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88	Los Angeles Harbor Consolidated Slip	DDT (tissue & sediment)	MAR	REC1, REC2, COMM, MAR, RARE, EST, MIGR, SPWN, WILD, NAV	An OEHHA fish consumption advisory has been established for this pollutant and the water segment specific data indicates that the 100 ug/kg evaluation guideline for tissue was exceeded once. The weight of evidence indicates that there is sufficient justification in favor of not removing this water segment pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.	There are no tissue data available for review. Current State guidelines have no objectives for total DDTs in sediment. Therefore DDT in sediment should be evaluated under Section 3 of the Listing Policy. The human health risk criteria is inappropriate for the beneficial use identified by the State. The fish consumption advisory should be reevaluated as most of the original advisories were conducted in the mid-1990's.	Do Not Delist	Evaluate under Listing Policy	Disagree	No Data	x					
89	Los Angeles River Estuary (Queensway Bay)	Zinc (sediment)	None identified by the State	SHELL IND, NAV, REC1, REC2, COMM, EST, MAR, WILD, RARE, MIGR, SPWN, WET	Historical use of pesticides and lubricants.	The most conservative applicable water quality criterion for total zinc is 410 µg/g for the objective. In Los Angeles River Estuary (Queensway Bay), the criterion was exceeded in 2 of 55 samples, which is 3.6% of the sample events. Under the State's listing policy Section 4, a waterbody is eligible for delisting for total zinc if there are 4 or fewer exceedances out of the 55 samples. The State has not identified a Beneficial Use to protect.	Silent	Evaluate under Listing Policy	Disagree	(2/55)	x	x				
90	Los Angeles River Reach 1 (Estuary to Carson Street)	Aluminum, Total	None identified by the State	MUN, IND, PROC, GWR, REC1, REC2, WARM, MAR, WILD, RARE, MIGR, SPWN, SHELL	No Comment	*MUN are designated under SB 88-63 and RB 89-03. As a result of a court decision, *MUN bodies are not subject to MUN criteria. The court decision requires USEPA to approve or disapprove the basin plan in such a way that MUN criteria could not be used for 303(d) listing decisions for waters designated as potential MUN. Additionally, the most conservative applicable water quality criterion for aluminum is 1000 µg/L for the Basin Plan MUN objective. In Los Angeles River Reach 1 (Estuary to Carson Street), the criterion was exceeded in 6 of 80 samples, which is 7.5% of the sample events. Under the State's listing policy Section 4, a waterbody is eligible for delisting for dissolved aluminum if there are 6 or fewer exceedances out of the 80 samples.	Silent	Evaluate under Listing Policy	Disagree	(6/80)	x	x				
91	Los Angeles River Reach 1 (Estuary to Carson Street)	Copper, Dissolved	WARM, WILD	MUN, IND, PROC, GWR, REC1, REC2, WARM, MAR, WILD, RARE, MIGR, SPWN, SHELL	One line of evidence is available to assess this pollutant. Eleven of 18 samples exceeded the CTR - CMC acute criterion, and 13 of 18 samples exceeded the CTR- CCC chronic criterion and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy. Based on this information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list.	It cannot be determined if the data the State used in its analysis Total Metals data or Dissolved Metals data or if the Hardness values were present and utilized. The most conservative applicable water quality criterion for dissolved copper is 13 µg/L for the CTR Aquatic Life Freshwater Chronic (CCC) objective. In Los Angeles River Reach 1 (Estuary to Carson Street), the criterion was exceeded in 4 of 63 samples, which is 6.4% of the sample events. Under the State's listing policy, a waterbody is eligible for delisting for dissolved copper if there are 5 or fewer exceedances out of the 63 samples. The State data is from 1997-1999. Newer data indicate that an evaluation under the Listing policy is warranted.	Do Not Delist	Evaluate under Listing Policy	Disagree	11/18 (4/63)	x	x		x		
92	Los Angeles River Reach 1 (Estuary to Carson Street)	Zinc, Dissolved	EST, MAR, MIGR, MUN, RARE, SA, SPWN, WARM, WILD	MUN, IND, PROC, GWR, REC1, REC2, WARM, MAR, WILD, RARE, MIGR, SPWN, SHELL	One line of evidence is available to assess this pollutant. This data set was probably used to place the waterbody - pollutant combination on the 2002 303(d) List originally. Seven of 18 samples exceeded the CTR - CMC acute criterion, and 7 of 18 samples exceeded the CTR- CCC chronic criterion and this exceeds the allowable frequency listed in Table 4.1 of the Listing Policy. Based on this information, the weight of evidence indicates that there is sufficient justification against removing this water segment-pollutant combination from the section 303(d) list.	It cannot be determined if the data the State used in its analysis Total Metals data or Dissolved Metals data or if the Hardness values were present and utilized. The most conservative applicable water quality criterion for dissolved zinc is 170 µg/L for the CTR Aquatic Life Freshwater Acute (CMC) objective. In Los Angeles River Reach 1 (Estuary to Carson Street), the criterion was exceeded in 0 of 54 samples, which is 0% of the sample events. Under the State's listing policy, a waterbody is eligible for delisting for dissolved zinc if there are 4 or fewer exceedances out of the 54 samples. Newer data indicate that an evaluation under the Listing policy is warranted.	Do Not Delist	Evaluate under Listing Policy	Disagree	7/18 (0/54)	x	x		x		

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93	Los Angeles River Reach 1 (Estuary to Carson Street)	High Coliform Count	None identified by the State	MUN, IND, PROC, GWR, REC1, REC2, WARM, MAR, WILD, RARE, MIGR, SPWN, SHELL	No Comment	The State has not identified a beneficial use for protection or impairment. This listing should be for fecal coliform. The most conservative applicable water quality criterion for fecal coliform is 200 MPN/100mL for the Basin Plan REC1 Freshwater 30-Day Minimum 5 samples objective. In Los Angeles River Reach 1 (Estuary to Carson Street), the criterion was exceeded in 41 of 43 samples, which is 95.4% of the sample events. Under the State's listing policy, a waterbody is considered to be impaired for fecal coliform if there are 8 or more exceedances out of the 43 samples.	Silent	Relist under appropriate pollutant	Disagree	(41/43) fc	x	x		
94	Los Angeles River Reach 1 (Estuary to Carson Street)	Trash	REC2	MUN, IND, PROC, GWR, REC1, REC2, WARM, MAR, WILD, RARE, MIGR, SPWN, SHELL	One line of evidence is available in the administrative record. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. This water segment-pollutant combination was moved off the section 303(d) list during the 2002 listing cycle only because a TMDL had been completed. No substantial evidence in the record shows that standards are met. Sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list.	TMDL is in place. Use of an existing TMDL as a sole source of a line of evidence is inadequate. All relevant data included in the TMDL should be included in the report as separate line(s) of evidence to determine if WQS are not attained. There are no water quality objectives or guidelines to evaluate a waterbody for trash impairment that meet the requirements of Section 3.7 or 6.1.3 of the Listing Policy. Additionally there are no criteria identified in the Report.	List	Cannot verify impairment	Disagree	No Data			x	
95	Los Angeles River Reach 1 (Estuary to Carson Street)	pH	WARM	MUN, IND, PROC, GWR, REC1, REC2, WARM, MAR, WILD, RARE, MIGR, SPWN, SHELL	One line of evidence is available in the administrative record. Sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard.	This pollutant should be evaluated as the high objective of 8.5 pH was exceeded 7 out of 54 samples, which does not exceed the frequency requirements. Two of 54 samples were below 6.5, which is 3.7% of the sample events. Under the state's listing policy, a waterbody is eligible for delisting for pH if 8 or fewer of the 54 samples are below the required range. Mainly wet weather data is available. Need dry weather data points. Although a TMDL is in place, the use of an existing TMDL as a sole source of a line of evidence is inadequate. All relevant data included in the TMDL should be included in the report as separate line(s) of evidence to determine if WQS are not attained.	Do Not Delist	Evaluate under Listing Policy	Disagree	(9/54)	x	x	x	
96	Los Angeles River Reach 1 (Estuary to Carson Street)	Nutrients (Algae)	WARM	MUN, IND, PROC, GWR, REC1, REC2, WARM, MAR, WILD, RARE, MIGR, SPWN, SHELL	Sufficient justification in favor of placing this water segment-pollutant combination on the 303(d) list. Other related lines of evidence are available in the administrative record to assess this pollutant. A TMDL and implementation plan has been approved for this water segment-pollutant combination. The Los Angeles River Nitrogen TMDL was approved by RWQCB on August 19, 2003 and subsequently approved by USEPA on March 18, 2004.	The original line of evidence supporting the listing does not identify a pollutant but rather, a condition caused by a pollutant(s) (Algae). Currently no criteria exists for US waterways to determine impairment. Algae is not a pollutant or toxicity in accordance with Section 2 of the policy and should not be listed. This Listing does not meet the requirements of Section 3.7 of the Listing Policy. There are no data in the record to evaluate. Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of removing these listing from the 303 (d) Water Quality Limited Segment list because the segment pollutant combinations is not a pollutant. The Los Angeles River Nitrogen TMDL was approved by RWQCB on August, 2003 and subsequently approved by USEPA on March 2004 and this TMDL is expected to address this water body condition. Use of an existing TMDL as a sole source of a line of evidence is inadequate. All relevant data included in the TMDL should be included in the report as separate line(s) of evidence to determine if WQS are not attained. There is only one line of evidence in the State	List	Evaluate under Listing Policy	Disagree	No Data	x		x	

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97	Los Angeles River Reach 2 (Carson to Figueroa Street)	Trash	REC2, WARM, WILD, WET	MUN, IND, WILD	GWR, REC1, REC2, WARM	One line of evidence is available in the administrative record. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. This water segment-pollutant combination was moved off the section 303(d) list during the 2002 listing cycle only because a TMDL had been completed. No substantial evidence in the record shows that standards are met. sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list.	TMDL is in place. Use of an existing TMDL as a sole source of a line of evidence is inadequate. All relevant data included in the TMDL should be included in the report as separate line(s) of evidence to determine if WQS are not attained. There are no water quality objectives or guidelines to evaluate a waterbody for trash impairment that meet the requirements of Section 3.7 or 6.1.3 of the Listing Policy. Additionally there are no criteria identified in the Report.	List	Cannot verify impairment	Disagree	No Data				x		
98	Los Angeles River Reach 2 (Carson to Figueroa Street)	Ammonia	WARM	MUN, IND, WILD	GWR, REC1, REC2, WARM	This pollutant is being considered for listing under section 2.2 of the Listing Policy. Under this section of the Policy, a minimum of one line of evidence is needed to assess listing status. the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list.	The State indicates that it has one line of evidence, however, in the report the state provides no evidence in the record to evaluate this impairment determination. This listing has been addressed by the TMDL for Nitrogen Compounds and Related Effects in the Los Angeles River and its Tributaries. Use of an existing TMDL as a sole source of a line of evidence is inadequate. All relevant data included in the TMDL should be included in the report as separate line(s) of evidence.	Do Not Delist	Cannot verify impairment	Disagree	No Data	x				x	
99	Los Angeles River Reach 2 (Carson to Figueroa Street)	High Coliform Count	None identified by the State	MUN, IND, WILD	GWR, REC1, REC2, WARM	No Comment	The State has not identified a beneficial use for protection or impairment. This listing should be for fecal coliform or E. coli. Los Angeles River Reach 1, the downstream waterbody, is listed for coliform. There is no available data in the report to evaluate this listing decision.	Silent	Relist under appropriate pollutant	Disagree	No Data	x					
100	Los Angeles River Reach 2 (Carson to Figueroa Street)	Oil	None identified by the State	MUN, IND, WILD	GWR, REC1, REC2, WARM	No Comment	This Listing does not meet the requirements of Section 2 or 3.7 of the Listing Policy. There are no data in the record to evaluate. Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of removing these listing from the 303 (d) Water Quality Limited Segment list because the segment pollutant combinations is not a pollutant. The state has not identified a beneficial use for protection or impairment.	Silent	Evaluate under Listing Policy	Disagree	No Data	x					
101	Los Angeles River Reach 3 (Figueroa St. to Riverside Dr.)	Ammonia	REC2	MUN, IND	GWR, REC1, REC2, WARM, WILD, WET	One line of evidence is available in the administrative record. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list.	This is a 2002 listing that the State is incorrectly seeking to add. Also, the State is protecting for REC2 instead of WARM, WILD, or WET. The State indicates that it has one line of evidence, however, in the report the state provides no evidence in the record to evaluate this impairment determination. This is a 2002 listing that the State is incorrectly seeking to add. This listing has been addressed by the TMDL for Nitrogen Compounds and Related Effects in the Los Angeles River and its Tributaries. Use of an existing TMDL as a sole source of a line of evidence is inadequate. All relevant data included in the TMDL should be included in the report as separate line(s) of evidence.	List	Cannot verify impairment	Revise and agree	No Data	x				x	
102	Los Angeles River Reach 3 (Figueroa St. to Riverside Dr.)	Trash	REC2, RARE, WARM, WET	MUN, IND	GWR, REC1, REC2, WARM, WILD, WET	One line of evidence is available in the administrative record. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. This water segment-pollutant combination was moved off the section 303(d) list during the 2002 listing cycle only because a TMDL had been completed. No substantial evidence in the record shows that standards are met. sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list.	TMDL is in place. Use of an existing TMDL as a sole source of a line of evidence is inadequate. All relevant data included in the TMDL should be included in the report as separate line(s) of evidence to determine if WQS are not attained. There are no water quality objectives or guidelines to evaluate a waterbody for trash impairment that meet the requirements of Section 3.7 or 6.1.3 of the Listing Policy. Additionally there are no criteria identified in the Report.	List	Cannot verify impairment	Disagree	No Data					x	

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103	Los Angeles River Reach 3 (Figueroa St. to Riverside Dr.)	Nutrients (Algae)	None identified by the State	MUN, IND	GWR, REC1, REC2, WARM, WILD, WET	No Comment	<p>The original line of evidence supporting the listing does not identify a pollutant but rather, a condition caused by a pollutant(s) (Algae). Currently no criteria exists for US waterways to determine impairment. Algae is not a pollutant or toxicity in accordance with Section 2 of the policy and should not be listed. This Listing does not meet the requirements of Section 3.7 of the Listing Policy.</p> <p>There are no data in the record to evaluate. Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of removing these listing from the 303 (d) Water Quality Limited Segment list because the segment pollutant combinations is not a pollutant. The State has not identified a Beneficial to protect.</p> <p>The Los Angeles River Nitrogen TMDL was approved by RWQCB on August, 2003 and subsequently approved by USEPA on March 2004 and this TMDL is expected to address this water body condition. Use of an existing TMDL as a sole source of a line of evidence is inadequate. All relevant data included in the TMDL should be included in the report as separate line(s) of evidence to determine if the State has not identified a beneficial use for protection or impairment.</p>	Silent	Evaluate under Listing Policy	Disagree	No Data	x					
104	Los Angeles River Reach 3 (Figueroa St. to Riverside Dr.)	Odors	None identified by the State	MUN, IND	GWR, REC1, REC2, WARM, WILD, WET	No Comment	<p>Odor should not be placed on the 303(d) list because there is no evidence in the State report to evaluate the presence of or to determine impairment. Odor is not a pollutant or toxicity in accordance with Section 2 of the policy and should not be listed. This Listing does not meet the requirements of Section 3.7 of the Listing Policy.</p> <p>There are no data in the record to evaluate.</p> <p>This listing has been addressed by the TMDL for Nitrogen Compounds and Related Effects in the Los Angeles River and its Tributaries.</p>	Silent	Evaluate under Listing Policy	Disagree	No Data	x					
105	Los Angeles River Reach 3 (Figueroa St. to Riverside Dr.)	Scum/Foam unnatural	None identified by the State	MUN, IND	GWR, REC1, REC2, WARM, WILD, WET	No Comment	<p>The listing does not identify a pollutant but rather, a condition (Scum). Currently no criteria exists for US waterways to determine impairment. Scum is not a pollutant or toxicity in accordance with Section 2 of the policy and should not be listed. This Listing does not meet the requirements of Section 3.7 of the Listing Policy.</p> <p>There are no data in the record to evaluate. Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of removing these listing from the 303 (d) Water Quality Limited Segment list because the segment pollutant combinations is not a pollutant.</p> <p>The state has not identified a beneficial use for protection or impairment.</p> <p>This listing has been addressed by the TMDL for Nitrogen Compounds and Related Effects in the Los Angeles River and its Tributaries.</p>	Silent	Evaluate under Listing Policy	Disagree	No Data	x					
106	Los Angeles River Reach 4 (Riverside Dr. to Sepulveda Dam)	Ammonia	REC2	MUN, IND	GWR, REC1, REC2, WARM, WILD, WET	<p>A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. The nutrient(algae), foam, and odor listings are backed by ammonia data. Nutrient(algae), foam, and odor information should not be placed on the section 303(d) list because they are not pollutants or toxicity (section 2 of the Listing Policy) sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list.</p>	<p>The state is protecting for REC2 instead of WARM, WILD, or WET. The state indicates that it has four lines of evidence, however, in the report the state provides no evidence in the record to evaluate this impairment determination.</p> <p>This listing has been addressed by the TMDL for Nitrogen Compounds and Related Effects in the Los Angeles River and its Tributaries. Use of an existing TMDL as a sole source of a line of evidence is inadequate. All relevant data included in the TMDL should be included in the report as separate line(s) of evidence.</p> <p>The most conservative applicable water quality criterion for ammonia as n is 2.235 mg/L for the Basin Plan Freshwater Not SPWN Inland 30-Day Average objective. In Los Angeles River Reach 4 (Riverside Dr. to Sepulveda Dam), the criterion was exceeded in 27 of 44 samples, which is 61.4% of the sample events. Under the state's listing policy, a waterbody is considered to be impaired for ammonia as n if there are 4 or more exceedances out of the 44 samples.</p>	Do Not Delist	Cannot verify impairment	Revise and agree	(27/44)	x	x	x			

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(X)

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111	Los Angeles River Reach 4 (Riverside Dr. to Sepulveda Dam)	Scum/Foam unnatural	None identified by the State	MUN, IND	GWR, REC1, REC2, WARM, WILD, WET	No Comment	<p>The listing does not identify a pollutant but rather, a condition (Scum). Currently no criteria exists for US waterways to determine impairment. Scum is not a pollutant or toxicity in accordance with Section 2 of the policy and should not be listed. This Listing does not meet the requirements of Section 3.7 of the Listing Policy.</p> <p>There are no data in the record to evaluate. Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of removing these listing from the 303 (d) Water Quality Limited Segment list because the segment pollutant combinations is not a pollutant.</p> <p>The state has not identified a beneficial use for protection or impairment.</p> <p>This listing has been addressed by the TMDL for Nitrogen Compounds and Related Effects in the Los Angeles River and its Tributaries.</p>	Silent	Evaluate under Listing Policy	Disagree	No Data	x					
112	Los Angeles River Reach 5 (within Sepulveda Basin)	Ammonia	WARM	MUN, IND	GRW, REC1, REC2, WARM, WILD, WET	<p>A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. The nutrient (algae), foam, and odor listings are backed by ammonia data. Nutrient (algae), foam, and odor information should not be placed on the section 303(d) list because they are not pollutants or toxicity (section 2 of the Listing Policy). sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list.</p>	<p>The state indicates that it has four lines of evidence, however, in the report the state provides no evidence in the record to evaluate this impairment determination.</p> <p>This listing has been addressed by the TMDL for Nitrogen Compounds and Related Effects in the Los Angeles River and its Tributaries. Use of an existing TMDL as a sole source of a line of evidence is inadequate. All relevant data included in the TMDL should be included in the report as separate line(s) of evidence.</p>	Do Not Delist	Cannot verify impairment	Disagree	No Data	x	x				
113	Los Angeles River Reach 5 (within Sepulveda Basin)	Trash	COLD, EST, MAR, MIG, REC2, RARE, SAL, SPWN, WARM, WET, WILD	MUN, IND	GRW, REC1, REC2, WARM, WILD, WET	<p>One line of evidence is available in the administrative record. A TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. This water segment-pollutant combination was moved off the section 303(d) list during the 2002 listing cycle only because a TMDL had been completed. No substantial evidence in the record shows that standards are met. sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list.</p>	<p>TMDL is in place. Use of an existing TMDL as a sole source of a line of evidence is inadequate. All relevant data included in the TMDL should be included in the report as separate line(s) of evidence to determine if WQS are not attained.</p> <p>There are no water quality objectives or guidelines to evaluate a waterbody for trash impairment that meet the requirements of Section 3.7 or 6.1.3 of the Listing Policy. Additionally there are no criteria identified in the Report.</p>	List	Cannot verify impairment	Disagree	No Data		x				
114	Los Angeles River Reach 5 (within Sepulveda Basin)	Nutrients (Algae)	None identified by the State	MUN, IND	GRW, REC1, REC2, WARM, WILD, WET	No Comment	<p>The original line of evidence supporting the listing does not identify a pollutant but rather, a condition caused by a pollutant(s) (Algae). Currently no criteria exists for US waterways to determine impairment. Algae is not a pollutant or toxicity in accordance with Section 2 of the policy and should not be listed. This Listing does not meet the requirements of Section 3.7 of the Listing Policy.</p> <p>There are no data in the record to evaluate. Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of removing these listing from the 303 (d) Water Quality Limited Segment list because the segment pollutant combinations is not a pollutant. The State has not identified a Beneficial to protect.</p> <p>The Los Angeles River Nitrogen TMDL was approved by RWQCB on August, 2003 and subsequently approved by USEPA on March 2004 and this TMDL is expected to address this water body condition. Use of an existing TMDL as a sole source of a line of evidence is inadequate. All relevant data included in the TMDL should be included in the report as separate line(s) of evidence to determine if WQS are not attained.</p>	Silent	Evaluate under Listing Policy	Disagree	No Data	x					

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115	Los Angeles River Reach 5 (within Sepulveda Basin)	Oil	None identified by the State	MUN, IND	GRW, REC1, REC2, WARM, WILD, WET	No Comment	This Listing does not meet the requirements of Section 2 or 3.7 of the Listing Policy. There are no data in the record to evaluate. Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of removing these listing from the 303 (d) Water Quality Limited Segment list because the segment pollutant combinations is not a pollutant. The state has not identified a beneficial use for protection or impairment.	Silent	Evaluate under Listing Policy	Disagree	No Data	x						
116	Los Angeles River Reach 5 (within Sepulveda Basin)	Odors	None identified by the State	MUN, IND	GRW, REC1, REC2, WARM, WILD, WET	No Comment	The State has not identified a beneficial use for protection or impairment. Odor should not be placed on the 303(d) list because there is no evidence in the State report to evaluate the presence of or to determine impairment. Odor is not a pollutant or toxicity in accordance with Section 2 of the policy and should not be listed. This Listing does not meet the requirements of Section 3.7 of the Listing Policy. There are no data in the record to evaluate. This listing has been addressed by the TMDL for Nitrogen Compounds and Related Effects in the Los Angeles River and its Tributaries.	Silent	Evaluate under Listing Policy	Disagree	No Data	x						
117	Los Angeles River Reach 5 (within Sepulveda Basin)	Scum/Foam unnatural	None identified by the State	MUN, IND	GRW, REC1, REC2, WARM, WILD, WET	No Comment	The listing does not identify a pollutant but rather, a condition (Scum). Currently no criteria exists for US waterways to determine impairment. Scum is not a pollutant or toxicity in accordance with Section 2 of the policy and should not be listed. This Listing does not meet the requirements of Section 3.7 of the Listing Policy. There are no data in the record to evaluate. Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of removing these listing from the 303 (d) Water Quality Limited Segment list because the segment pollutant combinations is not a pollutant. The state has not identified a beneficial use for protection or impairment. This listing has been addressed by the TMDL for Nitrogen Compounds and Related Effects in the Los Angeles River and its Tributaries.	Silent	Evaluate under Listing Policy	Disagree	No Data	x						
118	Los Angeles River Reach 6 (Above Sepulveda Flood Control Basin)	High Coliform Count	None identified by the State	MUN, IND	GRW, REC1, REC2, WARM, WILD, WET	No Comment	The State has not identified a beneficial use for protection or impairment. This listing should be for fecal coliform. The most conservative applicable water quality criterion for fecal coliform is 200 MPN/100mL for the Basin Plan REC1 Freshwater 30-Day Minimum 5 samples objective. In Los Angeles River Reach 6 (Above Sepulveda Flood Control Basin), the criterion was exceeded in 254 of 258 samples, which is 98.4% of the sample events. Under the state's listing policy, a waterbody is considered to be impaired for fecal coliform if there are 43 or more exceedances out of the 258 samples. There is no data available for E. coli. As with the other listings for coliform, they should all be reevaluated using E. coli data because they are better indicators of the waterbody's ability to support recreational uses, which is the issue of concern.	Silent	Relist under appropriate pollutant	Disagree	(254/258) fc	x	x					
119	Los Angeles River Reach 6 (Above Sepulveda Flood Control Basin)	Dichloroethylene / 1,1-DCE	None identified by the State	MUN, IND	GRW, REC1, REC2, WARM, WILD, WET	No Comment	There is no line of evidence to support the original listing. Using the 2004 State Listing Policy listing criteria, the existing data provided by the state do not support a listing for this constituent. There are 0 exceedances out of 16 samples. There are 16 non-detects which are above the CTR objective for human health and organisms of 0.057 ppb. We believe any monitoring required due to groundwater contamination should be addressed under an alternative enforcement program. Additional data needs to be collected in order to support a listing or delisting of this constituent in this waterbody. The Los Angeles River and most of its tributaries have a conditional beneficial use designation for MUN. Conditional designations are not subject to federal law and therefore are not subject to TMDLs. However, the Los Angeles River and its tributaries are designated for GWR. The CTR human health criteria are interpreted to include MUN and GWR.	Silent	Evaluate under Listing Policy	Disagree	(0/16)	x	x					

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120	Los Angeles River Reach 6 (Above Sepulveda Flood Control Basin)	Trichloroethylene / TCE	None identified by the State	MUN, IND	GRW, REC1, REC2, WARM, WILD, WET	No Comment	The State has not identified a beneficial use for protection or impairment. The existing data provided by the state do not support a listing for this constituent. There are 0 exceedences out of 16 samples. There are 16 non-detects which are below 1 ppb. The CTR objective for human health and organisms is 2.7 ppb. Monitoring required due to groundwater contamination should be addressed under an alternative enforcement program.	Silent	Evaluate under Listing Policy	Disagree	(0/16)	x	x				
121	Machado Lake (Harbor Park Lake)	Chlordane (tissue)	COMM	MUN	REC1, REC2, WARM, WILD, RARE, WET	Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification in favor of removing this water segment pollutant combination from the section 303(d) list in the Water Quality Limited Segments category. Four of the 9 samples exceeded the OEHHHA Screening Value but the number of samples is insufficient to determine with the confidence and power required by the Listing Policy.	The beneficial use that the state is protecting for is not in the basin plan. The data indicate a decreasing trend. To determine if the listing is valid, more recent fish tissue data should be collected.	Do Not Delist	Cannot verify impairment	Revise and agree	(16/21) t	x					
122	Machado Lake (Harbor Park Lake)	DDT (tissue)	COMM	MUN	REC1, REC2, WARM, WILD, RARE, WET	Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification in favor of removing this water segment pollutant combination from the section 303(d) list in the Water Quality Limited Segments category. Four of the 9 samples exceeded the OEHHHA Screening Value but the number of samples is insufficient to determine with the confidence and power required by the Listing Policy.	The beneficial use that the state is protecting for is not in the basin plan. The data indicate a decreasing trend. To determine if the listing is valid, more recent fish tissue data should be collected.	Do Not Delist	Cannot verify impairment	Revise and agree	4/9	x					
123	Machado Lake (Harbor Park Lake)	Dieldrin (tissue)	COMM	MUN	REC1, REC2, WARM, WILD, RARE, WET	One line of evidence is available in the administrative record to assess this pollutant. Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification in favor of removing this water segment pollutant combination from the section 303(d) list in the Water Quality Limited Segments category. Four of the nine samples exceeded the OEHHHA Screening Value but the number of samples is insufficient to determine with the confidence and power required by the Listing Policy.	The beneficial use that the state is protecting for is not in the basin plan. The data indicate a decreasing trend. To determine if the listing is valid, more recent fish tissue data should be collected.	Do Not Delist	Evaluate under Listing Policy	Revise and agree	4/9	x					
124	Machado Lake (Harbor Park Lake)	PCBs (tissue)	COMM	MUN	REC1, REC2, WARM, WILD, RARE, WET	One line of evidence is available in the administrative record to assess this pollutant. Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification in favor of removing this water segment pollutant combination from the section 303(d) list in the Water Quality Limited Segments category.	The beneficial use that the state is protecting for is not in the basin plan. The data indicate a decreasing trend. To determine if the listing is valid, more recent fish tissue data should be collected.	Do Not Delist	Evaluate under Listing Policy	Revise and agree	4/9	x					
125	Machado Lake (Harbor Park Lake)	Ammonia	None identified by the State	MUN	REC1, REC2, WARM, WILD, RARE, WET	No Comment	The State has not identified a beneficial use for protection or impairment. There are insufficient data provided by the state to support a listing decision. Data available in the record indicate zero exceedences in 17 samples. Request a review of this listing decision using the 2004 Listing Policy listing criteria.	Silent	Evaluate under Listing Policy	Disagree	(0/17)	x	x				

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126	Machado Lake (Harbor Park Lake)	Eutrophic	None identified by the State	MUN	REC1, REC2, WARM, WILD, RARE, WET	No Comment	The listing does not identify a pollutant but rather, a condition (eutrophic). Currently no criteria exists for US waterways to determine impairment. Eutrophic is not a pollutant or toxicity in accordance with Section 2 of the policy and should not be listed. This Listing does not meet the requirements of Section 3.7 of the Listing Policy. There are no data in the record to evaluate. Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of removing these listing from the 303 (d) Water Quality Limited Segment list because the segment pollutant combinations is not a pollutant. The state has not identified a beneficial use for protection or impairment.	Silent	Evaluate under Listing Policy	Disagree	No Data	x						
127	Machado Lake (Harbor Park Lake)	Odors	None identified by the State	MUN	REC1, REC2, WARM, WILD, RARE, WET	No Comment	The State has not identified a beneficial use for protection or impairment. Odor should not be placed on the 303(d) list because there is no evidence in the State report to evaluate the presence of or to determine impairment. Odor is not a pollutant or toxicity in accordance with Section 2 of the policy and should not be listed. This Listing does not meet the requirements of Section 3.7 of the Listing Policy. There are no data in the record to evaluate.	Silent	Evaluate under Listing Policy	Disagree	No Data	x						
128	Machado Lake (Harbor Park Lake)	Trash	None identified by the State	MUN	REC1, REC2, WARM, WILD, RARE, WET	No Comment	There are no water quality objectives or guidelines to evaluate a waterbody for trash impairment that meet the requirements of Section 3.7 or 6.1.3 of the Listing Policy. Additionally there are no criteria identified in the Report. The State has not identified a Beneficial Use to protect.	Silent	Cannot verify impairment	Disagree	No Data							
129	Machado Lake (Harbor Park Lake)	Algae	None identified by the State	MUN	REC1, REC2, WARM, WILD, RARE, WET	No Comment	The listing does not identify a pollutant but rather, a condition caused by a pollutant(s) (algal growth). Currently no criteria exists for US waterways to determine impairment. Algae is not a pollutant or toxicity in accordance with Section 2 of the policy and should not be listed. This Listing does not meet the requirements of Section 3.7 of the Listing Policy. There are no data in the record to evaluate. Based on the readily available information, the weight of evidence indicates that there is sufficient justification in favor of removing these listing from the 303 (d) Water Quality Limited Segment list because the segment pollutant combinations is not a pollutant. The state has not identified a beneficial use for protection or impairment.	Silent	Evaluate under Listing Policy	Disagree	No Data	x						
130	Machado Lake (Harbor Park Lake)	ChemA (tissue)	None identified by the State	MUN	REC1, REC2, WARM, WILD, RARE, WET	No Comment	The State has not identified a beneficial use for protection or impairment. ChemA should not be listed as it is a category of pollutants. There is no tissue guidance for this listing that meet the requirement of Section 6.1.3 of the Listing Policy. The listing should be on the pollutant of concern. The available data are outdated and therefore not representative of current conditions. Most of the data are from prior to 1990, and there are none available since 1997.	Silent	Evaluate under Listing Policy	Disagree	No Data	x						
131	Marina del Rey Harbor Back Basins	DDT (tissue)	MAR	REC1	NAV, REC2, COMM, MAR, WILD, RARE, SHELL	One line of evidence is ten sediment samples ranging from 34 to 97 ppb. Second line of evidence is two out of 4 samples exceeded the OEHHA Screening Value for fish tissue. A minimum of 28 samples would be needed in order for this water body to be delisted for this pollutant with 2 exceedances. Third line of evidence toxicity 6 of 7 sediment toxicity.	The MAR beneficial use that the State has identified should be associated with the wildlife protection criteria of 1000 ug/kg, which is ten times higher than the human health criteria used in the State evaluation which should then be associated with COMM beneficial use. Therefore there are no exceedances of the tissue criteria for human health. This listing is incorrect due to the application of improper use human health and sediment criteria. The available data the state provided are four samples from 1998 all NOAA mussel watch data with zero exceedances of the wildlife criteria or human health criteria. To properly evaluate exposure and risk, data should be collected on human consumption of mussels, as well as fish tissue concentrations and human consumption of fish. Levels of DDT in sediment are decreasing, which is consistent with the ban on DDT dating back to 1972.	Do Not Delist	Cannot verify impairment	Disagree	(na/97)	x	x					

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132	Marina del Rey Harbor Back Basins	High Coliform Count	REC1	REC1	NAV, REC2, COMM, MAR, WILD, RARE, SHELL	One line of evidence is available in the administrative record. After review of the available data and information for this recommendation, SWRCB staff conclude that the water body should be placed in the Water Quality Limited Segments Being Addressed category of the section 303(d) list because a TMDL has been approved by USEPA and an implementation plan has been approved.	This listing should be for fecal coliform, total coliform, and enterococcus. This listing has been addressed in the Marina del Rey Harbor, Mothers Beach and Back Basins Bacteria TMDL. Although a TMDL is in place, the use of an existing TMDL as a sole source of a line of evidence is inadequate. All relevant data included in the TMDL should be included in the report as separate line(s) of evidence to determine if WQS are not attained.	Do Not Delist	Relist under appropriate pollutant	Revise and agree	(419/1514) ent (330/1520) fc (997/1520) tc	x	x	x		
133	Marina del Rey Harbor Back Basins	Fish Consumption Advisory	None identified by the State	REC1	NAV, REC2, COMM, MAR, WILD, RARE, SHELL	No Comment	As required in Section 3.4 of the Listing Policy to determine impairment proof of an OEHHA or DHS fish consumption advisory must be provided. 2. Proof of an existing beneficial use for fish consumption. 3. Water segment specific data must be available indicating that the evaluation guideline for tissue is exceeded. None of this documentation has been provided. The fish consumption advisory should be reevaluated as most of the original advisories were conducted in the mid-1990's.	Silent	Evaluate under Listing Policy	Disagree	No Data	x				
134	Marina del Rey Harbor Back Basins	Sediment Toxicity	None identified by the State	REC1	NAV, REC2, COMM, MAR, WILD, RARE, SHELL	No Comment	There are no water quality objectives or guidelines to evaluate sediment toxicity that meet the requirements of Section 6.1.3 of the Listing Policy and there are no data that associate a pollutant contributing to toxicity. Nor has the State provided any toxicity data in their Line of Evidence to support a listing determination.	Silent	Evaluate under Listing Policy	Disagree	No Data	x				
135	Marina del Rey Harbor Beach	Beach Closures	REC1		NAV, REC1, COMM, MAR, WILD, RARE	No Comment	This is a condition, not a pollutant or toxicity. Therefore, according to Section 2 of the policy this should not be listed. This listing should be for enterococcus. See High Coliform Count listing. This listing has been addressed in the Marina del Rey Harbor, Mothers Beach and Back Basins Bacteria TMDL. Although a TMDL is in place, the use of an existing TMDL as a sole source of a line of evidence is inadequate. All relevant data included in the TMDL should be included in the report as separate line(s) of evidence to determine if WQS are not attained.	Silent	Relist under appropriate pollutant	Disagree	(396/938) ent (172/1612) fc (253/1585) tc	x		x		
136	Marina del Rey Harbor Beach	High Coliform Count	REC1		NAV, REC1, REC2, COMM, MAR, WILD, RARE	Two lines of evidence are available in the administrative record to assess this pollutant. Based on the applicable factor, a TMDL has been developed and approved by USEPA and an approved implementation plan is expected to result in attainment of the standard. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list.	This listing should be for enterococcus. The most conservative applicable water quality criterion for enterococcus is 35 MPN/100mL for the Basin Plan REC1 Marine 30-Day Minimum 5 samples objective. In Marina del Rey Harbor Beach, the criterion was exceeded in 396 of 938 samples, which is 42.2% of the sample events. Under the state's listing policy, a waterbody is considered to be impaired for enterococcus if there are 156 or more exceedances out of the 938 samples. The most conservative applicable water quality criterion for fecal coliform is 200 MPN/100mL for the Basin Plan REC1 Marine 30-Day Minimum 5 samples objective. In Marina del Rey Harbor Beach, the criterion was exceeded in 172 of 1612 samples, which is 10.7% of the sample events. Under the state's listing policy, a waterbody is eligible for delisting for fecal coliform if there are 267 or fewer exceedances out of the 1612 samples. The most conservative applicable water quality criterion for total coliform is 1000 MPN/100mL for the Basin Plan REC1 Marine Ratio Single sample objective. In Marina del Rey Harbor Beach, the criterion was exceeded in 253 of 1585 samples, which is 16% of the sample events.	Do Not Delist	Relist under appropriate pollutant	Revise and agree	(396/938) ent (172/1612) fc (253/1585) tc	x	x	x		
137	Pico Kenter Drain	Ammonia	None identified by the State	None	None	No Comment	Evaluate for consistency with the Clean Water Act. "Enclosed stormwater conveyance drains are not swimmable/fishable surface waterbodies and "Waters of the United States." Enclosed stormwater conveyance drains do not have designated beneficial uses in the Basin Plan, and therefore, no criteria apply to waters within the drain itself and as such, should not be listed as impaired. Furthermore, the Los Angeles County Municipal NPDES Stormwater Permit (Order 01-182) covers discharges from the drain, along with the Standard Urban Storm Water Mitigation Plans and the County's Storm Water Quality Management Program, all of which have been approved by our Regional Board. Identifying enclosed drains as waterbodies subject to a §305(b) evaluation and §303(d) listing is a confusing precedent, which extends the Clean Water Act beyond its intended scope. The State has not assigned a Beneficial Use to storm pipe.	Silent	Evaluate under Listing Policy	Disagree	No Data	x				

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142	Pico Kenter Drain	PAHs	None identified by the State	None	None	No Comment	Evaluate for consistency with the Clean Water Act . 'Enclosed stormwater conveyance drains are not swimmable/fishable surface waterbodies and "Waters of the United States." Enclosed stormwater conveyance drains do not have designated beneficial uses in the Basin Plan, and therefore, no criteria apply to waters within the drain itself and as such, should not be listed as impaired. Furthermore, the Los Angeles County Municipal NPDES Stormwater Permit (Order 01-182) covers discharges from the drain, along with the Standard Urban Storm Water Mitigation Plans and the County's Storm Water Quality Management Program, all of which have been approved by our Regional Board. Identifying enclosed drains as waterbodies subject to a §305(b) evaluation and §303(d) listing is a confusing precedent, which extends the Clean Water Act beyond its intended scope.The State has not assigned a Beneficial Use to storm pipe.	Silent	Evaluate under Listing Policy	Disagree		x						
143	Pico Kenter Drain	Toxicity	None identified by the State	None	None	No Comment	Evaluate for consistency with the Clean Water Act . 'Enclosed stormwater conveyance drains are not swimmable/fishable surface waterbodies and "Waters of the United States." Enclosed stormwater conveyance drains do not have designated beneficial uses in the Basin Plan, and therefore, no criteria apply to waters within the drain itself and as such, should not be listed as impaired. Furthermore, the Los Angeles County Municipal NPDES Stormwater Permit (Order 01-182) covers discharges from the drain, along with the Standard Urban Storm Water Mitigation Plans and the County's Storm Water Quality Management Program, all of which have been approved by our Regional Board. Identifying enclosed drains as waterbodies subject to a §305(b) evaluation and §303(d) listing is a confusing precedent, which extends the Clean Water Act beyond its intended scope.The State has not assigned a Beneficial Use to storm pipe.	Silent	Evaluate under Listing Policy	Disagree		x						
144	Pico Kenter Drain	Trash	None identified by the State	None	None	No Comment	There are no water quality objectives or guidelines to evaluate a waterbody for trash impairment that meet the requirements of Section 3.7 or 6.1.3 of the Listing Policy. Additionally there are no criteria identified in the Report.The State has not assigned a Beneficial Use to to storm pipe.. Evaluate for consistency with the Clean Water Act . 'Enclosed stormwater conveyance drains are not swimmable/fishable surface waterbodies and "Waters of the United States." Enclosed stormwater conveyance drains do not have designated beneficial uses in the Basin Plan, and therefore, no criteria apply to waters within the drain itself and as such, should not be listed as impaired. Furthermore, the Los Angeles County Municipal NPDES Stormwater Permit (Order 01-182) covers discharges from the drain, along with the Standard Urban Storm Water Mitigation Plans and the County's Storm Water Quality Management Program, all of which have been approved by our Regional Board. Identifying enclosed drains as waterbodies subject to a §305(b) evaluation and §303(d) listing is a confusing precedent, which extends the Clean Water Act beyond its intended scope.	Silent	Evaluate under Listing Policy	Disagree		x						
145	Point Fermin Park Beach	Beach Closures	REC1			Should not be placed in the 303(d) list because beach closures is not a pollutant.	This is a condition, not a pollutant or toxicity. Therefore, according to Section 2 of the policy this should not be listed. This listing should be for total coliform. The most conservative applicable water quality criterion for total coliform is 70 MPN/100mL for the Basin Plan SHELL 30-Day Median objective. In Point Fermin Park Beach, the criterion was exceeded in 104 of 458 samples, which is 22.7% of the sample events. Under the state's listing policy, a waterbody is considered to be impaired for total coliform if there are 76 or more exceedances out of the 458 samples. The most conservative applicable water quality criterion for enterococcus is 35 MPN/100mL for the Basin Plan REC1 Marine 30-Day Minimum 5 samples objective. In Point Fermin Park Beach, the criterion was exceeded in 0 of 78 samples, which is 0% of the sample events. Under the state's listing policy, a waterbody is eligible for delisting for enterococcus if there are 12 or fewer exceedances out of the 78 samples. The most conservative applicable water quality criterion for fecal coliform is 200 MPN/100mL for the Basin Plan REC1 Marine 30-Day Minimum 5 s	Delist	Relist under appropriate pollutant	Revise and agree	(104/458) tc (0/78) ent (0/134) fc	x	x					

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146	Point Fermin Park Beach	DDT	None identified by the State			Fish consumption advisory for DDT.	The State has not identified a beneficial use for protection or impairment. The State should provide in the record the supporting data and required information to list or not list using the listing criteria. According to Section 3.4 of the Listing Policy a health advisory must be posted, a beneficial use for consumption identified, and the supporting data must be available indicating the evaluation guideline for tissue has been exceeded. The fish consumption advisory should be reevaluated as most of the original advisories were conducted in the mid-1990's.	Silent	Cannot verify impairment	Disagree	No Data	x						
147	Point Fermin Park Beach	PCBs	None identified by the State			Fish consumption advisory for PCBs.	According to Section 3.4 of the Listing Policy a health advisory must be posted, a beneficial use for consumption identified, and the supporting data must be available indicating the evaluation guideline for tissue has been exceeded. The Fish Consumption Advisory for PCBs should be reevaluated.	Silent	Cannot verify impairment	Disagree	No Data	x						
148	Royal Palms Beach	Beach Closures	None identified by the State	SPWN	NAV, REC1, REC2, COMM, MAR, WILD, SHELL	No Comment	This is a condition, not a pollutant or pollution. Therefore, according to Section 2 of the policy this should not be listed. No beneficial use identified. The information provided by the State and available for review indicate that this waterbody is not impaired. It should be delisted. The most conservative applicable water quality criterion for total coliform is 70 MPN/100mL for the Basin Plan SHELL 30-Day Median objective. In Royal Palms Beach, the criterion was exceeded in 68 of 459 samples, which is 14.8% of the sample events. Under the state's listing policy, a waterbody is eligible for delisting for total coliform if there are 76 or fewer exceedances out of the 459 samples. The most conservative applicable water quality criterion for fecal coliform is 200 MPN/100mL for the Basin Plan REC1 Marine 30-Day Minimum 5 samples objective. In Royal Palms Beach, the criterion was exceeded in 0 of 82 samples, which is 0% of the sample events. Under the state's listing policy, a waterbody is eligible for delisting for fecal coliform if there are 13 or fewer exceedances out of	Silent	Evaluate under Listing Policy	Disagree	(68/459) tc (0/82) fc (3/82) ent	x	x					
149	Royal Palms Beach	DDT	None identified by the State	SPWN	NAV, REC1, REC2, COMM, MAR, WILD, SHELL	Fish consumption advisory for DDT.	The State has not identified a beneficial use for protection or impairment. The State should provide in the record the supporting data and required information to list or not list using the listing criteria. According to Section 3.4 of the Listing Policy a health advisory must be posted, a beneficial use for consumption identified, and the supporting data must be available indicating the evaluation guideline for tissue has been exceeded. The fish consumption advisory should be reevaluated as most of the original advisories were conducted in the mid-1990's.	Silent	Cannot verify impairment	Disagree	No Data	x						
150	Royal Palms Beach	PCBs	None identified by the State	SPWN	NAV, REC1, REC2, COMM, MAR, WILD, SHELL	Fish consumption advisory for PCBs.	According to Section 3.4 of the Listing Policy a health advisory must be posted, a beneficial use for consumption identified, and the supporting data must be available indicating the evaluation guideline for tissue has been exceeded. The Fish Consumption Advisory for PCBs should be reevaluated.	Silent	Cannot verify impairment	Disagree	No Data	x						
151	San Pedro Bay Near/Offshore Zones	Chromium (sediment)	None identified by the State		IND, NAV, REC1, REC2, COMM, MAR, RARE, SHELL	No Comment	Due to the Area of Change proposed, it is not possible to determine the location of the original listing samples or determine impairment. The State should investigate the validity of these listings due to the proposed Area of Change.	Silent	Cannot verify impairment	Disagree		x						
152	San Pedro Bay Near/Offshore Zones	Copper (sediment)	None identified by the State		IND, NAV, REC1, REC2, COMM, MAR, RARE, SHELL	No Comment	Due to the Area of Change proposed, it is not possible to determine the location of the original listing samples or determine impairment. The State should investigate the validity of these listings due to the proposed Area of Change.	Silent	Cannot verify impairment	Disagree		x						

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153	San Pedro Bay Near/Offshore Zones	PAHs (sediment)	None identified by the State	IND, NAV, REC1, REC2, COMM, MAR, RARE, SHELL	No Comment	Due to the Area of Change proposed, it is not possible to determine the location of the original listing samples or determine impairment. The State should investigate the validity of these listings due to the proposed Area of Change.	Silent	Cannot verify impairment	Disagree		x					
154	San Pedro Bay Near/Offshore Zones	Sediment Toxicity	None identified by the State	IND, NAV, REC1, REC2, COMM, MAR, RARE, SHELL	No Comment	Due to the Area of Change proposed, it is not possible to determine the location of the original listing samples or determine impairment. The State should investigate the validity of these listings due to the proposed Area of Change. There are no water quality objectives or guidelines to evaluate sediment toxicity that meet the requirements of Section 6.1.3 of the Listing Policy and there are no data that associate a pollutant contributing to toxicity. Nor has the State provided any toxicity data in their Line of Evidence to support a listing determination.	Silent	Cannot verify impairment	Disagree		x					
155	San Pedro Bay Near/Offshore Zones	Zinc (sediment)	None identified by the State	IND, NAV, REC1, REC2, COMM, MAR, RARE, SHELL	No Comment	Due to the Area of Change proposed, it is not possible to determine the location of the original listing samples or determine impairment. The State should investigate the validity of these listings due to the proposed Area of Change.	Silent	Cannot verify impairment	Disagree		x					
156	Santa Monica Bay Offshore/Nearshore	Debris	None identified by the State	REC1, REC2, COMM, MAR, WILD, MIGR, RARE, SPWN, SHELL	No Comment	There are no available data to support this listing or criteria to evaluate impairment as required under Section 3. According to the State Listing Policy Section 2, debris should not be placed on the 303(d) list because it is not a pollutant or toxicity.	Silent	Evaluate under Listing Policy	Disagree	No Data	x					
157	Santa Monica Bay Offshore/Nearshore	PAHs (sediment)	MAR	REC1, REC2, COMM, MAR, WILD, MIGR, RARE, SPWN, SHELL	Two lines of evidence are available in the administrative record to assess this pollutant. Based on section 4.6, the site does have significant sediment toxicity but this PAHs are is not likely to cause or contribute to any toxic effect. The benthic community is impacted. None of the 23 samples exceeded the PAHs sediment guideline, but five of the 23 samples exhibit toxicity. Although toxicity is documented, the number of samples is insufficient to determine with the confidence and power required by the Listing Policy.	For sediment the most conservative applicable water quality criterion for pahs (total) is 1800 µg/g for the objective. In Santa Monica Bay Offshore/Nearshore, the criterion was exceeded in 0 of 269 samples, which is 0% of the sample events. Under the state's listing policy, a waterbody is eligible for delisting for pahs (total) if there are 22 or fewer exceedances out of the 269 samples. The Bureau requests relisting PAH sediment-pollutant combination by replacing this general PAH listing as appropriate with the individually listings of Pyrene, Phenanthrene, Chrysene, or Benzo (a) pyrene or Total PAHs on the section 303(d) list in the Water Quality Limited Segments category.	Do Not Delist	Relist under appropriate pollutant	Disagree	(0/269)	x	x				
158	Santa Monica Bay Offshore/Nearshore	Fish Consumption Advisory	None identified by the State	REC1, REC2, COMM, MAR, WILD, MIGR, RARE, SPWN, SHELL	No Comment	According to the Listing Policy, Section 3.4 a health advisory must be posted, a beneficial use for consumption identified, and the supporting data must be available indicating the evaluation guideline for tissue has been exceeded. The fish consumption advisory should be reevaluated as most of the original advisories were conducted in the mid-1990's.	Silent	Evaluate under Listing Policy	Disagree	No Data	x					
159	Santa Monica Bay Offshore/Nearshore	Sediment Toxicity	None identified by the State	REC1, REC2, COMM, MAR, WILD, MIGR, RARE, SPWN, SHELL	No Comment	There are no water quality objectives or guidelines to evaluate sediment toxicity that meet the requirements of Section 6.1.3 of the Listing Policy and there are no data that associate a pollutant contributing to toxicity. Nor has the State provided any toxicity data in their Line of Evidence to support a listing determination.	Silent	Evaluate under Listing Policy	Disagree	No Data	x					

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160	Santa Monica Bay Offshore/Ne arshore	DDT (tissue & sediment)	None identified by the State		REC1, REC2, COMM, MAR, WILD, MIGR, RARE, SPWN, SHELL	No Comment	The State has not identified a beneficial use for protection or impairment.	Silent	Cannot verify impairment	Revise and agree	(20/213)	x					
161	Santa Monica Beach	High Coliform Count	REC1		NAV, REC1, REC2, COMM, MAR, WILD, MIGR, SPWN, SHELL	Sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list.	This listing should be for total coliform and enterococcus. Total coliform and enterococcus data support the listing through the binomial test. The most conservative applicable water quality criterion for total coliform is 70 MPN/100mL for the Basin Plan SHELL 30-Day Median objective. In Santa Monica Beach, the criterion was exceeded in 1199 of 2570 samples, which is 46.6% of the sample events. Under the state's listing policy, a waterbody is considered to be impaired for total coliform if there are 427 or more exceedances out of the 2570 samples. The most conservative applicable water quality criterion for enterococcus is 35 MPN/100mL for the Basin Plan REC1 Marine 30-Day Minimum 5 samples objective. In Santa Monica Beach, the criterion was exceeded in 249 of 1433 samples, which is 17.4% of the sample events. Under the state's listing policy, a waterbody is considered to be impaired for enterococcus if there are 238 or more exceedances out of the 1433 samples. Fecal coliform data does not support a listing through the binomial test. The most conservative applicable water quality criterion for fecal coliform is 200 MPN	Do Not Delist	Relist under appropriate pollutant	Revise and agree	(1199/2570) tc (427/2570) ent (249/1433) fc	x	x	x			
162	Santa Monica Beach	Beach Closures	REC1		NAV, REC1, REC2, COMM, MAR, WILD, MIGR, SPWN, SHELL	The beach closure information is backed by coliform data. Beach closure information should not be placed on the section 303(d) list because it is not a pollutant or toxicity (section 2 of the Listing Policy).	This is a condition, not a pollutant or toxicity. Therefore, according to Section 2 of the policy this should not be listed. This listing should be for total coliform and enterococcus. See High Coliform Count listing.	Delist	Relist under appropriate pollutant	Revise and agree	(1199/2570) tc (427/2570) ent (249/1433) fc	x					
163	Santa Monica Canyon	High Coliform Count	MUN, REC1, REC2, WARM, WILD	MUN, REC1, WARM, WILD	REC2	Sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list.	This listing should be for fecal coliform or E. coli. E. coli data support the listing through the binomial test. The Santa Monica Bay Beaches Bacteria TMDL has incorporated the coliform listing for the Santa Monica Canyon Storm Drain. Although the TMDL is in place, the use of an existing TMDL as a sole source of a line of evidence is inadequate. All relevant data included in the TMDL should be included in the report as separate line(s) of evidence to determine if WQS are not attained.	Do Not Delist	Relist under appropriate pollutant	Revise and agree	(62/68)	x		x			
164	Santa Monica Canyon	Lead	None identified by the State	MUN, REC1, WARM, WILD	REC2	No Comment	The State has not identified a beneficial use for protection or impairment. There is no line of evidence to support the original listing. Using the 2004 State Listing Policy listing criteria, the existing data provided by the state do not support a listing for this constituent. There is one data point readily available for review and is well below CTR Aquatic Life dissolved lead criteria. Request a review of this listing decision using the 2004 Listing Policy listing criteria.	Silent	Evaluate under Listing Policy	Disagree	No Data	x					
165	Sepulveda Canyon	High Coliform Count	REC1		REC1, REC2	Sufficient justification in favor of placing this water segment-pollutant combination in the Water Quality Limited Segments Being Addressed portion of the section 303(d) list.	In place of coliform bacteria listing, this listing should be for fecal coliform or E. coli. Although the TMDL is in place, the use of an existing TMDL as a sole source of a line of evidence is inadequate. All relevant data included in the TMDL should be included in the report as separate line(s) of evidence to determine if WQS are not attained.	Do Not Delist	Relist under appropriate pollutant	Revise and agree	No Data	x		x			
166	Sepulveda Canyon	Lead	None identified by the State		WARM, WILD	No Comment	The State has not identified a beneficial use for protection or impairment. There is no line of evidence to support the original listing. Using the 2004 State Listing Policy listing criteria, the existing data provided by the state do not support a listing for this constituent. There are no available data. Therefore a listing determination cannot be made.	Silent	Evaluate under Listing Policy	Disagree	No Data	x					
167	Sepulveda Canyon	Ammonia	None identified by the State			No Comment	The State has not identified a beneficial use for protection or impairment. There are no available data in the record to support a listing determination.	Silent	Evaluate under Listing Policy	Disagree	No Data	x					

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168	Torrance Carson Channel	Copper	None identified by the State	NAV	REC1, REC2, COMM, EST, MAR, WILD, RARE, MIGR, SPWN	No Comment	The beneficial uses for Torrance Carson Channel are not identified in the Basin Plan. Application of the tributary rule for Dominguez Channel Estuary identified these beneficial uses. There are no available data for the water column. 2002 data for sediments shows zero exceedances out of 14 for the PEC of 149 ug/g.	Silent	Evaluate under Listing Policy	Disagree	No Data	x					
169	Torrance Carson Channel	Lead	None identified by the State	NAV	REC1, REC2, COMM, EST, MAR, WILD, RARE, MIGR, SPWN	No Comment	The beneficial uses for Torrance Carson Channel are not identified in the Basin Plan. Application of the tributary rule for Dominguez Channel Estuary identified beneficial uses. There are no available data for the water column.	Silent	Evaluate under Listing Policy	Disagree	No Data	x					
170	Torrance Carson Channel	High Coliform Count	None identified by the State	NAV	REC1, REC2, COMM, EST, MAR, WILD, RARE, MIGR, SPWN	No Comment	The beneficial uses for Torrance Carson Channel are not identified in the Basin Plan. Application of the tributary rule for Dominguez Channel Estuary identified beneficial uses. Coliform listings usually occur due to an impact to recreational uses. This may or may not be an appropriate beneficial use for this waterway. The listing is not supported by data. If a coliform listing were to be assigned, a REC1 or REC2 beneficial use would be assigned and the impairment would be for fecal coliform and E. coli.	Silent	Cannot verify impairment	Disagree	No Data	x					
171	Tujunga Wash (LA River to Hansen Dam)	Copper	None identified by the State	MUN, REC1, WARM, COLD, WILD	REC2, GWR	No Comment	The State has not identified a beneficial use for protection or impairment. There are no available data to review. The State did not provide a single line of evidence to support a listing.	Silent	Evaluate under Listing Policy	Disagree	No Data	x					
172	Tujunga Wash (LA River to Hansen Dam)	Ammonia	None identified by the State	MUN, REC1, WARM, COLD, WILD	REC2, GWR	No Comment	The State has not identified a beneficial use for protection or impairment. There are no available data in the record to support a listing determination.	Silent	Evaluate under Listing Policy	Disagree	No Data	x					
173	Tujunga Wash (LA River to Hansen Dam)	Trash	None identified by the State	MUN, REC1, WARM, COLD, WILD	REC2, GWR	No Comment	TMDL is in place. Use of an existing TMDL as a sole source of a line of evidence is inadequate. All relevant data included in the TMDL should be included in the report as separate line(s) of evidence to determine if WQS are not attained. There are no water quality objectives or guidelines to evaluate a waterbody for trash impairment that meet the requirements of Section 3.7 or 6.1.3 of the Listing Policy. Additionally there are no criteria identified in the Report. The State has not identified a Beneficial Use to protect.	Silent	Evaluate under Listing Policy	Disagree	No Data	x					
174	Tujunga Wash (LA River to Hansen Dam)	High Coliform Count	None identified by the State	MUN, REC1, WARM, COLD, WILD	REC2, GWR	No Comment	The State has not identified a beneficial use for protection or impairment. This listing should be for fecal coliform and E. coli. There are no available data in the record to determine impairment.	Silent	Cannot verify impairment	Disagree	No Data	x					
175	Venice Beach	Beach Closures	REC1		NAV, REC1, REC2, COMM, MAR, WILD, RARE, MIGR, SPWN, SHELL	Should not be placed in the 303(d) list because beach closures is not a pollutant.	This is a condition, not a pollutant or toxicity. Therefore, according to Section 2 of the policy this should not be listed. This listing should be for total coliform. See High Coliform Count listing.	Delist	Releist under appropriate pollutant	Revise and agree	(696/1690) tc (1/1701) fc (174/1081) ent	x					

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176	Venice Beach	High Coliform Count	None identified by the State		NAV, REC1, REC2, COMM, MAR, WILD, RARE, MIGR, SPWN, SHELL	No Comment	The State has not identified a beneficial use for protection or impairment. This listing should be for total coliform. The most conservative applicable water quality criterion for total coliform is 70 MPN/100mL for the Basin Plan SHELL 30-Day Median objective. In Venice Beach, the criterion was exceeded in 696 of 1690 samples, which is 41.2% of the sample events. Under the state's listing policy, a waterbody is considered to be impaired for total coliform if there are 281 or more exceedances out of the 1690 samples. The most conservative applicable water quality criterion for fecal coliform is 200 MPN/100mL for the Basin Plan REC1 Marine 30-Day Minimum 5 samples objective. In Venice Beach, the criterion was exceeded in 1 of 1701 samples, which is 0.1% of the sample events. Under the state's listing policy, a waterbody is eligible for delisting for fecal coliform if there are 282 or fewer exceedances out of the 1701 samples. The most conservative applicable water quality criterion for enterococcus is 35 MPN/100mL for the Basin Plan REC1 Marine 30-Day Minimum 5 samples objective. In Venice Beach, the criterion was exceeded in 17	Silent	Relist under appropriate pollutant	Disagree	(696/1690) tc (1/1701) fc (174/1081) ent	x	x			
177	Whites Point Beach	DDT	None identified by the State	SPWN	NAV, REC1, REC2, COMM, MAR, WILD, SHELL	Fish Consumption Advisory for DDT.	The State has not identified a beneficial use for protection or impairment. The State should provide in the record the supporting data and required information to list or not list using the listing criteria. According to Section 3.4 of the Listing Policy a health advisory must be posted, a beneficial use for consumption identified, and the supporting data must be available indicating the evaluation guideline for tissue has been exceeded. The fish consumption advisory should be reevaluated as most of the original advisories were conducted in the mid-1990's.	Silent	Cannot verify impairment	Disagree	No Data	x				
178	Whites Point Beach	PCBs	None identified by the State	SPWN	NAV, REC1, REC2, COMM, MAR, WILD, SHELL	Fish Consumption Advisory for PCBs.	According to Section 3.4 of the Listing Policy a health advisory must be posted, a beneficial use for consumption identified, and the supporting data must be available indicating the evaluation guideline for tissue has been exceeded. The Fish Consumption Advisory for PCBs should be reevaluated.	Silent	Cannot verify impairment	Disagree	No Data	x				
179	Will Rogers Beach	Beach Closures	REC1	SPWN	NAV, REC1, REC2, COMM, MAR, WILD, SHELL	Should not be placed in the 303(d) list because beach closures is not a pollutant.	This is a condition, not a pollutant or toxicity. Therefore, according to Section 2 of the policy this should not be listed. This listing should be for total coliform and enterococcus. See High Coliform Count listing.	Delist	Relist under appropriate pollutant	Revise and agree	(1061/1910) tc (203/706) ent (0/1993) fc	x				
180	Will Rogers Beach	High Coliform Count	None identified by the State	SPWN	NAV, REC1, REC2, COMM, MAR, WILD, SHELL	No Comment	The State has not identified a beneficial use for protection or impairment. This listing should be for total coliform and enterococcus. Total coliform and enterococcus data support the listing through the binomial test. The most conservative applicable water quality criterion for total coliform is 70 MPN/100mL for the Basin Plan SHELL 30-Day Median objective. In Will Rogers Beach, the criterion was exceeded in 1061 of 1910 samples, which is 55.6% of the sample events. Under the state's listing policy, a waterbody is considered to be impaired for total coliform if there are 317 or more exceedances out of the 1910 samples. The most conservative applicable water quality criterion for enterococcus is 35 MPN/100mL for the Basin Plan REC1 Marine 30-Day Minimum 5 samples objective. In Will Rogers Beach, the criterion was exceeded in 203 of 706 samples, which is 28.8% of the sample events. Under the state's listing policy, a waterbody is considered to be impaired for enterococcus if there are 118 or more exceedances out of the 706 samples. The most conservative	Silent	Relist under appropriate pollutant	Disagree	(1061/1910) tc (203/706) ent (0/1993) fc	x	x			
181	Wilmington Drain	Copper	None identified by the State	MUN	REC1, REC2, WARM, RARE, WET, WILD	No Comment	The available data do not support a listing for copper. There are only two data records for total recoverable copper and both are below the WQO with a hardness of 200 mg/l. Request a review of this listing decision using the 2004 Listing Policy listing criteria.	Silent	Evaluate under Listing Policy	Disagree	(0/2)	x	x			

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182	Wilmington Drain	Lead	None identified by the State	MUN	REC1, REC2, WARM, RARE, WET, WILD	No Comment	The State has not identified a beneficial use for protection or impairment. The available data do not support a listing for lead. There are only two data records (for total lead) and both are below the WQO with a hardness of 200 mg/l. Request a review of this listing decision using the 2004 Listing Policy listing criteria.	Silent	Evaluate under Listing Policy	Disagree	(0/2)	x				
183	Wilmington Drain	Ammonia	None identified by the State	MUN	REC1, REC2, WARM, RARE, WET, WILD	No Comment	The State has not identified a beneficial use for protection or impairment. There are no available data in the record to support a listing determination.	Silent	Evaluate under Listing Policy	Disagree	No Data	x				
184	Wilmington Drain	High Coliform Count	None identified by the State	MUN	REC1, REC2, WARM, RARE, WET, WILD	No Comment	The State has not identified a beneficial use for protection or impairment. The original listing is not supported by data. If a bacterial listing were to be assigned, the impairment would be for fecal coliform or E. coli. However there is insufficient data in the record to evaluate an impairment for REC1 or REC2 for either fecal coliform or E. Coli.	Silent	Cannot verify impairment	Disagree	No Data	x				

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