



MARK PESTRELLA, Director

COUNTY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS

"To Enrich Lives Through Effective and Caring Service"

900 SOUTH FREMONT AVENUE
ALHAMBRA, CALIFORNIA 91803-1331
Telephone: (626) 458-5100
<http://dpw.lacounty.gov>

ADDRESS ALL CORRESPONDENCE TO:
P.O. BOX 1460
ALHAMBRA, CALIFORNIA 91802-1460

March 30, 2017

IN REPLY PLEASE
REFER TO FILE:

WM-9

Mr. Samuel Unger, P.E.
Executive Officer
California Regional Water Quality Control Board
Los Angeles Region
320 West 4th Street, Suite 200
Los Angeles, CA 90013

Attention Jun Zhu

Dear Mr. Unger:

COMMENT LETTER – REVISIONS TO THE LOS ANGELES REGION 303(D) LIST

The County of Los Angeles and the Los Angeles County Flood Control District appreciate the opportunity to provide comments on the proposed revisions to the Clean Water Act Section 303(d) List of Impaired Waters in the Los Angeles Region. Enclosed are our comments for your review and consideration.

If you have any questions, please contact me at (626) 458-4300 or ageorge@dpw.lacounty.gov or your staff may contact Mr. Paul Alva at (626) 458-4325 or palva@dpw.lacounty.gov.

Very truly yours,

MARK PESTRELLA
Director of Public Works

A handwritten signature in black ink, appearing to read "Angela R. George".

ANGELA R. GEORGE
Assistant Deputy Director
Watershed Management Division

GA:ba

P:\wmpub\Secretarial\2017 Documents\Letter\303(d) Comnt ltr\LA Region 303(d) list.docx\C17064

Enc.

cc: County Counsel (Grace Chang, Lillian Salinger, Michael Simon)

**THE COUNTY OF LOS ANGELES AND THE LOS ANGELES COUNTY FLOOD
CONTROL DISTRICT COMMENTS ON THE PROPOSED REVISIONS TO
THE 303(d) LIST FOR THE LOS ANGELES REGION**

I. Waterbodies With Water Quality Attainment Should Be Delisted As Requested By The Los Angeles County Flood Control District During The 2010 Data Solicitation Period And Pursuant to the 303d Listing Policy

In August 2010 in response to the State Water Resources Control Board's (State Water Board's) data solicitation for the 2012 Integrated Report for Clean Water Act Sections 303(d) and 305(b), the Los Angeles County Flood Control District (LACFCD) submitted all the data and information that it collected since the State's previous data solicitation in 2007. As part of the 2010 data submission, the LACFCD conducted a detailed analysis of the new data and found 15 listed waterbody-pollutant combinations that had attained their water quality standards and met the delisting criteria set forth in Section 4 of the *Water Quality Control Policy for Developing California's Clean Water Act Section 303(d) List* (303(d) Listing Policy). To this end, LACFCD provided a detailed analysis of this data and identified those waterbodies that should be delisted pursuant to the *State's 303(d) Listing Policy*. Those waterbody-pollutant combinations are listed below.

WATERBODY	POLLUTANT	Addressed in Current Proposed Revisions?
Coyote Creek	Diazinon	No
Dominguez Channel (lined portion)	Diazinon	Yes
Legg Lake	Ammonia Copper Lead	No
Los Angeles River Reach 1	Diazinon	No
Peck Road Park Lake	Lead Dissolved Oxygen	No
Santa Clara River Reach 6	Chlorpyrifos Diazinon Copper Iron	No
Santa Fe Dam Park Lake	Copper Lead pH	No

As set forth in the above table, none of the identified waterbody-pollutant combinations are currently proposed for delisting as part of the 2016 303(d) list, except for the Dominguez Channel Diazinon, despite meeting the delisting criteria under the *State's Listing Policy*. Based on a review of the fact sheets for these waterbodies in Appendix G, it appears that the post-2007 data and analysis submitted by the LACFCD was not taken into consideration by the Los Angeles Regional Water Quality Control Board (Regional Board).

The County and the LACFCD request that the Regional Board consider the data set forth in the LACFCD's 2010 submission. Attached is a copy of the LACFCD comment letter and technical report from the 2010 data solicitation for your review and consideration. The County and the LACFCD further request that the Regional Board delist these waterbodies as requested.

II. The Regional Board Should Wait For The Completion Of The State's Bointegrity Policy Development Before Listing Waterbodies For Benthic Community Effects

Currently, there is no officially established California water quality objective or guideline for listing waterbodies for benthic community effects. As such, the State Water Board is currently developing statewide biological objectives to assist in addressing this gap. The 2010 State Water Board's initial notice letter¹ for development of these biological objectives states the following:

“State and Regional Water Board plans and policies do not contain numeric objectives or guidance for using biological data in regulatory decision-making. Therefore, biological objectives are needed to provide the narrative or numeric benchmarks that describe conditions necessary to protect aquatic life beneficial uses. The initial effort will focus on wadeable perennial streams and rivers.”

Similarly, the CEQA public scoping document² released in 2012 for this project states the following:

“Benchmarks for identifying biological impairments and interpreting narrative water quality objectives are not formally adopted in Water

¹ http://www.swrcb.ca.gov/plans_policies/docs/biological_objective/kickoff_ltr.pdf

² Pages 6 and 8 of http://www.swrcb.ca.gov/plans_policies/docs/biological_objective/bioobj_ceqa.pdf

Board plans or policies and, therefore, not readily used as enforceable requirements ...” [Page 6 of the scoping document]

“The State Water Board will develop [biological objectives and] program of implementation that describes how biological objectives will be incorporated into permits and other regulatory actions, such as assessing attainment of aquatic life beneficial uses for 303(d) listing.” [Page 8 of the scoping document]

Thus, there is no established objective in California for assessing biological data, such as benthic macroinvertebrate data, for regulatory decision-making. This includes 303(d) listings.

The State Water Board is currently making progress on compiling available information and conducting necessary scientific studies to develop applicable objectives and implementation policy (also known as Biointegrity Policy). The State Water Board has hired the Southern California Coastal Water Research Project (SCCWRP) and the California Department of Fish and Wildlife to develop technical information to aid development of the policy. To ensure that a range of public interests are represented during the development process, the State Water Board has reached out to interested stakeholders. The County and LACFCD is actively participating in these meetings.

Although the State Water Board is currently developing biological objectives for benthic communities, the Regional Board has listed multiple waterbodies for benthic community impairment prior to the development of those objectives and its implementation guideline. The following table summarizes the waterbodies being proposed for benthic community listings by the Regional Board in the County.

WATERSHED	WATERBODY SEGMENT	CONCRETE CHANNEL?
Ballona Creek	Ballona Creek	Yes
Dominguez Channel	Dominguez Channel	Yes
Los Angeles River	Alhambra Wash	Yes
	Arroyo Seco Reach 3	No
	Los Angeles River Reach 3	Yes
	Los Angeles River Reach 4	Yes
Malibu Creek	Medea Creek Reach 1	No

	Triunfo Creek Reach 1	No
San Gabriel River	San Gabriel River – East Fork	No
Santa Clara River	Santa Clara River Reach 5	No

Adopting these benthic community impairment listings without first awaiting the State Water Board's development of water quality objectives and implementation guidance is premature. First, in assessing biological data and justifying the proposed listings, the Regional Board used the Index of Biological Integrity (IBI) and the California Stream Condition Index (CSCI). The benchmarks/thresholds used are 40 for IBI and 0.79 for CSCI. While IBI and CSCI are available tools for evaluating the relative biological condition of perennial wadeable streams, the associated benchmarks/thresholds used by Regional Board staff for justifying the listings have not been officially adopted by the State Water Board or the Regional Board for purposes of determining 303(d) listings. Thus, to ensure statewide consistency, the appropriate benchmarks should be set by the Biointegrity Policy being developed by the State Water Board.

Second, the CSCI was developed to replace the IBI and is expected to be used in the Biointegrity Policy. Thus, the IBI and its associated benchmark should not be used for assessing stream conditions for purposes of regulatory decisions, such as 303(d) listing.

Third, many of the listings set forth in the table above are for concrete/modified channels, which are being treated the same as natural channels. This is inconsistent with the approach that the State Water Board has been taking in developing the Biointegrity Policy, which provides that in highly altered conditions, the standard should be based on "best attainable conditions". In this regard, the State Water Board's 2012 CEQA Scoping document³ for biological objectives states the following:

“One of the difficulties of defining reference conditions in California is that many waterbodies in the State have been severely altered from their natural condition. Some of these alterations are not a result of the controllable environmental factors.... In highly altered systems where biological conditions are limited by uncontrollable factors, the focus is on expectations for the ‘best attainable’ conditions.”

³ Page 3 of http://www.swrcb.ca.gov/plans_policies/docs/biological_objective/bioobj_ceqa.pdf

Concrete/engineered flood control channels in urban environments are among the systems that the State Water Board considers highly altered. For those systems, the State's goal is to establish standards that are reasonably expected to be attainable, which is different than standards for natural channels. The State Water Board is using a gradient approach where the biological expectations for altered stream channels are based on the level of alteration. Since altered stream channels have limited habitat, it is improbable to expect a thriving benthic community in these channels the same way as in natural stream channels. This conclusion is well demonstrated in the stream survey report published in 2016 by the Southern California Stormwater Monitoring Coalition (SMC) – the *2015 Report on the SMC Regional Stream Survey⁴, with Special Study on Engineered Channels*.

For the reasons described above, the Regional Board should not list waterbodies, and particularly those with concrete or engineered channels, for benthic impairments until the State Biointegrity Policy is developed and adopted. However, if the Regional Board lists any waterbody for benthic impairment, then the listings should be listed under Category 4c, and not under Category 5, since it is uncertain that these impairments are caused by pollutants.

III. Toxicity Listings Are Based On Unreliable Data and Should Be Removed

Ten County waterbodies are newly listed for toxicity, nine of which are streams or rivers, and one is an estuary. The majority of toxicity data used in the listings are from water toxicity tests conducted using the *Ceriodaphnia dubia* or other species.

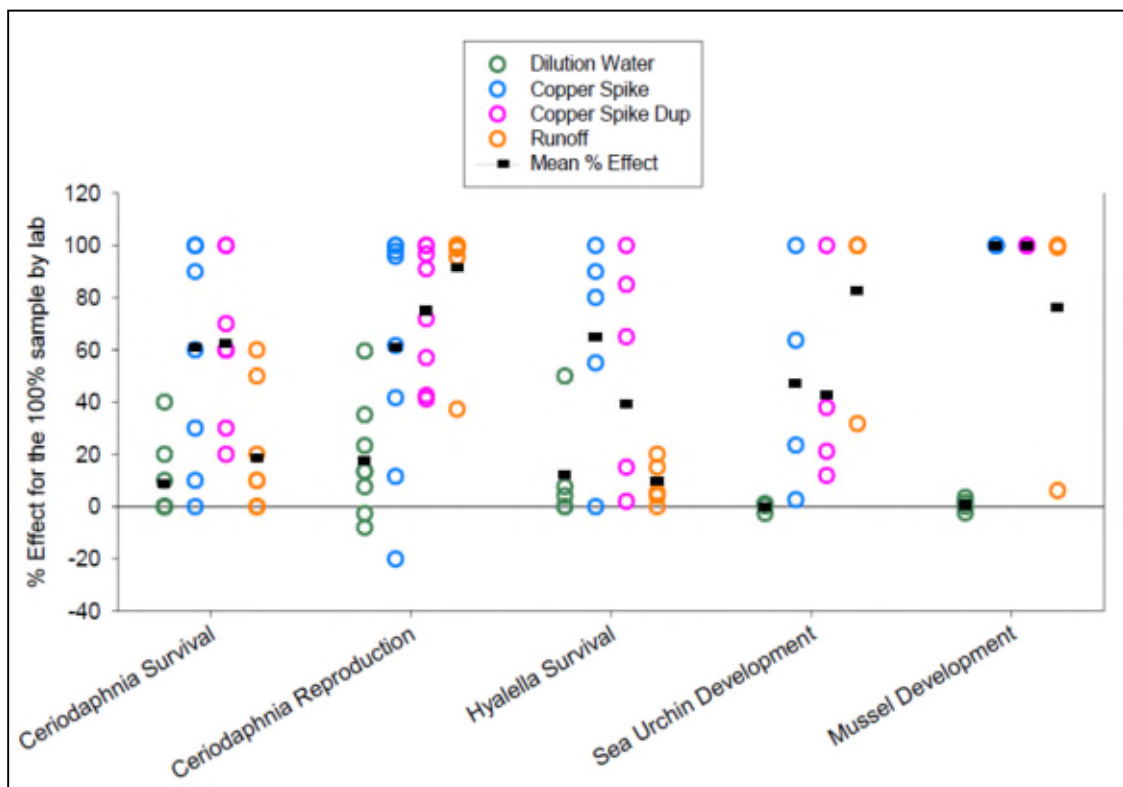
WATERSHED	WATERBODY SEGMENT	TEST SPECIES
Los Angeles River	Bull Creek	C. dubia, Fathead
	LA River Reach 4	
	LA River Reach 5	
	LA River Reach 6	C. dubia, Fathead, Hyaella
San Gabriel River	SG River Estuary	Topsmelt, Fathead
	SG River Reach 3	C. dubia, Fathead
	San Jose Creek Reach 2	

⁴ http://ftp.sccwrp.org/pub/download/DOCUMENTS/TechnicalReports/963_2015_SMC_Report_EnginChannels.pdf

	South San Jose Creek	
Santa Clara River	Piru Creek	C. dubia
	SC River Reach 5	C. dubia

These toxicity tests, however, have recently been found to be unreliable by a laboratory intercalibration study conducted by SMC⁵. The study utilized 10 laboratories in Southern California that are certified by the State of California for toxicity testing. (Almost all toxicity tests in Southern California are conducted by these laboratories.) Although standard methods and protocols were followed by all the laboratories, the test results for the same sample varied significantly between laboratories.

The below chart summarizes the results of the study. Each symbol in the chart represents the result from a single laboratory.



⁵ SMC Toxicity Testing Laboratory Guidance Document

ftp://ftp.sccwrp.org/pub/download/DOCUMENTS/TechnicalReports/956_StrmWtrMonitCoalitToxTestingLabGuid.pdf

As can be seen from the chart, there is high variability in the toxicity results between different laboratories for all the test species despite the fact that analytical procedures were performed on identical samples. For example, the results for *Ceriodaphnia survival* vary between 0 percent and 100 percent for the same sample depending on the laboratory used. Also, a sample of lab dilution water, which is expected to be non-toxic was found to be toxic by many labs. Such high magnitudes of inconsistency and incomparability between the labs makes the existing toxicity data invalid or not useful. It is thus very probable that the proposed 303(d) listings for toxicity are the result of false positive toxicity tests, resulting in unimpaired waterbodies being wrongly listed for toxicity.

It is incumbent upon the State to ensure that the laboratories it certifies produce consistent and accurate toxicity test results. The uncertainties and variability reflected in testing results between laboratories, as shown in the SMC study, can have a profound effect on the regulatory actions placed on a waterbody.

For these reasons the proposed water toxicity listings are not supported by reliable data. The County and the LACFCD therefore request that all toxicity listing based off of water toxicity testing be removed from the list. We also request that the State continue to re-evaluate its laboratory certification protocols and address the problems identified by SMC.

IV. The Proposed Temperature Listings Are Based On An Inapplicable Standard And Therefore Should Be Removed

The following four waterbodies in the County are proposed listings for temperature-related impairment: Los Angeles River Reach 3, San Gabriel River Reaches 1 and 2, and Santa Clara River Reach 6. These listings should not be adopted for the following reasons:

First, natural temperatures for waterbodies in the Los Angeles Region are not known. Chapter 3 of the Los Angeles Region Basin Plan states the following for temperature:

“For waters designated WARM, water temperature shall not be altered by more than 5°F above the natural temperature. At no time shall these WARM-designated waters be raised above 80°F as a result of waste discharges.”

“For waters designated as COLD, water temperature shall not be altered by more than 5°F above the natural temperature.”

The current Basin Plan does not have an established "natural temperature" baseline for waterbodies, nor does it have guidance for estimating natural temperatures. This precludes the use of alteration of natural temperature as a basis for assessing waterbodies in the region.

The Regional Board therefore appears to have used the 80°F objective as the basis for the proposed temperature listings. This standard, however, is not appropriate for two reasons: (1) Under the Basin Plan, the 80°F threshold is to be used only when there is evidence that the temperature rise was "as a result of waste discharges." The Regional Board did not provide evidence that any of the temperatures above 80°F were caused by waste discharges. (2) The 80°F threshold was applied to all waterbodies without considering the physical attributes or the historical ambient air temperatures of the waterbodies, which are uncontrollable. In the Los Angeles Region, ambient air temperatures can vary drastically, which would easily alter or raise the temperature above 80°F, especially in concrete channels during warmer months. Concrete channels are very susceptible to fluctuations in temperature due to the material's ability to absorb heat. Even if the water is at a reasonable temperature when it enters a concrete channel, the water temperature may naturally rise as it travels through the channel, and not as the result of waste discharges.

Second, Basin Plans of other Southern California Regions, which have similar habitats as in the Los Angeles Region, do not use 80°F as a water quality objective for WARM-designated waters. For example, the Santa Ana Region Basin Plan⁶ uses 90°F during warmer months of the year (June through October) and 78°F during the rest of the year. The San Diego Region does not have any temperature water quality objectives for WARM-designated waters.

Therefore, the use of 80°F for purposes of assessing temperature-related impairments and listing waterbodies is unreasonable and unsupported, especially in concrete channels during dry seasons. The Regional Board should not list waterbodies for temperature until applicable standards are established for the Region.

⁶ www.waterboards.ca.gov/santaana/water_issues/programs/basin_plan/docs/2016/Chapter_4_Feb_2016.pdf

V. Alondra Park Lake Is Not A Water of the United States And Therefore Should Be Removed From The Proposed 303(d) List

Alondra Park Lake is a man-made lake that was created in the late 1940s as part of County's plan to establish Alondra Park. The lake does not receive any runoff discharge from areas outside of the park and is not connected to the Dominguez Channel or any other surface waterbody. The lake's source of water is entirely groundwater that is pumped from the West Coast Groundwater Basin. This water is used to irrigate the park and the nearby golf course.

In addition, Alondra Lake is not identified in the Basin Plan and, thus, does not have any beneficial use designation assigned to it. This confirms that the lake is not a receiving waterbody.

The Section 303(d) list applies only to waters of the United States⁷. Alondra Park Lake is a man-made enclosed lake not connected to any other waterbody. Any listings associated with Alondra Park Lake should therefore be removed from the proposed 2016 303(d) list.

VI. Data Being Used For Legacy Pollutant Listings Do Not Satisfy The Temporal Representativeness Requirements of The State's Listing Policy

The data being used to support proposed listings of waterbody-pollutant combinations for legacy pollutants does not satisfy the temporal requirements of the State's 303(d) Listing Policy as described below. Thus, these proposed listings should be removed.

Section 6.1.5.3 of the State's 303(d) Listing Policy states:

“Samples used in the assessment must be temporally independent. If the majority of samples were collected on a single day or during a single short-term natural event (e.g., a storm, flood, or wildfire), the data shall not be used as the primary data set supporting the listing decision. Samples should be available from two or more seasons or from two or more events . . .”

⁷ 33 U.S.C §1313(d)

Section 6.1.5.6 of the Listing Policy states:

“To be considered temporally independent, samples collected during the averaging period shall be combined and considered one sampling event. For data that is not temporally independent (e.g., when multiple samples are collected at a single location on the same day), the measurements shall be combined and represented by a single resultant value.”

Section 3.1 of the Listing Policy requires a minimum of two exceedances to place a waterbody on the 303(d) list for toxic pollutants.

The data used to support some of the new listings was collected only on a single day. Therefore, pursuant to Sections 6.1.5.3 and 6.1.5.6 of the Listing Policy, these samples are not temporally independent and should be combined and considered as a single data point. Moreover, under Section 3.1 of the Listing Policy, a minimum of two exceedances are needed to place a waterbody on a 303(d) list. Thus, the following listings do not meet these Listing Policy guidelines:

WATERSHED	WATERBODY SEGMENT	POLLUTANT(S)
Dominguez Channel	Alondra Park Lake	PCBs
Malibu Creek	Malibou Lake	Dieldrin
Los Angeles River	Echo Park Lake	Chlordane, Dieldrin
	Lincoln Park Lake	PCBs
San Gabriel River	Legg Lakes	DDT, PCBs
	Santa Fe Dam Park Lake	PCBs
Santa Clara River	Castaic Lagoon	PCBs
	Castaic Lake	PCBs
	Elderberry Forebay	Dieldrin, PCBs
	Pyramid Lake	Chlordane, DDT, Dieldrin, PCBs

The County and the LACFCD request that these listings be removed until more samples are collected to satisfy the temporal representativeness of data of the State's Listing Policy.

VII. Legacy Pollutants (PCBs, DDT, Dieldrin, Chlordane) Should be Listed As a Category 4b, Not as Category 5

Many of the pollutants that are being considered for incorporation into the 303(d) list are legacy pollutants that have been banned by the U.S. Environmental Protection Agency (EPA) decades ago and are no longer manufactured or used in the United States. These pollutants include PCBs, DDT, Dieldrin, and Chlordane. PCBs were banned in 1979, DDT in 1980, Dieldrin in 1987, and Chlordane in 1988.

The newly proposed listing includes several waterbodies in the County that are listed for impairments associated with these pollutants:

WATERSHED	WATERBODY SEGMENT	POLLUTANT(S)
Dominguez Channel	Alondra Park Lake	PCBs
Malibu Creek	Malibou Lake	Dieldrin
Los Angeles River	Echo Park Lake	Chlordane, Dieldrin
	Lincoln Park Lake	PCBs
San Gabriel River	Legg Lakes	DDT, PCBs
	Santa Fe Dam Park Lake	PCBs
Santa Clara River	Castaic Lagoon	PCBs
	Castaic Lake	PCBs
	Elderberry Forebay	Dieldrin, PCBs
	Pyramid Lake	Chlordane, DDT, Dieldrin, PCBs

The complete ban on these pollutants three decades ago, which is the strongest regulatory action an agency can take, has effectively addressed the true sources of these pollutants in the environment. Since these chemicals are no longer manufactured or used, the regulatory program already in place by the U.S. EPA is reasonably expected to result in the attainment of the water quality standard for these pollutants over time.

As indicated in comment VI, waterbodies that contain legacy pollutants should not be listed because the data used for their listing does not satisfy the Listing Policy. However, if the Regional Board does list these waterbodies, we request that they be listed as Category 4b, not Category 5, because a regulatory program is already in place to address them.

VIII. The State Should Rely On The Most Updated Guideline to List Waterbodies Based On Fish Tissue Contamination

In assessing waterbodies for fish tissue contamination, the Regional Board used the following two guidelines:

- a. The 2008 Office of Environmental Health Hazard Assessment (OEHHA) fish contaminant goal⁸, and
- b. The 1972 National Academy of Sciences (NAS) guidelines.⁹

The OEHHA guideline, developed in 2008 is not only up-to-date but also specific to California and, thus, reasonable to use for this particular assessment. On the other hand, the NAS guideline is half a century old and out of date. In the absence of an up-to-date NAS guideline, the assessment should be based exclusively on the OEHHA standard's line of evidence.

Based on the OEHHA guideline, the following waterbodies meet water quality standards and, therefore, should be removed from the proposed listing:

- Castaic Lagoon for PCBs
- Elderberry Forebay for Dieldrin
- Pyramid Lake for Chlordane, DDT, Dieldrin, PCBs
- Alondra Park Lake for PCBs
- Echo Park Lake for Chlordane and Dieldrin
- Legg Lakes for DDT and PCBs.

IX. ADDITIONAL COMMENTS

A. Wilmington Drain-Copper should be delisted

Per Appendix G fact sheets, two lines of evidences (LOE) were used to support the listing for copper in Wilmington Drain. However, the information used for the second LOE is data collected in Compton Creek, which is a different waterbody. This data should not be used to evaluate Wilmington Drain. Removal of this LOE would lead to only 2 exceedances out of 33 data points. This would satisfy the delisting criteria of the State's Listing Policy. Therefore, copper should be delisted for Wilmington Drain.

⁸ http://www.waterboards.ca.gov/water_issues/programs/tmdl/records/state_board/2008/ref2456.pdf

⁹ http://www.waterboards.ca.gov/water_issues/programs/tmdl/records/state_board/2006/ref19.pdf

B. The listings in Appendix A should be corrected to reflect the listing and delisting decisions in Appendix G

As already acknowledged in the February 24 Regional Board notice letter, Appendix A does not accurately capture all the listing and delisting decisions detailed in the fact sheets in Appendix G. For example, for Ballona Creek, Chlordane, DDT, Dieldrin, and PCBs were delisted during the previous listing cycle. However, these listings continue to be identified in Appendix A as part of the 2016 303(d) list. This is true for many of the waterbodies summarized in Appendix A. This error should be corrected to avoid any confusion and misinterpretation of the information by the general public.

C. Waterbodies that are on the 303(d) list and being addressed by a USEPA approved TMDL should be moved to Category 4a from Category 5

Many of 303(d)-listed waterbodies from the previous listing cycle now have TMDLs. This requires a change in their status from Category 5 (TMDL required list) to Category 4a (being addressed by US EPA approved TMDL). Some of these status changes are not reflected in the revised list and need correction.

Similarly, some of the newly proposed listings are already being addressed by an existing TMDL for that watershed. In those cases, it is appropriate to put them also under Category 4a as opposed to Category 5. Examples, include:

- LA River Reach 3 and Rio Hondo Reach 2 for Indicator Bacteria, which are being addressed by the Los Angeles River Watershed Bacteria TMDL
- LA River Reach 6 for Copper and Compton Creek for Zinc, which are being addressed by the Los Angeles River Metals TMDL.



GAIL FARBER, Director

COUNTY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS

"To Enrich Lives Through Effective and Caring Service"

900 SOUTH FREMONT AVENUE
ALHAMBRA, CALIFORNIA 91803-1331
Telephone: (626) 458-5100
<http://dpw.lacounty.gov>

ADDRESS ALL CORRESPONDENCE TO:
P.O. BOX 1460
ALHAMBRA, CALIFORNIA 91802-1460

August 26, 2010

IN REPLY PLEASE

REFER TO FILE: **WM-9**

Mr. Jeffrey Shu, Environmental Scientist
State Water Resources Control Board
Division of Water Quality
P.O. Box 100
Sacramento, CA 95812-0100

Dear Mr. Shu:

RESPONSE TO WATER QUALITY DATA AND INFORMATION SOLICITATION FOR 2012 CALIFORNIA INTEGRATED REPORT CLEAN WATER ACT SECTIONS 303(D) AND 305(B)

Thank you for the opportunity to submit data and information for the 2012 Integrated Report – Clean Water Act Sections 303(d) and 305(b). The Los Angeles County Flood Control District conducts a minimum of six sampling events (four wet weather and two dry weather) per year at seven mass emission monitoring stations and six tributary monitoring stations in accordance with the Los Angeles County Municipal Stormwater Permit (NPDES Permit No. CAS004001). All data collected under the permit are submitted to the Los Angeles Regional Water Quality Control Board in August of each year. In addition, the Los Angeles County Flood Control District assisted the U.S. Environmental Protection Agency in collecting data for a development of the draft Los Angeles Area Lakes Total Maximum Daily Loads. Enclosed is a compact disk (CD) containing all data collected since the last data solicitation in 2007. Also included in the CD is a copy of this cover letter and the enclosures.

Our analysis of the newly available data and information, collected after the State's last data solicitation cycle in 2007, found that some listed water bodies have attained their water-quality standards and meet the delisting criteria in Section 4 of the State's Water Quality Control Policy for Developing Clean Water Act Section 303(d) List. We, therefore, request that the following water body-pollutant combinations be considered for removal from the 2012 Clean Water Act Section 303(d) List:

- Coyote Creek - Diazinon
- Dominguez Channel lined portion above Vermont Avenue - Diazinon

Mr. Jeffrey Shu
August 26, 2010
Page 2

- Legg Lakes - Ammonia, Copper, and Lead
- Los Angeles River Reach 1 - Diazinon
- Peck Road Park Lake - Lead and Organic Enrichment/Low-Dissolved Oxygen
- Santa Clara River Reach 6 - Chlorpyrifos, Diazinon, Copper, and Iron
- Santa Fe Dam Park Lake - Copper, Lead, and pH

Each water body-pollutant combination is discussed in detail in the enclosed Technical Report.

We look forward to your consideration of these comments. If you have any questions, please contact me at (626) 458-4300 or ghildeb@dpw.lacounty.gov or your staff may contact Ms. Rossana D'Antonio at (626) 458-4325 or rdanton@dpw.lacounty.gov.

Very truly yours,

GAIL FARBER
Director of Public Works -



GARY HILDEBRAND
Assistant Deputy Director
Watershed Management Division

El:lm
P:\wmpub\Secretarial\2010 Documents\Letters\california integrated report.docx\C10327

Enc.

Technical Report:
Data Analysis and Justifications
for Delisting Waterbody-Pollutant
Combinations

Submitted to:
California State Water Resources Control Board
1001 I Street, Sacramento, CA 95814

August 30, 2010

Table of Contents

Waterbody-Pollutant Combination	Page
1. Coyote Creek-Diazinon	1
Figure 1. Map showing Dominguez Channel Lined Portion, Los Angeles River Reach 1, Coyote Creek and Associated Monitoring Stations	2
Table 1. Summary of Diazinon Data in Coyote Creek	3
2. Dominguez Channel (Lined Portion Above Vermont Ave.)-Diazinon	4
Table 2. Summary of Diazinon Data in Dominguez Channel	5
3. Los Angeles River Reach 1-Diazinon	6
Table 3. Summary of Diazinon Data in Los Angeles River Reach 1	7
4. Santa Clara River Reach 6-Diazinon	8
Figure 2. Map showing Santa Clara River Reach 6 and Associated Monitoring Stations	9
Table 4. Summary of Diazinon Data in Santa Clara River Reach 6	10
5. Santa Clara River Reach 6-Chlorpyrifos	11
Table 5. Summary of Chlorpyrifos Data in Santa Clara River Reach 6	12
6. Santa Clara River Reach 6-Copper	13
Table 6. Summary of Copper Data in Santa Clara River Reach 6	14
7. Santa Clara River Reach 6-Iron	15
Table 7. Summary of Iron Data in Santa Clara River Reach 6	16
8. Legg Lake-Ammonia	17
Figure 3. Map showing Legg Lake and Associated Monitoring Stations	18
Table 8. Summary of Ammonia Data in Legg Lake	19
9. Legg Lake-Copper	20
Table 9. Summary of Copper Data in Legg Lake	21
10. Legg Lake-Lead	22
Table 10. Summary of Lead Data in Legg Lake	23
11. Peck Road Park Lake-Lead	24
Figure 4. Map showing Peck Road Park Lake and Associated Monitoring Stations	25
Table 11. Summary of Lead Data in Peck Road Park Lake	26
12. Peck Road Park Lake-Organic Enrichment/Low Dissolved Oxygen	27
Table 12. Summary of Dissolved Oxygen Data in Peck Road Park Lake	28
13. Santa Fe Dam Park Lake-Copper	29
Figure 5. Map showing Santa Fe Dam Park Lake and Associated Monitoring Stations	30
Table 13. Summary of Copper Data in Santa Fe Dam Park Lake	31
14. Santa Fe Dam Park Lake-Lead	32
Table 14. Summary of Lead Data in Santa Fe Dam Park Lake	33
15. Santa Fe Dam Park Lake-pH	34
Table 15. Summary of pH Data in Santa Fe Dam Park Lake	35

1. Coyote Creek - Diazinon

Watershed	San Gabriel River Watershed, Los Angeles County
Waterbody Reach	Coyote Creek (see Figure 1). This waterbody reach is concrete-lined channel.
Pollutant	Diazinon
Year First Listed and Evidences Used for the Listing	This waterbody pollutant was initially placed on the 303(d) list in 2006. The evidence used for the original listing indicates that two out of 20 samples of available data exceeded the California Department of Fish and Game (DFG) freshwater criteria for diazinon. No additional information was used at the time of first listing. The analysis for the most recent 2008 listing shows that seven out of 79 shows exceedance of the Chronic Criteria and six out of 79 shows exceedance of the acute criteria.
Applicable Water Quality Objectives	The DFG lists an acute and chronic hazard assessment criterion of 0.16 ug/L and 0.10 ug/L, respectively, for diazinon.
Changes in the Watershed since the First Listing	The U.S. Environmental Protection Agency (EPA) has banned the sales of diazinon in 2005. The data collected for Coyote Creek since 2005 shows the effectiveness of the EPA policy in removing diazinon from receiving water.
Monitoring Stations and Additional Data Collected since the Last Data Solicitation	<p><u>LACFCD station (S13)</u>: Los Angeles County Flood Control District's (LACFCD) Mass Emission Monitoring Station (S13) is located on Coyote Creek below Spring Street in the lower San Gabriel River Watershed (see Figure 1). Since the last data solicitation, additional 24 samples were collected between September 2007 and March 2010 at S13 in accordance with the Los Angeles County MS4 permit monitoring program. There were zero exceedances during this period.</p> <p><u>LACSD Stations (RA1, RA)</u>: the Sanitation Districts of Los Angeles County (LACSD) conducted sampling in two receiving water monitoring stations: station <u>RA1</u> located upstream of discharge from Long Beach Water Reclamation Plant and station <u>RA</u> located downstream of discharge from Long Beach Water Reclamation Plant (see Figure 1).</p>
Data Analysis and Justification for de-listing	<p>Of the total 68 samples collected by the LACFCD at S13 from October 2000 through March 2010, there were five exceedances out of 29 samples before the 2005 sales ban (Pre-EPA Ban), and only one out of 39 samples exceeded the diazinon criteria after the sales ban (Post-EPA Ban). The last diazinon exceedance at station S13 was observed on April 7, 2007.</p> <p>Of the total 52 samples collected by the LACSD at RA1 and RA stations, there were three exceedances out of five samples during the pre-EPA ban, while only one exceedance out of 43 samples during the post-EPA ban (see Table 1). The last exceedance of diazinon at these stations was observed on July 18, 2005.</p> <p>In summary, there were 8 exceedances out of 34 samples pre-EPA ban, while there were only 2 exceedances out of 82 samples post-EPA ban. This shows that the EPA policy is very effective in eliminating diazinon from Coyote Creek, and the waterbody has attained its water quality objectives. All supporting data is summarized in Table 1.</p>
Conclusions and Recommendation	After the EPA sales ban of diazinon, Coyote Creek is meeting section 4.1 of the State Listing Policy and should be removed from the 303(d) list.

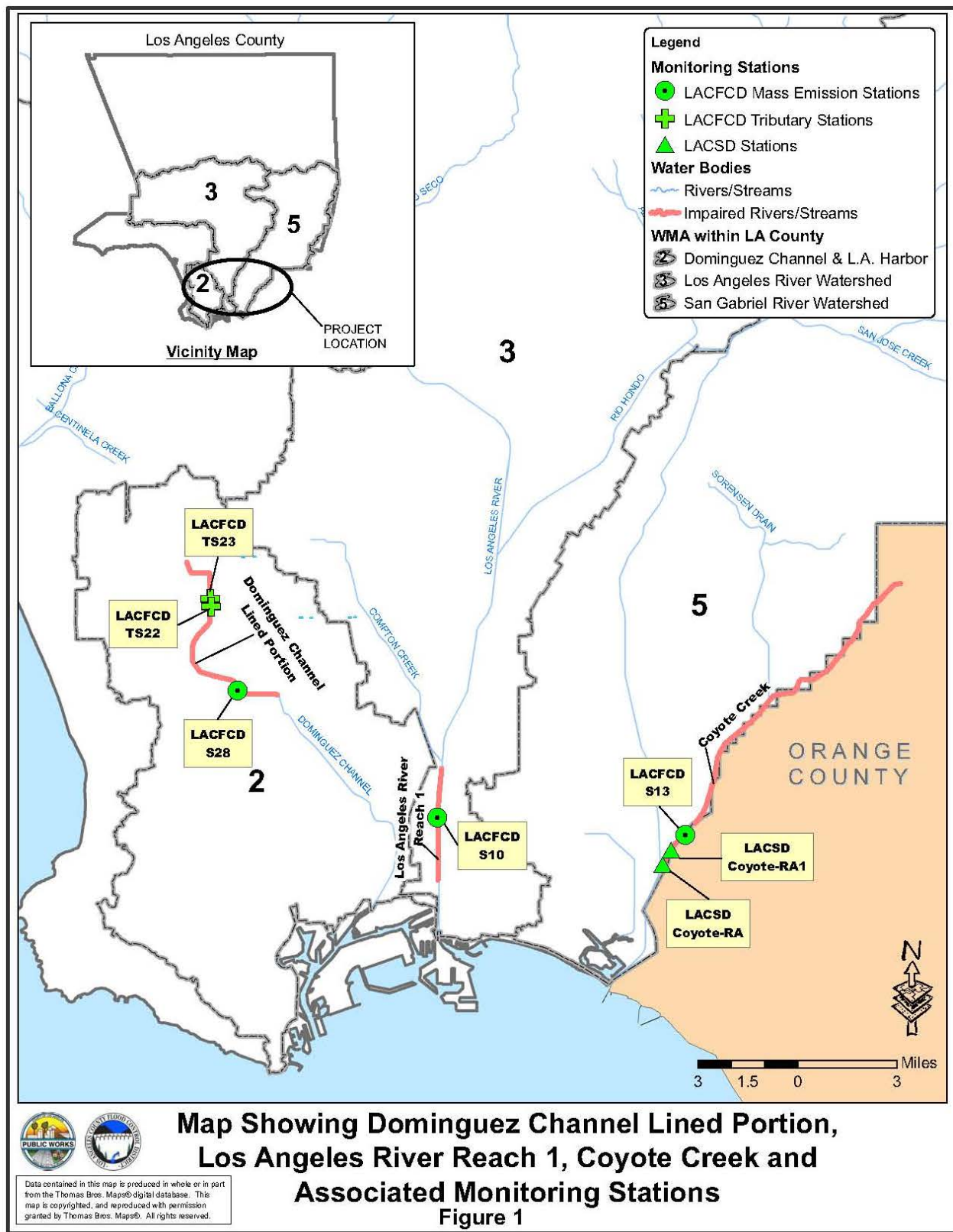


Table 1. Summary of Diazinon Data in Coyote Creek

	LACFCD	LACSD	Total
Pre-EPA Ban			
Number of Exceedance	5	3	8
Number of Sample	29	5	34
Average of Result (ug/L)	0.06	0.17	0.08
Minimum of Result (ug/L)	0.005	0.05	0.005
Maximum of Result (ug/L)	0.49	0.39	0.49
Water Quality Objectives (ug/L)	0.1	0.1	0.1
Start Date	10/12/2000	07/12/2004	10/12/2000
End Date	12/05/2004	10/04/2004	12/05/2004
Post-EPA Ban			
Number of Exceedance	1	1	2
Number of Sample	39	43	82
Average of Result (ug/L)	0.01	0.05	0.03
Minimum of Result (ug/L)	0.003	0.05	0.003
Maximum of Result (ug/L)	0.147	0.19	0.19
Water Quality Objectives (ug/L)	0.1	0.1	0.1
Start Date	01/07/2005	01/17/2005	01/07/2005
End Date	03/23/2010	02/16/2010	03/23/2010
Total Summary			
Total Number of Exceedance	6	4	10
Total Number of Sample	68	48	116
Total Average of Result (ug/L)	0.03	0.07	0.04
Total Minimum of Result (ug/L)	0.003	0.05	0.003
Total Maximum of Result (ug/L)	0.49	0.39	0.49
Water Quality Objectives (ug/L)	0.1	0.1	0.1
Total Start Date	10/12/2000	07/12/2004	10/12/2000
Total End Date	03/23/2010	02/16/2010	03/23/2010

EPA=Environmental Protection Agency

LACFCD=Los Angeles County Flood Control District

LACSD=Los Angeles County Sanitation Districts

2. Dominguez Channel (Lined Portion Above Vermont Ave.) - Diazinon

Watershed	Dominguez Channel Watershed, Los Angeles County
Waterbody Reach	Dominguez Channel Lined Porting Above Vermont Ave. (see Figure 1 for the location of this particular reach). This waterbody reach is concrete-lined channel.
Pollutant	Diazinon
Year First Listed and Evidences Used for the Listing	This waterbody-pollutant was initially placed on the 303(d) list in 2008. The evidence used for the listing indicates that five out of 31 samples collected between January 2002 and April 2007 exceeded the California Department of Fish and Game (DFG) freshwater criteria for diazinon.
Applicable Water Quality Objectives	The DFG lists an acute and chronic hazard assessment criterion of 0.16 ug/L and 0.10 ug/L, respectively, for diazinon.
Changes in the Watershed since the First Listing	The U.S. Environmental Protection Agency (EPA) has banned the sales of diazinon in 2005. Water quality improvement BMPs has been implemented as part NPDES permits. Additional data has been collected. The data collected for Coyote Creek since 2005 shows the effectiveness of the EPA policy in removing diazinon from receiving water.
Monitoring Stations and Additional Data Collected since the Last Data Solicitation	<p><u>LACFCD station (S28)</u>: Los Angeles County Flood Control District's (LACFCD) Mass Emission Monitoring Station (S28) is located on Dominguez Channel and Artesia Boulevard in the City of Torrance (see Figure 1). Since the last data solicitation, additional 24 samples were collected between September 2007 and March 2010 at S28 in accordance with the Los Angeles County MS4 permit monitoring program. There were zero exceedances during this period.</p> <p><u>LACFCD Tributary Stations (TS22, TS23)</u>: LACFCD's tributary monitoring stations, TS22 and TS23, are located near a confluent to Dominguez Channel and located approximately 2.5 miles upstream of S28 (see Figure 1). 36 samples were collected at these two stations between November 2008 and March 2010.</p>
Data Analysis and Justification for de-listing	<p>Of the total 55 samples collected by the LACFCD at S28 from October 2000 through March 2010, there were three exceedances out of 16 samples before the 2005 sales ban (Pre-EPA Ban), and only two out of 39 samples exceeded the diazinon criteria after the sales ban (Post-EPA Ban). The last diazinon exceedance at station S28 was observed on October 17, 2005.</p> <p>Of the total 36 samples collected by the LACFCD at TS22 and TS23 stations, there were zero exceedances at these stations since the LAFCD started monitoring in November 2008.</p> <p>In summary, there were three exceedances out of 16 samples during the pre-EPA ban, while there were only 2 exceedances out of 75 samples during the post-EPA ban. This shows that the EPA policy is very effective in eliminating diazinon from Dominguez Channel, and the waterbody has attained its water quality objectives. All supporting data is summarized in Table 2.</p>
Conclusions and Recommendation	After the EPA sales ban of diazinon, Dominguez Channel Lined Portion is meeting section 4.1 of the State Listing Policy for diazinon and should be removed from the 303(d) list.

Table 2. Summary of Data in Dominguez Channel lined portion above Vermont Ave.

	S28	TS22*	TS23*	Total
Pre-EPA Ban				
Number of Exceedance	3			3
Number of Samples	16			16
Max of Result (ug/L)	0.415			0.415
Min of Result (ug/L)	0.003			0.003
Reporting Limit (ug/L)	0.01			0.01
Water Quality Objectives (ug/L)	0.1			0.1
Start Date	01/28/2002			01/28/2002
End Date	12/05/2004			12/05/2004
Post-EPA Ban				
Number of Exceedance	2	0	0	2
Number of Samples	39	18	18	75
Max of Result (ug/L)	0.96	0.003	0.003	0.96
Min of Result (ug/L)	0.003	0.003	0.003	0.003
Reporting Limit (ug/L)	0.01	0.01	0.01	0.01
Water Quality Objectives (ug/L)	0.1	0.1	0.1	0.1
Start Date	01/07/2005	11/04/2008	11/04/2008	01/07/2005
End Date	03/23/2010	03/23/2010	03/23/2010	03/23/2010
Total Summary				
Total Number of Exceedance	5	0	0	5
Total Number of Samples	55	18	18	91
Total Max of Result (ug/L)	0.96	0.003	0.003	0.96
Total Min of Result (ug/L)	0.003	0.003	0.003	0.003
Total Reporting Limit (ug/L)	0.01	0.01	0.01	0.01
Water Quality Objectives (ug/L)	0.1	0.1	0.1	0.1
Total Start Date	01/28/2002	11/04/2008	11/04/2008	01/28/2002
Total End Date	03/23/2010	03/23/2010	03/23/2010	03/23/2010

EPA=Environmental Protection Agency

* Monitoring at tributary stations were activated on October 2008.

3. Los Angeles River Reach 1 - Diazinon

Watershed	Los Angeles River Watershed, Los Angeles County
Waterbody Reach	Los Angeles River Reach 1 (see Figure 1). This waterbody reach is a concrete-lined channel.
Pollutant	Diazinon
Year First Listed and Evidences Used for the Listing	This waterbody-pollutant was placed on the 303(d) list in 2006. The evidence used for the listing indicates that two out of 22 samples collected from October 2000 through April 2003 exceeded the California Department of Fish and Game (DFG) freshwater criteria for diazinon. The data submitted by Los Angeles County Flood Control District (LACFCD) for the 2008 data solicitation was not evaluated.
Applicable Water Quality Objectives	The DFG lists an acute and chronic hazard assessment criterion of 0.16 ug/L and 0.10 ug/L, respectively, for diazinon.
Changes in the Watershed since the First Listing	The U.S. Environmental Protection Agency (EPA) has banned the sales of diazinon in 2005. Water quality improvement BMPs has been implemented as part NPDES permits. Additional data has been collected. The data collected for Los Angeles River Reach 1 since 2005 shows the effectiveness of the EPA policy in removing diazinon from receiving water.
Monitoring Stations and Additional Data Collected since the Last Data Solicitation	<u>LACFCD station (S10)</u> : LACFCD's Mass Emission Monitoring Station (S10) is located on Los Angeles River between Willow Street and Wardlow Road in the City of Long Beach (see Figure 1). 46 samples were collected between October 2003 and March 2010 at S10 in accordance with the Los Angeles County MS4 permit monitoring program. There were zero exceedances during this period.
Data Analysis and Justification for de-listing	Of the total 67 samples collected by the LACFCD at S10 from October 2000 through March 2010, there were two exceedances out of 31 samples before the 2005 sales ban (Pre-EPA Ban), and zero out of 36 samples exceeded the diazinon criteria after the sales ban (Post-EPA Ban). The last diazinon exceedance at S10 was observed on February 11, 2003. This shows that the EPA policy is very effective in eliminating diazinon from Los Angeles River Reach 1, and the waterbody has attained its water quality objectives. All supporting data is summarized in Table 3.
Conclusions and Recommendation	Los Angeles River Reach 1 is meeting section 4.1 of the State Listing Policy for diazinon and should be removed from the 303(d) list.

Table 3. Summary of Diazinon Data in Los Angeles River Reach 1

	S10
Pre-EPA Ban	
Number of Exceedance	2
Number of Sample	31
Average of Result (ug/L)	0.024
Max of Result (ug/L)	0.179
Min of Result (ug/L)	0.003
Water Quality Objectives (ug/L)	0.1
Start Date	10/12/2000
End Date	12/05/2004
Post-EPA Ban	
Number of Exceedance	0
Number of Sample	36
Average of Result (ug/L)	0.003
Max of Result (ug/L)	0.003
Min of Result (ug/L)	0.003
Water Quality Objectives (ug/L)	0.1
Start Date	01/07/2005
End Date	03/23/2010
Total Summary	
Total Number of Exceedance	2
Total Number of Sample	67
Total Average of Result (ug/L)	0.013
Total Max of Result (ug/L)	0.179
Total Min of Result (ug/L)	0.003
Water Quality Objectives	0.1
Total Start Date	10/12/2000
Total End Date	03/23/2010

EPA=Environmental Protection Agency

4. Santa Clara River Reach 6 - Diazinon

Watershed	Santa Clara River Watershed, Los Angeles County
Waterbody Reach	Santa Clara River Reach 6 (see Figure 2). This waterbody reach is a soft bottom channel.
Pollutant	Diazinon
Year First Listed and Evidences Used for the Listing	This waterbody-pollutant was placed on the 303(d) list in 2006. The evidence used for the listing indicates that 28 out of 29 samples collected between October 2001 and May 2003 exceeded the California Department of Fish and Game (CDFG) freshwater criteria for diazinon. In actuality, however, there were 24 samples with 23 exceedances. The data were collected by the Surface Water Ambient Monitoring Program (SWAMP). These data do not satisfy the section 6.1.4 of the Listing Policy because only two data points out of 24 were reported to be in "Compliant with associated QAPP" for the data set.
Applicable Water Quality Objectives	The CDFG lists an acute and chronic hazard assessment criterion of 0.16 ug/L and 0.10 ug/L, respectively, for diazinon.
Changes in the Watershed since the First Listing	The U.S. Environmental Protection Agency (EPA) has banned the sales of diazinon in 2005. Also, water quality improvement BMPs has been implemented as part NPDES permits and additional data has been collected. The data collected for Santa Clara River Reach 6 since 2005 shows the effectiveness of the EPA policy in removing diazinon from receiving water.
Monitoring Stations and Additional Data Collected since the Last Data Solicitation	<u>LACFCD station (S29)</u> : Los Angeles County Flood Control District's (LACFCD) Mass Emission Monitoring Station (S29) is located on Santa Clara River (see Figure 2). 48 samples were collected between October 2002 and March 2010 at S29 in accordance with the Los Angeles County MS4 permit. <u>LACSD Stations (RA, RB)</u> : the Sanitation Districts of Los Angeles County (LACSD) conducted sampling at two receiving water monitoring stations: station <u>RA</u> located 300 feet upstream of discharge from Saugus Water Reclamation Plant and station <u>RB</u> located 100 feet downstream of discharge from Saugus Water Reclamation Plant (see Figure 2).
Data Analysis and Justification for de-listing	Of the total 48 samples collected by the LACFCD at S29 from October 2002 through March 2010, there were three exceedances out of 13 samples before the 2005 sales ban (Pre-EPA Ban), and only one out of 35 samples exceeded the diazinon criteria after the sales ban (Post-EPA Ban). The last diazinon exceedance at S29 was observed on January 14, 2006. Of the total 27 samples collected by the LACSD at RA and RB stations, there were only one exceedance out of 25 samples during the post-EPA ban. The last exceedance of diazinon at these stations was observed on February 7, 2005. In summary, there were three exceedances out of 15 samples during the pre-EPA ban, while there were only two exceedances out of 60 samples during the post-EPA ban. All supporting data is summarized in Table 4. This shows that the EPA policy is very effective in eliminating diazinon from Santa Clara River Reach 6, and the waterbody has attained its water quality objectives.
Conclusions and Recommendation	After the EPA sales ban of diazinon, Santa Clara River Reach 6 is meeting section 4.1 of the State Listing Policy for diazinon and should be removed from the 303(d) list.

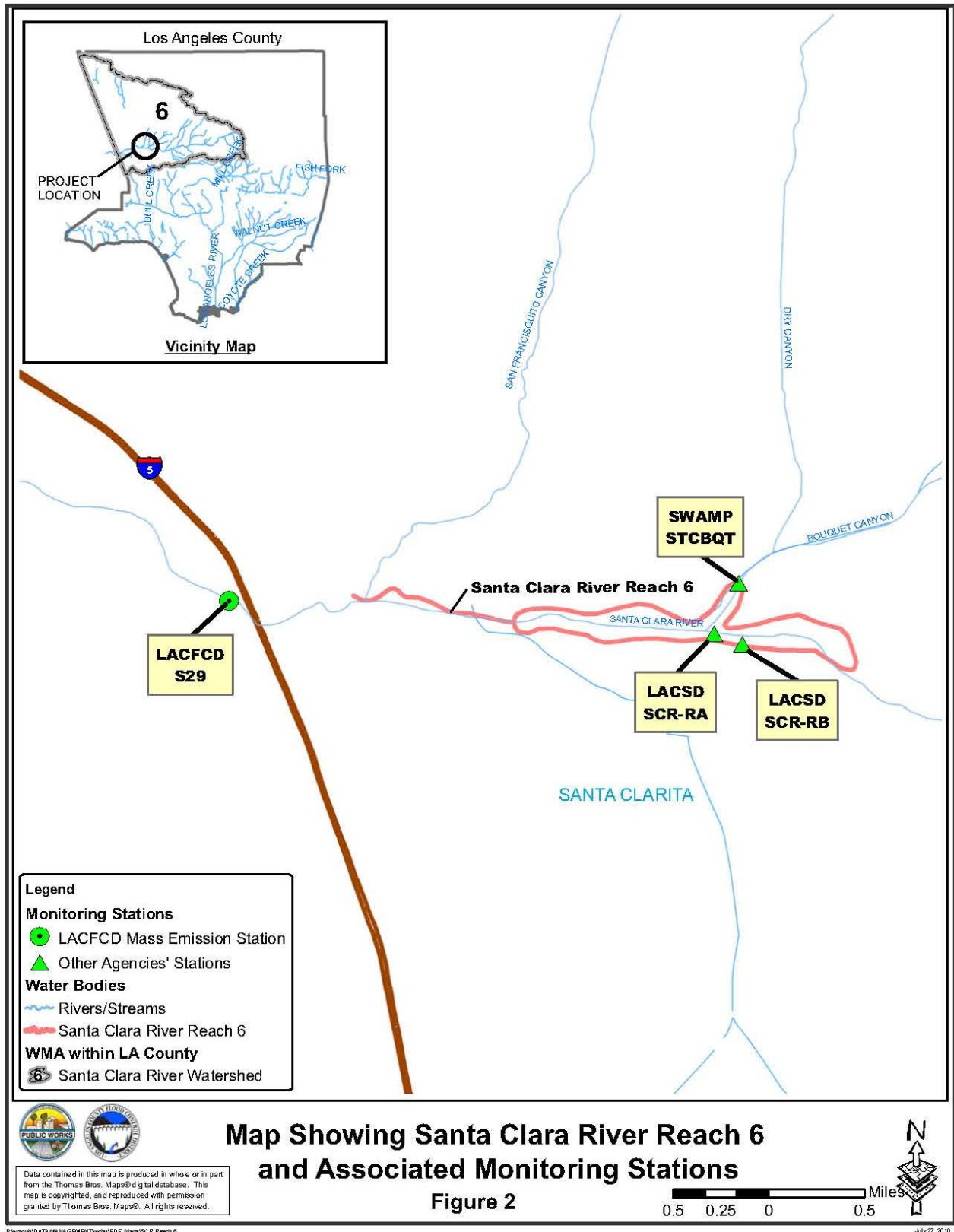


Table 4. Summary of Diazinon Data in Santa Clara River Reach 6

	Diazinon			
Pre-EPA Ban	SWAMP*	LACFCD	LACSD	Total
Number of Exceedance	23	3	0	26
Number of Sample	24	13	2	39
Average of Result (ug/L)	1.94	0.10	0.05	1.23
Minimum of Result (ug/L)	0.054	0.003	0.05	0.003
Maximum of Result (ug/L)	6.7	0.43	0.05	6.7
Water Quality Objectives (ug/L)	0.1	0.1	0.1	0.1
Start Date	10/31/2001	10/10/2002	11/01/2004	10/31/2001
End Date	05/17/2003	10/26/2004	12/22/2004	12/22/2004
Post-EPA Ban				
Number of Exceedance		1	1	2
Number of Sample		35	25	60
Average of Result (ug/L)		0.01	0.07	0.03
Minimum of Result (ug/L)		0.003	0.05	0.003
Maximum of Result (ug/L)		0.11	0.51	0.51
Water Quality Objectives (ug/L)		0.1	0.1	0.1
Start Date		01/07/2005	01/17/2005	01/07/2005
End Date		03/23/2010	01/08/2010	03/23/2010
Total Summary				
Total Number of Exceedance	23	4	1	28
Total Number of Sample	24	48	27	99
Total Average of Result (ug/L)	1.94	0.03	0.07	0.51
Total Minimum of Result (ug/L)	0.054	0.003	0.05	0.003
Total Maximum of Result (ug/L)	6.7	0.43	0.51	6.7
Water Quality Objectives (ug/L)	0.1	0.1	0.1	0.1
Total Start Date	10/31/2001	10/10/2002	11/01/2004	10/31/2001
Total End Date	05/17/2003	03/23/2010	01/08/2010	03/23/2010

EPA=Environmental Protection Agency

LACFCD=Los Angeles County Flood Control District

LACSD=Los Angeles County Sanitation Districts

SWAMP=Surface Water Ambient Monitoring Program

*Data is not found from SWAMP database after May 2003 at this location

5. Santa Clara River Reach 6 - Chlorpyrifos

Watershed	Santa Clara River Watershed, Los Angeles County
Waterbody Reach	Santa Clara River Reach 6 (see Figure 2 for the location of this particular reach). This waterbody reach is a soft bottom channel.
Pollutant	Chlorpyrifos
Year First Listed and Evidences Used for the Listing	This waterbody-pollutant was placed on the 303(d) list in 2006. The evidence used for the listing indicates that 10 out of 39 samples collected by SWAMP (10), LACFCD (5) and Newhall Land and Farming Co. (24, unable to locate) between August 2002 and April 2003 exceeded the California Department of Fish and Game (CDFG) freshwater criteria for chlorpyrifos. All exceedances were from SWAMP STCBQT Bouquet Canyon Station (see Figure 2 for locations). The SWAMP data used in here do not satisfy the section 6.1.4 of the Listing Policy because only two data points out of 10 were reported to be in "Compliant with associated QAPP" for the data set.
Applicable Water Quality Objectives	CDFG Aquatic life toxicity one hour average: 0.08 ug/l and 4 day average: 0.05 ug/L.
Changes in the Watershed since the First Listing	The U.S. Environmental Protection Agency (EPA) has banned the sales of chlorpyrifos in 2001. Also, water quality improvement BMPs has been implemented as part NPDES permits and additional data has been collected. The data collected for Santa Clara River Reach 6 by LACFCD and LACSD since 2001 shows the effectiveness of the EPA policy in removing chlorpyrifos from receiving water.
Monitoring Stations and Additional Data Collected since the Last Data Solicitation	<u>LACFCD station (S29)</u> : Los Angeles Flood Control District's (LACFCD) Mass Emission Monitoring Station (S29) is located on Santa Clara River and the Old Road in Santa Clara (see Figure 2). 48 samples were collected between October 2002 and March 2010 at S29 in accordance with the Los Angeles County MS4 permit monitoring program. <u>LACSD Stations (RB)</u> : the Sanitation Districts of Los Angeles County (LACSD) conducted sampling in Santa Clara River in a receiving water monitoring station (RB) located 100 feet downstream of discharge from Saugus Water Reclamation Plant (see Figure 2). Three samples were collected by LACSD between July 2009 and January 2010.
Data Analysis and Justification for de-listing	Of the total 48 samples collected by the LACFCD at S29 from October 2002 through March 2010, there were three samples exceeded the chlorpyrifos criteria after the sales ban (Post-EPA Ban). The last chlorpyrifos exceedance at S29 was observed on January 14, 2006. Of the three samples were collected by the LACSD at station RB, there were zero exceedances. In summary, there were three exceedances out of 51 samples during the post-EPA ban. This shows that the EPA policy is very effective in eliminating chlorpyrifos from Santa Clara River Reach 6, and the waterbody has attained its water quality objectives. All supporting data is summarized in Table 5.
Conclusions and Recommendation	Santa Clara River Reach 6 is meeting section 4.1 of the State Listing Policy for chlorpyrifos and should be removed from the 303(d) list.

Table 5. Summary of Chlorpyrifos Data in Santa Clara River Reach 6

	Chlorpyrifos			
Pre-EPA Ban*	SWAMP	LACFCD	LACSD	Total
Number of Exceedance				
Number of Sample				
Average of Result (ug/L)				
Minimum of Result (ug/L)				
Maximum of Result (ug/L)				
Water Quality Objectives (ug/L)				
Start Date				
End Date				
Post-EPA Ban				
Number of Exceedance	10	3	0	13
Number of Sample	10	48	3	61
Average of Result (ug/L)	0.06	0.15	0.04	0.13
Minimum of Result (ug/L)	0.051	0.02	0.015	0.015
Maximum of Result (ug/L)	0.083	3.02	0.05	3.02
Water Quality Objectives (ug/L)	0.05	0.05	0.05	0.05
Start Date	10/31/2001	10/10/2002	07/06/2009	10/31/2001
End Date	03/03/2003	03/23/2010	01/08/2010	03/23/2010
Total Summary				
Total Number of Exceedance	10	3	0	13
Total Number of Sample	10	48	3	61
Total Average of Result (ug/L)	0.06	0.15	0.04	0.13
Total Minimum of Result (ug/L)	0.051	0.02	0.015	0.015
Total Maximum of Result (ug/L)	0.083	3.02	0.05	3.02
Water Quality Objectives (ug/L)	0.05	0.05	0.05	0.05
Total Start Date	10/31/2001	10/10/2002	07/06/2009	10/31/2001
Total End Date	03/03/2003	03/23/2010	01/08/2010	03/23/2010

EPA=Environmental Protection Agency

LACFCD=Los Angeles County Flood Control District

LACSD=Los Angeles County Sanitation Districts

SWAMP=Surface Water Ambient Monitoring Program

*Data was not collected before the EPA ban in 2001

6. Santa Clara River Reach 6 - Copper

Watershed	Santa Clara River Watershed, Los Angeles County
Waterbody Reach	Santa Clara River Reach 6 (see Figure 2 for the location of this particular reach). This waterbody reach is a soft bottom channel.
Pollutant	Copper
Year First Listed and Evidences Used for the Listing	This waterbody-pollutant was placed on the 303(d) list in 2008. The evidence used for the listing indicates that 2 out of 20 samples collected by Ventura County Flood Control District between October 2003 and October 2007 exceeded the California Toxics Rule's (CTR) acute and chronic criteria for copper to protect aquatic life in freshwater for dissolved copper. In actuality, however, these samples were collected by Los Angeles Flood Control District (LACFCD), and there were zero exceedances, which would not qualify section 3.1 of the Listing Policy. Another data used for the listing was 15 samples of total copper concentrations, which was compared to the CTR for dissolved copper, causing one exceedance out of 15 samples while compared to the total copper CTR, there are zero exceedances.
Applicable Water Quality Objectives	The CTR criterion for copper in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling.
Changes in the Watershed since the First Listing	The pollutant was wrongly listed based on the insufficient evidence. Further, water quality improvement BMPs has been implemented as part of NPDES permits and additional data has been collected.
Monitoring Stations and Additional Data Collected since the Last Data Solicitation	<p><u>LACFCD station (S29)</u>: LACFCD's Mass Emission Monitoring Station (S29) is located on Santa Clara River at the Old Road (see Figure 2). 6 samples collected between October 2002 to April 2003 at S29 were not used or mistakenly neglected in the analysis during the first listing. Additionally, 20 samples were collected between September 2007 and March 2010 at S29 in accordance with the Los Angeles County MS4 permit monitoring program.</p> <p><u>LACSD Stations (RA, RB)</u>: the Sanitation Districts of Los Angeles County (LACSD) conducted sampling at two receiving water monitoring stations: station <u>RA</u> located 300 feet upstream of discharge from Saugus Water Reclamation Plant and station <u>RB</u> located 100 feet downstream of discharge from Saugus Water Reclamation Plant (see Figure 2). 12 samples were collected between April 2007 and January 2010.</p>
Data Analysis and Justification for de-listing	<p>Of the total 48 samples collected by the LACFCD at S29 from October 2002 through March 2010, there were three exceedances out of 48 samples for dissolved copper.</p> <p>Of the total 27 samples collected by the LACSD at RA and RB stations between July 2004 and January 2010, there were zero exceedances for total copper.</p> <p>In summary, there were three exceedances out of 75 samples collected by LACFCD and LACSD from October 2002 through March 2010. Data is summarized in Table 6. Based on these multiple line of evidence, there is sufficient justification that this waterbody is meeting its water quality objectives.</p>
Conclusions and Recommendation	Santa Clara River Reach 6 is meeting section 4.1 of the State Listing Policy for copper and should be removed from the 303(d) list.

Table 6. Summary of Copper Data in Santa Clara River Reach 6

		Copper	
		Dissolved (ug/L)	Total (ug/L)
LACFCD*			
New Data	Number of Exceedance	1	
	Number of Sample	6	
	Average of Result	5.39	
	Minimum of Result	2.55	
	Maximum of Result	8.39	
	Start Date	10/10/2002	
	End Date	10/28/2003	
Ref 2720	Number of Exceedance	2	
	Number of Sample	22	
	Average of Result	6.26	
	Minimum of Result	2.19	
	Maximum of Result	22.6	
	Start Date	10/31/2003	
	End Date	04/02/2007	
New Data	Number of Exceedance	0	
	Number of Sample	20	
	Average of Result	4.09	
	Minimum of Result	0.5	
	Maximum of Result	11.5	
	Start Date	09/21/2007	
	End Date	03/23/2010	
LACSD**			
Ref 2657	Number of Exceedance		0
	Number of Sample		15
	Average of Result		6.76
	Minimum of Result		0.8
	Maximum of Result		29
	Start Date		07/14/2004
	End Date		02/14/2007
New Data	Number of Exceedance		0
	Number of Sample		12
	Average of Result		7.43
	Minimum of Result		4.55
	Maximum of Result		14
	Start Date		04/11/2007
	End Date		01/05/2010
Total Summary			
Total Number of Exceedance		3	0
Total Number of Sample		48	27
Total Average of Result		5.25	7.06
Total Minimum of Result		0.5	0.8
Total Maximum of Result		22.6	29
Total Start Date		10/10/2002	07/14/2004
Total End Date		03/23/2010	01/05/2010

LACFCD=Los Angeles County Flood Control District; LACSD=Los Angeles County Sanitation Districts

*Dissolved fraction data is shown for its appropriateness although total fraction data is also available

**Only total fraction data is available at LACSD stations

7. Santa Clara River Reach 6 - Iron

Watershed	Santa Clara River Watershed, Los Angeles County
Waterbody Reach	Santa Clara River Reach 6 (see Figure 2). This waterbody reach is a soft bottom channel.
Pollutant	Iron
Year First Listed and Evidences Used for the Listing	This waterbody-pollutant was placed on the 303(d) list in 2008. The evidence used for the listing indicates that 2 out of 20 samples collected by Ventura County Flood Control District between October 2003 and February 2007 exceeded the U.S. Environmental Protection Agency (EPA) National Recommended Water Quality Criteria for Freshwater Aquatic Life Protection for dissolved iron. In actuality, however, these sampled were collected by Los Angeles Flood Control District (LACFCD), and there were 22 samples. Another data used for the listing was collected in total iron concentrations by the Sanitation Districts of Los Angeles County (LACSD), and there were two exceedances out of 15 samples (instead of referenced 10 samples in the listing).
Applicable Water Quality Objectives	EPA National Recommended Water Quality Criteria for Freshwater Aquatic Life Protection for dissolved iron is 1 mg/L, or 1000 ug/L
Changes in the Watershed since the First Listing	The pollutant was wrongly listed based on the insufficient evidence. Further, water quality improvement BMPs has been implemented as part of NPDES permits and additional data has been collected.
Monitoring Stations and Additional Data Collected since the Last Data Solicitation	<u>LACFCD station (S29)</u> : LACFCD's Mass Emission Monitoring Station (S29) is located on Santa Clara River at the Old Road (see Figure 2). 5 samples collected between October 2002 to April 2003 at S29 were not used or mistakenly neglected in the analysis during the first listing. Additionally, 21 samples were collected between March 2007 and March 2010 at S29 in accordance with the Los Angeles County MS4 permit monitoring program. <u>LACSD Stations (RA, RB)</u> : LACSD conducted sampling at two receiving water monitoring stations: station <u>RA</u> located 300 feet upstream of discharge from Saugus Water Reclamation Plant and station <u>RB</u> located 100 feet downstream of discharge from Saugus Water Reclamation Plant (see Figure 2). 18 samples were collected between April 2007 and March 2010.
Data Analysis and Justification for de-listing	Of the total 48 samples collected by the LACFCD at S29 from October 2002 to March 2010, there were two exceedances for dissolved iron. Of the total 33 samples collected by the LACSD at RA and RB stations, there were two exceedances for total iron. In summary, there were four exceedances out of 81 samples collected by LACFCD and LACSD from October 2002 through March 2010. All Data is summarized in Table 7. Based on these multiple line of evidence, there is sufficient justification that this waterbody is meeting its water quality objectives.
Conclusions and Recommendation	Santa Clara River Reach 6 is meeting section 4.1 of the State Listing Policy for iron and should be removed from the 303(d) list.

Table 7. Summary of Iron Data in Santa Clara River Reach 6

		Iron	
		Dissolved (ug/L)	Total (ug/L)
LACFCD*			
New Data	Number of Exceedance	0	
	Number of Sample	5	
	Average of Result	190.6	
	Minimum of Result	100	
	Maximum of Result	460	
	Start Date	10/10/2002	
	End Date	04/30/2003	
Ref 2720	Number of Exceedance	2	
	Number of Sample	22	
	Average of Result	454.82	
	Minimum of Result	50	
	Maximum of Result	3635	
	Start Date	10/28/2003	
	End Date	02/22/2007	
New Data	Number of Exceedance	0	
	Number of Sample	21	
	Average of Result	144.43	
	Minimum of Result	50	
	Maximum of Result	434	
	Start Date	04/02/2007	
	End Date	03/23/2010	
LACSD**			
Ref 2657	Number of Exceedance		2
	Number of Sample		15
	Average of Result		4483.80
	Minimum of Result		30
	Maximum of Result		42700
	Start Date		07/14/2004
	End Date		02/14/2007
New Data	Number of Exceedance		0
	Number of Sample		18
	Average of Result		120.94
	Minimum of Result		9
	Maximum of Result		1000
	Start Date		04/11/2007
	End Date		03/16/2010
Total Summary			
Total Number of Exceedance		2	2
Total Number of Sample		48	33
Total Average of Result		291.50	2104.06
Total Minimum of Result		50	9
Total Maximum of Result		3635	42700
Total Start Date		10/10/2002	07/14/2004
Total End Date		03/23/2010	03/16/2010

LACFCD=Los Angeles County Flood Control District; LACSD=Los Angeles County Sanitation Districts

*Dissolved fraction data is shown for its appropriateness although total fraction data is also available

**Only total fraction data is available at LACSD stations

8. Legg Lake - Ammonia

Watershed	San Gabriel River Watershed, Los Angeles County
Waterbody Reach	Legg Lake (see Figure 3). Legg Lakes consist of three interconnected lakes. Its watershed is approximately 1.8 square miles.
Pollutant	Ammonia
Year First Listed and Evidences Used for the Listing	This waterbody-pollutant was placed on the 303(d) list in 1996 based on an assessment in the Regional Board's Water Quality Assessment and Documentation Report (LARWQCB 1996).
Applicable Water Quality Objectives	As defined in the Basin Plan, ammonia criteria is a function of pH and temperature, and are expressed as 1-hr, 4-day, and 30-day averages.
Changes in the Watershed since the First Listing	There was not sufficient data that indicated ammonia impairment at the time of listing. Non-structural BMPs has been implemented and more data has been collected since then as part of the NPDES permits.
Monitoring Stations and Additional Data Collected since the Last Data Solicitation	The U.S. Environmental Protection Agency (EPA), the Regional Board and Los Angeles County Flood Control District (LACFCD) collected 41 ammonia samples between May 2007 and July 2009. There were eight sampling locations (LEGG-1, LEGG-2, LEGG-4, LEGG-5, LEGG-6, LEGG-8, LEGG-9, and LEGG-10) distributed throughout the lakes (see Figure 3).
Data Analysis and Justification for de-listing	Of the 41 samples collected between May 2007 and July 2009, there was only one exceedance for ammonia. Accordingly, during the development of the Los Angeles Lakes Total Maximum Daily Loads (TMDL), EPA concluded that Legg Lake meets ammonia water quality standards and recommended that it be removed from the 303(d) list. Supporting data is summarized in Table 8.
Conclusions and Recommendation	Legg Lake is meeting section 4.1 of the State Listing Policy for ammonia and should be removed from the 303(d) list. This concurs with EPA's findings and recommendations for Legg Lake.

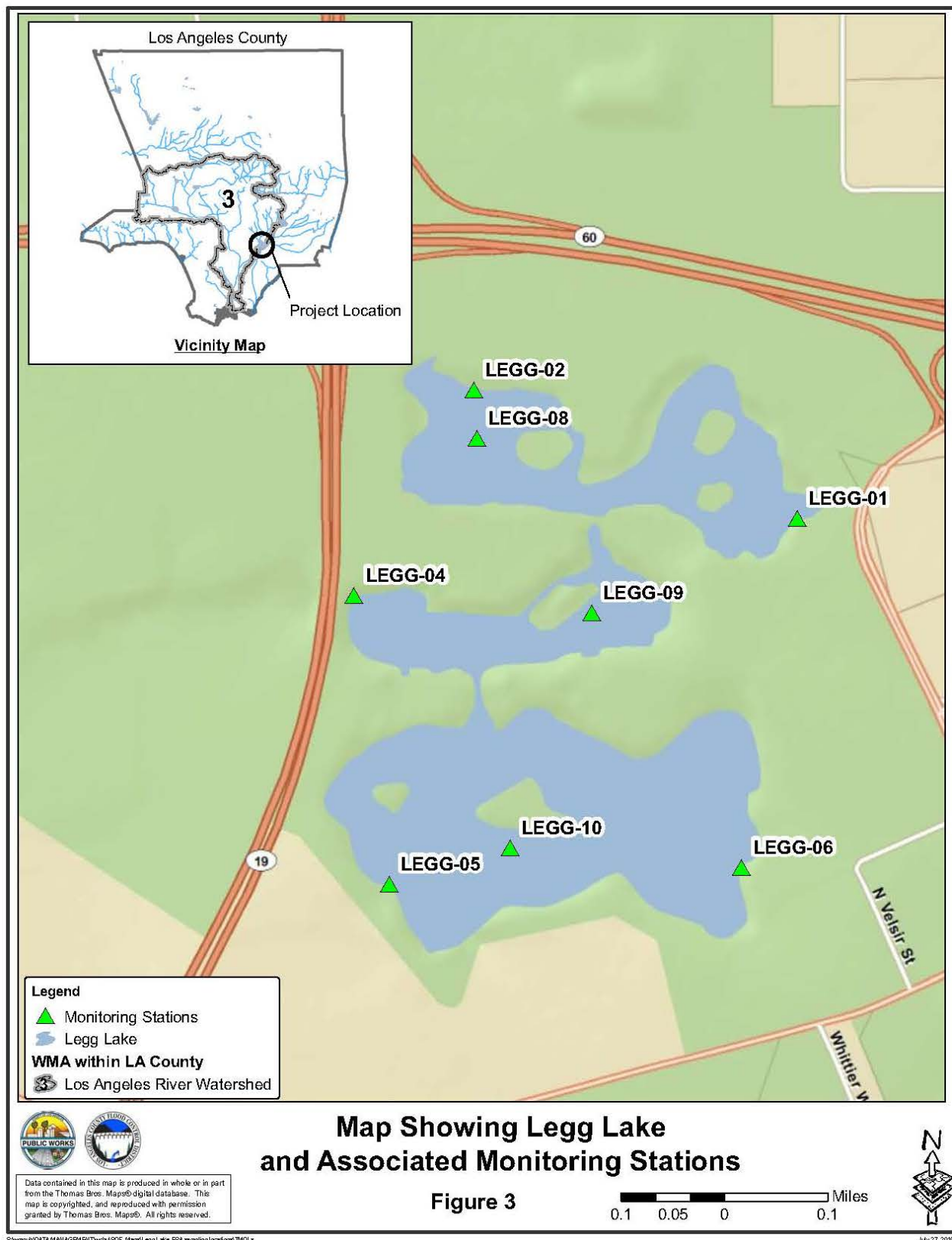


Table 8. Summary of Ammonia Data in Legg Lakes

	Ammonia (mg-N/L)
LACFCD	
Number of Exceedances	1
Number of Samples	28
Average Result	0.32
Minimum Result	0.01
Maximum Result	5.76
Start Date	05/18/2007
End Date	07/05/2007
Regional Board	
Number of Exceedances	0
Number of Samples	13
Average Result	0.04
Minimum Result	0.03
Maximum Result	0.07
Start Date	02/03/2009
End Date	07/18/2009
Total Summary	
Total Number of Exceedances	1
Total Number of Samples	41
Total Average Result	0.23
Total Minimum Result	0.01
Total Maximum Result	5.76
Total Start Date	05/18/2007
Total End Date	07/18/2009

LACFCD=Los Angeles County Flood Control District

9. Legg Lake - Copper

Watershed	San Gabriel River Watershed, Los Angeles County
Waterbody Reach	Legg Lake (see Figure 3). Legg Lakes consist of three interconnected lakes. Its watershed is approximately 1.8 square miles.
Pollutant	Copper
Year First Listed and Evidences Used for the Listing	This waterbody-pollutant was placed on the 303(d) list in 1996 based on an assessment in the Regional Board's Water Quality Assessment and Documentation Report (LARWQCB 1996).
Applicable Water Quality Objectives	The California Toxics Rule (CTR) criterion for copper in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling.
Changes in the Watershed since the First Listing	There was not sufficient data that indicated copper impairment at the time of listing. Non-structural BMPs has been implemented and more data has been collected since then as part of the NPDES permits.
Monitoring Stations and Additional Data Collected since the Last Data Solicitation	The U.S. Environmental Protection Agency (EPA), the Regional Board and Los Angeles County Flood Control District (LACFCD) collected 33 copper samples between February 2009 and February 2010. There were eight sampling locations (LEGG-1, LEGG-2, LEGG-4, LEGG-5, LEGG-6, LEGG-8, LEGG-9, and LEGG-10) distributed throughout the lakes (see Figure 3).
Data Analysis and Justification for de-listing	Of the 33 samples collected between February 2009 and February 2010, there were no exceedances of copper. Accordingly, during the development of the Los Angeles Lakes Total Maximum Daily Loads (TMDL), EPA concluded that Legg Lake meets copper water quality standards (i.e., unimpaired) and recommended that it be removed from the 303(d) list. Supporting data is summarized in Table 9.
Conclusions and Recommendation	Legg Lake is meeting section 4.1 of the State Listing Policy for copper and should be removed from the 303(d) list. This concurs with EPA's findings and recommendations for Legg Lake.

Table 9. Summary of Copper Data in Legg Lakes

	Copper (µg/L)
EPA	
Number of Exceedances	0
Number of Samples	6
Average Result	1.34
Minimum Result	0.60
Maximum Result	2.30
Start Date	12/16/2009
End Date	12/16/2009
LACFCD	
Number of Exceedances	0
Number of Samples	18
Average Result	1.03
Minimum Result	0.40
Maximum Result	3.45
Start Date	12/08/2009
End Date	02/17/2010
Regional Board	
Number of Exceedances	0
Number of Samples	3
Average Result	1.18
Minimum Result	0.90
Maximum Result	1.55
Start Date	02/03/2009
End Date	02/03/2009
Regional Board/EPA	
Number of Exceedances	0
Number of Samples	6
Average Result	0.54
Minimum Result	0.50
Maximum Result	0.60
Start Date	07/14/2009
End Date	07/14/2009
Total Summary	
Total Number of Exceedances	0
Total Number of Samples	33
Total Average Result	1.01
Total Minimum Result	0.40
Total Maximum Result	3.45
Total Start Date	02/03/2009
Total End Date	02/17/2010

EPA=Environmental Protection Agency

LACFCD=Los Angeles County Flood Control District

10. Legg Lake - Lead

Watershed	San Gabriel River Watershed, Los Angeles County
Waterbody Reach	Legg Lake (see Figure 3). Legg Lakes consist of three interconnected lakes. Its watershed is approximately 1.8 square miles.
Pollutant	Lead
Year First Listed and Evidences Used for the Listing	This waterbody-pollutant was placed on the 303(d) list in 1996 based on an assessment in the Regional Board's Water Quality Assessment and Documentation Report (LARWQCB 1996).
Applicable Water Quality Objectives	The California Toxics Rule (CTR) criterion for lead in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling.
Changes in the Watershed since the First Listing	There was not sufficient data that indicated lead impairment at the time of listing. Non-structural BMPs has been implemented and more data has been collected since then as part of the NPDES permits.
Monitoring Stations and Additional Data Collected since the Last Data Solicitation	The U.S. Environmental Protection Agency (EPA), the Regional Board and Los Angeles County Flood Control District (LACFCD) collected 33 lead samples between February 2009 and February 2010. There were eight sampling locations (LEGG-1, LEGG-2, LEGG-4, LEGG-5, LEGG-6, LEGG-8, LEGG-9, and LEGG-10) distributed throughout the lakes (see Figure 3).
Data Analysis and Justification for de-listing	Of the 33 samples collected between February 2009 and February 2010, there were no exceedances of lead. Accordingly, during the development of the Los Angeles Lakes Total Maximum Daily Loads (TMDL), EPA concluded that Legg Lake meets lead water quality standards (i.e., unimpaired) and recommended that it be removed from the 303(d) list. Supporting data is summarized in Table 10.
Conclusions and Recommendation	Legg Lake is meeting section 4.1 of the State Listing Policy for lead and should be removed from the 303(d) list. This concurs with EPA's findings and recommendations for Legg Lake.

Table 10. Summary of Lead Data in Legg Lakes

	Lead (µg/L)
EPA	
Number of Exceedances	0
Number of Samples	6
Average Result	0.15
Minimum Result	0.12
Maximum Result	0.18
Start Date	12/16/2009
End Date	12/16/2009
LACFCD	
Number of Exceedances	0
Number of Samples	18
Average Result	0.08
Minimum Result	0.05
Maximum Result	0.165
Start Date	12/08/2009
End Date	02/17/2010
Regional Board	
Number of Exceedances	0
Number of Samples	3
Average Result	0.15
Minimum Result	0.05
Maximum Result	0.21
Start Date	02/03/2009
End Date	02/03/2009
Regional Board/EPA	
Number of Exceedances	0
Number of Samples	6
Average Result	0.06
Minimum Result	0.05
Maximum Result	0.09
Start Date	07/14/2009
End Date	07/14/2009
Total Summary	
Total Number of Exceedances	0
Total Number of Samples	33
Total Average Result	0.10
Total Minimum Result	0.05
Total Maximum Result	0.21
Total Start Date	02/03/2009
Total End Date	02/17/2010

EPA=Environmental Protection Agency

LACFCD=Los Angeles County Flood Control District

11. Peck Road Park Lake - Lead

Watershed	Los Angeles River Watershed, Los Angeles County
Waterbody Reach	Peck Road Park Lake (see Figure 4). The Peck Road Park Lake is in the City of Arcadia.
Pollutant	Lead
Year First Listed and Evidences Used for the Listing	This waterbody-pollutant was placed on the 303(d) list in 1996 based on an assessment in the Regional Board's Water Quality Assessment and Documentation Report (LARWQCB 1996).
Applicable Water Quality Objectives	The California Toxics Rule (CTR) criterion for lead in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling.
Changes in the Watershed since the First Listing	There was not sufficient data that indicated lead impairment at the time of listing. Non-structural BMPs has been implemented and more data has been collected since then as part of the NPDES permits.
Monitoring Stations and Additional Data Collected since the Last Data Solicitation	The U.S. Environmental Protection Agency (EPA), the Regional Board and Los Angeles County Flood Control District (LACFCD) collected 26 lead samples between December 2009 and February 2010. There were five sampling locations (PRPL-8, PRPL-9, PRPL-10, PRPL-11, and PRPL-11B) distributed throughout the lake (see Figure 4).
Data Analysis and Justification for de-listing	Of the 26 samples collected between December 2008 and February 2010, there were zero exceedances. Accordingly, during the development of the Los Angeles Lakes Total Maximum Daily Loads (TMDL), EPA concluded that Legg Lake meets lead water quality standards and recommended that it be removed from the 303(d) list. Supporting data is summarized in Table 11.
Conclusions and Recommendation	Peck Road Park Lake is meeting section 4.1 of the State Listing Policy for lead and should be removed from the 303(d) list. This finding and recommendation concurs with EPA's.

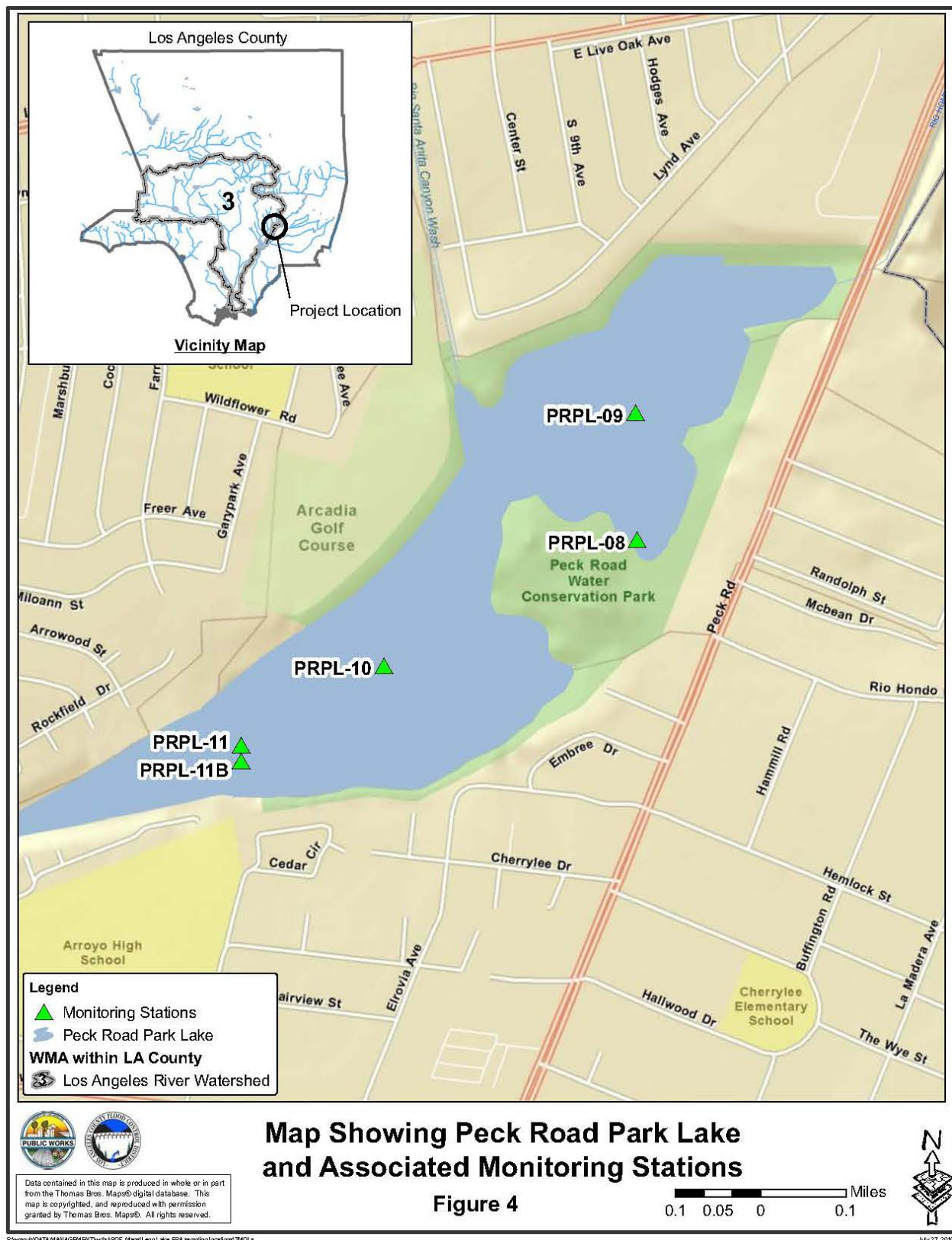


Table 11. Summary of Lead Data in Peck Road Park Lake

	Lead (µg/L)
Regional Board/EPA	
Number of Exceedances	0
Number of Samples	6
Average Result	0.16
Minimum Result	0.05
Maximum Result	0.33
Start Date	12/11/2008
End Date	08/05/2009
EPA/LACFCD	
Number of Exceedances	0
Number of Samples	4
Average Result	0.26
Minimum Result	0.05
Maximum Result	0.61
Start Date	11/16/2009
End Date	11/16/2009
LACFCD	
Number of Exceedances	0
Number of Samples	12
Average Result	0.29
Minimum Result	0.05
Maximum Result	1.05
Start Date	12/08/2009
End Date	02/17/2010
EPA	
Number of Exceedances	0
Number of Samples	4
Average Result	0.22
Minimum Result	0.05
Maximum Result	0.46
Start Date	12/14/2009
End Date	12/14/2009
Total Summary	
Total Number of Exceedances	0
Total Number of Samples	26
Total Average Result	0.24
Total Minimum Result	0.05
Total Maximum Result	1.05
Total Start Date	12/11/2008
Total End Date	02/17/2010

EPA=Environmental Protection Agency

LACFCD=Los Angeles County Flood Control District

12. Peck Road Park Lake - Organic Enrichment/Low Dissolved Oxygen

Watershed	Los Angeles River Watershed, Los Angeles County
Waterbody Reach	Peck Road Park Lake (see Figure 4). The Peck Road Park Lake is located in the City of Arcadia.
Pollutant	Organic Enrichment/Low Dissolved Oxygen (DO)
Year First Listed and Evidences Used for the Listing	This waterbody-pollutant was placed on the 303(d) list in 1996 based on an assessment in the Regional Board's Water Quality Assessment and Documentation Report (LARWQCB 1996).
Applicable Water Quality Objectives	Per the Basin Plan, the mean annual DO concentration target should be > 7 mg/L, and the single sample concentration should be ≥ 5 mg/L
Changes in the Watershed since the First Listing	DO results from the above assessment may have not been analyzed with the consideration of lake stratification. Subsequently, the DO impairment was listed based on improper data analysis. Recently more data was collected.
Monitoring Stations and Additional Data Collected since the Last Data Solicitation	The U.S. Environmental Protection Agency (EPA) and the Los Angeles Regional Board have collected DO samples in 2008 and 2009 at five stations (PRPL-8, PRPL-9, PRPL-10, PRPL-11, PRPL-11B) distributed throughout the lake (see Figure 4). The data was collected as part of the Los Angeles Area Lakes Total Maximum Daily Load (TMDL) development.
Data Analysis and Justification for de-listing	<p>Per the 1994 UC Riverside's Urban Lakes Study (referred in the EPA's draft LA Area Lakes TMDLs), the DO concentrations at depths less than 5 meters were around 7 mg/L during the summer months. This study proves that the lake's DO levels are not in violation of the Basin Plan criteria in the epilimnion (surface water above the thermocline).</p> <p>Sampling by Regional Board in June 2008 shows that the DO in the lake is greater than 9 mg/L in the epilimnion (thermocline at 2 meters). Further, a sampling conducted by EPA and Regional Board in August 2009 shows that the DO in the epilimnion is greater than 8 mg/L.</p> <p>Based on evaluation of historical and recent data during the development of LA Area Lakes TMDL, EPA concluded that "DO levels in the epilimnion are typically greater than 7 mg/L and impairment due to low DO is not evident in either the historic or recent sampling events". Further, EPA concluded that though historical data may show lower DO levels in the deeper waters (which might be the reason for the initial listing), no exceedances have been observed relative to the target depths. Data is summarized in Table 12.</p> <p>In summary, DO results collected for the 1996 assessment did not incorporate the depth/stratification effects into the data analysis which led to wrongly listing the DO impairment for the lake. The recent investigation conducted by EPA concluded that the lake is attaining water quality objectives for DO.</p>
Conclusions and Recommendation	Peck Road Park Lake is meeting section 4.1 of the State Listing Policy for DO and should be removed from the 303(d) list. This finding and recommendation concurs with EPA's.

Table 12. Summary of Dissolved Oxygen Data in the Epilimnion in Peck Road Park Lake

	DO (mg/L)
Regional Board/EPA	
Number of Exceedances	0
Number of Samples	13
Average Result	17.54
Minimum Result	9.00
Maximum Result	20.10
Start Date	06/17/2008
End Date	06/17/2008
EPA	
Number of Exceedances	0
Number of Samples	26
Average Result	10.45
Minimum Result	8.84
Maximum Result	12.02
Start Date	08/05/2009
End Date	08/05/2009
Total Summary	
Total Number of Exceedances	0
Total Number of Samples	39
Total Average Result	12.82
Total Minimum Result	8.84
Total Maximum Result	20.10
Total Start Date	06/17/2008
Total End Date	08/05/2009

DO=Dissolved Oxygen

EPA=Environmental Protection Agency

13. Santa Fe Dam Park Lake - Copper

Watershed	San Gabriel River Watershed, Los Angeles County
Waterbody Reach	Santa Fe Dam Park Lake (see Figure 5). This waterbody is a man-made, fully enclosed lake, hydrologically disconnected from the surrounding stream system and has neither stormwater inputs nor outlets.
Pollutant	Copper
Year First Listed and Evidences Used for the Listing	This waterbody-pollutant was placed on the 303(d) list in 1996 based on an assessment in the Regional Board's Water Quality Assessment and Documentation Report (LARWQCB 1996).
Applicable Water Quality Objectives	The California Toxics Rule (CTR) criterion for copper in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling.
Changes in the Watershed since the First Listing	There was not sufficient data that indicated copper impairment at the time of listing. More water quality data has been collected since the first listing.
Monitoring Stations and Additional Data Collected since the Last Data Solicitation	The U.S. Environmental Protection Agency (EPA), Los Angeles Regional Board, and Los Angeles County Flood Control District (LACFCD) collected 28 samples between March 2009 and February 2010 as part of the Los Angeles Area Lakes Total Maximum Daily Load (TMDL) development. The samples were collected at five stations (SFD-1, SFD-2, SFD 3, SFD-4, and SFD-5) distributed throughout the lake (see Figure 5).
Data Analysis and Justification for de-listing	Of the total 28 samples collected between December 2009 and February 2010, there were zero exceedances. Accordingly, EPA concluded that Santa Fe Dam Park Lake meets the water quality objectives for copper and recommended its removal from the 303(d) List. Supporting data is summarized in Table 13.
Conclusions and Recommendation	Santa Fe Dam Park Lake is meeting section 4.1 of the State Listing Policy for Copper and should be removed from the 303(d) list. This concurs with EPA's findings and recommendation.

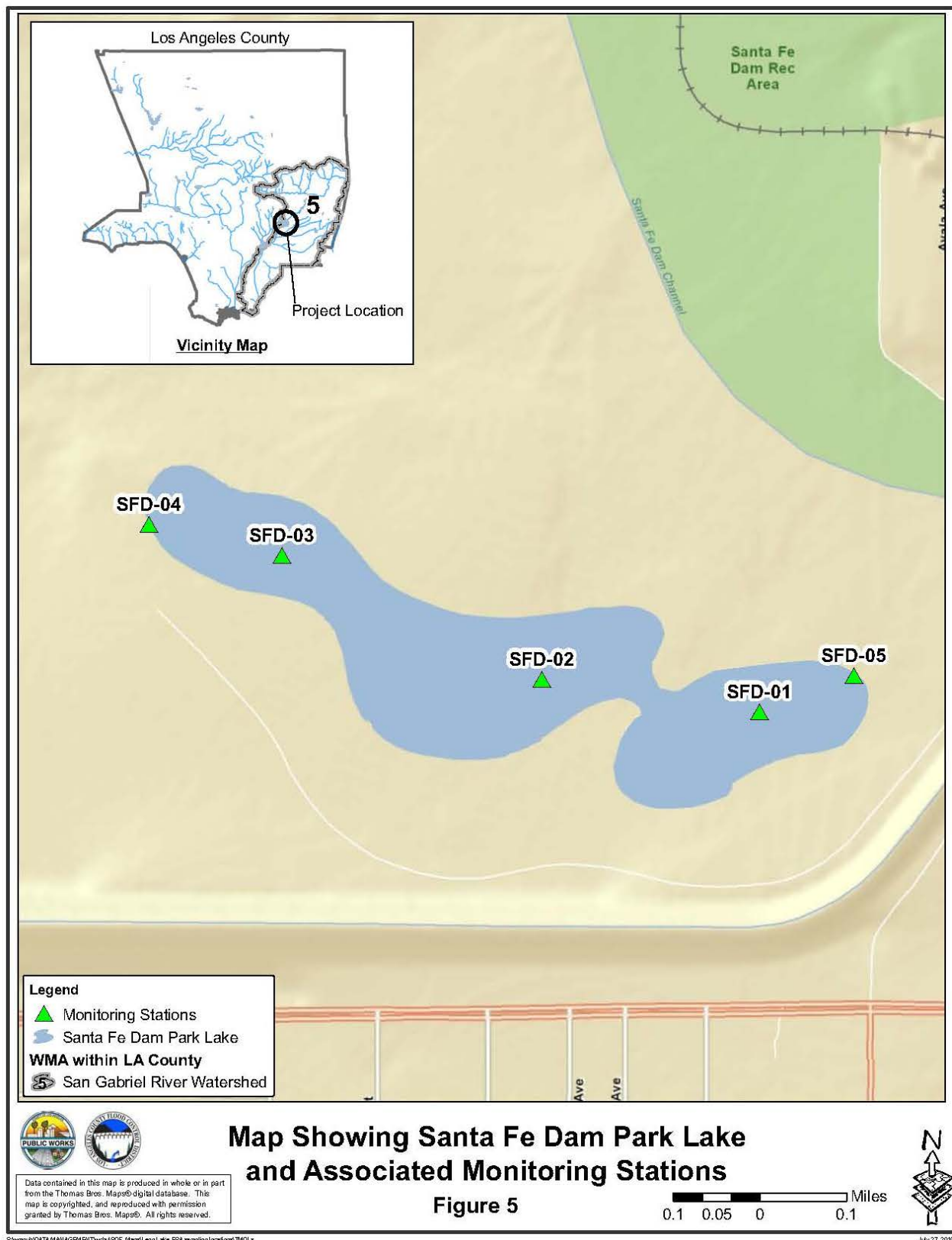


Table 13. Summary of Copper Data in Santa Fe Dam Park Lake

	Copper (µg/L)
EPA	
Number of Exceedances	0
Number of Samples	8
Average Result	0.81
Minimum Result	0.65
Maximum Result	1.00
Start Date	11/17/2009
End Date	12/14/2009
LACFCD	
Number of Exceedances	0
Number of Samples	12
Average Result	1.05
Minimum Result	0.60
Maximum Result	1.50
Start Date	12/08/2009
End Date	02/17/2010
Regional Board	
Number of Exceedances	0
Number of Samples	8
Average Result	1.58
Minimum Result	1.03
Maximum Result	1.90
Start Date	03/03/2009
End Date	08/03/2009
Total Summary	
Total Number of Exceedances	0
Total Number of Samples	28
Total Average Result	1.13
Total Minimum Result	0.60
Total Maximum Result	1.90
Total Start Date	03/03/2009
Total End Date	02/17/2010

EPA=Environmental Protection Agency

LACFCD=Los Angeles County Flood Control District

14. Santa Fe Dam Park Lake - Lead

Watershed	San Gabriel River Watershed, Los Angeles County
Waterbody Reach	Santa Fe Dam Park Lake (see Figure 5). This waterbody is a man-made, fully enclosed lake, hydrologically disconnected from the surrounding stream system and has neither stormwater inputs nor outlets.
Pollutant	Lead
Year First Listed and Evidences Used for the Listing	This waterbody-pollutant was placed on the 303(d) list in 1996 based on an assessment in the Regional Board's Water Quality Assessment and Documentation Report (LARWQCB 1996).
Applicable Water Quality Objectives	The California Toxics Rule (CTR) criterion for lead in freshwater is hardness dependent for each sample and varies based on the ambient hardness during sampling.
Changes in the Watershed since the First Listing	There was not sufficient data that indicated lead impairment at the time of listing. More water quality data has been conducted since the first listing.
Monitoring Stations and Additional Data Collected since the Last Data Solicitation	The U.S. Environmental Protection Agency (EPA), Los Angeles Regional Board, and Los Angeles County Flood Control District (LACFCD) collected 28 samples between March 2009 and February 2010 as part of the Los Angeles Area Lakes Total Maximum Daily Load (TMDL) development. The samples were collected at five stations (SFD-1, SFD-2, SFD 3, SFD-4, and SFD-5) distributed throughout the lake (see Figure 5).
Data Analysis and Justification for de-listing	Of the total 28 samples collected between December 2009 and February 2010, there were zero exceedances. Accordingly, EPA concluded that Santa Fe Dam Park Lake meets the water quality objectives for lead and recommended its removal from the 303(d) List. Supporting data is summarized in Table 14.
Conclusions and Recommendation	Santa Fe Dam Park Lake is meeting section 4.1 of the State Listing Policy for lead and should be removed from the 303(d) list. This concurs with EPA's findings and recommendation.

Table 14. Summary of Lead Data in Santa Fe Dam Park Lake

	Lead (µg/L)
EPA	
Number of Exceedances	0
Number of Samples	8
Average Result	0.05
Minimum Result	0.05
Maximum Result	0.05
Start Date	11/17/2009
End Date	12/14/2009
LACFCD	
Number of Exceedances	0
Number of Samples	12
Average Result	0.05
Minimum Result	0.05
Maximum Result	0.07
Start Date	12/08/2009
End Date	02/17/2010
Regional Board	
Number of Exceedances	0
Number of Samples	8
Average Result	0.06
Minimum Result	0.05
Maximum Result	0.10
Start Date	03/03/2009
End Date	08/03/2009
Total Summary	
Total Number of Exceedances	0
Total Number of Samples	28
Total Average Result	0.05
Total Minimum Result	0.05
Total Maximum Result	0.10
Total Start Date	03/03/2009
Total End Date	02/17/2010

EPA=Environmental Protection Agency

LACFCD=Los Angeles County Flood Control District

15. Santa Fe Dam Park Lake - pH

Watershed	San Gabriel River Watershed, Los Angeles County
Waterbody Reach	Santa Fe Dam Park Lake (see Figure 5). This waterbody is a man-made, fully enclosed lake, hydrologically disconnected from the surrounding stream system and has neither stormwater inputs nor outlets.
Pollutant	pH
Year First Listed and Evidences Used for the Listing	This waterbody-pollutant was placed on the 303(d) list in 1996 based on an assessment in the Regional Board's Water Quality Assessment and Documentation Report (LARWQCB 1996).
Applicable Water Quality Objectives	Basin Plan: the pH of inland surface waters shall not be depressed below 6.5 or raised above 8.5 (i.e., $6.5 < \text{pH} < 8.5$)
Changes in the Watershed since the First Listing	More data has been collected, and recent evaluations of the data indicate that the elevated pH level in Santa Fe Dam Park Lake is most likely caused by the presence of naturally occurring anions in the lake.
Monitoring Stations and Additional Data Collected since the Last Data Solicitation	The U.S. Environmental Protection Agency (EPA), the Los Angeles Regional Board and the Los Angeles County Parks and Recreation conducted water quality monitoring between March 2009 and December 2009 as part of the Los Angeles Area Lakes Total Maximum Daily Load (TMDL) development. The samples were collected at five stations (SFD-1, SFD-2, SFD 3, SFD-4, and SFD-5) distributed throughout the lake (see Figure 5). In total, 75 pH samples were collected during this period.
Data Analysis and Justification for de-listing	<p>During the 1996 water quality assessment, 95 pH samples were collected. pH ranged from 7.5 to 9.6 with an average value of 8.7.</p> <p>For the 75 samples collected in 2009, the pH ranged from 7.4 to 9.0 with an average of 8.3. Some of the samples have exceeded the target. This data is summarized in Table 15.</p> <p>The Santa Fe Dam Park Lake is an enclosed lake and the only discharges to the lake are groundwater and potable water. The pH of both the groundwater and potable water feeding the lake was measured to be in the range of 7.5 - 7.7 and, thus, are not sources of high pH in the lake. After evaluating various water quality parameters associated with the lake during the development of the LA Area Lakes TMDLs, EPA concluded that "the elevated pH levels in the Santa Fe Dam Park Lake are likely due to natural conditions, ... the lake meets the pH water quality standard, ... and be removed from the 303(d) list."</p> <p>In summary, elevated pH in Santa Fe Dam Park Lake is not due to anthropogenic sources, and the lake is attaining the pH standard.</p>
Conclusions and Recommendation	The Santa Fe Dam Park Lake meets pH water quality standards and should be removed from the 303(d) list. This concurs with the EPA findings and recommendations.

Table 15. Summary of pH and Other Data in Santa Fe Dam Park Lake

	pH
UC Riverside	
Number of Sample	37
Average of Result	8.75
Min of Result	8.0
Max of Result	9.6
Start Date	08/10/1992
End Date	06/21/1993
EPA	
Number of Sample	8
Average of Result	8.7
Min of Result	8.6
Max of Result	8.8
Start Date	03/03/2009
End Date	08/03/2009
LACDPR	
Number of Sample	21
Average of Result	7.6
Min of Result	7.39
Max of Result	7.96
Start Date	05/04/2009
End Date	05/04/2009
Regional Board	
Number of Sample	46
Average of Result	8.62
Min of Result	7.45
Max of Result	9.02
Start Date	08/03/2009
End Date	12/14/2009
Total Summary	
Total Number of Sample	112
Total Average of Result	8.48
Total Min of Result	7.39
Total Max of Result	9.6
Total Start Date	08/10/1992
Total End Date	12/14/2009

UC = University of California

EPA = Environmental Protection Agency

LACDPR=Los Angeles County Department of Park and Recreation