



Public Works Department
Engineering Services Division

415 Diamond Street
Redondo Beach, California 90277
www.redondo.org

tel: 310 318-0661
fax: 310 374-4828

March 29, 2017

California Regional Water Quality Control Board
Los Angeles Region
ATTN: Jun Zhu
320 W 4th Street, Suite 200
Los Angeles, CA 90013
Electronic Submission: losangeles@waterboards.ca.gov

Subject: Comment Letter – Revisions to the Los Angeles Region 303(d) List

Dear Dr. Zhu:

The City of Redondo Beach (City) appreciates the opportunity to provide comments on the proposed revisions to the Clean Water Act Section 303(d) list of impaired waterbodies in the Los Angeles Region (303(d) List), which was distributed for public review on February 8, 2017.

The Los Angeles Regional Water Quality Control Board (Water Board) has stated, within the Staff Report, that it is proposing a total of 200 new waterbody segment-pollutant combination 303(d) listings, of which 43 modifications fall within the City's two watersheds – Santa Monica Bay and Dominguez Channel. The City is committed to implementing management programs that assist in achieving the shared goal of improving water quality within the Los Angeles region. The City participates in the implementation of several total maximum daily loads (TMDLs), including the Santa Monica Bay Bacteria¹ and DDT/PCBs², which have resulted in a reduction of exceedances and are reflected in the Water Board's reclassification of indicator bacteria, PCBs, and DDT to Category 4A³. These TMDLs are listed as the highest priority pollutant combinations in the Beach Cities Enhanced Watershed Management Program, to which the City is a party. The City fully endorses the proposed re-categorizations and looks forward to continued collaboration with the Water Board to protect beneficial uses.

However, after reviewing the proposed changes to the 303(d) List, the City remains concerned about a number of specific issues, which are detailed below. The City's comments are generally grouped within two categories:

- Segment specific comments on the proposed 303(d) List; and
- Inconsistencies within the 303(d) List.

¹ Santa Monica Bay Bacteria TMDL. Resolution R12-007. Approved by LARWQCB April 6, 2006. Pending USEPA approval.

² Santa Monica Bay TMDL for DDT and PCBs. Approved by USEPA March 26, 2012.

³ Category 4A is defined as "A TMDL has been developed and approved by USEPA for any waterbody-pollutant combination and the approved implementation plan is expected to result in full attainment of the water quality standard within a specified time frame."

I. Segment Specific Comments on the Proposed 303(d) List

A. Dominguez Channel (lined portion above Vermont)

Comment 1: The benthic community effects listing (Decision ID 66165) appears to be flawed and should be removed.

The listing for benthic community effects should be removed because it is based on flawed data and/or analyses. The basis for this comment is as follows:

- The sample size did not meet the minimum criteria pursuant to the Listing Policy. According to Section 3.9 Degradation of Biological Populations and Communities of the Listing Policy⁴, *The analysis should rely on measurements from at least two stations*. The Appendix G Fact Sheets list only one sample site, however it treats the data from the one site as three separate samples, which is incorrect. As a result, there are not enough data to justify a listing.
- The benthic community effects listing for the lined portion of Dominguez Channel lacks a sufficient reference site. Since this section of the Dominguez channel is lined, it does not have a traditional bed structure or substrates found in a typical stream. The classic Index of Biotic Integrity (IBI) stream assessment score does not take into consideration that lined channels naturally have lower IBI scores as noted in the recently released SCCWRP Special Study on Engineered Channels⁵. In order to make a robust assessment, the reference site should also be a lined channel that has not been subject to anthropogenic influences, however such a reference site was not used in the analysis.
- The IBI is not the assessment tool that should be used to determine benthic community effects. As acknowledged in the Appendix G Fact Sheets: *The CSCI is applicable statewide, accounts for a much wider range of natural variability, and provides equivalent scoring thresholds in all regions of the state. The CSCI will be used in the future for water quality assessment purposes statewide over the regional indices of biologic integrity (IBIs)*. We agree with this statement and also note that some IBI scores are especially skewed when utilized for hardened channels since they heavily rely on macroinvertebrates, which are inherently more common in natural bottom stream beds. Other assessment tools such as the diatom IBI may also be used to assess the benthic community of a hardened channel as demonstrated by the SCCWRP Study on Engineered Channels referenced earlier. Therefore, the IBI assessment tool should not be used as the sole basis for a listing in this lined channel.
- The benthic community effects exceedance should not be linked to diazinon as a way to establish a causal effect since this pollutant has been delisted with respect to the Dominguez Channel (lined portion above Vermont) (Decision ID 33061).

⁴ State Water Resources Control Board. *Water Quality Control Policy for Developing California's Clean Water Act Section 303(d) List*, as amended Feb. 3, 2015. [Referred to hereinafter as the Listing Policy]

⁵ Pages 5-7 of Southern California Stormwater Monitoring Coalition. 2017. *2015 Report on the Stormwater Monitoring Coalition Regional Stream Survey: Special Study on Engineered Channels*. SCCWRP Technical Report 963. Southern California Coastal Water Research Project. Costa Mesa, CA.

Requested Action:

- *Remove the benthic community effects listing for Dominguez Channel since the sample size does not meet the minimum criteria, this section of channel lacks a proper reference site, and is based on an inappropriate assessment tool.*
- *If the listing is not removed, the diazinon linkage to benthic community effects should be removed since this pollutant has been delisted.*

Comment 2: The ammonia listing (Decision ID 35134) should be updated to consider all readily available data.

Ammonia was not delisted based on the existence of 2 exceedances out of 21 samples collected from 7/1/2009 to 8/13/2009 at Western Ave., Manhattan Beach Blvd, and El Segundo Blvd. Additional samples were also collected at a sample site just across Vermont Ave. (33° 52' 16" N, 118° 17' 23" W), however these samples were not included in the analysis. The Basin Plan lists Vermont Ave. as the reach break between the Dominguez Channel and Dominguez Channel Estuary and, therefore, it appears a decision was made to include the Vermont Ave. samples in the downstream segment - the Dominguez Channel Estuary (unlined portion below Vermont Ave.) (see map in **Attachment A**).

The City maintains that the Vermont Ave. samples should be considered in the Dominguez Channel (lined portion above Vermont) based on their direct proximity to the end of the reach, offering optimal spatial representation of the water body segment. Furthermore, the sample site is located less than 100 meters from the lined portion of Dominguez Channel and according to the Listing Policy, a sample collected 200 meters upstream, in the lined portion of the Channel, would be considered the same station location⁶.

If the additional 8 samples from the Vermont Ave. station are included in the Dominguez Channel (lined portion above Vermont) analysis, the total samples in exceedance would be 2 out of 29. These data would then meet the requirement to delist ammonia as stated in Section 4.1 of the California Delisting Factors set in the Listing Policy – i.e., these samples support rejection of the null hypothesis using the binomial distribution and the sample size is greater than 28. Specifically, Table 4.1 at page 14 of the Listing Policy demonstrates that where 2 or less exceedances are identified in a sample size of 28-36 samples, such as here, then the water segment shall be removed from the 303(d) List. Therefore, based on the updated and appropriate sample size, which includes Vermont Ave. samples, and number of exceedances, ammonia should be delisted for this reach.

Requested Action:

Include the Vermont Ave. sampling data in the analysis of the ammonia listing for Dominguez Channel (lined portion above Vermont).

Delist ammonia based on the updated analysis.

B. Dominguez Channel Estuary (unlined portion below Vermont Ave)

Comment 3: Delist Ammonia (unionized) due to lack of exceedances.

A listing for ammonia was shown in the Appendix G Fact Sheets, however none of the cited lines of evidence (LOE) shows evidence of an exceedance. One LOE is an unspecified

⁶ Page 22 of the SWRCB Listing Policy “Samples collected within 200 meters of each other should be considered samples from the same station or location.”

placeholder for a listing decision made prior to 2006, however the other two LOE show 0 out of 28 and 0 out of 7 exceedances. Based on the data, this pollutant meets the Section 4 California Delisting Factors set in the Listing Policy.

Requested Action:

- *Delist ammonia (unionized) (Decision ID 34669) based on lack of evidence and exceedances.*

C. Santa Monica Bay Offshore/Nearshore

Comment 4: The arsenic and mercury fish tissue listings are not based on all readily available data, are not spatially representative of the water body, and samples were not treated as temporally independent.

The samples used for the proposed 5A Arsenic and Mercury fish tissue listings (Decision ID: 67208 and 67209) are not spatially representative of the water body. Samples used for these listings were collected for the City of Los Angeles Hyperion Treatment Plant NPDES Permit (NO. CA0109991). The permit designates 5 different sampling zones along the coast of the Santa Monica Bay⁷ of which the City falls along the border of zones 4 and 3 (see map in **Attachment B**). All of the samples used for these listings were collected from zones 4 and 5 - no representative samples were collected from zone 3, which includes the southern end of Santa Monica Bay and a substantial portion of the City's drainage area. Therefore, using current samples to list the entire Santa Monica Bay Offshore/Nearshore would incorrectly list zone 3 of the bay despite a lack of representative samples from this area. This would contradict the Listing Policy which states that "*samples should represent statistically or in a consistent targeted manner the segment of the water body*"⁸. The spatial coverage of the samples should be considered and the listing reassessed by either segmenting the water body or using samples from all representative zones of Santa Monica Bay.

In addition, sampling data beyond the 19 samples collected in 2006-2007 should be available from the City of Los Angeles' Hyperion Treatment Plant NPDES permit. It is unclear why only the 2006-2007 samples were used when there are presumably more samples available from the Hyperion Treatment Plant NPDES monitoring program. The City requests that the Water Board review all available data for fish tissue before making a listing for Arsenic and/or Mercury.

Finally, the fish tissue assessment for arsenic and mercury did not properly categorize the data in a way that is temporally independent. The Listing Policy states that samples should be *temporally independent*⁹; however, in some cases fish collected on the same day were treated as unique data points. In addition, the samples collected were from August 2006, October 2007- November 2007, and August - September 2007. Because both arsenic and mercury bioaccumulate over the lifetime of the individual species an averaging period of at least a year should be considered. Therefore, instead of considering 19 individual samples these data should only be considered representative of 2 years thus supporting the need for additional data as previously requested.

⁷ Page T-55 of City of Los Angeles Hyperion Treatment Plant. Order NO. R4-2005-0020. NPDES Permit NO. CA0109991, as revised April 7, 2005.

⁸ Page 22 of the Listing Policy.

⁹ Page 23 of the Listing Policy.

Requested Action:

Either (1) segment the Santa Monica Bay listing since the data used to list arsenic and mercury are not representative of the entire water body as required by the Listing Policy, or (2) seek additional data from all zones of Santa Monica Bay to ensure proper spatial representation of the data prior to listing.

Seek and reanalyze additional sample data from the City of Los Angeles beyond the 19 samples from 2006 and 2007 that were originally used for the analysis.

The mercury and arsenic fish tissue data should be aggregated based on a more reasonable temporal resolution.

Comment 5: Sediment toxicity should be delisted; no justification was provided for the name change in the Fact Sheets.

The Santa Monica Bay Offshore/Nearshore toxicity listing (Decision ID 34120) was marked only as a name change in Appendix A. However, a TMDL for DDTs and PCBs was developed and approved by USEPA in 2012¹⁰ which evaluated sediment toxicity resulting in a recommendation for delisting:

"Our evaluation of the data showed only 3 out of 116 samples exhibited toxicity. Following the California listing policy, Santa Monica Bay is meeting the toxicity objective and there is sufficient evidence to delist sediment toxicity. We therefore make a finding that there is no significant toxicity in Santa Monica Bay and recommend that Santa Monica Bay not be identified as impaired by toxicity in the California's next 303(d) list."

Based on the statement above and data summarized on pages 19 and 20 of the TMDL there is sufficient evidence to delist sediment toxicity for Santa Monica Bay Offshore/Nearshore.

The listed name change appears to be a change from "sediment toxicity" to "toxicity" based on the Appendix G Fact Sheets. We assume that this name change is the result of the Water Board's acknowledged systems and clerical errors in Appendix A. In the event that it is not a mere error that will be corrected by the Water Board, the City requests that justification be provided to support the name change. This name change should only occur if new data is used to support the observation of toxicity in the water column as outlined in section 3.6 of the Listing Policy, however no new data was presented and a reason for this name change was not discussed in the staff report.

Requested Action:

Delist sediment toxicity for Santa Monica Bay based on the data analysis performed in the 2012 DDTs and PCBs TMDL.

- *Correct the name change error.*

II. Inconsistencies within the 303(d) List

As noted by Water Board staff, the Appendices of the proposed 303(d) List have a number of inconsistencies. The inconsistencies listed below are a few examples and should not be considered an exhaustive list. We request that the Water Board do a thorough review of all of the Appendices to ensure that they are internally consistent with the changes listed in the Appendix G Fact Sheets.

¹⁰ Santa Monica Bay Total Maximum Daily Loads for DDTs and PCBs. Approved by USEPA March 26, 2012.

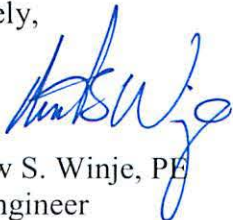
Table 1. Inconsistencies in the Proposed 303(d) List Appendices

Waterbody Segment	Pollutant(s)	Comment/Requested Action
Dominguez Channel (lined portion above Vermont)	Diazinon	<p>This pollutant is shown as “delisted” in Appendix A with a note “<i>TMDL status changed from TMDL still required to Being Addressed by Completed TMDL</i>”.</p> <p>In Appendix G the same pollutant is listed as “<i>Delist from 303(d) list (being addressed by USEPA approved TMDL)</i>”.</p> <p>The City would like clarification that this listing will be entirely removed from the 303(d) list and not categorized as 4A as indicated by the note in Appendix A.</p>
	Aldrin, Chem A, Chlordane, Chromium, DDT, Dieldrin, PAHs, and PCBs	<p>These pollutants are shown as delisted in the Appendix G factsheets, however they are not listed as changed in Appendix A.</p> <p>All of these pollutants should be delisted due to flaws in the original listing (as noted within the factsheets).</p>
	Chromium and Dieldrin	<p>These pollutants are shown as “name changes” in Appendix A, however we could find no evidence of a name change throughout the rest of the document.</p> <p>Any name change should be supported by a reason detailing the need for the change in the Fact Sheets. Furthermore both of these listing should be delisted based on the comment above.</p>
Dominguez Channel Estuary (unlined portion below Vermont Ave)	Aldrin, ChemA, Chromium (total), and PAHs	<p>These pollutants are not listed as a change in Appendix A, but shown as “delisted” in Appendix G.</p> <p>All listings should be delisted either because of flaws in the original listing or lack of an exceedance.</p>
	DDT	<p>This listing is missing from Appendix B or C and has not been listed as changed in Appendix A, however the Appendix G factsheets lists DDT as being addressed with a USEPA approved TMDL and therefore should be categorized as 5B or 4A.</p>
	Dieldrin	<p>Listed in Appendix A as “<i>TMDL status changed from TMDL still required to Being Addressed by Completed TMDL</i>”, however the pollutant does not appear in Appendix B or C and is listed as “<i>List on</i></p>

		<p>303(d) list (being addressed by USEPA approved TMDL)" in Appendix G.</p> <p>This pollutant should be listed as 4A or delisted.</p>
	Chlordane(tissue)	<p>Listed in Appendix A as unchanged but not found in Appendix B or C. The Appendix G Fact Sheets list this pollutant as "Do not delist (being addressed with USEPA approved TMDL)".</p> <p>The City would like clarification if this pollutant has been delisted or recategorized as 5B.</p>
The Santa Monica Bay Offshore/Nearshore	Chlordane and PAHs	<p>Not listed as a change in Appendix A but shown as "delisted" in Appendix G.</p> <p>These pollutants should be delisted.</p>
Redondo Beach	DDT	<p>Listed in Appendix A only as a 'name change', however Appendix G lists this as "TMDL status changed from TMDL still required to Being Addressed by Completed TMDL". The 2010 303(d) list shows Redondo Beach DDT listing was Category 5A however in the newly proposed 303(d) list the pollutant is listed as 4A in Appendix C. Category 4A is the correct category for this pollutant since a USEPA-approved TMDL does exist to manage DDT which is expected to result in full attainment of the water quality standard within a specified time frame. The City would like Appendix A edited to reflect new 4A listing.</p> <p>Furthermore if this is in fact a name change, as stated in Appendix A, an explanation including supporting data for the name change should be included in the Appendix G Fact Sheets.</p>

The City thanks the Water Board for the substantial time invested in developing the proposed 303(d) List and appreciates the opportunity to comment and consideration of these comments. If you have questions, please do not hesitate to contact me at 310-318-0661.

Sincerely,



Andrew S. Winje, PE
City Engineer

Attachment A: Map of Vermont Ave. Sampling Location

Attachment B: Map of Hyperion NPDES Santa Monica Bay Sampling Zones

Dominguez Channel (lined
portion above Vermont)

Vermont Avenue

Vermont Ave. Sample Location

Dominguez Channel Estuary
(unlined portion below
Vermont Ave)

645 meters

2119 ft

1994

© 2016 Google

Google Earth

33°52'23.59" N 118°17'28.11" W elev 21 ft eye alt 9242 ft

Figure 5. Local seafood survey zones as defined by SMBRP seafood tissue monitoring design.

