CITY OF VENTURA

March 30, 2017

Electronic Submission: losangeles@waterboards.ca.gov

California Regional Water Quality Control Board
Los Angeles Region
ATTN: Jun Zhu
320 W 4th Street, Suite 200
Los Angeles, CA 90013

Subject: Comment Letter – Proposed Revisions to the Clean Water Act Section 303(d) List for the Los Angeles Region and the 2016 Integrated Report

Dear Dr. Zhu,

The City of San Buenaventura (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 [hereinafter referred to as "303(d) list"] which was distributed for public review on February 8, 2017. A separate comment letter is being submitted by Ventura Water, a department of the City, which specifically focuses on the Santa Clara River Estuary proposed listings and the Ventura Water Reclamation Facility.

The City understands that the Los Angeles Regional Water Quality Control Board (Regional Board) is proposing over 200 new waterbody segment-pollutant combination 303(d) listings. The development and implementation of total maximum daily loads (TMDLs) is a significant investment of resources and it is critical that the 303(d) list be based on sound science and methodologies. The City participates in the implementation of several TMDLs in the Santa Clara and Ventura River Watersheds covering a diverse set of pollutants.

The City notes that Ventura County, the Stakeholders Implementing Total Maximum Daily Loads in the Calleguas Creek Watershed, and the Ventura County Agricultural Irrigated Lands Group (VCAILG) will be submitting separate comments regarding the listing changes in Ventura County, Calleguas Creek Watershed, and VCAILG-affected waterbody segments, respectively. The City recognizes the importance of following the State Water Resources Control Board's "Water Quality Control Policy For Developing California's Clean Water Act Section 303(d) List" ("Listing Policy")[1] when developing the 303(d) list and agrees with those comments from other stakeholders that speak to the process for assessing the quality and quantity of data used to develop proposed listings.

[1] California State Water Resources Control Board, "Water Quality Control Policy For Developing California's Clean Water Act Section 303(d) List," Adopted September 30, 2004, Amended February 3, 2015.

The City has several concerns regarding the Regional Board's proposed 303(d) list and feels that it requires significant review and modifications before adoption. The City requests that the issues identified in this letter be addressed and the revised, proposed 303(d) list be released for another 60-day comment period prior to adoption. Several of the issues identified herein have resulted in the inability of the proposed 303(d) list to be fully vetted and reviewed by the affected parties.

The requested modifications fall into two general categories:

1. New Category 5 listings that should not be listed due to incorrect thresholds being applied for the beneficial use and/or incorrect interpretation of the data (e.g., lack of temporal representation).
2. Errors in the listing information that make it difficult to fully evaluate the listings. Examples include challenges in identifying the data sets and analysis methods used, inconsistencies between the Category 5 list (Appendix B) and the Proposed updates to the 303(d) list (Appendix A), incorrect HUC/Calwater designations, incorrect beneficial uses listed for the applicable water quality objectives, and inconsistent use of thresholds for interpreting narrative objectives.

The remaining sections of this letter provide the detailed list of requested changes to the proposed 303(d) list and the rationale for the requests. In summary, the City requests that all waterbody pollutant combinations in **Table 1** below not be listed on the 303(d) list and the errors and inconsistencies identified in the other letters cited above be addressed.

I. REQUESTED MODIFICATIONS TO THE LISTING STATUS

Based on a review of the proposed Category 5 waterbody pollutant combinations, the City has identified several waterbodies that should either be delisted based on available data or proposed listings that should not be listed based on errors in the evaluation. The requested modifications are shown in **Table 1**, below, with a summary of the justifications for the requested change. A detailed discussion of each of the justifications follows the table.

Table 1. Waterbody-pollutant combinations that should not be listed

Waterbody Segment	Pollutant	Justification
Santa Clara River Estuary[2]	pH	• No demonstration high pH is a result of waste discharge. A listing is not warranted in light of reference conditions for pH within estuaries.
	Ammonia	• Appropriate data not considered and current data does not meet Listing Policy criteria.
	Nitrogen, Nitrate	• Appropriate data not considered and current data does not meet Listing Policy criteria.

[2] See generally Ventura Water comment letter specifically addressing the Santa Clara River Estuary proposed listings.

Table 1. Waterbody-pollutant combinations that should not be listed		
Waterbody Segment	**Pollutant**	**Justification**
Santa Clara River Reach 1 (Estuary to Hwy 101 Bridge)	pH	• No demonstration high pH is a result of waste discharge.
Ventura Harbor: Ventura Keys	Arsenic	• Data does not include proper temporal representation.
	Cadmium	• Data does not include proper temporal representation.
	Chlordane	• Data does not include proper temporal representation.
	DDT	• Data does not include proper temporal representation.
	Dieldrin	• Data does not include proper temporal representation.
	PCBs (Polychlorinated biphenyls)	• Data does not include proper temporal representation.
Ventura River Reach 1 and 2 (Estuary to Weldon Canyon)	Benthic Community Effects	• Benthic Community Effects listing is based on flawed analyses. • Data does not include proper spatial representation.
	Temperature, water	• Analysis does not demonstrate temperature is above natural temperature.
Ventura Harbor: Ventura Keys	Indicator Bacteria	• Data from mouth of Arundell Barranca used in listing assessment.

1. There is no demonstration that high pH is a result of waste discharge.

The waterbodies listed for high pH do not appropriately demonstrate that the high pH was a result of waste discharge as required in the Los Angeles Region Basin Plan (Basin Plan).[3] The Santa Clara River Estuary and Santa Clara River Reach 1 are both listed for high pH. As stated in the Fact Sheets and according to the Basin Plan, "*The pH of inland surface waters shall not be depressed below 6.5 or raised above 8.5* ***as a result of waste discharges***."[4] However, it was not demonstrated for either of these waterbodies that the elevated pH levels were a result of waste discharge as opposed to natural causes. Therefore, the Regional Board should either provide evidence that the elevated pH was a result of waste discharge and detail that in the Fact Sheets or, if no such evidence exists, the Regional Board should remove this proposed listing.[5]

Requested Action:
Remove the pH listings for Santa Clara River Estuary and Santa Clara River Reach 1 as these high pH values are not the result of waste discharge.

[3] Water Quality Control Plan Los Angeles Region R4 Basin Plan.
[4] Basin Plan at 3-35 [emphasis added].
[5] Please see additional comments in the Ventura Water comment letter.

2. Listing data lacks proper temporal representation.

There are many instances where the data to support the listed pollutant lacks proper temporal representation. Section 6.1.5.3 of the Listing Policy states that:

> "*Samples should be representative of the critical timing that the pollutant is expected to impact the water body. 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.*"

Many of the pollutants listed in **Table 1** included data collected from a single sampling date, which violates the Listing Policy. For instance, all of the newly proposed pollutants for the Ventura Harbor: Ventura Keys (i.e., arsenic, cadmium, chlordane, DDT, dieldrin, and PCBs) were collected on a single day – February 28, 2007. These pollutants should not be listed because there is no temporal resolution provided.

Requested Action:
Remove all listings shown in Table 1 that were based on a single sample collection date.

3. Benthic Community Effects listing is based on flawed analyses and should be removed.

The benthic community effects listing is based on a metric which has since been deemed arbitrary and inappropriate. The Index of Biotic Integrity (IBI) stream assessment was a commonly used metric to determine benthic community effects where the threshold used to distinguish an impaired reach was identified as a value of 39 and below. However, this threshold value was arbitrarily assigned as a statistical cut-off value in the originating study. The State has since endorsed the use of the California Stream Condition Index (CSCI), as stated in the Appendix G Fact Sheets for numerous other benthic community effects listings (e.g., Decision ID 66264)v, "*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).*" Despite this, the newly listed benthic community effects for Ventura River Reach 1 and 2 (Estuary to Weldon Canyon) utilizes the IBI to assess the waterbody. Therefore, the City requests that this flawed listing be removed until the waterbody can be assessed with a more representative metric such as the CSCI.

In addition to use of an arbitrary metric, the proposed listing for benthic community effects for the Ventura River Reach 1 and 2 lacks proper spatial representation since only two samples were collected from the same sample site ("Station 0 Main Street Bridge, Mainstem Ventura River" according to the Fact Sheets). In addition, temperature is used as a line of evidence to support the benthic community effects listing, however, the temperature listing for this same waterbody segment is also flawed and should be removed as discussed in the comment below.

Requested Action:
Remove the benthic community effects listing for Ventura River Reach 1 and 2 (Estuary to Weldon Canyon) due to use of an outdated metric, lack of spatial resolution, and lack of supporting evidence from the temperature listing.

4. Correct the proposed temperature listings which are based on incorrect criteria.

The temperature listing for Ventura River Reach 1 and 2 (Estuary to Weldon Canyon) uses an evaluation guideline of 13-21°C as the optimum growth range for rainbow trout. However, the applicable Basin Plan objective for waterbodies designated as COLD is, "*For waters designated COLD, water temperature shall not be altered by more than 5°F above the natural temperature.*"[6] The fact sheets provide no discussion of natural temperatures or a demonstration that the temperature was raised above natural temperatures in order to exceed the objectives.

Notwithstanding that a deviation from natural temperatures has not been demonstrated, the way the evaluation guideline is applied is also inappropriate. Moyle 1976 is referenced as the source of the evaluation guideline. Moyle 1976 was revised and expanded by Moyle 2002.[7] Moyle 2002 states: "Rainbows are found where daytime temperatures range from nearly 0°C in winter to 26-27°C in summer, although extremely low (<4°C) or extremely high (>23°C) temperatures can be lethal if the fish have not previously been gradually acclimated. Even when acclimation temperatures are high, temperatures of 24-27°C are invariably lethal to trout, except for very short exposures."[8] As such, while temperatures above 21°C may not be optimal according to Moyle 1976, Moyle 2002 clearly states that lethal temperatures are those greater than 23°C, which indicates that the evaluation guideline of 21°C is more appropriately applied as a chronic guideline (necessitating the establishment of an averaging period) and 23°C is the more appropriate "not-to-exceed" guideline if used for listing.

Using the threshold of 23°C, only 2 samples would exceed the threshold in Ventura River Reach 1 and 2, which would not be enough to meet the listing threshold.

Requested Action:
Remove the temperature listing for Ventura River Reach 1 and 2 based on lack of exceedances.

5. Data from Arundell Barranca mouth is inappropriate to assess Ventura Harbor.

Based on a review of the data provided in the spreadsheet entitled: Peninsula Beach, Ventura Harbor-Keys, and Arundell Barranca Data, site K5 appears to have been included in the analysis of the Ventura Harbor: Ventura Keys assessment. Site K5 is located in the mouth of the Arundell Barranca and is not within Ventura Harbor. A review of the data shows that the indicator bacteria concentrations at this site are much more similar to Arundell Barranca and not representative of the data for the rest of Ventura Harbor.

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[6] Basin Plan at 3-38.
[7] Moyle, Peter B. *Inland fishes of California: revised and expanded.* University of California Press, 2002.
[8] Moyle 2002 at 276 [internal citations omitted].

In 2009, as part of the review of the proposed Harbor Cove TMDL, the City conducted an analysis of indicator bacteria data from Ventura Harbor using what appears to be the same dataset as used in the Regional Board's assessment. While the dataset appears to be the same, the number of samples and exceedances did not match completely (e.g., 103 exceedances of the enterococcus geomean with 510 samples in the City's analysis as compared to 104 exceedances and 537 samples in the Regional Board's analysis). The City could not easily determine what the differences in the calculations were and requests that the Regional Board review the exceedance calculations to ensure that all geomeans were calculated using a minimum of 5 samples and that duplicate samples in the dataset were correctly handled in accordance with the Listing Policy.

Regardless of the potential differences in the calculations, the clear majority of the exceedances are from site K5 (64 of the 103 exceedances in the City's analysis). If site K5 is removed from the Ventura Harbor analysis (and added to the Arundell Barranca analysis so it is in the correct waterbody), based on the City's calculations, insufficient samples exist to list Ventura Harbor: Ventura Keys for fecal coliform or enterococcus. A summary of the City's analysis is shown in **Table 2**.

Table 2. Summary of City's Analysis of Ventura Harbor Indicator Bacteria

Constituent	Number Samples	Number Exceedances	Number exceedances required to List
Total Coliform-Single Sample	636	74	106
Total Coliform-Geomean	440	186	73
Fecal Coliform-Single Sample	636	24	106
Fecal Coliform-Geomean	440	2	73
Enterococcus-Single Sample	595	48	99
Enterococcus-Geomean	408	39	68

Requested Action:
Revise the calculations for Ventura Harbor: Ventura Keys by removing site K-5 which is not located in the Harbor. Revise any Lines of Evidence that no longer support a listing for indicator bacteria and remove the listing if appropriate.

II. CORRECT OTHER ERRORS AND INCONSISTENCIES IN APPENDICES AND FACT SHEETS

Appendix A, Appendix B, Appendix C, and Appendix G have many inconsistencies which make the analysis of new additions very difficult since it is unclear which segment-pollutant combinations are new listings. Additionally, in many cases, data and Quality Assurance Project Plan (QAPP) references in the fact sheets are inconsistent with the data provided for review and it is not always clear what data were used in the analysis presented in the fact sheets. Examples

of these inconsistencies and errors are detailed in the Calleguas Creek Watershed Stakeholders, VCAILG, and County of Ventura comment letter. The City requests that the Regional Board do a thorough review of all appendices to ensure that the proposed 303(d) list is internally consistent, the correct data were used for the assessment, and the errors identified in the other comment letters are addressed.

Requested Action:
Correct the numerous errors and inconsistencies in the report and ensure that all the proposed 303(d) list appendices are internally consistent.

The City appreciates the opportunity to comment on the proposed 303(d) list and looks forward to continuing to work with the Regional Board to address these concerns. Thank you for your time and consideration of these comments. If you have questions, please contact Joe Yahner, Environmental Services Manager, at 805-652-4558 or jyahner@cityofventura.net.

Sincerely,

Tulson Clifford
Public Works Director
City of San Buenaventura