



July 10, 2017

submitted via email

Jeanine Townsend, Clerk to the Board
State Water Resources Control Board
1001 I St., 24th Floor
Sacramento, CA 95814

RE: Comment Letter - 303(d) portion of the 2014 and 2016 California Integrated Report

Dear Ms. Townsend:

The following comments are submitted on behalf of the Middle Santa Ana River TMDL Task Force ("Task Force") administered by the Santa Ana Watershed Project Authority (SAWPA).¹ The Task Force is responsible for implementing the Regional Bacteria Monitoring Program approved by the Santa Ana Regional Water Quality Control Board ("Regional Board") in March of 2016.² Data from this program is used to evaluate compliance with water quality objectives and to assess water quality trends in accordance with the state's antidegradation policy.³

At a public hearing held in April of 2017, the Regional Board determined that two waterbodies previously included on the 303(d) list due to elevated bacteria concentrations should now be removed from that list. The two waterbodies are the Santa Ana Delhi Channel (Decision ID #44427) and Cucamonga Creek-Reach 1 (Decision ID #34154). In the draft Integrated Report, State Board staff rejected the Regional Board's findings and, instead, recommended that neither waterbody be de-listed at this time.⁴

We have reviewed the rationale provided in the draft Integrated Report and concluded that the State Board staff has misunderstood and misapplied the Antidegradation Targets adopted by the Regional Board in 2012.⁵ Below, we set forth the reasons why the State Board should support the Regional Board's recommendation to de-list both waterbodies.

¹ <http://www.sawpa.org/collaboration/projects/tmdl-taskforce/>

² Res. No. R8-2016-0022

³ Res. No. 68-16

⁴ All comments refer to the draft document posted to the SWRCB website on June 9, 2017.

⁵ Res. No. R8-2012-0001 (subsequently approved by the SWRCB in Res. No. 2014-0005, by the OAL in Reg. Action #2014-0520-02S, and by U.S. EPA on April 8, 2015).

- 1) The draft Integrated Report states that "several waterbodies were required to maintain the REC-2 beneficial use which has a bacteria objective of 409 cfu/100ml." This is not true. The Basin Plan clearly states that there are no water quality objectives for waterbodies designated REC-2 Only.⁶ The 409 cfu/100mL objective cited in the draft Integrated Report is the Single Sample Maximum (SSM) which applies only to waterbodies designated REC-1 and assigned to Tier C or Tier D (as described in Chapter 5 of the Santa Ana Region's Basin Plan). It does not apply to waterbodies where the REC-1 use has been properly removed through a Use Attainability Analysis that has been approved by USEPA - such as the Santa Ana Delhi Channel and Reach 1 of Cucamonga Creek.
- 2) Waterbodies designated REC-2, but not REC-1, must continue to comply with the state Antidegradation Policy (Res. 68-16). To this end, the Regional Board has developed and approved Antidegradation Targets to implement this policy. However, the Antidegradation Targets are not water quality objectives and exceedances of these targets are not evidence that the beneficial uses are impaired. EPA acknowledges that antidegradation policies "may not lend themselves to attainment determinations" like those made in conjunction with developing the 303(d) list.⁷
- 3) The Antidegradation Targets were never designed or intended to be used as Not-to-Exceed values in the same way that water quality objectives are implemented. Rather, as explained in the Basin Plan:

"The baseline condition (antidegradation target) for each REC2 only water will be established through a comprehensive statistical analysis of ambient bacteria quality data that is conducted as part of the UAA used to justify the REC2 only designation. The statistical analysis must be designed to characterize the entire distribution of the dataset. This includes determination of the geometric mean, median, standard deviation, coefficient-of-variation, maximum value, 75th percentile value and sample size for the dataset. The 75th percentile density will serve as the antidegradation target, that is the trigger threshold for further investigation and possible corrective action."⁸ (emphasis added)

Because the Antidegradation Targets were set equal to the 75th percentile of the historical data, 25 percent of the data will exceed the target threshold. This is as expected and properly characterizes the "entire distribution of the dataset." It is not, by itself, proof that water quality degradation has occurred.

⁶ Water Quality Control Plan - Santa Ana River Basin (8). Updated February, 2016 (see pg. 4-18 and pg. 5-107).

⁷ U.S. EPA. Guidance for 2006 Assessment, Listing and Reporting Requirements Pursuant to Sections 303(d), 305(b) and 314 of the Clean Water Act. Memorandum from Diane Regas, Director of Office of Wetlands, Oceans and Watersheds to Water Division Directors, Regions 1-10. July 29, 2005 (see FN16 @ pg. 47)

⁸ Water Quality Control Plan - Santa Ana River Basin (8). Updated February, 2016 (see pg. 5-107).

- 4) The Antidegradation Targets were intended to evaluate new water quality data that was collected after the Basin Plan amendment was adopted and a regional bacteria monitoring program was implemented:

"...as new data become available pursuant to requisite monitoring, they will be compared to this antidegradation target to determine whether future investigation or action is needed. The additional monitoring results must be sufficiently robust to assess whether a lowering of water quality has occurred...Where 75% of the new data is less than or equal to the antidegradation target, no degradation will be inferred. However, if more than 25% of the samples exceed the target, additional samples must be collected and analyzed to determine whether the elevated values are anomalous (verified by outlier analysis) or if there is a true trend toward water quality degradation."⁹ (emphasis added)

The Basin Plan amendment required local stakeholders to develop and submit a Regional Bacteria Monitoring Program to the Regional Board no more than six months after EPA issued final approval of the amendment. A draft plan was submitted on time and the final, revised plan was approved by the Regional Board in March of 2016.¹⁰

The approved Regional Bacteria Monitoring Program describes the specific procedures that will be used to implement the Antidegradation Targets. It states that water quality samples will be collected and evaluated annually at each of the waterbodies designated REC-2 only.

"If an exceedance of the antidegradation target is observed, additional bacterial indicator samples will be collected once/month for the three following months. If any of the follow-up samples exceed the antidegradation target, then sampling will continue on a monthly basis until source(s) of the increased bacterial indicators is identified and mitigated and bacteria levels return to below the antidegradation target in three of the four samples collected over three consecutive months."¹¹

At the time the Antidegradation Targets were established, it was the Regional Board's understanding that data from "future monitoring" would be used to determine if the triggers were being exceeded.¹²

⁹ Water Quality Control Plan - Santa Ana River Basin (8). Updated February, 2016 (see pg. 5-107 and 5-108).

¹⁰ Res. No. R8-2016-0022 (March 11, 2016).

¹¹ Santa Ana River Watershed Bacteria Monitoring Program-Monitoring Plan. Feb., 2016 (see §3.3.4.3 @ pg. 3-16).

¹² California Regional Water Quality Control Board-Santa Ana Region. Staff Report: Basin Plan Amendments - Revisions to Recreational Standards for Inland Fresh Surface Water in the Santa Ana Region. Jan. 12, 2012 (see pg. 45 of 126).

"The proposed Basin Plan amendments require stakeholders in the watershed to collect and analyze new samples in accordance with a Regional Board-approved monitoring plan to assess water quality trends in waterbodies designated REC-2 only. As new data become available, the data will be compared to the baseline data developed during the UAA."¹³ (emphasis added)

It should be noted that the Regional Board's approved Monitoring Program also states that water quality degradation will be evaluated by comparing a "*newly acquired dataset*" to the "*historical dataset*."¹⁴

The statistical analysis done by the State Board staff compares the historical dataset to itself and does so in a manner that does not comport with the methods described in the Basin Plan or the Regional Board's approved Monitoring Plan. Only new data collected after the Basin Plan amendment became effective on April 8th, 2015, and gathered in accordance with the approved Monitoring Plan/QAPP, can be used to determine whether water quality degradation has occurred.

- 5) In order to minimize statistical variability, the Antidegradation Targets were intentionally developed using only water quality data from samples collected under dry weather conditions. According to the Basin Plan, these targets "do not apply to samples collected during wet weather conditions."¹⁵ It is not clear whether State Board staff properly excluded all wet weather results before undertaking their own retrospective analysis of the historical data. The exact data that the State Board staff used to support its conclusion was not detailed or cited in the Integrated Report.

- 6) In the event that the State Board elects to over-ride the Regional Board's determination and keep these stream segments on the 303(d) list, both should be re-assigned from Category 5 (TMDL required) to Category 2 because there is "insufficient information to determine beneficial use support." The Regional Bacteria Monitoring Program approved by the Regional Board in March of 2016 is expected to provide the necessary water quality data and this data can be considered in the next 303(d) listing cycle. There is no need to develop a TMDL because the Basin Plan, related Monitoring Program, MS4 permits, and Comprehensive Bacteria Reduction Plans (CBRP) previously approved by the Regional Board, already require stakeholders to identify and mitigate bacteria sources that are causing or contributing to water quality degradation when there is "credible evidence" that such degradation is occurring.¹⁶

¹³ California Regional Water Quality Control Board-Santa Ana Region. Staff Report: Basin Plan Amendments - Revisions to Recreational Standards for Inland Fresh Surface Water in the Santa Ana Region. Jan. 12, 2012 (see pg. 46 of 126).

¹⁴ Santa Ana River Watershed Bacteria Monitoring Program-Monitoring Plan. Feb., 2016 (see §3.3.4.1 @ pg. 3-14).

¹⁵ Water Quality Control Plan - Santa Ana River Basin (8). Updated February, 2016 (see pg. 5-108)..

¹⁶ CBRPs were approved as Regional Board Res. No. R8-2012-0015 and Res. No. R8-2012-0016.

For the reasons given above, the Task Force advises that the State Board staff reconsider its recommendation that Santa Ana Delhi Channel and Reach 1 of Cucamonga Creek should remain on the 303(d) list. These waterbodies were originally added to the 303(d) list based on elevated fecal coliform concentrations. Fecal coliform is no longer considered an accurate or reliable indicator of human health risk and these water quality objectives have since been deleted from the Basin Plan. Thus, the prior listing should be considered obsolete and invalid.

The current 303(d) assessment is constrained to consider only data submitted prior to August 30, 2010.¹⁷ However, the Basin Plan amendment requires that "new data" be used to determine if water quality has degraded compared to the historical baseline condition. Moreover, the new data must be collected in accordance with the Monitoring Program and QAPP approved by the Regional Board in March of 2016. Any data used to develop the Antidegradation Target is not "new." All genuinely "new" data, by definition, must have been collected long after the 2010 submission deadline had passed.

The Regional Board looked at all of the same water quality data that was evaluated by State Board staff and concluded that Santa Ana Delhi Channel and Reach 1 of Cucamonga Creek no longer belong on the 303(d) list. Deference should be given to the Regional Board's ability to implement its own Antidegradation Targets properly. State Board staff's interpretation of these targets and analysis of the historical data is inconsistent with the plain language of the approved Basin Plan amendment and the related Monitoring Program. Therefore, the State Board should affirm the Regional Board's determination and de-list both streams.

Respectfully submitted,



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Rick Whetsel, Task Force Administrator, Santa Ana Watershed Project Authority

¹⁷ State Water Resources Control Board. Extended Deadline: Notice of Public Solicitation of Water Quality Data and Information for 2012 California Integrated Report - Surface Water Quality Assessment and List of Impaired Waters [Clean Water Act Sections 303(d) and 305(b)]. May 24, 2010.