



# County of San Diego



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

Electronic Submission: [commentletters@waterboards.ca.gov](mailto:commentletters@waterboards.ca.gov)

**COMMENTS ON AMENDMENTS TO WATER QUALITY CONTROL PLANS FOR INLAND SURFACE WATERS, ENCLOSED BAYS AND ESTUARIES AND THE OCEAN WATERS OF CALIFORNIA FOR STATEWIDE WATER CONTRACT RECREATION BACTERIA OBJECTIVES (STATEWIDE BACTERIA OBJECTIVES)**

Dear Ms. Townsend:

The County of San Diego (County) appreciates the opportunity to provide comments on the Informational Document for the Public Scoping Meeting for the Proposed Statewide Water Contact Recreational Objectives Amendments to Water Quality Control Plans for Inland Surface Waters, Enclosed Bays and Estuaries and the Ocean Waters of California for Statewide Water Contract Recreation Bacteria Objectives (Statewide Bacteria Objectives).

The County is responsible for implementing multiple water quality programs, including the municipal stormwater program that includes a regional Bacteria Total Maximum Daily Load (TMDL), which will be impacted by the proposed Statewide Bacteria Objectives. The proposed changes align well with key studies that the County hopes to incorporate into watershed planning efforts and bacteria TMDL modifications. In conjunction with other agencies in Southern California, the County is currently administering a Reference Beaches and Creeks Study and a first of its kind Wet Weather Epidemiology Study at several local beaches. These studies will further our understanding of bacteria within the local environment.

The County is supportive of the proposed amendments, and offers the following comments and recommendations for your consideration.

## **ELEMENT 1 – BACTERIA INDICATORS**

**Comment #1:** The County supports the State Board's recommendations to utilize *E. coli* as the only indicator organism for fresh waters and enterococci as the only indicator in marine waters.

The use of these indicators is consistent with the United States Environmental Protection Agency's (USEPA) 2012 Recreational Water Quality Criteria. However, the scoping document should clarify that once adopted, these should be the only applicable objectives used in Clean Water Act and/or Porter-Cologne Water Quality Control Act regulatory actions. This clarification is necessary to avoid the potential misapplication of California Department of Public Health (CDPH) standards to 303(d) listing decisions, Total Maximum Daily Loads (TMDLs), and National Pollutant Discharge Elimination System (NPDES) permits. The CDPH standards are not consistent with the USEPA's 2012 Recreational Water Quality Criteria.

**Recommendation:** Include language in the statewide objectives indicating that the proposed amendments are the only applicable objectives for programs implemented under the Clean Water Act and/or Porter-Cologne Act requirements, in the absence of the adoption of site-specific objectives for such purposes. Clarify that once the new marine bacteria objectives become effective, the CDPH standards will no longer be applicable for 303(d) listing decision, TMDLs and NPDES permits.

**Comment #2:** There are a number of coastal estuaries in the San Diego Region. Please clarify that the marine waters bacteria objective that uses enterococcus applies to estuaries.

**Recommendation:** Clarify the application of the marine waters objective to estuaries.

## **ELEMENT 2 – LEVEL OF PUBLIC HEALTH PROTECTION FOR ILLNESS RATE**

**Comment #3:** USEPA's 2012 Recreational Water Quality Criteria (RWQC) were developed based on epidemiology studies that link the health risks associated with recreational water use to concentrations of indicator bacteria. The studies established risk levels as the driver for selecting indicator bacteria concentrations. However, to protect REC-1 uses, these risk levels could be used as the sole basis for the criteria, rather than establishing "one size fits all" bacteria indicator objectives. Table 4 in the RWQC recommends the acceptable risk level as an estimated illness rate of 32 or 36 per 1,000 primary contact recreators. Use of the higher illness rate would result in an enterococcus geometric mean consistent with the current Ocean Plan and AB 411 levels. Similarly, use of the higher risk level for E. Coli in freshwater would result in consistency with the 1986 EPA recommended geometric mean of 126 CFU/100 ml for *E. Coli* and is currently used in many of the Basin Plans in California. Furthermore, the County requests that the SWRCB consider setting the risk level as the objective to protect REC-1 uses in place of the proposed bacteria concentrations. The use of a risk-based approach would allow for site-specific studies, like the County's wet weather epidemiological study, to select appropriate levels for bacteria indicators that protect public health.

**Recommendation:** Consistent with the 2012 RWQC recommendations, consider setting the risk level as the objective to protect REC-1 uses in place of the proposed bacteria concentrations. In the absence of site-specific data, the "default" concentration based numeric objectives (i.e., geometric mean and statistical threshold values for enterococci and *E.coli*) consistent with the 2012 RWQC could continue to be used.

## **ELEMENT 3 – ADDRESS NATURAL SOURCES OF BACTERIA LEVELS**

**Comment #4:** The County supports the State Board staff's recommendation to allow the use of reference system/anti-degradation approach (RSAA) or natural sources exclusion approaches (NSEA) to ensure that agencies are able to focus bacteria reduction efforts on anthropogenic

sources. The County is currently participating in a Reference Study for Beaches and Creeks in Southern California in support of the RSAA, within the context of the existing Bacteria TMDL.

Although the proposed amendment does not refer to the use of RSAA/NSEA specifically within the context of a TMDL, the preceding discussion seems to target the use of RSAA/NSEA during TMDL development and implementation. The Information Document indicates that the intent of the recommended approach is to avoid requiring dischargers to treat their discharges more than necessary. This potential exists in non-TMDL situations where discharges may be required to implement controls that address exceedances of receiving water limitations outside of the context of a TMDL. In instances where no TMDL exists, requirements to meet receiving water limitations are present and could be viewed as more restrictive than TMDL requirements that apply a RSAA approach. As such, the use of the RSAA/NSEA should not be limited to TMDLs. Changes to the Basin Plan language could allow the RSAA approach to be evaluated in the absence of an adopted TMDL. These changes could also streamline TMDL development and compliance determination efforts by the Regional Boards.

**Recommendation:** Clarify the ability to use of the RSAA/NSEA in both TMDL and non-TMDL applications.

#### **ELEMENT 4 – HIGH FLOW SUSPENSION OF OBJECTIVES FOR FRESH WATERS**

**Comment #5:** The County strongly supports State Board staff’s recommendation to allow the suspension of recreational objectives in engineered and non-engineered channels during high flow events. Conditions during high flow storm events are unsafe for recreation and objectives are temporarily unattainable, regardless of the channel type. Implementation of a high flow suspension (HFS) would allow permittees to better focus resources on protecting recreational beneficial uses where and when they actually occur. As part of the development of the statewide objectives, the State Water Board should provide the necessary analysis to streamline the application of HFS statewide. This could be accomplished by developing a streamlined process for implementing HFS based on simple metrics, such as rainfall amounts, developing a Use Attainability Analysis (UAA) template for different types of waterbodies, or assigning HFS designations statewide.

**Recommendation:** Continue to develop HFS for engineered and non-engineered channels as indicated in Option 2.

#### **ELEMENT 5 – COMPLIANCE SCHEDULES AND INTERIM REQUIREMENTS**

**Comment #6:** The County supports the “no action” alternative with modifications to address the use of compliance schedules within permits.

**Recommendation:** The discussion preceding the proposed options should acknowledge that the proposed bacteria objectives are *new* objectives and therefore compliance schedules could be appropriately established within individual permits. Furthermore, compliance schedules can be established via mechanisms other than the Compliance Schedule Policy (Resolution No. 2008-0025). As such, the reference to the Compliance Schedule Policy should be removed. At a minimum, language should be included so that compliance schedules are not limited to the scope of the Compliance Schedule Policy.

## ELEMENT 7 – MIXING ZONES FOR POINT SOURCES

**Comment #7:** The County encourages further consideration regarding the allowance of mixing zones and allowing bacteria limits to be calculated while accounting for dilution, where appropriate. Although not appropriate for waters that have limited capacity due to background levels of bacteria, dischargers to waters with assimilative capacity, such as ocean waters, should be allowed to account for dilution. The State Board's Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (SIP) allows for mixing zones in the calculation of effluent limits for pollutants with human health criteria. This approach is protective of recreational use and may be appropriate in waters where discharges and receiving water are mixed.

**Recommendation:** Revise State Board staff's recommendation to select Option 2 rather than Option 1 to specify mixing zones for bacteria.

## ELEMENT 8 – AVERAGING PERIODS TO DETERMINE COMPLIANCE

**Comment #8:** The use of rolling averaging periods can result in a single high sample impacting up to five rolling geometric means (i.e., five exceedances). Establishing discrete averaging periods, such as seasonal or monthly periods, would allow for a more representative assessment of steady state water quality conditions (i.e., geometric means) and a better assessment of attainment of water quality objectives.

Since USEPA's 2012 RWQC were developed using epidemiologic data collected over summer recreational seasons, the County supports an averaging period that reflects seasonal recreational use. The County encourages the State Board to consider seasonal or sub-seasonal durations to determine attainment of the geometric mean and statistical threshold value for NPDES and TMDL compliance.

**Recommendation:** Specify a discrete averaging period that reflects a recreational season or sub-season.

**Comment #9:** Due to the potential for inconsistencies in the calculations used to determine attainment of water quality objectives, the County supports specific guidance for data analysis. Guidance should include an appropriate minimum number of samples or a timeframe for the averaging period. Additionally, an appropriate mechanism to incorporate non-detects into data analysis, the establishment of discrete averaging periods, and how to handle wet weather data within the analysis should be included.

**Recommendations:**

- (1) The current minimum of five samples per 30 day period is impractical in application, as routine monitoring often occurs on a weekly basis, resulting in four samples per month. To account for typical operations, the monitoring should either be adjusted to four samples per 30 day period or the averaging period should be increased to six weeks.
- (2) Improper incorporation of non-detects into the analysis can be unnecessarily restrictive and lead to false water quality exceedances. The averaging protocol should allow for statistically appropriate handling of non-detects (e.g., use of regression on order statistics or, at a minimum, substitute one-half of the detection limit rather than the full detection limit).

- (3) Geometric mean calculations are intended to be representative of steady-state conditions and are intended to provide more robust estimates of *ambient* water quality conditions, accounting for variability through distributional estimates as opposed to single point estimates<sup>1</sup>. As such, the State Board should specify how wet weather data will be used to evaluate attainment of the water quality objectives. The State Board should specifically exclude wet weather data from geometric mean calculations, which is scientifically consistent with the 2012 RWQC. Wet weather data should only be used in evaluation of the statistical threshold value.

#### **ELEMENT 11 – ALLOW FOR A VARIANCE, SEASONAL SUSPENSION OR LIMITED REC-1**

**Comment #10:** The County supports the State Board staff's approach that allows for seasonal suspension and Limited REC 1 (LREC-1). Numerous waterbodies in southern California are not supportive of year-round recreation, either due to physical access limitations or water depths that are not conducive to water contact recreation. However, the County is concerned that the discussion under Element 11 implies that a UAA would be required for seasonal suspensions. The County requests language clarification noting that a UAA may be required, but other mechanisms, such as implementation procedures for the objectives, could be utilized as well.

The objectives apply specifically to contact recreational uses where ingestion is reasonably possible. As such, for the application of the objectives in situations that do not support contact recreation, options to modify the implementation procedures should be considered (see comment #8 for an example). Implementation measures for the objectives that outline their specific application may be more appropriate than removing uses or replacing REC-1 objectives with LREC-1. Adopting implementation procedures could be done at a statewide level, would not require the removal of the use, and would not trigger a UAA. Seasonal applications and other analogous approaches to the implementation of recreational uses have been approved in other states<sup>2</sup>.

**Recommendation:** Consistent with 40 CFR 131.10(g), clarify that a UAA is only required for removal or changes to the beneficial use. Alternative methods could be utilized instead, such as implementation procedures for the objectives or suspension of the objectives. Note that the development of seasonal objectives, without beneficial use changes, does not require a UAA.

**Comment #11:** The County supports the State Board's approach allowing the use of a variance, as meeting indicator levels may not be attainable in the near term.

**Recommendation:** The County is in favor of the development of guidance to support the use of variances. Because use of variances in California is limited, guidance is needed to outline situations where variances are applicable, as well as the expectations for situations that would allow for variances.

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<sup>1</sup> U.S. EPA 2012. Recreational Water Quality Criteria. U.S. Environmental Protection Agency, Office of Water. EPA 820-F-12-058. p.4.

<sup>2</sup> California Regional Water Quality Control Board, Santa Ana Region. 2012. Staff Report, Basin Plan Amendments, Revisions to Recreational Standards for Inland Fresh Surface Waters in the Santa Ana Region. January 12, 2012

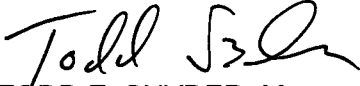
## **Add Additional Element for Consideration**

**Comment #12:** USEPA's RWQC document and the proposed statewide amendments are focused on REC-1 objectives. However, REC-2 objectives are contained in all regional basin plans. Body contact that would reasonably lead to ingestion of water is not included in the activities identified by REC-2 uses. As noted in the recently adopted revisions to the recreational bacteria objectives in the Santa Ana Regional Board's Basin Plan, no scientific basis has been established for indicator bacteria objectives that are intended to protect human health as a result of non-contact recreational uses (REC-2)<sup>3</sup>. As a result, the REC-2 objectives in the Santa Ana Region Board's Basin Plan were removed and replaced by antidegradation targets in waters with only REC-2 beneficial uses. The State Board should take this opportunity to provide implementation consistency and address this issue on a statewide basis.

**Recommendation:** Establish appropriate statewide REC-2 criteria or an approach to developing criteria on a regional basis. Consider utilizing an approach that is consistent with the recently adopted amendments to the Santa Ana Region's Basin Plan.

Thank you for your time and consideration of these comments. We encourage timely completion of the project and hope that our comments will assist you in development of the bacteria objectives. If you have questions or comments, please contact Jo Ann Weber at (858) 495-5317 or e-mail at [JoAnn.Weber@sdcounty.ca.gov](mailto:JoAnn.Weber@sdcounty.ca.gov).

Sincerely,

  
TODD E. SNYDER, Manager  
Watershed Protection Program

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<sup>3</sup>Attachment 2 to Resolution No. R8-2012-0001, Approved June 15, 2012; corrected February 12, 2013 and November 15, 2013. See [http://www.waterboards.ca.gov/santaana/water\\_issues/programs/basin\\_plan/docs/rec\\_standards/SWRCB/20140121\\_Attachment%202.pdf](http://www.waterboards.ca.gov/santaana/water_issues/programs/basin_plan/docs/rec_standards/SWRCB/20140121_Attachment%202.pdf)