

Letter 27



August 9, 2017

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

Sent via e-mail to [commentletters@waterboards.ca.gov](mailto:commentletters@waterboards.ca.gov)

**Subject: Comment Letter - Bacteria Provisions**

Dear Ms. Townsend:

The following comments are offered by the Sacramento Regional County Sanitation District (Regional San) on the draft proposed staff report for Bacteria Provisions and a Water Quality Standards Variance Policy (Bacteria Provisions). Regional San owns and operates the Sacramento Regional Wastewater Treatment Plant in accordance with its National Pollutant Discharge Elimination System (NPDES) permit. Regional San is in the process of constructing its \$2 billion EchoWater Project that will provide disinfected tertiary treated effluent suitable for recycling and reuse for a broad range of beneficial purposes.

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In general, Regional San is supportive of the State Water Resources Control Board's (State Water Board) goal to ensure that the most effective bacteria indicator is used, and to adopt statewide standards conforming to United States Environmental Protection Agency's (US EPA) recommendations. However,

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we do have questions and comments on the proposed Bacteria Provisions and Draft Staff Report. Our overarching comment is that multiple regulatory issues are attempting to be addressed within the Bacteria Provisions, including bacteria criteria, a new beneficial use, and the proposed Variance Policy. Combining these issues into a single document creates some confusion and requires clarification. Our specific comments and questions are listed below.

27.03

1. Regional San supports the concept of suspending the REC-1 beneficial use designation during periods when water conditions are unsafe or when the use is inapplicable. It should be recognized and reflected in the staff report and provisions that high flows may not be limited to a single season. For example, high flows can occur during late spring, summer, or fall rain events.

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Also, it is not clear how water quality objectives are intended to be addressed for waters that exceed the REC-1 water quality objectives. The Bacteria Provisions provide for a natural sources exclusion approach and on page 73 states that “...requirements placed upon anthropogenic dischargers may not reduce the actual sources of bacteria if those sources are natural”. And would require “...the control of all anthropogenic sources of bacteria and the identification and quantification of natural sources of bacteria.” The report acknowledges that, for bacteria, many major Publicly Owned Treatment Works (POTWs) are already subject to existing State Water Board Division of Drinking Water (DDW) guidelines based on recycled wastewater effluent recommendations that are more stringent than the proposed REC-1 bacteria water quality objectives. Also, using the current treatment practices, these facilities have little difficulty meeting permit conditions based on the proposed objectives. The State Water Board should clarify the intended plan for achieving the proposed Bacteria Water Quality Objectives when a majority of loading comes from natural sources that are excluded.

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In some regulatory programs that involve Total Maximum Daily Loads (TMDLs), natural and legacy sources are the predominant sources of contaminants (such as bacteria and mercury), but their control is not included or is specifically excluded from the program implementation requirements. This often shifts regulatory requirements for control to NPDES permittees, even when control of those sources may not result in significant or measurable environmental improvement. We recommend that the State Water Board develop a policy or guideline for exclusion of insignificant dischargers and de minimus sources in these types of instances.

2. The Bacteria Provisions propose a new limited water contact recreation (LREC-1) beneficial use for designation. However, the report doesn't propose water quality criteria or guidance associated with the water quality that would support LREC-1. The distinction between REC-1 in which ingestion is “reasonably possible” and LREC-1 where ingestion is “infrequent or insignificant” appear to overlap, and

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3. determining which beneficial use applies may be difficult. It's also unclear what is meant by very shallow water depths – this should be clarified. If public assets (water body) exist on private (restricted or no access) lands, there should not be a designated beneficial use such as LREC-1, or for that matter, REC-1. Waters that are restricted from public use such as those that are fenced, posted, or otherwise prohibit public use and access should not have the LREC-1 beneficial use, and the staff report and/or definition should indicate this.

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Since the proposed LREC-1 beneficial use could be impacted by contaminants other than bacteria such as cyano-toxins, we believe that a discussion is appropriate in this staff report to address appropriate water quality objectives and specific related contaminants.

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4. The Bacteria Provision Draft Staff Report should be clarified for the method(s) for monitoring *E. coli* and enterococci. On page 19 the first paragraph states “The Bacteria Provisions include the U.S. EPA recommended use of method 1603 or equivalent for monitoring *E. coli* and method 1600 or equivalent for monitoring enterococci.” Also, there are numerous places in the report that a table for U.S. EPA 2012 Recreation Water

Quality Criteria is presented (e.g. Table 5). In the notes below these tables it states “U.S. EPA recommends using U.S. EPA Method 1600 (U.S. EPA, 2002a) to measure culturable enterococci, or another equivalent method that measures culturable enterococci and using U.S. EPA Method 1603 (U.S. EPA, 2002b) to measure culturable *E. coli*, or any other equivalent method that measures culturable *E. coli*.”

EPA 1603 is a membrane filtration method and it can be costly and complicated. As per the method: “Water samples containing colloidal or suspended particulate material can clog the membrane filter and prevent filtration, or cause spreading of bacterial colonies which could interfere with enumeration and identification of target colonies.” The proposed Bacteria Provision should remove any reference to a specific method.

Instead, alternate appropriate methods that measure culturable *E. coli*” should be allowed. Under 40 CFR 136.3 there are other methods approved for *E. coli* in wastewater and ambient water. Some of them would not have the same performance issues as method 1603, and are less complicated and less costly. These are Most Probable Number (MPN) methods as opposed to membrane filtration (direct count) methods. The provisions and report should list methods such as SM 9221 B.F. (2006) and Colilert (IDEXX). Both of these methods are approved under 40 CFR 136.4 for wastewater and ambient water.

We appreciate the opportunity to comment on the draft Bacteria Provision report. If you have any questions, please contact me at (916) 876-6092 or [mitchellt@sacsewer.com](mailto:mitchellt@sacsewer.com) or Sam Safi at (916) 876-6290 or [safis@sacsewer.com](mailto:safis@sacsewer.com).

Sincerely,



Terrie L. Mitchell  
Manager, Legislative and Regulatory Affairs

cc: Prabhakar Somavarapu, District Engineer, Regional San  
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