



# Ventura Countywide Stormwater Quality Management Program

## Participating Agencies

February 20, 2015

Camarillo

County of Ventura

Fillmore

Moorpark

Ojai

Oxnard

Port Hueneme

San Buenaventura

Santa Paula

Simi Valley

Thousand Oaks

Ventura County  
Watershed Protection  
District

Ms. Jeanine Townsend  
Clerk to the Board  
State Water Resources Control Board  
1001 I Street, 24<sup>th</sup> Floor  
Sacramento, California 95814

### **SUBJECT: COMMENT LETTER – STATEWIDE BACTERIA OBJECTIVES – SCOPING COMMENTS**

The Ventura Countywide Stormwater Quality Management Program (Program) has reviewed the January 2015 Informational Document for the Public Scoping Meeting for Proposed Statewide Water Contact Recreation Bacteria Objectives Amendments to Water Quality Control Plans for Inland Surface Waters, Enclosed Bays and Estuaries and the Ocean Waters of California, and attended the Public Scoping Meeting on February 10, 2015. The Program include the Watershed Protection District, the County of Ventura and the incorporated cities of Camarillo, Fillmore, Moorpark, Ojai, Oxnard, Port Hueneme, Ventura, Santa Paula, Simi Valley, and Thousand Oaks. These organizations operate municipal storm drain systems and discharge stormwater and urban runoff pursuant to the Ventura Countywide 2010 NPDES Stormwater Permit. All 12 of these agencies are committed to working cooperatively to improve water quality. The Program strongly supports the efforts of the State Water Resources Control Board (State Board) to amend these plans in order to provide consistent statewide REC 1 bacteria objectives based on USEPA's 2012 RWQC, and appreciates the opportunity to comment on the proposed amendments. We submit the following comments and recommendations for consideration by the State Board.

**Comment No. 1:** The Program has identified elevated bacteria levels as one of its top water quality priorities, and is allocating significant resources to identify sources of indicator bacteria, study health risks of indicator bacteria and implement Best Management Practices to reduce indicator bacteria concentrations in MS4s and receiving waters. All these efforts support the Program's goal of protecting public health in a cost-effective manner. However, current bacteria objectives often get in the way of cost-effective public health protection, in most cases because objectives are based on flawed indicators and are not representative of risk to human health.



Common examples include the requirement to meet bacteria water quality objectives during high flows when contact recreation is unsafe, in water bodies with flows so low that contact recreation is not possible, or in water bodies where indicator bacteria originate from sources with a much lower risk to human health compared to human sources. Fortunately, the scientific knowledge related to public health risks associated with recreational water use, sources of fecal indicator bacteria in the environment and analytical methods for detection of bacteria in the environment has improved tremendously, and is captured well by USEPA's 2012 RWQC. Therefore, we strongly support many of the proposed amendments by the State Board that incorporate the recommendations set forth in the 2012 RWCB.

**Recommendation No. 1:** We strongly support the following proposed amendments by the State Board along with the preliminary staff recommendations, which have the potential to empower stormwater agencies statewide to prioritize actions where the benefit to public health is greatest:

- Element 1. Use only *E. coli* as an indicator organism for fresh waters, and enterococci for marine waters.
- Element 3. Allow reference system/antidegradation or natural sources exclusion approaches.
- Element 4. Allow high flow suspension of objectives for engineered and non-engineered channels.
- Element 8. Specify the appropriate averaging period.
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- Element 11. Allow the use of a variance, seasonal suspension or Limited REC 1.

**Comment No. 2:** The Program supports the goal of bacteria objectives to protect human health, but recommends the State Board establishes objectives based on the U.S. EPA's estimated illness rate of 36 per 1,000 (Element 2). Given the large uncertainty (wide 95% prediction intervals) when predicting illness rates based on indicator bacteria concentrations, predicted illness rates based on criteria corresponding to U.S. EPA recommendation 1 (36 per 1,000) or recommendation 2 (32 per 1,000) are not statistically different, and there's no evidence for a real public health benefit associated with using the most stringent criteria. However, the compliance outcomes for the different criteria values (especially when using the geometric criteria) are significantly different based on analyses of Ventura County beaches. We ask the State Board not to create additional program costs and hurdles to compliance, when there's no public health benefit. In addition, the geometric criteria corresponding to the estimated illness rate of 36 per 1,000 (35 CFU/100 ml for Enterococci and 126 CFU/100 ml for *E. coli*), are the same as the criteria that are currently being used. Therefore, selecting an illness rate of 36 per 1,000 is justifiable as it offers the same level of human health protection as is currently the case.



**Recommendation No. 2:** We ask the State Board to consider the indistinguishable benefit to public health between the two illness rates in the context of the potential costly impacts, and consider the using the U.S. EPA's estimated illness rate of 36 per 1000 primary contact recreators.

**Comment No. 3:** The Program supports the intention of the State Board to allow reference system/antidegradation (RSA) or natural source exclusion (NSE) approaches (Element 3). We ask the State Board to specifically include and support a process for setting site-specific alternative water quality criteria based on Quantitative Microbial Risk Assessment (QMRA). In order to maximize effectiveness of RSA, NSE and QMRA options, we ask the State Board to provide clear guidance and streamlined processes where possible, for beaches as well as inland water bodies. Clear guidance includes, but is not limited to (1) the definition of anthropogenic sources of bacteria, (2) clarifying that RSA, NSE and QMRA approaches are allowed in the application of the bacteria objectives in both TMDL and non-TMDL regulatory requirements, and (3) guidance documents for source identification, QMRA and epidemiology studies. Streamlined processes could be based on those described in the USEPA Technical Support Materials, *Site-Specific Alternative Recreational Criteria Technical Support Materials for Predominantly Non-Human Fecal Sources*. The document describes the process that can be used to document likely sources of fecal contamination, and describes the QMRA results from several conservative (health protective) scenarios where the predominant sources of fecal contamination are from one or more of the following: gulls, pigs, chickens, and non-pathogenic sources. If water bodies fit one of USEPA's conservative scenarios, then USEPA provides potential criteria values. We ask the State Board to review and consider adopting these USEPA scenarios, where applicable, and provide criteria values for other scenarios relevant to the state, as needed. The availability of such streamlined processes for scenarios relevant to the state, would greatly improve water quality managers' access to QMRA.

**Recommendation No. 3:** We ask the State Board to provide clear guidance and streamlined processes related to the implementation of reference system/antidegradation or natural source exclusion approaches (Element 3), for beaches as well as inland water bodies, and to specifically include a process for setting site-specific alternative water quality criteria based on Quantitative Microbial Risk Assessments.

**Comment No. 4:** The Program supports the intention of the State Board to allow high flow suspension of objectives for engineered and non-engineered channels (Element 4), and we ask that the State Board provides clear guidance and streamlined processes where possible. We recommend that the State Board implements high flow suspension based on simple metrics, such as rainfall amounts. If a Use Attainability Analysis (UAA) is required, we recommend the State Board provides streamlined process options, as the current process for individual UAA has been challenging and there are not many

examples of successful efforts in the state. We also recommend that the State Board considers setting the thresholds for high flow suspension at an appropriate level reflecting that REC 1 use can be unsafe even at relatively low rainfall amounts (e.g. 0.5 inches).

**Recommendation No. 4:** We recommend the State Board provides clear guidance and streamlined processes for implementing high flow suspension (Element 4), based on simple metrics and at levels that appropriately reflect the associated risks.

**Comment No. 5:** To ensure that mixing zones are a regulatory option in all regions with respect to meeting bacteria objectives, the Program encourages the State Board to consider option #2 for Element 7. As water contact recreation occurs in receiving waters after mixing of discharges, it makes sense to allow for mixing zones for point sources. In particular, mixing zones should be allowed for freshwater discharges to brackish or marine environments, as enterococci criteria are proposed for the latter. As enterococci are not recommended as an indicator organism in fresh water due to their ability to reproduce and yield false positive results, allowing a mixing zone after discharge into brackish or marine environments will help preventing false positive results due to freshwater discharges in these receiving waters.

**Recommendation No. 5:** The Program recommends the State Board allows mixing zones in a small area near an outfall. The mixing zone would allow the existing bacteria limits to be calculated taking into account dilution, if appropriate.

**Comment No. 6:** The Program supports the intention of the State Board to the use of a variance, seasonal suspension or Limited REC 1 (Element 11), and we ask that the State Board provides clear guidance and streamlined processes where possible. Many flood control channels and creeks in Ventura County have seasonally very low flows, effectively prohibiting REC 1 uses in these water bodies. In addition, the Program acknowledges that new options for regulatory relief from bacteria objectives upstream of regional treatment facilities, would stimulate implementation and expand options for locating such facilities. In these cases, a variance would be the preferred regulatory tool. We ask the State Board to clearly identify where UAA is required, and recommend the State Board provides streamlined process options, as the current process for individual UAA has been challenging and there are not many examples of successful efforts in the state.

**Recommendation No. 6:** We recommend the State Board to provide clear guidance and streamlined processes for implementing variances, seasonal suspension or Limited REC 1 (Element 11).

**Comment No. 7:** The Los Angeles Regional Board has required daily effluent monitoring for bacteria in some cases, requiring significant efforts from stormwater

agencies while the benefit is not at all clear. The Program acknowledges that daily effluent monitoring can be useful in special studies that only last short periods of time (e.g. weeks), it should not be required for long-term monitoring. Therefore, we ask the State Board to establish a maximal monitoring frequency for long-term monitoring or provide narrative guidance to prevent such excessive monitoring, as part of Element 9 (Effluent Monitoring and Reporting Frequency), and we propose a maximum frequency of weekly monitoring would be appropriate. In addition, to improve consistency, similar guidance should be provided for monitoring frequency of effluent to salt and brackish waters.

**Recommendation No. 7:** The Program recommends the State Board establishes guidance on monitoring frequency for bacteria in discharges to all receiving waters (not only fresh water) (Element 9), by establishing a maximum effluent monitoring frequency in order to prevent excessive long-term monitoring with no demonstrated benefits.

**Comment No. 8:** It is not clear how Element 8 (Averaging Periods to Determine Compliance) and Element 9 (Effluent Monitoring and Reporting Frequency) can be applied to the portion of stormwater not subject to high flow suspension, i.e. runoff associated with low rainfall amounts. Calculating geometric means is not possible for stormwater runoff, unless an averaging period of one season or more is considered. Also, we recommend stormwater monitoring frequencies should be expressed as number of qualifying events per year (e.g. 2 or 3 events), excluding events where high flow suspension applies. Therefore, we recommend the State Board includes specific guidance for stormwater monitoring frequency and determination of compliance.

**Recommendation No. 8:** The Program recommends the State Board includes specific guidance related to the averaging period to determine compliance (Element 8) and effluent monitoring frequency (Element 9) for stormwater.

**Comment No. 9:** While we understand the scope of the proposed objectives is focused on the REC 1 beneficial use, the basis for and application of the REC 2 objectives should be considered as part of the bacteria objective development. As noted in the recently adopted revisions to the recreational bacteria objectives in Santa Ana Regional Board's Basin Plan, there is no scientific basis to establish indicator bacteria objectives intended to protect human health as a result of non-contact recreational uses (REC 2). As a result, the REC 2 objectives in the Basin Plan were removed and replaced by antidegradation targets in waters with only REC 2 beneficial uses. As one of the stated intents of the Scoping Document and establishment of statewide bacteria objectives is to provide implementation consistency, we supports the approach utilized in the Santa Ana Region and request inclusion of this option as a new element in the Scoping Document. Alternatively, we ask the State Board at minimum to consider removing fecal coliform standards and include equally protective *E. coli* standards for REC 2 uses in Statewide Bacteria Objectives. For instance, in the Los Angeles region most water



bodies are designated REC 1 as well as REC 2, and Statewide Bacteria Objectives should harmonize REC 1 as well as REC 2 objectives. Note that fecal coliform objectives were removed for REC 1 and LREC 1 in the Los Angeles Basin Plan (R10-005), in order to "remove unnecessary regulatory and monitoring requirements" and maintain consistency with EPA's recommendations. However, REC 2 objectives were not updated at that time and still include fecal coliform objectives, and unnecessary monitoring for fecal coliforms is therefore still required.

**Recommendation No. 9:** We propose that the State Board includes an additional element to evaluate the REC 2 objectives, and preferably remove indicator bacteria objectives for REC 2.

**Comment No. 10:** With respect to the application of statewide bacteria objectives in general, the Program recommends additional clarification be added to the Scoping Document regarding the application of newly proposed statewide objectives, and their replacement of existing bacteria objectives contained in regional water quality control plans. Specifically, where bacteria water quality objectives are used in State and Regional Water Board water quality regulatory actions (e.g., determinations of impairment, total maximum daily loads (TMDLs), and receiving water limitations),

**Recommendation No. 10:** Clearly indicate that once statewide bacteria objectives are adopted, such objectives would replace any other bacteria objectives or standards that might otherwise be used by the State or Regional Water Boards in their water quality programs.

Thank you for the opportunity to provide scoping comments on the Proposed Statewide Water Contact Recreation Bacteria Objectives Amendments to Water Quality Control Plans for Inland Surface Waters, Enclosed Bays and Estuaries and the Ocean Waters of California. Should you have any questions, please contact me at (805) 654-5051 or via email at [Gerhardt.Hubner@ventura.org](mailto:Gerhardt.Hubner@ventura.org).

Sincerely,



Gerhardt J. Hubner, Chair

*On Behalf of the Ventura Stormwater Quality Management Program*