

**California Regional Water Quality Control Board
Santa Ana Region**

July 15, 2011

ITEM: 10

SUBJECT: Stormwater Quality Standards Task Force

Attached is a draft Executive Summary of proposed revisions to recreation standards for inland fresh surface waters in the Santa Ana Region. The proposed revisions reflect the work and recommendations of the Stormwater Quality Standards Task Force, of which Regional Board staff have been an integral part. The proposed amendments to the Basin Plan to incorporate these changes are expected to be presented to the Regional Board in Fall 2011.

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EXECUTIVE SUMMARY

PROPOSED REVISIONS TO RECREATIONAL STANDARDS FOR INLAND FRESH SURFACE WATERS IN THE SANTA ANA REGION

Staff of the California Regional Water Quality Control Board, Santa Ana Region (Regional Board) and the other members of the Stormwater Quality Standards Task Force (SWQSTF, or Task Force) have been engaged since 2003 in the implementation of a workplan designed to assist the Regional Board in reviewing water quality standards related to recreational use of the Region's inland fresh surface waters. This effort has included consideration of revisions to the bacteria quality objectives currently specified in the Basin Plan (Water Quality Control Plan, Santa Ana River Basin 1995, updated February 2008 and June 2011¹) to protect the REC-1 (Water Contact Recreation) beneficial use of these waters based on bacteria criteria developed by the U.S. Environmental Protection Agency (USEPA) and published in 1986.

Consideration of the scientific basis of both the existing Basin Plan bacteria quality objectives for inland surface waters and the 1986 bacteria criteria recommended by USEPA led the Task Force to recommend revisions to the definition of the REC1 (water contact recreation) use, and to the development of a recommended narrative pathogen objective. Changes to the current recreation beneficial use designations for specific waters in the Basin Plan have also been considered through the Use Attainability Analysis process, as prescribed by federal regulation.

The Task Force has also developed recommended implementation strategies pertaining to recreational standards, including criteria for the temporary suspension of recreational uses and associated objectives under specified high flow conditions. A monitoring program has been designed to provide data necessary to determine compliance with the recommended REC1 objectives.

Initiation of the Task Force effort was prompted by concern among stakeholders throughout the watershed that the California Water Code Section 13241 factors, which pertain to the adoption of water quality objectives by the Regional Board, had not been considered in the context of compliance under storm conditions. There was widespread concern about the propriety of both the water quality objectives and beneficial use designations in the Basin Plan as a whole, and the need to assure that public resources are expended reasonably and fairly to achieve and maintain those water quality standards. The first phase of the Task Force effort was focused on recreational

¹These updates to the Basin Plan did not include any substantive changes to the Plan. The purpose of the updates was to incorporate in the text the separate amendments that had been approved subsequent to the re-publication of the Basin Plan in 1995 and to correct typographical and editorial errors.

standards; other water quality standards in the Basin Plan are expected to be the subject of future work sponsored by the Task Force. The underlying goal of the Task Force is to assure that water quality standards are appropriate, based on the best available science and in accordance with applicable statute and regulation, and that public resources are expended in the most effective and efficient manner to protect public health and water quality.

While the Basin Plan amendments developed through the Task Force effort relate principally to recreation standards in the inland freshwaters of the Region, the need for and opportunity to recommend other changes was recognized. These other changes include recommendations for the addition of reference to the federal promulgation of new pathogen indicator criteria for coastal waters, including enclosed bays and estuaries, and for the revision and update of the narrative text in the Basin Plan. In addition, certain surface waters not yet included in the Basin Plan are proposed to be added, together with their beneficial use designations. Two reservoirs that are currently identified in the Basin Plan but that no longer exist are proposed to be deleted. Other minor editorial changes are also proposed.

In summary, the following amendments to the Basin Plan are proposed:

1. Rename the REC1 use from “Water Contact Recreation” to “Primary Contact Recreation”. Clarify the current Basin Plan definition of the REC1 use.
2. Delete the current Basin Plan fecal coliform objectives for REC1 and REC2 (non-contact water recreation) and replace with *E. coli* objectives, as follows:
 - a. For waters designated both REC1 and REC2, replace the current Basin Plan fecal coliform objectives with a geometric mean objective of less than 126 *E. coli* organisms per 100 mL (expressed as the geometric mean of at least 5 samples over a 30-day period).
 - b. For waters that are designated only REC2 pursuant to an approved Use Attainability Analysis, identify bacteria quality targets, in conformance with the state antidegradation policy. The targets are intended to provide the basis for assuring that bacteria quality conditions do not degrade.
3. Establish a narrative pathogen objective requiring that waste discharges not cause or contribute to excessive risk of illness from human pathogens.
4. Add expected maximum single sample *E. coli* values for REC1 waters, subdivided into “Tier A,” “B,” “C” or “D” tiers based on known/anticipated intensity of REC1 use (see #5). These values are to be used as an alternative method for assessing probable compliance with the geometric mean *E. coli* objective for REC1 when insufficient data are available to calculate the geometric mean. The principal intended use of these single sample values is for notification and posting purposes, and as a trigger for further investigation of sources contributing to high bacteria indicator densities.

5. Establish tiers of REC1-designated inland surface waters as Tier A, B, C or D for the purposes of assigning expected maximum single sample *E. coli* values. The Tiers reflect differences in known or estimated intensity of REC1 use, from waters that are heavily used (Tier A) to infrequently used (Tier D). Reach 3 of the Santa Ana River is considered a Tier A water and used as the basis for determining the relative intensity of use for other freshwaters in the Region. More conservative single sample values are assigned to Tier A waters; progressively less conservative values are assigned to Tier B, C and D waters, reflecting differences in expected public health risk. Certain waters in these tiers are in natural condition and are denoted with an “n”. The more conservative single sample values assigned to Tier A waters are also applied to “n” waters.
6. Establish criteria for the temporary suspension of bacteria objectives and recreation beneficial uses for inland surface streams under certain flow conditions.
7. Re-designate specific waters (portions of the Santa Ana-Delhi Channel², Greenville-Banning Channel², Temescal Creek and Cucamonga Creek) to remove the REC1 or REC1 and REC2 uses, based on Use Attainability Analyses. Any such re-designated waters would be reviewed at least once every three years, pursuant to federal requirements for the triennial review of water quality standards, to determine whether conditions had changed such that the designation of REC1 or REC2 was warranted.
8. Incorporate an implementation plan that: includes a surveillance plan to assess compliance with the revised bacteria quality objectives; identifies the criteria for suspension of recreation standards under certain flow conditions; describes the intended application of single sample maximum values in REC1 freshwaters; describes implementation of antidegradation targets for REC2 only freshwaters; discusses controllable and uncontrollable source of bacteria inputs to surface waters.
9. Delete the bacterial quality objective for MUN waters, which was made obsolete by the final federal Interim Enhanced Surface Water Treatment Rule.
10. Add specific waters and beneficial use designations, and revise reach descriptions for certain waters. Certain waters not currently listed in the Basin Plan are proposed to be added, and appropriate beneficial uses designated. Where appropriate, the rationale for exception of the water body from the MUN use, per the exception criteria specified in the State Water Board’s Sources of Drinking Water Policy, is provided. Delete two reservoirs (Laguna and Lambert) that no longer exist.

²Neither the Santa Ana Delhi Channel nor the Greenville-Banning Channel is listed in the current Basin Plan. These waters are among those proposed to be added (item #10). Pursuant to federal law and implementing regulation, all waters are presumed to be REC1 unless a Use Attainability Analysis demonstrates otherwise.

11. Editorial changes include:

- a. Revise the current Basin Plan footnote re REC1 and REC2 designations to clarify and correct the intended meaning.
- b. Change the phrase “present or potential” to characterize beneficial use designations in Table 3-1 of the Basin Plan to “existing or potential”. Correct other references in the text of Chapter 3 BENEFICIAL USES regarding “existing” or “present” beneficial use designations.
- c. Update narrative language in Chapter 3 BENEFICIAL USES, Chapter 4 WATER QUALITY OBJECTIVES, and Chapter 5 IMPLEMENTATION to reflect the work of the Task Force and incorporation of the changes identified in items 1-9, above.
- d. In Chapter 4 WATER QUALITY OBJECTIVES, ENCLOSED BAYS AND ESTUARIES, re-name Bacteria, Coliform to Pathogen Indicator Bacteria and add a note regarding the federal promulgation of enterococcus criteria for coastal waters in California, including enclosed bays and estuaries.
- e. Other minor editorial changes, such as footnote re-numbering and the like.