

Joanne Schneider
Environmental Program Manager
Santa Ana Regional Water Quality Control Board
3737 Main Street, Suite 500
Riverside, CA 92501-3339

Dear Ms. Schneider,

We have reviewed the strawman document, “Recommended Revisions to Santa Ana Region’s Basin Plan for Recreational Use Classifications and Related Water Quality Objectives”, prepared by the Task Force dated December 4, 2007. The purpose of this letter is to document some concerns that we have with the proposal and to recommend solutions.

The proposal affects both the recreational use designations and the bacterial objectives designed to protect those uses.

The use changes involve:

- (1) redefining the primary contact recreation (REC1) use,
- (2) adding a RECX category to define where a use attainability analysis (UAA) has been done to demonstrate that recreational uses do not exist and
- (3) providing a high flow suspension of uses when REC1 and REC2 (non-contact recreation) uses are precluded due to high stormwater flows.

The changes to the bacterial objectives involve

- (1) adding a narrative pathogen objective that applies to REC1 and REC2;
- (2) replacing the fecal coliform geometric mean and single sample objectives for REC1 with a geometric mean *E. coli* objective;
- (3) reinterpreting the single sample maximum for REC2 fecal coliform as a trigger for monitoring only; and
- (4) removing the MUN total coliform objective.

We are not supportive of the proposed changes to the REC1 use definition, but we would be amenable to creation of a limited REC1 use to be applied to specific waters where REC1 is neither existing nor attainable for a UAA. Any change to the existing use designations requires a UAA. We require clarity from the Task Force on which of the six UAA factors in 40 CFR 131.10(g) would be applied in these use designations and what thresholds the Regional Board would be considering in making the case that the use was not existing. We would also need to see greater specificity on the criteria and thresholds that would be used to define the high flow exclusion period.

We are not opposed to refinements of the use classification schemes or UAAs to re-designate recreational use. Our goal is to ensure the process is consistent with EPA guidelines, the approach is technically sound and the decision framework is well documented and transparent. We look forward to working with you on improving the proposed changes. If you have questions, please call me at (415) 972-3452. Our specific comments on the strawman proposal are attached.

Sincerely,

Janet Hashimoto, Chief
Monitoring and Assessment Office

Comments on Strawman proposal: “Recommended Revisions to Santa Ana Region’s Basin Plan for Recreational Use Classifications and Related Water Quality Objectives”

Task Force Recommendation 1. RB8 is proposing changes to the REC1 Use definition. The language changes include a shift from the threshold of “potential for body contact” to “frequent and prolonged use”, a change in threshold for water ingestion from “reasonably possible” to “likely” and the elimination of fishing and wading from REC1 activities. The definition also includes a statement that “All defined waters of the U.S. are presumed to be capable of supporting primary contact recreation unless a Use Attainability Analysis (UAA) demonstrates that this use has not been attained and is not attainable and the Basin Plan is revised accordingly.”

We do not support this change in the REC1 definition. The current REC1 definition was the product of an intense collaborative effort by the State Water Resources Control Board the Regional Water Quality Control Boards and the USEPA, to develop a consistent statewide definition for the REC1 use. The proposed changes have the effect of altering the thresholds for REC1 use designations, rendering them less protective. We would support the development of a new Limited REC1 use designation. A Limited REC1 use designation more accurately reflects the situation where frequent and prolonged use is unlikely, where ingestion is unlikely but possible. EPA guidance allows adjustment of single sample maxima for areas where use is less frequent.

Task Force Recommendation 2. Maintain existing definition of REC2.

We note that wading and fishing uses would not be covered under this proposed new definition scheme, since these uses would be removed from REC1 definition and they are not included in the current REC2 definition.

Task Force Recommendation 3. New language would be added to the Basin Plan to identify factors that would be used to reclassify waterbodies into three use classifications (REC1, REC2 and RECX). The RECX definition would apply to areas where a UAA has been done to show that all recreational uses are not attainable. Factors for classification include flow condition, ease of access, adjacent land use, proximity to parks and or residences, channel morphology and modification, legal restrictions, public safety concern, probable risk of ingestion, parks and recreation plans, type of use that occurred in 1975.

It is important to make a distinction between factors that relate to use, those that relate to the level of protection needed to protect the use and those 6 factors identified in 131.10(g) that relate to use attainability.

Under 40 CFR 131.10(g) states may remove a designated use which is not an existing use, as defined in § 131.3, or establish sub-categories of a use if the State can demonstrate that attaining the designated use is not feasible because:

1. *Naturally occurring pollutant concentrations prevent the attainment of the use; or*
2. *Natural, ephemeral, intermittent or low flow conditions or water levels prevent the attainment of the use, unless these conditions may be compensated for by the discharge of sufficient volume of effluent discharges without violating State water conservation requirements to enable uses to be met; or*
3. *Human caused conditions or sources of pollution prevent the attainment of the use and cannot be remedied or would cause more environmental damage to correct than to leave in place; or*
4. *Dams, diversions or other types of hydrologic modifications preclude the attainment of the use, and it is not feasible to restore the water body to its original condition or to operate such modification in a way that would result in the attainment of the use; or*
5. *Physical conditions related to the natural features of the water body, such as the lack of a proper substrate, cover, flow, depth, pools, riffles, and the like, unrelated to water quality, preclude attainment of aquatic life protection uses; or*
6. *Controls more stringent than those required by sections 301(b) and 306 of the Act would result in substantial and widespread economic and social impact.*

Issues relating to access, proximity to parks and future plans relate to potential use (i.e., whether people can recreate there) rather than potential use attainment (i.e. whether we can meet the bacterial objectives). Both are important pieces of information but the latter is the key issue in the UAA process. Similarly, landuse by itself is not a factor in the UAA process.

The potential for ingestion should be separated from probable risk from ingestion. The former relates to exposure. The latter relates to risk of getting ill from ingestion based on the epidemiology. Together these two factors provide information on the level of protection needed to protect the use. However, they are not factors to be considered when performing a use attainability analysis.

RB8 should identify which factors would be used in UAAs and how these relate to the 6 factors in 131.10(g).

Under Factor 1, RB8 would need to show that natural sources prevent attainment of use. This is similar to the approach used in RB4. For EPA approval, there must be a demonstration that the exceedances are due to natural sources (i.e. all human sources have been controlled). We would also expect studies to determine the appropriate bacterial objectives for the waterbody impacted by natural sources. The recent natural source loadings study may provide useful information to support development of such an objective.

Under Factor 4 we would expect an analysis as to how hydromodification precludes the attainment of the use and why it is not feasible to restore the use to its "original" (i.e., the use that existed in November 1975) condition.

Under Factor 6 we would expect a demonstration that attainment would result in widespread economic and social impact. Guidance on this is provided in a document titled “Interim economic Guidance for Water Quality Standards Workbook” (EPA-823-B-95-002, March 1995).

Task Force Recommendation #4. RB8 is proposing to add a narrative pathogen objective.

We have no objection to the addition of narrative objective

Task Force Recommendations #5 and #6 (REC1 objectives). R8 is proposing deleting the fecal objectives (both geomean and single sample standard) from REC 1. This would be replaced with an *E. coli* objective of 126 (geomean of 5 samples over 30 days) for REC1. They are not considering a single sample maximum for *E. coli*.

EPA is encouraging states to replace the fecal coliform objectives with objectives for E. coli. However, we do not believe we can approve the standards change being proposed without a single sample standard for E. coli. In other EPA approvals, we have required adding single sample standards where only a geometric mean has been adopted.

Task Force Recommendations #7 and #10 (REC2 objectives). RB8 is proposing to retain the fecal coliform standard for REC2 (average of 2000, no more than 10% > 4000). Those standards were only conditionally approved when and where they were adopted as part of the standards in California, and only because more stringent REC1 standards apply to nearly all waters. The Task Force seeks clarification if the term “average” as applied to the REC2 standard for fecal coliforms can be interpreted as a geomean. They are also proposing that the single sample maxima for fecal coliform (currently in their Basin Plan) should be used as a trigger for monitoring only.

It is unclear why RB8 is not replacing the REC2 fecal objective with an E. coli objective. Having different indicators for different uses would seem to confuse the issue and could result in increased monitoring costs.

We believe that the term “average” for REC2 can be interpreted as a geomean. This would be consistent with the existing REC1 fecal standard. Such a clarification of the standards language would constitute a standards change.

Use of the single sample maxima as a trigger for monitoring would require a standards change. We suggest that the language in the California Ocean Plan regarding single sample maxima could be used as a model.

Recommendation #8. RB8 is proposing to remove the MUN objective for total coliform to surface water. They are not proposing to eliminate the MUN use for surface water, nor are they proposing to make any changes to the MUN use or objective for groundwater.

EPA has no objection to this recommendation. RB8 has a total coliform standard of 100 that applies to MUN. It can be argued that the need for this objective was obviated by the adoption of the Enhanced Surface Water Treatment Requirements into the national Primary Drinking Water Regulations. RB8 does not intend to change the MUN objective for groundwater which is 2.2 for total coliform.

Recommendation #9. RB8 is proposing a temporary high flow suspension. This would suspend both REC1 and REC2 uses when high flows caused by stormwater runoff, preclude safe recreation in the stream channel. The temporary suspension is automatically terminated when flow conditions have returned to a safe level". This would apply to streams only (not lakes or reservoirs). It would not be limited to engineered channels only.

This is a reasonable approach, however the proposal is too vague as to what criteria would be used to define high flow. The summary discusses a number of potential thresholds from USGS safe sampling criteria, Swift Water Rescue Safe Access criteria, LA Regional Board standard, or other. It is unclear how these decisions would be made. RB8 must provide the threshold hydrologic event values that would be used to initiate the high flow suspension of the use and the threshold values or duration limits that would signal the return of the use.

We agree that flow and velocity are important factors in estimating potential use of the waterbody for swimming but this is but one factor that should be considered. However, high flows may not preclude other recreational uses of the water where ingestion is possible (e.g., kayaking). We are also concerned that the high flow exclusion is not confined to specific engineered channels.

Recommendations #11-16. RB8 has identified 6 stream segments where they propose some sort of reclassification of uses. They indicate that UAAs are currently being performed on these segments.

EPA is not opposed to a re-classification of recreational waterbodies. However, the Task Force should specify how potential uses (REC1, REC2 and RECX) will be established and the thresholds for re-classification into these three use categories. The Task Force must specify the factors and thresholds that would be used in any UAA to downgrade a use from REC1 to REC2 or to remove the use entirely (RECX).