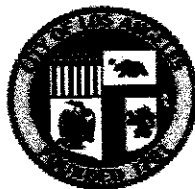


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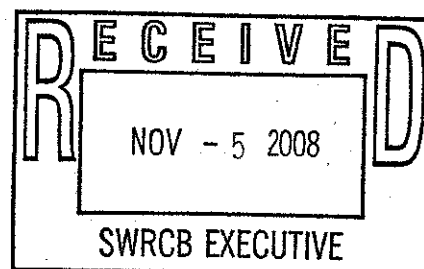
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November 5, 2008

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



STATEWIDE BACTERIAL OBJECTIVES FOR WATER CONTACT RECREATION IN FRESH WATERS OF CALIFORNIA - TECHNICAL COMMENTS ON CEQA SCOPING DOCUMENT

Dear Ms. Townsend:

The City of Los Angeles Bureau of Sanitation (Bureau of Sanitation) appreciates the opportunity to provide technical comments towards the State Water Resources Control Board's (State Board) revision to the Bacterial Standards for Water Contact Recreation in Freshwaters of California. The Bureau of Sanitation has been proactive and dedicated in addressing freshwater bacteria pollution. Accordingly, in addition to the initial CEQA scoping phase of the proposed revision, the Bureau of Sanitation would appreciate continued interaction with stakeholders on workshops held by your agency in future phases of the revisions until the final draft of the proposals are completed.

The Los Angeles Regional Water Quality Control Board (LARWQCB) has adopted EPA water quality objectives for bacterial indicators for water contact recreation, which are incorporated into requirements such as TMDLs. The State Board's objectives may impact the Los Angeles region implementation actions and will affect pending future TMDL re-considerations. Therefore, the Bureau of Sanitation is submitting technical comments on the proposed Potential Elements in the State Board's September 2008 Informational Document and on the CEQA checklist for potential environmental impacts of the proposals.



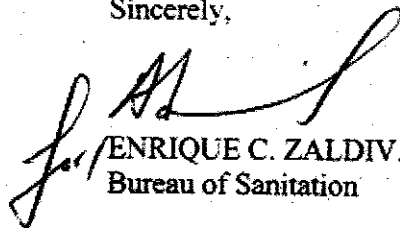
Jeanie Townsend
State Water Resources Control Board
November 5, 2008
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The Bureau of Sanitation is familiar with the complex nature of bacterial sources and behavior in the environment. The Bureau of Sanitation has conducted, and is aware of recent intense research and monitoring on bacterial pollution in freshwater streams and lakes. Currently, new epidemiological studies are being conducted, and the U.S. EPA is preparing new bacterial objectives by 2012. Technical issues such as the validity of indicator bacteria in assessing human fecal sources, bacterial survival and regrowth rates, and the degree of contribution of diverse natural sources continue to challenge scientists in identifying basic scientific concepts that promote or suppress bacterial growth in the environment.

As the science develops, there will be greater opportunity to incorporate scientific findings towards improving water quality sensibly, feasibly, and responsibly. The Bureau of Sanitation recommends that the State consider all available commentary and technical information from stakeholders, and carefully evaluate the available options in the goal of selecting and promoting viable options to improve water quality.

The Bureau of Sanitation's technical comments are presented in the attached Tables 1 and 2. If you have any additional questions regarding the Bureau of Sanitation's comments, please contact the Watershed Protection Division's Assistant Division Manager, Ms. Donna Chen at (213) 485-3928 or Mr. Zora Baharians, Water Biologist and lead on this document review, at (213) 485-3918.

Sincerely,



ENRIQUE C. ZALDIVAR, Director
Bureau of Sanitation

Attachment

Cc: Adel Hagekhalil, Bureau of Sanitation
Shahram Kharaghani, Bureau of Sanitation
Masahiro Dojiri, Bureau of Sanitation

Table 1: Comments on State Water Resources Control Board Potential Elements for Freshwater Recreational Use Bacterial Objectives - November 5, 2008

	POTENTIAL ELEMENT	COMMENT
1.	Bacterial Indicators	<p>Recent scientific and epidemiological studies at the Los Angeles River, Mission Bay, Marina Del Rey, and Santa Monica Bay show that the current bacterial indicator levels do not sufficiently correlate with anthropogenic bacteria sources that cause human health risks. The U.S. EPA is developing new water quality criteria based on new scientific and epidemiological studies by October 2012. Additionally, recent <i>Enterococcus</i> speciation studies at Orange County and Santa Monica Bay suggest that up to 50% of quantified <i>Enterococcus</i> may be from plant sources. A recent bacterial source investigation at the Los Angeles River showed that bacterial regrowth and survival could potentially be significant in altering indicator bacterial levels.</p> <p><u>Recommendation:</u> It is recommended that the State Board adopt provisions that accommodate scientific findings for appropriate indicators. Additionally, it is recommended that the State recognize the shortcomings and applicability of the currently used indicators in implicating the responsible sources and their level of bacterial contribution.</p>
2.	Level of Protection	<p>It is excessive in terms of cost for implementation to meet more stringent standards for waterbodies that are rarely or never used for recreational purposes. Since most freshwater streams in Southern California are channelized, using 75th percentile (Designated Beach Areas) for these streams may not be appropriate. Many of the fresh water streams and channels in the City of Los Angeles do not allow contact recreation, often because their primary functions are as flood control channels. Nonetheless, they are listed as REC-1.</p> <p><u>Recommendation:</u> It is recommended that the State Board include provisions to apply the appropriate level of protection suited for specific waterbodies. Infrequently, Used Full Body Contact (95th percentile) is a more appropriate standard for most fresh waterbodies in Los Angeles and should be considered for channelized rectangular streams.</p>
3.	Calculation of Effluent Limits	<p>Waterbody beneficial uses and bacterial objectives are meant for the subject receiving waters.</p> <p><u>Recommendation:</u> It is recommended that end-of pipe criteria not applied for effluent limit calculations.</p>
4.	Mixing Zones	<p>Sampling at mixing zones would be indicative of how the waterbody reacts to a tributary input, whereas sampling at the point of input only would only show the tributary data. On the other hand sampling the tributaries right before mixing could show if the tributaries are contributing to the exceedances and help with source tracking so remediation efforts can be taken for that tributary instead of focusing efforts in areas that may not need help in the watershed.</p> <p><u>Recommendation:</u> Specific sampling could be done in the tributaries for source tracking.</p>
5.	Averaging Periods	<p>In the Santa Monica Bay Beaches Bacteria TMDL, geometric mean as a 30-day rolling average has proven to be a problematic measure of bacterial water quality when monitoring locations have shown to be consistently meeting all single sample limits but still exceed geometric mean limits. Therefore, duplicate compliance to both geometric mean and the single sample maximum has been questionable as the correct measure of protecting recreational uses.</p> <p><u>Recommendation:</u> The use of geometric mean as a compliance measure should be subjected to</p>

		thorough scientific and statistic analysis and discussion on sample frequency and averaging period. If viable, geometric mean should be calculated as a seasonal or annual average, especially where less frequent sampling is available.
6.	Effluent Monitoring and Reporting	<p>Effluent monitoring frequency will depend on advances in scientific and statistical methods to evaluate an accurate application of water quality objectives in protecting beneficial uses. Establishing a uniformly standard monitoring frequency limits the applicability of technical advancements and new knowledge.</p> <p>Recommendation: It is recommended that the State build flexibility for monitoring schedules due to novel developments in scientific and statistical applications, and due to specific variations in waterbodies and their use, including accessibility and safety issues.</p>
7.	Analytical Methods	<p>Recently, parallel studies and inter-laboratory calibrations for specific waterbodies have proven to be useful tools in assessing available analytical methodology.</p> <p>Recommendation: It is recommended that the State be flexible in allowing analytical methods, provided the methods have been rigorously tested and undergone scientific examination.</p>
8.	Compliance Schedules and Interim Requirements	<p>Implementation of TMDLs take a great deal of coordination between responsible agencies and immense amount of time to plan, bid, design, construct and obtain funding. Interim milestones on a two-year basis are not practical for municipalities, because project cycles usually are longer. It also depends how compliance with interim milestones will be evaluated: percentage of watershed area (very difficult to do) or percentage reduction of waste load/exceedance frequency (more realistic approach if we follow a watershed approach for TMDL implementation).</p> <p>Recommendation: It is recommended that no action or longer compliance periods be selected.</p>
9.	Site-Specific Objectives	<p>In considering the inherent natural environmental variability that exists among waterbodies and among different parts of streams, it would be scientifically and hydrologically sensible to include the flexibility to determine SSOs for specific waterbodies.</p> <p>Recommendation: The limit should be the more suitable for the waterbody regardless if it is higher or lower than EPA estimates.</p>
10.	Implementation of Bacterial Objectives in Regards to TMDLs	<p>Since practical and efficient methods to accurately and timely differentiate and quantify anthropogenic and non-anthropogenic sources of bacteria do not exist, the natural source exclusion and the reference beach/antidegradation approach are necessary tools for assessment. Additionally, a reference system/anti degradation approach should require identification of reference systems that are truly comparable with a subject waterbody or parts/reaches of the waterbody.</p> <p>Recommendation: Consider truly comparable with a subject waterbody or parts/reaches of the waterbody.</p>

**Table 2: Comments on State Water Resources Control Board (State Board) Bacterial Objectives
 Additional CEQA Checklist Factors - November 5, 2008**

		COMMENT
1.	aesthetics	Potential impact if large and unattractive BMPs are required for implementation of new standards.
2.	agriculture resources	Potential impact on cost of operations.
3.	air quality	Potential impact from larger facilities for treatment.
4.	biological resources	Potential impact on habitat and biological species if water sources are depleted due to diversion of runoff to the sewer system or for treatment.
5.	cultural resources	Potential positive and negative impacts; positive – "cleaner" waters; negative – less funding available for cultural programs because of the expense of installing BMPs to meet excessive water quality standards
6.	geology and soils	No impact.
7.	hazards/hazardous materials	Potential positive impact through reduction of "hazardous" pathogenic bacteria. Potential negative impact from treatment BMP residues.
8.	hydrology/water quality	Potential impact if water sources are depleted due to diversion of runoff to the sewer system.
9.	land use/planning	Potential impact due to funding issues and possible depletion of water resources. Additionally, treatment of storm water entering fresh water systems would likely require significant land use.
10.	mineral resources	No impact.
11.	noise	No impact.
12.	population and housing	Potential funding impacts.
13.	public services	Potential funding impacts. The funds associated with treating these waters would come be removed from public service funds.
14.	recreation	Potential positive impacts, but also funding impacts.
15.	transportation/traffic	Potential increase in traffic to areas with new water quality standards.
16.	utilities and service systems	Potential funding impacts.
17.	mandatory findings of significance	No comment.