# Comment Summary and Responses

## Amendment to Establish Bacteria Objectives for Waters Designated for Contact Recreation in Marine and Estuarine Waters of the San Francisco Bay Region

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<tr>
<th>No.</th>
<th>Commenter</th>
<th>Commenter Name</th>
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<tbody>
<tr>
<td>1.</td>
<td>U.S. Environmental Protection Agency – Region 9</td>
<td>Diane E. Fleck</td>
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<td>2.</td>
<td>RMC Water and Environment (RMC)</td>
<td>Andy Eggleston</td>
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<td>3.</td>
<td>Bay Area Clean Water Agencies (BACWA)</td>
<td>Amy Chastain</td>
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<td>4.</td>
<td>Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP)</td>
<td>Adam Olivieri</td>
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<tr>
<td>No.</td>
<td>Author</td>
<td>Comment</td>
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<tr>
<td>0.1</td>
<td>Multiple</td>
<td>Some of the comments submitted in opposition to the State Board’s approval of this TMDL were previously submitted to the Regional Water Board and submitted verbatim to the State Board, without further explanation.</td>
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comment submitted below, the State Water Board cannot divine what the commenter believes has been adequately satisfied and what has not, nor can it determine the reason for any remaining dissatisfaction. State Board staff will review the SF Bay Water Board’s responses to ensure that they are thorough and address the specific question presented.

<table>
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<th>Commenter</th>
<th>Comments</th>
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<tr>
<td><strong>1.1 U.S. EPA</strong></td>
<td>We are pleased to express our support for the new Enterococcus objectives for the Water Contact Recreation beneficial use in marine and estuarine waters in Region 2. These objectives include: a geometric mean of less than 35 MPN/100 ml; and a &quot;no sample greater than&quot; value of 104 MPN/100 ml. These objectives are consistent with U.S. EPA’s BEACH Act of 2000, and U.S. EPA’s November 2004 implementing regulations entitled, &quot;Water Quality Standards for Coastal and Great Lakes Recreational Waters&quot; at 40 CFR Part 131.41. We expect implementation to be consistent with meeting the proposed objectives. We are pleased to support the package, and urge its adoption.</td>
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| **2.1 RMC Water and Environment (RMC)** | Having assisted in the reissuance of a number of Bay Area POTW NPDES permits that encompass a wide variety of discharge conditions, we are concerned about the language added to Section 4.5.5.1 that would require all such permits to include applicable effluent limits from Table 4-2A. While Table 4-2A indicates which limits are applicable to a number of certain specified discharge conditions, it does not address the full range of scenarios currently accounted for in Table 3-1.

We understand that the purpose of this Basin Plan amendment is to add enterococcus water quality objectives to protect the water contact recreation beneficial use in marine and estuarine waters rather than to overhaul the Basin Plan’s bacterial indicator objectives and address all beneficial uses. It appears, therefore, that eliminating the potential implementation of those objectives from Table 3-1 that are not directly addressed in Table 4-2A was most likely an oversight.

We recommend that the amendment be revised as follows in order | Table 4-2A contains effluent limits to ensure that the discharge of treated wastewater into State waters will not cause or contribute to exceedances of water quality objectives protective of the contact recreation beneficial use. Currently all POTWs in the San Francisco Bay Region, discharging into surface waters, must protect Water Contact Recreation as a beneficial use and therefore the effluent limits in Table 4-2A are applicable.

The only exception to this approach would be for circumstances where a discharge is proposed to surface waters that do not have Contact Recreation as a beneficial use. In this case, we agree that water quality-based effluent limitations derived from Table 3-1 would be more appropriate. However, since Water Contact Recreation is a beneficial use for all surface |
to avoid any unintended consequences (revisions are shown in bold double underline/strike-out):

**4.5.5.1 LIMITATIONS FOR CONVENTIONAL POLLUTANTS**

Table 4-2 contains effluent limitations for conventional pollutants are contained in Table 4-2 for discharges to inland surface waters and enclosed bays and estuaries within the region.

Table 4-2A contains both daily maximum and longer-term effluent limitations for bacteriological indicator organisms. All NPDES permits for discharges that contain sanitary waste shall include the applicable effluent limitations from Table 4-2A. If specific discharge conditions are not addressed by Table 4-2A, water quality-based effluent limitations may be derived directly from objectives included in Table 3-1. The water quality-based effluent limitations in Table 4-2A may be adjusted to account for dilution in a manner consistent with procedures in the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (see footnotes ‘a’ and ‘e’ in Table 4-2A).

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### 3.1 Bay Area Clean Water Agencies (BACWA)

Disinfection of sanitary waste is one of the most fundamental pollution prevention services that POTWs provide to their communities. POTWs balance, each day, the need to adequately protect San Francisco Bay users against pathogenic organisms with the broader impacts that can result from increased disinfection. Because it is a better indicator of water contact-related illness, the use of enterococcus will help agencies achieve this balance.

*Comment Noted*

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### 3.2 BACWA

The San Francisco Bay Regional Water Quality Control Board’s (Regional Water Board’s) Amendment makes substantial improvements to the Basin Plan by adding enterococcus and providing additional detail about how water quality objectives will be implemented in NPDES permits. However, BACWA requests changes to the proposed amendment to indicate how the objectives will apply.

In particular, footnote “b” of Table 3-1 should explain that the National Shellfish Sanitation Program (NSSP) guidelines are intended to protect areas where recreational or commercial shellfishing occurs. The NSSP is a federal and state cooperative program, first established by the U.S. Public Health Service in...
response to a recognized need to control disease associated with the consumption of raw shellfish. Its stated purpose is to “promote and improve the sanitation of shellfish…moving in interstate commerce.” The water quality standards established in the NSSP’s model ordinance are intended to apply to state classified shellfish growing areas for which the state must also perform regular sanitary surveys and develop management plans. These standards are not intended to apply broadly to ambient surface waters where no harvesting occurs.

3.3 BACWA

BACWA also requests that a new footnote be added to explain that the single sample maximum value for enterococcus is “best used for making beach notification and closure decisions” rather than being an effluent limitation per se. As explained in the EPA rule promulgating these national criteria, the geometric mean is the better value for determining whether appropriate actions are being taken to protect and improve water quality because it is “less subject to random variation, and more directly linked to the underlying studies upon which the 1986 bacteria criteria were based.”

The SF Bay Water Board has already addressed this comment in its response to comments No 1.3

State Water Board Staff reviewed the SF Bay Water Board's response to this comment and agrees with the response

Please see Response to Comment 0.1 above

3.4 BACWA

In addition, BACWA submitted a comment letter to the Regional Water Board on the proposed Amendment that included a request to clarify that either the enterococcus or the total coliform limitations are each individually sufficient to protect REC-1, and that both are not required. The Regional Water Board’s Response to Comments indicated that it was “not necessary to add the suggested explanation clarifying that permits need not contain both total coliform and enterococcus effluent limitations because the modifications to Chapter 4 of the Basin Plan clearly only require one indicator be established in effluent limitation to protect water contact recreation uses.”

Contrary to this statement, the State Water Board’s Draft Agenda Item staff report indicates that “The implementation program requires the inclusion of numeric water quality-based effluent limitations in NPDES municipal wastewater permits for fecal coliform and enterococcus in addition to current total coliform limits.”

BACWA requests that the State Water Board revise the Draft Agenda Item staff report to reflect that permits do not need to include effluent limitations for more than one indicator.

State Water Board staff agrees with the commenter's assertion and has made the requested changes to the "State Water Board’s Draft Agenda item". However, it should be noted that the referenced "State Water Board's Draft Agenda Item staff report" is only for informational purposes. It is an executive summary and does not contain any regulatory language or authority for this amendment. In addition, the State Water Board staff has reviewed the SF Bay Water Board's previous response that the commenter references and agrees.
The Program appreciates the opportunity to submit our explanations for why the responses provided by the San Francisco Bay Water Board (RWB) to our prior comments (see attached comment letter dated March 22, 2010) were inadequate and/or incorrect. A brief description of our highest priority issue is provided below, followed by our response to what we believe to be inadequate RWB staff responses to our associated comments.

### 4.1 Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP)

The Program appreciates the opportunity to submit our explanations for why the responses provided by the San Francisco Bay Water Board (RWB) to our prior comments (see attached comment letter dated March 22, 2010) were inadequate and/or incorrect. A brief description of our highest priority issue is provided below, followed by our response to what we believe to be inadequate RWB staff responses to our associated comments.

**Comment Noted**

** Basin Plan Should Retain all Four USEPA Single Sample Maximum Enterococcus Values (Table 3-2) to Provide Maximum Flexibility in Assessing Actual Public Health Risk During REC-1 Usage of Areas of the Bay Outside of Heavily Used Designated Beaches

Our primary unaddressed concern remains that the proposed Basin Plan Amendment (BPA) should not adopt only the single, most stringent single sample maximum (SSM) 104 MPN/100 mL Enterococcus value Bay-wide (this SSM was developed to protect heavily used legally designated beaches). Rather, as described in Comment 1 in our March 22, 2010 comment letter, the BPA should simply adopt the USEPA standard set of four single sample maximum values as water quality objectives, that are applicable based on the relative intensity of water contact recreational usage (i.e. moderately, lightly, and infrequently used) in a given area, and that are already included in the Basin Plan Table 3-2 (copy attached) as criteria.

These four USEPA SSM categories and associated Enterococcus values have been:

- promulgated by USEPA as water quality criteria since 1986;
- included verbatim in the SF Bay Basin Plan since 1986 (first in Table III-1A and currently in Table 3-2);
- promulgated by the USEPA for California coastal and estuarine waters in 2004 pursuant to the BEACH Act;
- included in the State Board’s September 2008 Scoping Document Proposed Revision to the Bacterial Standards for water Contact Recreation in Fresh Waters of California; and
- included as water quality objectives in other Basin Plans (e.g., San Diego Region, p. 3-6).

The SF Bay Water Board has already addressed this comment in its response to comments No 1.1

State Water Board Staff reviewed the SF Bay Water Board's response to this comment and agrees with the response and supports the SF Bay Water Board's selection of the 104 MPN/100 ml Single Sample Maximum.

The commenter has made it clear that they would prefer a tiered use alternative to the Single Sample Maximum values. While the US EPA has indeed promulgated all four values for use, SF Bay Water Board is not required to include them all in their Basin Plan. The selected Single Sample Maximum value ensures that all waters designated for recreation will be protected at all times. Although U.S. EPA allows state to “tier” their recreational uses by frequency they do not require the states to do so and allow the states to maintain one level of protection for all recreational waters. The SF Bay Water Board has basically applied the same single sample maximum and 30 day geometric mean that is included in the California Ocean Plan and State Water Board staff agrees that this approach is appropriate.

Also, the Table the commenter refers to (Table 3-2) does not actually contain Water Quality Objectives and remains as it currently exists in the Basin Plan. This table provides as a
reference, those criteria promulgated by the US EPA in 1986. These criteria were not intended to be used as objectives as is. From that table footnote 2 is as follows:

"The U.S. EPA criteria apply to water contact recreation only. The criteria provide for a level of production based on the frequency of usage of a given water contact recreation area. The criteria may be employed in special studies within this region to differentiate between pollution sources or to supplement the current coliform objectives for water contact recreation."

This is similar to the approach used in the San Diego Basin Plan. In the San Diego Basin Plan, the US EPA criteria are referred to as water quality objectives for the San Diego Region, however the same footnote applies; they may be employed in special studies to differentiate between pollution sources or to supplement the coliform objectives.

The 2008 scoping document represents possible alternatives to water quality objectives, not adopted policy and the implementation of the tiered SSM criteria was not addressed as part of CEQA scoping.

| 4.3 | SCVURPPP | Enterococcus Basin Plan Amendment (BPA) Staff Response to Comments (April 14, 2010) in italics followed by SCVURPPP response to the response to comments.

1) The purpose of this amendment is to incorporate enterococcus objectives into the Basin Plan to address their implementation for wastewater discharges. (p. 1)

The preceding statement is not supported by the record. Regardless of the Water Board’s purpose, the BPA’s effect is not

|  |  | State Water Board staff has reviewed the BPA and finds that it does not require any implementation measures for municipal or non-wastewater discharges. Any resulting consequences for other regulatory programs would be the result of later amendments that would be subject to the California Environmental Quality Act and section §13241 of Porter Cologne. SCVURPP and other stormwater agencies would have adequate opportunities to |
limited to wastewater discharges. The BPA did address wastewater discharges in Effluent Limits Table 4-2A, including the 35 MPN/100 mL geometric mean based on five consecutive samples equally spaced over a 30-day period and no associated SSM value (per EPA guidance). However, adding only the most stringent 104 MPN/100 mL SSM (for protection of heavily used designated beaches) to Table 3-1 will have potential consequences for other regulatory programs and non-wastewater sources (see below).

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<th>4.4</th>
<th>SCVURPPP</th>
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<tr>
<td>2) The reason we decided to take on this project was that we could accomplish it efficiently because we could rely on technical work already developed (p.1).</td>
<td>Please see response to comment 4.2 above.</td>
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Relying on prior technical work to achieve efficiency is laudable; however, the Water Board has neither taken full advantage of the efficiencies arising from USEPA’s prior work, nor created a situation likely to give rise to efficiency in terms of its own efforts going forward.

As noted above, the technical work regarding development of Enterococcus median and SSM values was completed and promulgated by USEPA in 1986. The exact same values are applicable today as in 1986 and are already included in the Basin Plan Table 3-2 as criteria. Adopting the four SSMs promulgated by USEPA in Table 3-2 instead as WQOs, would allow the Water Board more flexibility in implementing WQOs appropriately (i.e. matching SSMs to actual level of water contact use), while still fully protecting all intended recreational beneficial uses of the Bay. Again as noted above, all the SSMs have been promulgated for California by USEPA per the BEACH Act, so minimal if any additional technical work is required to include them as WQOs in the Basin Plan. For example, the San Diego Basin Plan Enterococcus WQOs are structured in this manner (p. 3-6 Table Title “WQOs for Enterococci and E. Coli” with “USEPA Bacteriological Criteria for Water Contact Recreation” titled table below that).

Again as noted above, all the SSMs have been promulgated for California by USEPA per the BEACH Act, so minimal if any additional technical work is required to include them as WQOs in the Basin Plan.

Please see response to comment 4.2 above.

State Board staff disagrees with the commenter’s statement that minimal if any additional technical work would be required to adopt all USEPA SSM values as water quality objectives. As was stated in the Supporting Staff Report prepared by the SF Bay Water Board, adopting the four SSMs would require investigations or judgments concerning the intensity of water contact recreation throughout San Francisco and Tomales Bays. Use patterns are not static so such designations would require periodic updating to remain accurate.

In addition, adding the additional US EPA criteria as objectives to protect different levels of use would also likely require adoption and designation of additional beneficial uses for limited water contact recreation. This would require an increased level of effort and additional analyses under section §13241 of Porter Cologne akin to a complete overhaul of the Bacteria Standards. The Regional Board has specifically stated in it’s response to comments (see Regional Board's response to comments 1.2 and 1.5.) that this would be outside of the scope of this amendment.

The SF Bay Water Board has applied the objectives correctly as they are consistent with
<table>
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<th>4.5</th>
<th>SCVURPPP</th>
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<tr>
<td>3) We have no data available to assign different use categories to different portions of San Francisco Bay (p.2).</td>
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This response to comments is inaccurate given the data made available to the California Water Board’s regarding public beaches by the legislature in AB 411 and AB 2534, as well as beside the point. It unnecessarily assumes a need to identify and assign different water contact recreational uses to different portions of the Bay before it is possible to adopt the four categories of USEPA SSMs as WQOs in the Basin Plan. See the above comments regarding the existence since 1986 nationally and locally in Basin Plan Table 3-2 of the USEPA SSM criteria.

We would assert the converse, that the proposed adoption of the single 104 MPN/100 mL SSM, would, without any data in the record, arbitrarily and capriciously assume with no factual basis the use of a heavily used designated beach to all marine/estuarine portions of San Francisco Bay.

The four tiered SSMs need to be included as WQOs in the Basin Plan to allow RWB staff and interested parties to most accurately evaluate the appropriate level of protection required to be provided to a given area, as data become available from such areas in the California Ocean Plan and Title 17, Section 7952 et seq. of the California Code of Regulations. The entire San Francisco Bay is designated as REC-1. SF Bay Water Board has chosen to apply the single sample maximum in a manner that is consistent with State and Federal Water Code; using the most protective SSM designated for REC-1. While all four of the SSMs have indeed been promulgated by the US EPA, there is no requirement that the policy as a whole should be applied.

As stated in Response to Comment 4.2 above, the San Diego Basin Plan states that the US EPA criteria are to be applied as supplemental criteria.

It is unclear what data the commenter is referring to that were made available by the legislature in AB411 and AB 2534. By these laws, the legislature required the Department of Health Services to promulgate regulations to protect public health. Those regulations (Title 17 CCR) established the minimum protective bacteriological standards for waters adjacent to public beaches and public water-contact sports areas. The enterococcus bacteria standards identified in these regulations are the same as the objectives the SF Water Board adopted in this amendment.

The commenter's statement that the application of the single sample maximum would be arbitrary and capricious is incorrect. This same single sample maximum has been applied to the entire California Coastline (except in certain circumstances i.e. TMDLs). The SF Bay Water Board is merely taking objectives that apply to coastal waters and moving them inland to the estuarine waters of the SF Bay. The entire SF
future. We know from limited ambient bacteriological studies in the Bay Area, and from other more extensive studies around the State, that there can be significant natural (e.g., birds, wildlife) and uncontrollable contributing sources of Enterococcus and other indicator bacteria to waterbodies. User surveys conducted pursuant to current Basin Plan Table 4-2 footnote "d" to support substituting fecal coliform effluent limitations for total coliform limitations have documented areas of the Bay where full body contact recreation rarely if ever occurs.

Given these facts, if the proposed BPA is not modified at this time to include all four SSMs, the RWB is likely to find itself in the position of having to reopen the Basin Plan in the future to include the missing SSMs, including perhaps the prerequisite for conducting potentially very costly Use Attainability Analyses to avoid the need for 303(d) listings for areas that are not truly impaired when compared to the SSM associated with the actual level of water contact use.

Bay is designated as REC-1, and using the most protective SSM is appropriate.

State Water Board staff disagrees that this amendment will create a need for the SF Bay Water Board to reopen the Basin Plan in the future to include the missing SSMs because of 303(d) listings. In general, the existing 303(d) listings are driven by exceedances of the 5-sample geometric mean or median (depending on the bacterial indicator sampled) and not the SSM. Other Indicator bacteria, e.g., total and fecal coliform, also show exceedances at these beaches.

The comment that exceedances of the proposed SSM objective would be the reason for conducting costly Use Attainability Analyses is purely speculative. In many cases, some locations in the bay would be in exceedance of all four of the SSMs during certain events. SF Bay Water Board has consistently stated that it is not likely that listings for water bodies with little or no public use would be based solely on exceedances of the SSM, nor would this be ideal. The majority of 303(d) listings are based upon the exceedance of the 5-sample geometric mean or median (depending on the bacterial indicator sampled) and not the SSM.

In any event, as stated in the amendment, the SF Bay Water Board does anticipate reopening the basin plan in the future after the US EPA promulgates new bacteriological water quality criteria, and possibly after the State Board adopts the freshwater bacterial objectives.
4) Many commenters stated a preference for inclusion of all tiered use single sample maxima (SSMs). They expressed concern that our approach would lead to unintended consequences of listing water bodies as impaired that are not heavily used for water contact recreation, such that onerous TMDLs would need to be developed and unnecessary costs of compliance imposed on dischargers. (p.2)

The concern about unintended impaired water body listings resulting from our choice of the SSM enterococcus objective is overstated, and concerns about higher levels of control measures based on the choice of single sample maximum objectives is unfounded. We do not think it likely that listings for water bodies with little or no public use would be based solely on exceedances of the SSM. (p.2) (emphasis added)

The Water Board’s predictions on what may be likely does not render the concern unfounded as the Clean Water Act’s listing requirements are not discretionary and could be enforced by USEPA or citizens’ suit even if the Water Board elected to exercise its discretion to not devote resources to such listings.

In addition, monitoring programs at areas other than the 12 designated beaches may not collect sufficient samples at the required frequency of five consecutive samples equally spaced over a 30-day period to be able to evaluate REC-1 compliance with the 35 MPN/100 mL geometric mean Enterococcus WQO. Monitoring results from non-designated beach near shore or offshore locations collected less frequently than five times per month, and/or over a longer time frame would by default have to be evaluated for impairment of REC-1 beneficial uses against the 104 MPN/100 mL SSM Enterococcus WQO, given the absence of any other applicable SSMs in the Basin Plan.

For example, it is foreseeable that bacteria water quality data collected from wetland areas where swimming is prohibited, or from difficult and unsafe to access slough areas (e.g., Lower South Bay) could have significant natural sources of Enterococcus and easily exceed the SSM for designated bathing beaches.

The existing listing policy requires data of sufficient temporal and spatial quality to exist in order to conduct an assessment. A few sporadically collected samples would likely not meet the data sufficiency requirements.

In general, existing 303(d) listings for San Francisco Bay beaches are driven by exceedances of the 5-sample geometric mean or median (depending on the bacterial indicator sampled) and not the SSM. Other indicator bacteria, e.g., total and fecal coliform also show exceedances at these beaches.

In addition, the SF Bay Water Board has regulatory tools to address sources associated with natural sources, such as bird use of wetland areas, if they are the predominant source of bacteria.
(104MPN/100mL), while consistently meeting the infrequently used recreational water SSM (500MPN/100mL).

When cases like these arise, the Water Board could be required to enforce the single Enterococcus SSM for heavily used designated bathing beaches at sites where swimming is in fact prohibited or extremely unlikely, which would in turn require the listing of the water body on the 303(d) list and a TMDL to be developed and implemented, all of which require significant resources of the Water Board and local agencies while providing little or no water quality protection. This approach is contrary to the State’s interests in efficiency, goes beyond what USEPA determined is protective of public health, and conflicts with actual uses and conditions in San Francisco Bay. Alternatively, adopting all four SSMs would allow the Water Board the flexibility in applying these criteria in a more appropriate manner.
5) *The concern that the SSM would somehow inform permit conditions for municipal stormwater discharges resulting in significant and unnecessary costs is also overstated* (p.3).

The preceding statement is conclusory, without evidence, and belied by experience elsewhere in the State. The SWB on December 14, 2010 adopted Resolution No. 2010-0064 approving the February 10, 2010 Resolution No. R9-2010-0001 by the San Diego Water Board amending the San Diego Basin Plan to incorporate revised TMDLs for indicator bacteria, Project I, for twenty beaches and creeks in the San Diego Region. As cited below, that TMDL differentiated between the use of Enterococcus SSM WQOs for wet weather numeric targets versus use of geometric mean Enterococcus WQOs for dry weather numeric targets.

“The single sample maximum WQOs were appropriate for use as wet weather numeric targets since wet weather conditions are episodic and short in duration. They are also characterized by rapid wash-off and transport of high bacteria loads, with short residence times from all land use types to receiving waters. The geometric mean WQOs were appropriate for use as dry weather numeric targets because dry weather runoff is not generated from storm flows, is not uniformly linked to every land use, and is more uniform than storm flow, with lower flows, lower loads, and slower transport, making die-off and/or amplification processes more important.” (SWB Item 8 12/14/10 p. 3).

A summary of the associated implementation provisions of the San Diego TMDL (SWB Item 8 12/14/10 p. 4) indicates that the SSM, given its linkage to the wet weather TMDL, would indeed inform TMDL/permit requirements for stormwater discharges.

“The TMDLs will be implemented primarily through the revision of the National Pollutant Discharge Elimination System (NPDES) permits that regulate discharges from the Phase I MS4s. The basis for this approach is that the Phase I MS4s are located at the base of the watersheds, and have been identified as the most significant controllable source of bacteria discharging into the receiving waters.

The commenter has provided an example of the SSM informing permit conditions and associated implementation measures required by a TMDL in San Diego. The SF Bay Water Board has considered all factors required by § 13241 of Porter Cologne when establishing water quality objectives. The SF Bay Water Board has clearly stated that there are no regulatory requirements or implementation measures for stormwater in this BPA, but has acknowledged that there may be controls necessary in the future. These controls are outside of the scope of this amendment and would be addressed in future amendments to the Basin Plan. However, the SF Bay Water Board did include an economic analysis as required under § 13241 of Porter Cologne for these potentially foreseeable controls in the Regional Board Staff Report as follows:

"Control of bacteria from urban runoff and non-point sources is not a required regulatory element of the current project. However, because it is possible that some areas where water contact occurs are influenced by such sources, it is foreseeable that some control of non-point sources of bacteria will be necessary. The scope of this project does not include identification of those areas that are not attaining the enterococcus criteria. Thus, it is not possible to specify in detail which measures will be necessary to control such sources in order to attain water quality standards in all locations. In any case, the Water Board is prohibited from specifying the manner of compliance with its regulations (Water Code § 13360), and accordingly, the actual compliance strategies will be selected by the local agencies and other permittees. That said,
The Phase I MS4s and Caltrans will be required to submit Bacteria Load Reduction Plans (BLRPs) or Comprehensive Load Reduction Plans (CLRPs) outlining a proposed BMP program that will be capable of achieving the necessary load reductions required to attain the TMDLs in the receiving waters, acceptable to the San Diego Water Board, within 18 month after the effective date of these TMDLs.” (emphasis added)

The draft SWB undated item (issued February 2, 2011) that would approve the Enterococcus BPA contains the following language indicating the potential need for urban runoff control measures where bacteriological water quality standards are not being met (e.g., the SSM).

“Control of bacteria from urban runoff and non-point sources is not a required regulatory element of the current project. However, potential control measures to control urban runoff and various non-point sources may be implemented where the San Francisco Bay Water Board determines that specific areas are not meeting bacteriological water quality standards. The specific priorities and control measures would need to be determined by a case by case basis, and could be addressed by an array of alternatives. Such control measures would most likely be addressed through TMDLs in separate Basin Plan amendments.” (p. 2)

While this amendment contains no implementation measures for stormwater, if the Regional Board were to adopt a TMDL it most likely would contain allocations to municipal stormwater. A TMDL could potentially include the adoption of site-specific water quality objectives, e.g., a different SSM based on frequency of recreational contact use that could address the concerns raised by the commenter. A TMDL would be subject to an open public process and SCVURPP would be most certainly invited to participate in the development of any future TMDLs for bacteria. SF Bay Water Board would appreciate and take into consideration any data that SCVURPP could provide that would inform these decisions in the future, specifically data related to frequency of recreational contact for waters in the SF Bay Region.

| Foreseeable methods of controlling or remediating non-point or urban runoff bacteria inputs are generally well known. A list of foreseeable structural measures for controlling or remediating bacteria in urban environments was developed for bacteria TMDLs for southern California beaches and the pathogen TMDL from Tomales Bay and is provided in the following table along with estimated unit costs where possible. Implementation of these measures may be subject to additional future environmental review by the appropriate lead agency.” (SF Bay Water Board's Staff report page 22) |
6) We want to emphasize that the interests of our Board are not served by developing and implementing TMDLs for ill-founded impairment determinations for areas where there is little water quality benefit or by requiring significant expenditures for bacterial control measures where little contact recreation use occurs. (p. 3)

We support these regulatory goals. However, to effectively achieve these goals, instead of a single WQO, the RWB needs to adopt into the Basin Plan all four *Enterococcus* SSMs promulgated by USEPA. This is the only way to provide for necessary regulatory flexibility in implementing water quality standards, while protecting beneficial uses in San Francisco Bay.

**Recommendations:**

There are a number of acceptable approaches, identified below, which would correct the above issue with the proposed BPA

a) That the State Water Board, on its own motion, modify Table 3-1 of the proposed Basin Plan Amendment to include all four of the USEPA *Enterococcus* SSMs below as WQOs:

- Designated (heavily used beach) 104 MPN/100 ml
- Moderately Used Area 124 MPN/100 ml
- Lightly Used Area 276 MPN/100 ml
- Infrequently Used Area 500 MPN/100 ml or;

b) That the State Water Board remand the proposed Basin Plan Amendment back to the Regional Water Board directing them to include all four USEPA *Enterococcus* SSMs as WQOs; or

c) That the State Water Board remand the proposed Basin Plan Amendment back to the Regional Water Board directing them to retain the prior Basin Plan Table 3-1 and to adopt as WQOs all the Table 3-2 USEPA Bacterial Criteria for Water Contact Recreation.

The State Water Board does not have the ability to make the suggested changes under its approval authority, only to approve or disapprove. State Water Board staff recommends approval of the amendment as adopted, and does not support a remand.