

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION**

RESOLUTION NO. R2-2009-0051

**APPROVING THE 2009 BASIN PLAN TRIENNIAL REVIEW OF THE WATER
QUALITY CONTROL PLAN FOR THE SAN FRANCISCO BAY REGION AND
ADOPTING A PRIORITY LIST OF BASIN PLAN ISSUES**

WHEREAS, the California Regional Water Quality Control Board, San Francisco Bay Region (Water Board), finds that:

1. The Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan) is the Water Board's master water quality control planning document. The Basin Plan has been duly adopted by the Water Board and approved by the State Water Resources Control Board, Office of Administrative Law and the U.S. EPA, where required.
2. The Basin Plan contains the Region's water quality standards, which consist of beneficial uses and water quality objectives necessary to protect those uses.
3. In accordance with section 303(c)(1) of the federal Clean Water Act and section 13240 of the California Water Code, the Water Board has concluded its 2009 triennial water quality standard review.
4. Water Board staff prepared an issue paper entitled "Brief Issue Descriptions," dated April 2008, describing potential Basin Plan projects, and a staff report dated April 2009, describing the 2009 Basin Plan Triennial Review process and the prioritized list of Basin Plan issues to be investigated over the next three years.
5. As a part of this review, Water Board staff circulated the issue paper and held a workshop on May 19, 2008, for the purpose of receiving public comments concerning the need for revisions to the water quality standards, (i.e., beneficial use designations, water quality objectives, etc.) established in the Basin Plan, as amended.
6. The Water Board held a public hearing on July 8, 2009, for the purpose of receiving testimony on the 2009 Basin Plan Triennial Review staff report.
7. The Water Board reviewed and carefully considered all comments and testimony received relative to the 2009 Basin Plan Triennial Review staff report.

8. The Water Board notified all known interested parties of its intent to adopt the *2009 Prioritized List of Basin Plan Issues for Investigation* in fulfillment of the 2009 Triennial Review.

NOW THEREFORE BE IT RESOLVED, that

1. The Water Board hereby certifies completion of the 2009 Basin Plan Triennial Review and adopts the *2009 Prioritized List of Basin Plan Issues for Investigation* as set forth in Attachment A to this Resolution; and
2. The Water Board may address issues described in the 2009 Basin Plan Triennial Review staff report but not included in Attachment A, as staff and external resources may become available; and
3. The entire Basin Plan shall remain in effect until such time that appropriate and specific amendments are adopted by the Water Board and approved by the appropriate review authorities.

I, Bruce H. Wolfe, Executive Officer, do hereby certify the foregoing is a full, true and correct copy of a Resolution adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on July 8, 2009.

BRUCE H. WOLFE
Executive Officer

Attachment A – 2009 Prioritized List of Basin Plan Issues for Investigation

ATTACHMENT A

2009 Prioritized List of Basin Plan Issues for Investigation

ISSUE TITLE	1. Complete Stream and Wetland Systems Protection Policy	
CATEGORY	Beneficial Uses	
ISSUE SUMMARY	<p>This project is to complete the Stream and Wetland Policy currently under development. Staff has made considerable progress on this project, which was identified in the last Triennial Review as a high priority. The resulting Basin Plan amendment would protect stream and wetland systems, which include stream channels, wetlands, floodplains, and riparian areas. The amendment is expected to help protect and restore the physical characteristics of these systems, including their connectivity and natural hydrologic regimes, in order to protect beneficial uses. The proposed stream protection amendment would designate two beneficial uses of streams and wetlands, water quality enhancement and flood peak attenuation/flood water storage. These beneficial uses explicitly recognize that physical characteristics of water bodies contribute to better water quality, and need to be protected in the Water Board's permitting programs in order to achieve the Water Board's mission of protecting all beneficial uses of the Region's water bodies.</p> <p>The proposed amendment may also include new water quality objectives, and an implementation plan that sets forth actions needed to attain the new water quality standards. The implementation plan will provide flexibility to account for a wide range of watershed conditions (e.g., degree of urbanization, watershed size, and surrounding land uses) and will establish a general framework for avoiding, minimizing, and mitigating water quality impacts.</p> <p>A single Stream and Wetland Systems Protection Policy will be proposed for Basin Plan adoption in both the North Coast and San Francisco Bay Regions to improve regulatory consistency.</p> <p>The policy would be implemented by the Watershed Division via issuance of CWA Section 401 water quality certifications for projects requiring U.S. Army Corps of Engineers CWA Section 404 permits for fill of U.S. Waters and would also apply to regulation of local jurisdictions through NPDES permits for discharges of urban runoff.</p>	
PROPOSED BY:	Water Board	
SUPPORTED BY:	U.S. EPA Bay Area Stormwater Management Agencies Association Guadalupe-Coyote Resource Conservation District	
PRIORITIZED RANK: 1	GENERALIZED RANK: HIGH	
SCORE: 82	COMPLEXITY: HIGH	
ESTIMATED PERSONNEL-YEARS (PY): 2.0	PY RUNNING TOTAL: 2.0	
IMPLEMENTING DIVISION: WATERSHED		

ISSUE TITLE	2. Complete the Update of Significant Water bodies and their Associated Beneficial Uses, Update Maps	
CATEGORY	Beneficial Uses	
ISSUE SUMMARY	A number of the Region's surface water bodies with substantial public interest are not specifically identified in the Basin Plan's water body list. Such water bodies would be added and appropriate beneficial uses designated. Basin Plan maps would also be updated (Figures 2-3 through 2-9) to include the newly listed water bodies. This project is currently in progress as it was a prioritized project under the last Triennial Review.	
PROPOSED BY	Water Board	
SUPPORTED BY	Bay Area Stormwater Management Agencies Association U.S. EPA Guadalupe-Coyote Resource Conservation District Ross Creek Neighbors	
PRIORITIZED RANK: 2	GENERALIZED RANK: HIGH	
SCORE: 75	COMPLEXITY: MEDIUM	
ESTIMATED PERSONNEL-YEARS (PY): 0.6	PY RUNNING TOTAL: 2.6	
IMPLEMENTING DIVISION: PLANNING AND TMDL		

ISSUE TITLE	3. Adopt U.S. EPA BEACH Act Marine Recreational Contact Criteria as Objectives	
CATEGORY	Water Quality Objectives	
ISSUE SUMMARY	<p>U.S. EPA promulgated bacteriological indicator criteria (<i>1986 Ambient Water Quality Criteria for Bacteria</i>, “Water Quality Standards for Coastal and Great Lakes Recreation Waters” 69FR 67217 et seq. also 40 CFR part 131.41; effective date December 16, 2004) for protection of human health due to contact recreation that are more appropriate than the current Basin Plan objectives of total and fecal coliform. The criteria are based on enterococci. In 1986, the Water Board included the then-newly adopted U.S. EPA bacteriological criteria for reference (Table 3-2), but not as water quality objectives.</p> <p>Adoption of these criteria as objectives would also involve evaluating the appropriateness of the effluent limitations identified in Table 4-2. Current effluent limitations for bacteria are expressed as total coliform.</p> <p>Enterococci are commonly used as a bacterial indicator in sampling conducted as part of the beach monitoring program to assess safety for recreational contact, and the sampling results have been assessed by the U.S. EPA to support the listing of several beaches on this Region’s impaired water body list (303(d) list). In addition, enterococci were included as a water quality target in the Richardson Bay TMDL Basin Plan amendment adopted by the Water Board in July 2008.</p> <p>The U.S. EPA is currently in the process of developing new bacterial indicators to address some of the limitations of the existing indicators. That effort will take a few years and adoption of these criteria as objectives is appropriate. Staff has already begun the initial stages of this project.</p>	
PROPOSED BY	U.S. EPA	
SUPPORTED BY	Water Board Bay Area Clean Water Agencies Bay Area Stormwater Management Agencies Association City of Sunnyvale	
PRIORITIZED RANK: 3	GENERALIZED RANK: HIGH	
SCORE: 75	COMPLEXITY: MEDIUM	
ESTIMATED PERSONNEL-YEARS (PY): 0.6	PY RUNNING TOTAL: 3.2	
IMPLEMENTING DIVISION: PLANNING AND TMDL, NPDES, WATERSHED		

ISSUE TITLE	4. Designate Beneficial Uses for Hayward Marsh	
CATEGORY	Beneficial Uses	
ISSUE SUMMARY	<p>The Hayward Marsh is a 145-acre improved marsh system including three freshwater marsh basins (85 acres) and two brackish marsh basins (60 acres) at Hayward Shoreline Regional Park, adjacent to Lower San Francisco Bay. The three freshwater marsh basins (Basins 1, 2A, and 2B) are part of a wastewater treatment process and are not waters of the United States. The two brackish marsh basins (Basins 3A and 3B) are waters of the United States and do not have specified beneficial uses other than those beneficial uses generically established in the Basin Plan for wetlands in the Hayward area, including contact recreation. At issue is whether contact recreation is an existing use of Basins 3A and 3B and whether water quality objectives protective of contact recreational uses should apply. The Water Board issued an NPDES permit in May 2006 to Union Sanitary District requiring it to submit information regarding beneficial uses of Basins 3A and 3B. Union Sanitary District has submitted the required information. The Water Board would consider designating beneficial uses specific to Basins 3A and 3B as part of the Update of Beneficial Uses project or as a separate Basin Plan amendment.</p>	
PROPOSED BY	Water Board	
SUPPORTED BY	Union Sanitary District	
PRIORITIZED RANK: 4	GENERALIZED RANK: HIGH	
SCORE: 73	COMPLEXITY: LOW	
ESTIMATED PERSONNEL-YEARS (PY): 0.3	PY RUNNING TOTAL: 3.5	
IMPLEMENTING DIVISION: NPDES		

ISSUE TITLE	5. Development of Bioassessment Objectives - Implementation Plan	
CATEGORY	Water Quality Objectives	
ISSUE SUMMARY	<p>Biological assessments provide direct measures of the cumulative response of the biological community to all sources of stress; they measure the condition of the aquatic resource to be protected. Biological objectives set the biological quality goal, or target, to which water quality can be managed, rather than the maximum allowable level of a stressor (pollutant or other water quality condition) that affects the aquatic life in that water body. Therefore, biological objectives are more integrative and environmentally relevant goals for the protection of aquatic life than objectives based on stressors that are currently in the Basin Plan. U.S. EPA is encouraging states to adopt biological objectives. Several states, such as Ohio and Florida, have done so and Water Boards in Southern California are currently in the process of incorporating biological objectives into their Basin Plans.</p> <p>In California, the Surface Water Ambient Monitoring Program (SWAMP) has been actively involved in collecting the information needed to develop biological objectives. In the San Francisco Bay region, SWAMP has collected bioassessment data by monitoring watersheds in the Region. In addition, through the Bay Area Macro Benthic Invertebrate network (BAMBI-net), SWAMP has been collaborating with stormwater and other watershed monitoring programs to develop a Bay Area specific index of biotic integrity, referred to as an IBI.</p> <p>State Water Board has indicated its intention to develop statewide narrative biological objectives, thus this project would not duplicate that effort. Instead the Water Board would build on these objectives. Projects could include developing a San Francisco Bay specific implementation plan, or the development of tiered aquatic life beneficial uses.</p>	
PROPOSED BY	U.S. EPA	
SUPPORTED BY	State Water Board, Water Board Bay Area Stormwater Management Agencies Association U.S. EPA	
PRIORITIZED RANK: 5	GENERALIZED RANK: HIGH	
SCORE: 71	COMPLEXITY: MEDIUM	
ESTIMATED PERSONNEL-YEARS (PY): 1.5	PY RUNNING TOTAL: 5.0	
IMPLEMENTING DIVISION: PLANNING AND TMDL, WATERSHED		

ISSUE TITLE	6. Evaluate the Shellfish Harvesting Beneficial Use	
CATEGORY	Beneficial Uses	
ISSUE SUMMARY	<p>All of San Francisco Bay is currently designated appropriate for commercial and recreational shellfish uses (SHELL). There are currently no commercial shellfish beds in San Francisco Bay. Commercial shellfish beds in the region are in Tomales Bay and along the coast at Point Reyes National Seashore. The Basin Plan identifies water quality objectives for shellfishing using a bacterial indicator, measured as fecal coliforms. The objective is based on protection of commercial shellfish beds for human health consumption. Studies are being conducted at the State Water Board to identify where recreational shellfish harvesting is currently occurring along the coast and within the estuary. This may result in a refinement of the spatial and temporal patterns of shellfish harvesting uses. The project may also include refinement of the beneficial use definition to distinguish between commercial and recreational shellfishing as well as the collection of information to support a reference/natural source implementation option for SHELL. Currently we are participating with other Regional Boards and the State Water Board in the development of the statewide project related to this beneficial use. A regional basin planning project would follow this statewide effort.</p>	
PROPOSED BY	Water Board	
SUPPORTED BY	Bay Area Clean Water Agencies Bay Area Stormwater Management Agencies Association City of Sunnyvale	
PRIORITIZED RANK: 6	GENERALIZED RANK: HIGH	
SCORE: 69	COMPLEXITY: HIGH	
ESTIMATED PERSONNEL-YEARS (PY): 2.0	PY RUNNING TOTAL: 7.0	
IMPLEMENTING DIVISION: PLANNING AND TMDL, NPDES		

ISSUE TITLE	7. Numeric Nutrient Criteria	
CATEGORY	Water Quality Objectives	
ISSUE SUMMARY	<p>The Basin Plan does not currently include numeric water quality objectives protective of nutrient related impairments, e.g., excessive algae growth (eutrophication), unnatural foam, odor, etc., associated with excessive nitrogen and phosphorous. To address impacts from eutrophication, U.S. EPA and the State Water Board developed a technical approach and framework for developing numeric nutrient endpoints (NNEs) for California waters. The scientific framework supports the development of numeric endpoints for a suite of biological response indicators (e.g., algal biomass, dissolved oxygen, water clarity, etc.) that are directly linked with beneficial uses. The State Water Board is in the process of evaluating the framework to support freshwater nutrient objective development to be adopted statewide. Pilot studies for the freshwater NNE framework have already been conducted and are undergoing peer review. Water Board staff would follow this effort and evaluate their application for fresh waters in the Region.</p> <p>In additional, a State Regional Technical Advisory Group has been established by State Water Board to support application of the framework to California estuaries. San Francisco Bay has been selected as one of the pilot estuaries for evaluation. The State Water Board has a three-year workplan with the Southern California Coastal Water Research Project (SCCWRP), which will include participation by the San Francisco Estuary Institute (SFEI). Water Board staff would participate in this State Water Board project.</p>	
PROPOSED BY	U.S. EPA	
SUPPORTED BY	Water Board, State Water Board	
PRIORITIZED RANK: 7	GENERALIZED RANK: HIGH	
SCORE: 67	COMPLEXITY: HIGH	
ESTIMATED PERSONNEL-YEARS (PY): 2.0	PY RUNNING TOTAL: 9.0	
IMPLEMENTING DIVISION: PLANNING AND TMDL		

ISSUE TITLE	8. Describe Environmental Screening Levels (ESLs) Tiered Decision Process for Groundwater Cleanups	
CATEGORY	Implementation	
ISSUE SUMMARY	Staff would update the Basin Plan with a description of the tiered-decision process used to determine relevant exposure pathways and appropriate site cleanup levels using environmental screening levels (ESLs). The decision process expands the existing protection of groundwater beneficial uses to include potential risk to human health from indoor air exposure and protection of aquatic receptors. This update would not incorporate the current ESL criteria but rather the ESL approach. This would document our current process for screening sites using a multiple pathway conceptual model, which includes groundwater and surface water interactions. This project was included in the prioritized list in the last Triennial Review and some initial work, supported by the Toxics Division, has already been conducted.	
PROPOSED BY	Water Board	
SUPPORTED BY		
PRIORITIZED RANK: 8	GENERALIZED RANK: HIGH	
SCORE: 67	COMPLEXITY: LOW	
ESTIMATED PERSONNEL-YEARS (PY): 0.3	PY RUNNING TOTAL: 9.3	
IMPLEMENTING DIVISION: TOXICS, GROUNDWATER PROTECTION		

ISSUE TITLE	9. Update Based on State Water Board's Water Recycling Policy	
CATEGORY	Update Implementation Plans	
ISSUE SUMMARY	The Water Board acknowledges the importance of using recycled water to meet California's future water supply needs and would update language in the Basin Plan to reflect the State Water Board's recent policy on recycled water (Resolution 2009-0011) and other policies or statewide permits related to the use of recycled water. State Water Board's recycled water policy charges the Regional Water Boards with using their authority to the fullest extent possible to encourage the use of recycled water. This Board has adopted a General Water Reuse Permit, Order 96-011, which has been effective to date in encouraging reuse of recycled wastewater.	
PROPOSED BY	Water Board	
SUPPORTED BY	City of Sunnyvale Alameda County Water District	
PRIORITIZED RANK: 9	GENERALIZED RANK: HIGH	
SCORE: 60	COMPLEXITY: LOW	
ESTIMATED PERSONNEL-YEARS (PY): .3	PY RUNNING TOTAL: 9.6	
IMPLEMENTING DIVISION: WATERSHED, PLANNING AND TMDL, NPDES		