

**State of California**  
**California Regional Water Quality Control Board, Los Angeles Region**

**RESOLUTION NO. 2002-022**  
**December 12, 2002**

**Amendment to the Water Quality Control Plan (Basin Plan) for the Los Angeles Region to Incorporate Implementation Provisions for the Region's Bacteria Objectives and to Incorporate a Wet-Weather Total Maximum Daily Load for Bacteria at Santa Monica Bay Beaches**

**WHEREAS, the California Regional Water Quality Control Board, Los Angeles Region, finds that:**

1. The federal Clean Water Act (CWA) requires the California Regional Water Quality Control Board, Los Angeles Region (Regional Board) to develop water quality standards which include beneficial use designations and criteria to protect beneficial uses for each water body found within its region.
2. The Regional Board carries out its CWA responsibilities through California's Porter-Cologne Water Quality Control Act and establishes water quality objectives designed to protect beneficial uses contained in the Water Quality Control Plan for the Los Angeles Region (Basin Plan).
3. Section 303(d) of the CWA requires states to identify and to prepare a list of water bodies that do not meet water quality standards and then to establish load and waste load allocations, or a total maximum daily load (TMDL), for each water body that will ensure attainment of water quality standards and then to incorporate those allocations into their water quality control plans.
4. Many of the beaches along Santa Monica Bay were listed on California's 1998 section 303(d) list, due to impairments for coliform or for beach closures associated with bacteria generally. The beaches appeared on the 303(d) list because the elevated bacteria and beach closures prevented full support of the beaches' designated use for water contact recreation (REC-1).
5. A consent decree between the U.S. Environmental Protection Agency (USEPA), Heal the Bay, Inc. and BayKeeper, Inc. was approved on March 22, 1999. This court order directs the USEPA to complete TMDLs for all the Los Angeles Region's impaired waters within 13 years. A schedule was established in the consent decree for the completion of 29 TMDLs within 7 years, including completion of a TMDL to reduce bacteria at Santa Monica Bay beaches by March 2002. The remaining TMDLs will be scheduled by Regional Board staff within the 13-year period.
6. The elements of a TMDL are described in 40 CFR 130.2 and 130.7 and section 303(d) of the CWA, as well as in USEPA guidance documents (e.g., USEPA, 1991). A TMDL is defined as "the sum of the individual waste load allocations for point sources and load allocations for nonpoint sources and natural background" (40 CFR 130.2). Regulations further stipulate that TMDLs must be set at "levels necessary to attain and maintain the applicable narrative and numeric water quality standards with seasonal variations and a margin of safety that takes into account any lack of knowledge concerning the relationship between effluent limitations

and water quality" (40 CFR 130.7(c)(1)). The provisions in 40 CFR 130.7 also state that TMDLs shall take into account critical conditions for stream flow, loading and water quality parameters.

7. Upon establishment of TMDLs by the State or USEPA, the State is required to incorporate the TMDLs along with appropriate implementation measures into the State Water Quality Management Plan (40 CFR 130.6(c)(1), 130.7). The Basin Plan and applicable statewide plans serve as the State Water Quality Management Plans governing the watersheds under the jurisdiction of the Regional Board.
8. Santa Monica Bay is located in Los Angeles County, California. The proposed TMDL addresses documented bacteriological water quality impairments at 44 beaches from the Los Angeles/Ventura County line, to the northwest, to Outer Cabrillo Beach, just south of the Palos Verdes Peninsula.
9. The Regional Board is establishing the above-mentioned TMDL to preserve and enhance the water quality at Santa Monica Bay beaches and for the benefit of the 55 million beachgoers, on average, that visit these beaches each year. At stake is the health of swimmers and surfers and associated health costs as well as sizeable revenues to the local and state economy. Estimates are that visitors to Santa Monica Bay beaches spend approximately \$1.7 billion annually.
10. The Regional Board's goal in establishing the above-mentioned TMDL is to reduce the risk of illness associated with swimming in marine waters contaminated with bacteria. Local and national epidemiological studies compel the conclusion that there is a causal relationship between adverse health effects, such as gastroenteritis and upper respiratory illness, and recreational water quality, as measured by bacteria indicator densities. The water quality objectives on which the TMDL numeric targets are based will ensure that the risk of illness to the public from swimming at Santa Monica Bay beaches generally will be no greater than 19 illnesses per 1,000 swimmers, which is defined by the US EPA as an "acceptable health risk" in marine recreational waters.
11. Interested persons and the public have had reasonable opportunity to participate in review of the amendment to the Basin Plan. Efforts to solicit public review and comment include staff presentations to the Santa Monica Bay Restoration Project's Bay Watershed Council and Technical Advisory Committee between May 1999 and October 2001 and creation of a Steering Committee in July 1999 to provide input on scientific and technical components of the TMDL with participation by the Southern California Coastal Water Research Project, City of Los Angeles, County of Los Angeles Department of Public Works, County Sanitation Districts of Los Angeles County, Heal the Bay, and Santa Monica Bay Restoration Project.
12. A first draft of the TMDL for bacteria at Santa Monica Bay beaches was released for public comment on November 9, 2001; an interim draft TMDL covering wet weather only was released on June 21, 2002, for discussion at a public workshop; and a public workshop on the draft Wet-Weather TMDL was held on June 27, 2002 at a regularly scheduled Regional Board meeting.
13. A final draft of the Wet-Weather TMDL along with a Notice of Hearing and Notice of Filing were published and circulated 45 days preceding Board action; Regional Board staff responded to oral and written comments received from the public; and the Regional Board

held a public hearing on September 26, 2002 to consider adoption of the Wet-Weather TMDL.

14. The Regional Board continued the item from the September 26, 2002 Board meeting to the December 12, 2002 Board meeting to give staff time to make revisions based on public comments and Board discussion at the September 26, 2002 Board meeting. Specifically, the Board wanted an implementation program that was reasonable and as short as practicable given the testimony on impairments to the RFC-1 beneficial use.
15. The Regional Board recognizes that there are two broad approaches to implementing the TMDL. One approach is an integrated water resources approach that takes a holistic view of regional water resources management by integrating planning for future wastewater, storm water, recycled water, and potable water needs and systems; focuses on beneficial re-use of storm water, including groundwater infiltration, at multiple points throughout a watershed; and addresses multiple pollutants for which Santa Monica Bay or its watershed are listed on the CWA section 303(d) List as impaired. The other approach is a non-integrated water resources approach.

Some responsible jurisdictions and agencies have indicated a preference to take an integrated water resources approach to realize the benefits of re-using storm water to preserve local groundwater resources and to reduce reliance on imported water. The Regional Board recognizes that an integrated water resources approach not only provides water quality benefits to the people of the Los Angeles Region, but also recognizes that the responsible jurisdictions implementing this TMDL can serve a variety of public purposes by adopting an integrated water resources approach. An integrated water resources approach will address multiple pollutants, and as a result, responsible jurisdictions can recognize cost-savings because capital expenses for the integrated approach will implement several TMDLs that address pollutants in storm water. In addition, jurisdictions serve multiple roles for their citizenry, and an integrated approach allows for the incorporation and enhancement of other public goals such as water supply, recycling and storage; environmental justice; parks, greenways and open space; and active and passive recreational and environmental education opportunities.

The Regional Board acknowledges that a longer timeframe is reasonable for an integrated water resources approach because it requires more complicated planning and implementation such as identifying markets for the water and efficiently siting storage and transmission infrastructure within the watershed(s) to realize the multiple benefits of such an approach.

16. Therefore, after considering testimony, the Regional Board directed staff to adjust the implementation provisions of the TMDL to allow for a longer implementation schedule (up to 18 years) only when the responsible jurisdictions and agencies clearly demonstrate their intention to undertake an integrated water resources approach and justify the need for a longer implementation schedule. In contrast, testimony indicated that a shorter implementation schedule (up to 10 years) is reasonable and practicable for non-integrated approaches because the level of planning is not as complicated.
17. A revised draft of the Basin Plan amendment and Tentative Resolution were circulated 45 days preceding Board action. Regional Board staff responded to oral and written comments received from the public on the revised draft. The Regional Board held a second public hearing on December 12, 2002 to consider adoption of the Wet-Weather TMDL.

18. On October 25, 2001, the Regional Board adopted Resolution 2001-018 establishing revised bacteriological water quality objectives for the Water Contact Recreation (REC-1) beneficial use, and the TMDL is intended to accompany and to implement the revised water quality objectives. The State Water Resources Control Board approved the Regional Board's Basin Plan amendment on July 18, 2002 in State Board Resolution 2002-0142, the Office of Administrative Law approved it on September 19, 2002 in OAL File No. 02-0807-01-S, and the US EPA approved it on September 25, 2002.
19. Under certain circumstances and through the TMDL development process, the Regional Board proposes to implement the aforementioned revised bacteria objectives using either a 'reference system/anti-degradation approach' or a 'natural sources exclusion approach.' As required by the CWA and Porter-Cologne Water Quality Control Act, the Basin Plan includes beneficial uses of waters, water quality objectives to protect those uses, an anti-degradation policy, collectively referred to as water quality standards, and other plans and policies necessary to implement water quality standards. This TMDL and its associated waste load allocations, which will be incorporated into relevant permits, are the vehicles for implementation of the bacteria standards as required under Water Code section 13242.
20. Both the 'reference system/anti-degradation approach' and the 'natural sources exclusion approach' recognize that there are natural sources of bacteria that may cause or contribute to exceedances of the single sample objectives.
21. The Regional Board's intent in implementing the bacteria objectives using a 'reference system/anti-degradation approach' is to ensure that bacteriological water quality is at least as good as that of a reference site and that no degradation of existing bacteriological water quality is permitted where existing bacteriological water quality is better than that of a reference site. The Regional Board's intent in implementing the bacteria objectives using a 'natural sources exclusion approach' is to ensure that all anthropogenic sources of bacteria are controlled such that they do not cause an exceedance of the single sample objectives. These approaches are consistent with state and federal anti-degradation policies (State Board Resolution No. 68-16 and 40 C.F.R. 131.12), while acknowledging that it is not the intent of the Regional Board to require treatment or diversion of natural coastal creeks or to require treatment of natural sources of bacteria from undeveloped areas. While treatment and diversion of natural sources may fully address the impairment of the water contact recreation beneficial use, such an approach may adversely affect valuable aquatic life and wildlife beneficial uses in the Region.
22. For the Wet-Weather and Dry-Weather Bacteria TMDLs at Santa Monica Bay beaches, Leo Carrillo Beach and its associated drainage area, Arroyo Sequit Canyon, were selected as the local reference system until other reference sites or approaches are evaluated and the necessary data collected to support the use of alternative reference sites or approaches when the TMDL is revised four years after the effective date. Leo Carrillo Beach was selected as the interim reference site because it best met the three criteria for selection of a reference system. Specifically, its drainage is the most undeveloped subwatershed in the larger Santa Monica Bay watershed, the subwatershed has a freshwater outlet (i.e., creek) to the beach, and adequate historical shoreline monitoring data were available. It is the intent of the Regional Board to re-evaluate the use of Leo Carrillo Beach due to potential problems arising from the heavy recreational use of the beach and the close proximity of two campgrounds.
23. Northern Bay beach monitoring sites are fewer in number and provide less comprehensive data than the extensive shoreline monitoring network elsewhere in Santa Monica Bay.

24. The numeric targets in this TMDL are not water quality objectives and do not create new bases for enforcement against dischargers apart from the water quality objectives they translate. The targets merely establish the bases through which load allocations and wasteload allocations (WLAs) are calculated. WLAs are only enforced for a discharger's own discharges, and then only in the context of its National Pollutant Discharge Elimination System (NPDES) permit, which must be consistent with the assumptions and requirements of the WLA. The Regional Board will develop permit requirements through a subsequent permit action that will allow all interested persons, including but not limited to municipal storm water dischargers, to provide comments on how the waste load allocations will be translated into permit requirements.
25. The Regional Board has the authority to authorize compliance schedules through the basin planning process. In this Basin Plan amendment, the Regional Board establishes a schedule for implementation that affords the responsible jurisdictions and agencies up to ten or eighteen years, depending on the implementation approaches pursued, to implement this Wet-Weather Bacteria TMDL.
26. Previously, the Regional Board adopted a Dry-Weather Bacteria TMDL for the Santa Monica Bay Beaches. The Dry-Weather TMDL includes implementation provisions contained in Table 7-4.3 of the Basin Plan, including a provision to reconsider two years after the effective date the Dry-Weather TMDL and specifically the reference beach(es) used. Because that effort overlaps with reconsideration of the reference beach(es) anticipated by this Wet-Weather TMDL, the Regional Board proposes to coordinate the reconsiderations of the reference beach approach to assure efficiency and consistency in implementing the two Santa Monica Beaches TMDLs.
27. The basin planning process has been certified as functionally equivalent to the California Environmental Quality Act requirements for preparing environmental documents (Public Resources Code, Section 21000 et seq.) and as such, the required environmental documentation and CEQA environmental checklist have been prepared.
28. The proposed amendment results in no potential for adverse effect (de minimis finding), either individually or cumulatively, on wildlife.
29. The regulatory action meets the "Necessity" standard of the Administrative Procedures Act, Government Code, section 11353, subdivision (b).
30. The Basin Plan amendment incorporating a TMDL for bacteria at Santa Monica Bay beaches must be submitted for review and approval by the State Water Resources Control Board (State Board), the State Office of Administrative Law (OAL), and the USEPA. The Basin Plan amendment will become effective upon approval by OAL and USEPA. A Notice of Decision will be filed.

**THEREFORE, be it resolved that pursuant to Section 13240 and 13242 of the Water Code, the Regional Board hereby amends the Basin Plan as follows:**

1. Pursuant to sections 13240 and 13242 of the California Water Code, the Regional Board, after considering the entire record, including oral testimony at the hearing, hereby adopts the amendments to Chapters 3 and 7 of the Water Quality Control Plan for the Los Angeles Region, as set forth in Attachment A hereto, to incorporate the elements of the Santa Monica

Bay Beaches Bacteria TMDL for wet weather and to implement the water quality objectives for bacteria set to protect the water contact recreation beneficial use.

2. Pursuant to sections 13240 and 13242 of the California Water Code, the Regional Board, after considering the entire record, including oral testimony at the hearing, hereby adopts the amendments to Chapter 7 of the Water Quality Control Plan for the Los Angeles Region, as set forth in Attachment B hereto, to amend Table 7-4.3 of the Santa Monica Bay Beaches Bacteria TMDL for dry weather to change the date for revision of the TMDL from two years after the effective date to four years after the effective date [of the Wet-Weather TMDL] to achieve consistency in scheduling between the Dry-Weather and Wet-Weather TMDLs.
3. The Executive Officer is directed to exercise authority under Water Code section 13267, or other applicable law, to require additional monitoring data in the northern Bay beach regions to ensure that wet weather bacteria exposure is adequately quantified before the TMDL is reconsidered in four years.
4. The Executive Officer is directed to forward copies of the Basin Plan amendment to the State Board in accordance with the requirements of section 13245 of the California Water Code.
5. The Regional Board requests that the State Board approve the Basin Plan amendment in accordance with the requirements of sections 13245 and 13246 of the California Water Code and forward it to OAL and the USEPA.
6. If during its approval process the State Board or OAL determines that minor, non-substantive corrections to the language of the amendment are needed for clarity or consistency, the Executive Officer may make such changes, and shall inform the Board of any such changes.
7. The Executive Officer is authorized to sign a Certificate of Fee Exemption.

I, Dennis A. Dickerson, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of a resolution adopted by the California Regional Water Quality Control Board, Los Angeles Region, on December 12, 2002.

ORIGINAL SIGNED BY

Dennis A. Dickerson  
Executive Officer