

STATE WATER RESOURCES CONTROL BOARD
RESOLUTION NO. 2002 - 0149

APPROVING AN AMENDMENT TO THE WATER QUALITY
CONTROL PLAN FOR THE LOS ANGELES REGION
INCORPORATING
A DRY WEATHER TOTAL MAXIMUM DAILY LOAD FOR
BACTERIA AT SANTA MONICA BAY BEACHES

WHEREAS:

1. The Los Angeles Regional Water Quality Control Board (Los Angeles Regional Board) adopted a revised Water Quality Control Plan (Basin Plan) for the Los Angeles Region on June 13, 1994 that was approved by the State Water Resources Control Board (SWRCB) on November 17, 1994 and by the Office of Administrative Law (OAL) on February 23, 1995.
2. On October 25, 2001, the Los Angeles Regional Board adopted Resolution No. 01-018 amending the Basin Plan to update the bacterial objectives for waters designated for water contact recreation.
3. On January 24, 2002, the Los Angeles Regional Board adopted Resolution No. 02-004 (attached) amending the Basin Plan to incorporate a dry weather Total Maximum Daily Load (TMDL) for bacteria at Santa Monica Bay Beaches. This TMDL is based on the bacterial water quality objectives adopted by the Los Angeles Regional Board in Resolution No. 01-018.
4. On July 18, 2002, SWRCB approved Los Angeles Regional Board Resolution No. 01-018.
5. The water quality objectives adopted by the Los Angeles Regional Board in Resolution No. 01-018 must be approved by OAL and by the U.S. Environmental Protection Agency (USEPA) before becoming effective. They have not yet been approved and are therefore not yet in effect.
6. The Los Angeles Regional Board followed appropriate procedures to satisfy the environmental documentation requirement of the California Environmental Quality Act (PL 92-500 and PL 95-217) and other State laws and regulations. The Los Angeles Regional Board has found that adoption of these amendments will not have a significant adverse effect on the environment.
7. A Basin Plan amendment does not become effective until approved by SWRCB and until the regulatory provisions are approved by OAL.
8. A TMDL must be approved by USEPA.
9. 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 input as to how the waste load allocations will be translated into permit requirements.

10. If a municipal permittee, through diversions, source reduction, or other means, eliminates discharges from the municipal separate storm sewer system (MS4) to the Santa Monica Bay Beaches (waters of the United States) that would otherwise be subject to the requirements of an NPDES permit, that permittee is not responsible under the MS4 permit for exceedances of beach water quality standards at the Santa Monica Bay Beaches. The receiving-water limitations contained in municipal storm water permits only apply to the extent there is actually a discharge from the MS4; however, an MS4 permit does place obligations on the permittees to ensure that any best management practices (including diversions) are properly maintained and functioning. Notwithstanding the aforesaid, apart from this TMDL and the MS4 permit, municipalities may nonetheless be subject to other statutory requirements respecting the health of the beaches under their control, including, e.g., A.B. 411 (Stats. 1997, ch. 765), irrespective of any discharge subject to the Clean Water Act, and if appropriate, A.B. 538 (Stats. 1999, ch. 488).
11. 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 municipal storm water NPDES dischargers up to three or six years, respectively for summer dry and winter dry weather, to implement this TMDL.

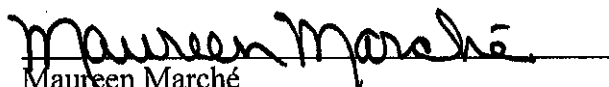
THEREFORE BE IT RESOLVED THAT:

SWRCB:

1. Approves the [amendment to the Los Angeles Regional Board Basin Plan](#) to incorporate a dry weather TMDL for bacteria at Santa Monica Bay beaches, contingent on OAL and USEPA approval of the bacterial objectives adopted by the Los Angeles Regional Board in Resolution No. 01-018.
2. Authorizes the Executive Director or designee to transmit the amendment and administrative record for this action to OAL and the TMDL to USEPA for approval.

CERTIFICATION

The undersigned, Clerk to the Board, does hereby certify that the foregoing is a full, true, and correct copy of a resolution duly and regularly adopted at a meeting of the State Water Resources Control Board held on September 19, 2002.


Maureen Marché
Clerk to the Board

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

**RESOLUTION NO. 02-004
January 24, 2002**

Amendment to the Water Quality Control Plan (Basin Plan) for the Los Angeles Region to Incorporate a Dry 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 objectives which are sufficient to protect beneficial uses for each water body found within its region.
2. 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 Total Maximum Daily Loads (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.
3. 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.
4. 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 Water Quality Control Plan for the Los Angeles Region (Basin Plan), and applicable statewide plans, serve as the State Water Quality Management Plans governing the watersheds under the jurisdiction of the Regional Board.
5. 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.
6. 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 human sewage and other sources of bacteria. Local and national epidemiological studies compel the conclusion that there is a causal relationship between adverse health effects, such as gastroenteritis, and recreational water quality, as measured by bacteria indicator densities.

7. 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. In addition, a draft of the TMDL for bacteria at Santa Monica Bay beaches was released for public comment on November 9, 2001; 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 January 24, 2002 to consider adoption of the TMDL.
8. 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. While the Regional Board has approved the water quality objective change, the change is not yet effective because the State Water Resources Control Board, the Office of Administrative Law, and the USEPA have not yet approved the revised water quality objective.
9. The amendment is consistent with the State Antidegradation Policy (State Board Resolution No. 68-16), in that the changes to water quality objectives (i) consider maximum benefits to the people of the state, (ii) will not unreasonably affect present and anticipated beneficial use of waters, and (iii) will not result in water quality less than that prescribed in policies. Likewise, the amendment is consistent with the federal Antidegradation Policy (40 CFR 131.12).
10. 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.
11. The proposed amendment results in no potential for adverse effect (de minimis finding), either individually or cumulatively, on wildlife.
12. The regulatory action meets the "Necessity" standard of the Administrative Procedures Act, Government Code, section 11353, subdivision (b).
13. 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 amendment to Chapter 7 the Water Quality Control Plan for the Los Angeles Region to incorporate the elements of the Santa Monica Bay Beaches Bacteria TMDL for dry weather as set forth in Attachment A hereto.
2. 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.
3. 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.
4. The Basin Plan amendment set forth in Attachment A shall only become effective if the water quality objectives revised by Regional Board Resolution 2001-018, or equivalent water quality objectives, have been approved by the State Board, OAL, and USEPA, and are consistent with the TMDL.
5. 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.
6. 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 January 24, 2002.

/s/

Dennis A. Dickerson
Executive Officer

Proposed Amendment to the Water Quality Control Plan – Los Angeles Region to incorporate the Santa Monica Bay Beaches Bacteria TMDL

Proposed for adoption by the California Regional Water Quality Control Board, Los Angeles Region on January 24, 2002.

Amendments:

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Add:

Chapter 7. Total Maximum Daily Loads (TMDLs) Summaries
7-4 Santa Monica Bay Beaches Bacteria TMDL*

List of Figures, Tables and Inserts

Add:

Chapter 7. Total Maximum Daily Loads (TMDLs)

Tables

7-4 Santa Monica Bay Beaches Bacteria TMDL

7-4.1. Santa Monica Bay Beaches Bacteria TMDL (Dry Weather Only): Elements

7-4.2a. *Santa Monica Bay Beaches Bacteria TMDL (Dry Weather Only): Implementation Schedule*

7-4.2b. *Santa Monica Bay Beaches Bacteria TMDL (Dry Weather Only): Implementation Schedule*

7-4.3. Santa Monica Bay Beaches Bacteria TMDL (Dry Weather Only): Significant Dates

**Chapter 7. Total Maximum Daily Loads (TMDLs) Summaries
Santa Monica Bay Beaches Bacteria TMDL (Dry Weather Only)***

This TMDL was adopted by:

The Regional Water Quality Control Board on January 24, 2002.

The State Water Resources Control Board on [Insert Date].

The Office of Administrative Law on [Insert Date].

The U.S. Environmental Protection Agency on [Insert Date].

The following table summarizes the key elements of this TMDL.

Table 7-4.1. Santa Monica Bay Beaches Bacteria TMDL (Dry Weather Only): Elements

Element	Key Findings and Regulatory Provisions
<i>Problem Statement</i>	Elevated bacterial indicator densities are causing impairment of the water contact recreation (REC-1) beneficial use at many Santa Monica Bay (SMB) beaches. Swimming in waters with elevated bacterial indicator densities has long been associated with adverse health effects. Specifically, local and national epidemiological studies compel the conclusion that there is a causal relationship between adverse health effects and recreational water quality, as measured by bacterial indicator densities.
<i>Numeric Target</i> <i>(Interpretation of the numeric water quality objective, used to calculate the waste load allocations)</i>	<p>The TMDL has a multi-part numeric target based on the bacteriological water quality objectives for marine water to protect the water contact recreation use. These targets are the most appropriate indicators of public health risk in recreational waters.</p> <p>These bacteriological objectives are set forth in Chapter 3 of the Basin Plan, as amended by the Regional Board on October 25, 2001. The objectives are based on four bacterial indicators and include both geometric mean limits and single sample limits. The Basin Plan objectives are as follows:</p> <ol style="list-style-type: none"> 1. <u>Rolling 30-day Geometric Mean Limits</u> <ol style="list-style-type: none"> a. Total coliform density shall not exceed 1,000/100 ml. b. Fecal coliform density shall not exceed 200/100 ml. c. Enterococcus density shall not exceed 35/100 ml. 2. <u>Single Sample Limits</u> <ol style="list-style-type: none"> a. Total coliform density shall not exceed 10,000/100 ml. b. Fecal coliform density shall not exceed 400/100 ml. c. Enterococcus density shall not exceed 104/100 ml. d. Total coliform density shall not exceed 1,000/100 ml, if the ratio of fecal-to-total coliform exceeds 0.1. <p>The targets apply throughout the year. The compliance point for the targets is the wave wash¹, where there is a freshwater outlet (i.e., storm drain or creek) to the beach, or at ankle depth at beaches without a freshwater outlet.</p> <p>The geometric mean targets may not be exceeded at any time. For the single sample targets, each existing shoreline monitoring site is assigned an allowable number of exceedance days for two time periods (summer dry weather and winter dry weather as defined in Table 7-4.2a). (A separate amendment will address the allowable number of wet weather exceedance days.)</p> <p>The allowable number of exceedance days is set such that (1) bacteriological water quality at any site is at least as good as at a designated reference site within the watershed and (2) there is no degradation of existing shoreline bacteriological water quality.</p>
<i>Source Analysis</i>	With the exception of isolated sewage spills, dry weather urban runoff

¹ The wave wash is defined as the point at which the storm drain or creek empties and the effluent from the storm drain initially mixes with the receiving ocean water.

	<p>conveyed by storm drains and creeks is the primary source of elevated bacterial indicator densities to SMB beaches during dry weather. Limited natural runoff and groundwater may also potentially contribute to elevated bacterial indicator densities during winter dry weather. This is supported by the finding that historical monitoring data from the reference beach indicate no exceedances of the single sample targets during summer dry weather and on average only three percent exceedance during winter dry weather.</p>
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<i>Loading Capacity</i>	Studies show that bacterial degradation and dilution during transport from the watershed to the beach do not significantly affect bacterial indicator densities at SMB beaches. Therefore, the loading capacity is defined in terms of bacterial indicator densities, which is the most appropriate for addressing public health risk, and is equivalent to the numeric targets, listed above.
<i>Waste Load Allocations</i>	<p>Waste load allocations are expressed as the number of sample days at a shoreline monitoring site that may exceed the single sample targets identified under “Numeric Target.” Waste load allocations are expressed as allowable exceedance days because the bacterial density and frequency of single sample exceedances are the most relevant to public health protection.</p> <p>For each shoreline monitoring site and corresponding subwatershed, the allowable number of exceedance days is set for two time periods. These two periods are:</p> <ol style="list-style-type: none"> 1. Summer dry weather (April 1 to October 31), and 2. Winter dry weather (November 1 to March 31). <p>The allowable number of exceedance days for a shoreline monitoring site for each time period is based on the lesser of two criteria (1) exceedance days in the designated reference system and (2) exceedance days based on historical bacteriological data at the monitoring site. This ensures that shoreline bacteriological water quality is at least as good as that of a largely undeveloped system and that there is no degradation of existing shoreline bacteriological water quality.² All responsible jurisdictions and responsible agencies³ within a subwatershed are jointly responsible for complying with the allowable number of exceedance days for each associated shoreline monitoring site identified in Table 7-4.2a below.</p> <p>The three Publicly Owned Treatment Works (POTWs)⁴ discharging to Santa Monica Bay are each given individual WLAs of zero (0) days of exceedance during both summer dry weather and winter dry weather.</p>
<i>Implementation</i>	This TMDL will be implemented in two phases over a 6-year period. The regulatory mechanisms used to implement the TMDL will include primarily the Los Angeles County Municipal Storm Water NPDES Permit, the Caltrans Storm Water Permit, the three NPDES permits for the POTWs, and the authority vested in the Executive Officer via 13267 of the Porter-Cologne Water Quality Control Act.

² In order to fully protect public health, no exceedances are permitted at any shoreline monitoring location during summer dry weather (April 1 to October 31). In addition to being consistent with the two criteria, waste load allocations of zero (0) exceedance days are further supported by the fact that the California Department of Health Services has established minimum protective bacteriological standards – the same as the numeric targets in this TMDL – which, when exceeded during the period April 1 to October 31, result in posting a beach with a health hazard warning (California Code of Regulations, title 17, section 7958).

³ For the purposes of this TMDL, “responsible jurisdictions and responsible agencies” includes: (1) local agencies that are responsible for discharges from a publicly owned treatment works to the Santa Monica Bay watershed or directly to the Bay, (2) local agencies that are permittees or co-permittees on a municipal storm water permit, (3) local or state agencies that have jurisdiction over a beach adjacent to Santa Monica Bay, and (4) the California Department of Transportation pursuant to its storm water permit.

⁴ Hyperion Wastewater Treatment Plant, Joint Water Pollution Control Plant, and Tapia Wastewater Reclamation Facility.

	<p>Within 3 years of the effective date of the TMDL, summer dry-weather allowable exceedance days and the rolling 30-day geometric mean targets must be achieved. Within 6 years of the effective date, winter dry-weather allowable exceedance days and the rolling 30-day geometric mean targets must be achieved.</p>
<i>Margin of Safety</i>	<p>WLAs of zero days of exceedance during the summer include an implicit margin of safety. The WLAs of a maximum of three days of exceedance during winter dry weather include an implicit margin of safety because the maximum allowable days of exceedance are based on samples collected 50 yards downcurrent of the freshwater outlet at the reference beach. Findings from a bacterial dispersion study of selected freshwater outlets show that there is typically significant dilution between the freshwater outlet, the wave wash (the compliance point), and a point 50 yards downcurrent.</p>
<i>Seasonal Variations and Critical Conditions</i>	<p>Seasonal variations are addressed by developing separate waste load allocations for two time periods (summer dry weather and winter dry weather) based on public health concerns and observed natural background levels of exceedance of bacterial indicators.</p> <p>The critical period for this dry weather bacteria TMDL is during winter months, when historic shoreline monitoring data for the reference beach indicate that the single sample bacteria objectives are exceeded on average 3% of the dry weather days sampled.</p>

Note: The complete staff report for the TMDL is available for review upon request.

Table 7-4.3. Santa Monica Bay Beaches Bacteria TMDL (Dry Weather Only): Significant Dates

Date	Action
120 days after the effective date of the TMDL	Responsible jurisdictions and responsible agencies must submit coordinated shoreline monitoring plan(s), including a list of new sites or sites relocated to the wave wash at which time responsible jurisdictions and responsible agencies will select between daily and weekly shoreline sampling.
120 days after the effective date of the TMDL	<p>Responsible jurisdictions and responsible agencies must identify and provide documentation on 342 potential discharges to Santa Monica Bay beaches listed in Appendix C of the TMDL Staff Report dated January 11, 2002. Documentation must include a Report of Waste Discharge (ROWD) where necessary.</p> <p>Responsible jurisdictions and responsible agencies must identify and provide documentation on potential discharges to the Area of Special Biological Significance (ASBS) in northern Santa Monica Bay from Latigo Point to the County line.</p> <p>Cessation of the discharges into the ASBS shall be required in conformance with the California Ocean Plan.</p>
2 years after effective date of TMDL	Re-open TMDL to re-evaluate allowable winter dry weather exceedance days based on additional data on bacterial indicator densities in the wave wash, a re-evaluation of the reference system selected to set allowable exceedance levels, and a re-evaluation of the reference year used in the calculation of allowable exceedance days.
3 years after effective date of the TMDL	Achieve compliance with allowable exceedance days as set forth in Table 7-4.2a and rolling 30-day geometric mean targets during summer dry weather (April 1 to October 31).
6 years after effective date of the TMDL	Achieve compliance with allowable exceedance days as set forth in Table 7-4.2a and rolling 30-day geometric mean targets during winter dry weather (November 1 to March 31).