

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

RESOLUTION NO. 2006-005
April 6, 2006

Statement of support for the efforts of responsible jurisdictions and agencies in Jurisdictional Groups 1 and 4 to utilize an integrated water resources approach to achieve full compliance with the Santa Monica Bay Beaches Bacteria Wet Weather TMDL in the shortest possible timeframe and no later than 2021

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 Santa Monica BayKeeper, Inc. was approved on March 22, 1999. This court order required completion of a TMDL to reduce bacteria at Santa Monica Bay beaches by March 2002.
6. The Regional Board adopted two TMDLs to address bacteriological water quality impairments for 44 beaches along Santa Monica Bay located in Los Angeles County, California. The Regional Board adopted a TMDL to address water quality impairments during dry weather on January 24, 2002 and a TMDL to address wet weather impairments on December 12, 2002 (Resolutions 2002-004 and 2002-022, respectively).
7. The Regional Board incorporated the dry weather and wet weather TMDLs along with appropriate implementation measures into its Basin Plan as required (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. The Regional Board established the above-mentioned TMDLs 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.
9. The Regional Board's goal in establishing the above-mentioned TMDLs 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 USEPA as an "acceptable health risk" in marine recreational waters.
10. The Dry Weather and Wet Weather Santa Monica Bay Beaches Bacteria TMDLs cover 44 beaches and 29 subwatersheds, with multiple jurisdictions and agencies that are responsible for compliance. Therefore, in the Wet Weather TMDL for implementation planning the Regional Board grouped the subwatersheds into Jurisdictional Groups. Each Jurisdictional Group is comprised of one or more subwatersheds, the beach(es) associated with these subwatersheds, and all responsible jurisdictions and agencies within the subwatershed(s). Each Jurisdictional Group is assigned a primary jurisdiction. A primary jurisdiction is that jurisdiction comprising greater than fifty percent of the subwatershed land area. The primary jurisdiction is responsible for submitting an implementation plan for the Jurisdictional Group per the requirements of the Wet Weather TMDL.
11. Jurisdictional Group 1 is responsible for sixteen subwatersheds, including Arroyo Sequit, Los Alisos, Encinal, Trancas, Zuma, Ramirez, Escondido, Latigo, Solstice, Corral, Carbon, Las Flores, Piedra Gorda, Pena, Tuna, and Topanga. The primary jurisdiction is the County of Los Angeles. Other participating responsible jurisdictions and agencies in Jurisdictional Group 1 include the City of Malibu and California Department of Transportation (Caltrans).
12. Jurisdictional Group 4 is responsible for one subwatershed, referred to as the Nicholas Canyon subwatershed. The primary jurisdiction is the City of Malibu. Other participating responsible jurisdictions and agencies in Jurisdictional Group 4 include the County of Los Angeles and Caltrans.
13. During the adoption of the wet weather TMDL, the Regional Board recognized two broad approaches to implementing the TMDL. One possible 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 possible approach is a non-integrated water resources approach in which

implementation is achieved by focusing on narrowly tailored, end-of-the-pipe solutions to improve bacteriological water quality without incorporating other environmental and public goals.

14. The Regional Board recognized that an integrated water resources approach not only provides water quality benefits to the people of the Los Angeles Region, but also 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.
15. The Regional Board acknowledged 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. Therefore, after considering testimony, the Regional Board revised the implementation provisions of the TMDL to allow for a longer implementation schedule (*up to 18 years*) if 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, the Regional Board required a shorter implementation schedule (*up to 10 years*) for non-integrated approaches because the level of planning is not as complicated.
16. The Regional Board has the authority to provide compliance schedules through the basin planning process. In the wet weather TMDL, adopted by the Regional Board, the Regional Board established dual schedules for implementation that afford the responsible jurisdictions and agencies up to ten or eighteen years, depending on the implementation approaches pursued, to implement the wet weather TMDL.
17. The implementation provisions in Table 7-4.4 of the wet weather TMDL state that, "the implementation schedule will be determined on the basis of the implementation plan(s), which must be submitted to the Regional Board by responsible jurisdictions and agencies within two years of the effective date of the TMDL" (Resolution 2002-022, Attachment A).
18. The implementation provisions in Table 7-4.4 further state that, "responsible jurisdictions and agencies must clearly demonstrate in the above-mentioned plan whether they intend to pursue an integrated water resources approach." If the responsible jurisdictions and agencies prefer an integrated approach, there must be a clear demonstration of need for the longer implementation schedule in the implementation plan. Otherwise, at most a 10-year implementation timeframe will be allotted by the Regional Board, depending upon a clear demonstration of the time needed in the implementation plan.
19. Per the requirements set forth in the wet weather TMDL, responsible jurisdictions and agencies in Jurisdictional Groups 1 and 4 jointly submitted a draft Implementation Plan to the Regional Board on March 15, 2005. Regional Board staff met with the responsible jurisdictions and agencies in Jurisdictional Groups 1 and 4 to review and provide comments on the draft Implementation Plan. Regional Board staff also provided written comments to

the responsible jurisdictions and agencies in a letter dated July 8, 2005. The responsible jurisdictions and agencies submitted a final Implementation Plan to the Regional Board on August 30, 2005.

20. The Implementation Plan submitted by Jurisdictional Groups 1 and 4 lays out a four phase, iterative-adaptive program that combines unique non-structural activities, local on-site structural measures and regional structural solutions for each subwatershed based on subwatershed characteristics and priorities.
21. The Implementation Plan for Jurisdictional Groups 1 and 4 incorporates the principles of an integrated water resources approach by taking a holistic view of regional water resources management by integrating planning for future wastewater, storm water, recycled water, and potable water needs and systems; focusing on beneficial re-use of storm water, including groundwater infiltration at multiple points throughout a watershed; and addressing multiple pollutants.
22. The implementation schedule is phased over 16 years with a final compliance date of 2021 (18 years after the effective date of the TMDL). The Implementation Plan for Jurisdictional Groups 1 and 4 is divided into four phases. The first phase begins with the submittal of the final Implementation Plan (July 2005) and extends until July 2007, the date for reconsideration of the TMDL. In the first phase, Jurisdictional Groups 1 and 4 will initiate all committed non-structural activities; pre-feasibility studies for four (4) sub-regional pilot projects; planning for on-site BMPs; and monitoring, additional studies and source identification activities. Phase II extends until July 2010. In the second phase, Jurisdictional Groups 1 and 4 will continue to implement committed non-structural activities; conduct non-structural pilot programs; continue planning for on-site BMPs; initiate planning and construction of sub-regional pilot projects; and continue monitoring and source identification studies. Phase III extends until July 2013. In the third phase, Jurisdictional Groups 1 and 4 will refocus and reprioritize efforts as appropriate and continue to implement committed non-structural activities; implement successful piloted non-structural programs; begin to implement on-site BMPs; and operate and evaluate pilot sub-regional projects. The final phase extends until final compliance in 2021. In the final phase, Jurisdictional Groups 1 and 4 will again refocus and reprioritize efforts as appropriate and continue to implement non-structural solutions; continue or expand on-site BMPs; and continue, modify or initiate regional structural solutions.
23. The responsible jurisdictions and agencies in Jurisdictional Groups 1 and 4 have committed to 14 targeted non-structural measures; 4 local on-site structural measures; and 4 subregional pilot projects in high priority subwatersheds pending the results of the feasibility studies. These commitments are expected to achieve the early interim milestones of 10% and 25% reductions in exceedance days beyond the allowable exceedance days set forth in the wet weather TMDL.
24. Regional solutions are a secondary resort in managing runoff and reducing bacteria loading at the beaches. However, due to scientific uncertainties it is not possible to guarantee that the implementation actions outlined in the Implementation Plan for Jurisdictional Groups 1 and 4 will achieve the necessary reductions in exceedance days as required by the TMDL. Therefore, it is essential to start the feasibility and conceptual analyses for regional solutions early in the implementation schedule (prior to 2013) in order to identify potential land requirements, physical limitations, and implementation issues. Because these regional solutions require a significant amount of time to plan and implement, beginning the

feasibility analyses early will provide the responsible jurisdictions and agencies sufficient time to make changes and other arrangements and still keep to the implementation schedule.

25. Interested persons and the public have had reasonable opportunity to participate in the development and review of the Implementation Plan for Jurisdictional Groups 1 and 4. The responsible jurisdictions and agencies in Jurisdictional Groups 1 and 4 held two stakeholder workshops on December 1, 2004 and February 1, 2005 during the development of the Implementation Plan.
26. The final Implementation Plan for Jurisdictional Groups 1 and 4 submitted by the responsible jurisdictions and agencies to the Regional Board was posted on the Regional Board's website in advance of the April 6, 2006 Board hearing. A Notice of Hearing was published and circulated 30 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 April 6, 2006 to consider the Implementation Plan for Jurisdictional Groups 1 and 4.

THEREFORE, be it resolved that pursuant to Regional Board Resolution 2002-022, Attachment A, Amendment to the Water Quality Control Plan – Los Angeles Region to incorporate Implementation Provisions for the Region's Bacteria Objectives and to incorporate the Santa Monica Bay Beaches Wet Weather Bacteria TMDL, Table 7-4.4, "Implementation", adopted by the Regional Board on December 12, 2002 and effective on July 15, 2003:

1. The Regional Board hereby acknowledges the submission of a draft Implementation Plan and final Implementation Plan dated August 30, 2005 by responsible jurisdictions and agencies in Jurisdictional Groups 1 and 4, including the City of Malibu, County of Los Angeles and California Department of Transportation, per requirements of the Santa Monica Bay Beaches Bacteria Wet Weather TMDL as set forth in Resolution 2002-022, Attachment A, Table 7-4.7.
2. The Regional Board hereby determines that the responsible jurisdictions and agencies in Jurisdictional Groups 1 and 4 as identified in (1) have demonstrated at a conceptual level in the Implementation Plan that they intend to pursue an integrated water resources approach as defined in the Santa Monica Bay Beaches Bacteria Wet Weather TMDL, Table 7-4.4.
3. The Regional Board hereby determines that assuming the responsible jurisdictions and agencies in Jurisdictional Groups 1 and 4 as identified in (1) adequately comply with the terms of this resolution, they will have demonstrated based on their conceptual plan the need for the longer implementation schedule as outlined in the final Implementation Plan dated August 30, 2005, which commits to a final compliance date of July 2021.
4. Given the conceptual commitment to an integrated water resources approach and to achieving final compliance by July 2021 outlined in the Implementation Plan for Jurisdictional Groups 1 and 4, the Regional Board strongly supports and encourages the efforts of the responsible jurisdictions and agencies to (1) aggressively implement early actions as outlined in the Implementation Plan and (2) make timely adjustments and refinements to the Implementation Plan to ensure that bacteriological water quality impairments at Santa Monica Bay beaches are resolved in the shortest possible timeframe.

5. The Regional Board encourages an integrated water resources approach and recognizes that additional time may be necessary to pursue such an approach to TMDL implementation. In order to clearly justify an extended implementation schedule beyond 10 years and up to 18 years from the effective date of the TMDL, the responsible jurisdictions and agencies are required to submit additional quantifiable analyses as described below to demonstrate (1) the proposed plans will meet the interim and final WLAs and (2) the proposed implementation actions will achieve multiple water quality benefits and other public goals.

The Regional Board strongly encourages responsible jurisdictions and agencies pursuing an integrated water resources approach to employ natural methods as opposed to end-of-pipe, whenever it would be effective and feasible.

6. Per the provisions of the TMDL, the Regional Board will determine, when the TMDL is reconsidered in 2007, if a longer implementation schedule (up to 18 years from the TMDL effective date) shall be granted if there is a clear demonstration that an integrated water resources approach will be pursued.

The types of approaches proposed coupled with quantifiable estimates of the integrated water resources benefits of the proposed structural and non-structural BMPs included in the Implementation Plan would provide the obligatory demonstration that an integrated water resources approach is being pursued. This demonstration shall provide numeric estimates of the benefits, including reductions in other pollutants, groundwater recharged, acres of multi-use projects and water (e.g. stormwater, runoff, wastewater) beneficially reused among other integrated water resources criteria outlined in the Santa Monica Bay Beaches Wet Weather Bacteria TMDL. Responsible jurisdictions and agencies should submit to the Regional Board technically defensible quantifiable estimates of integrated benefits for actions to meet the first and second interim compliance deadlines (6 and 10 years after the effective date of the TMDL, respectively). This information must be submitted within 9 months to allow sufficient time for staff analyses prior to the Board's reassessment of the TMDL, scheduled for July 2007.

7. The Regional Board recognizes that it is critical to establish a technically defensible quantitative linkage to the interim and final waste load allocations (WLAs) to measure progress toward achieving the WLAs. The linkage should include target reductions in stormwater runoff and/or total coliform, fecal coliform and enterococcus using the 90th percentile year for the jurisdictional group and each individual subwatershed.

The Regional Board also recognizes that it is essential to establish quantitative estimates of the water quality benefits provided by the proposed structural and non-structural BMPs to meet the first interim compliance deadline (6 years after the effective date of the TMDL), and preliminary estimates of the benefits provided by the proposed BMPs to meet the second interim compliance deadline (10 years after the effective date of the TMDL). These estimates, including a quantitative analysis of their linkage to the interim WLAs, are necessary to provide assurance that interim compliance deadlines will be achieved given the uncertainties involved in an integrated water resources approach. Estimates should address reductions in exceedance days, bacteria concentration and loading, and flow in the drain and at each beach compliance monitoring location. Responsible jurisdictions and agencies should submit such information to the Regional Board within nine months so that the Regional Board staff will have time to assess the information in time for the reconsideration of the TMDL.

8. The Regional Board directs staff to develop draft language for Board consideration that incorporates into the Los Angeles County Municipal Separate Storm Sewer System (MS4) NPDES permit at reissuance explicit requirements for responsible jurisdictions and agencies in Jurisdictional Groups 1 and 4 to submit single coordinated regular reports to the Board on progress toward achieving the required reductions set forth in the TMDLs. These single coordinated regular reports may be submitted as part of the Los Angeles County MS4 Annual Program and Annual Monitoring reports. Reports on progress toward compliance with the TMDL shall include data and information on (1) water quality improvements in the receiving water; (2) the effectiveness of BMPs implemented as part of the Implementation Plan for Jurisdictional Groups 1 and 4 measured in terms of water quality improvement and quantity of wet weather runoff reduced, captured, treated, or infiltrated; and (3) the performance of other programmatic solutions, source identification activities and source control measures. Data on water quality improvements may include for example reductions in exceedance days compared to historical data and interim milestones, where appropriate; the proportion of wet weather days that exceed the water quality objectives by storm year as defined in the TMDLs; and corresponding rainfall data as set forth in the Santa Monica Bay Beaches Bacterial TMDLs Coordinated Shoreline Monitoring Plan submitted by responsible jurisdictions and agencies.

Given the iterative approach outlined in the Implementation Plan for Jurisdictional Groups 1 and 4, reports shall also include documentation on changes and refinements to the Implementation Plan based on the results of shoreline monitoring data, data on BMP effectiveness, and evaluations of pilot projects and other implementation actions under consideration. Such updates to the Implementation Plan shall include revised quantitative estimates of the water quality benefits of the proposed BMPs and the linkage to the waste load allocations identified pursuant to (7) above.

9. The Regional Board further directs staff to develop draft language for Board consideration that incorporates into the Los Angeles County MS4 NPDES permit at reissuance specific provisions to reopen the TMDL section of the permit and incorporate, after providing the opportunity for public comment, TMDL-related provisions as well as additional implementation actions, including but not limited to institutional controls, source identification and control, and structural and treatment controls if adequate progress is not being made to achieve compliance with Santa Monica Bay Beaches Bacteria TMDLs.
10. The Regional Board anticipates the California Department of Transportation (Caltrans) as a responsible agency to work cooperatively with the responsible jurisdictions and agencies under the Los Angeles County MS4 NPDES permit to achieve compliance with the Santa Monica Bay Beaches Bacteria TMDL, including requirements as set forth pursuant to (8) and (9) above. In the event that Caltrans decides to proceed independently to address compliance with the TMDL, Caltrans will be required to meet the applicable significant dates for responsible jurisdictions and agencies as contained in Attachment A to Resolution No. 2002-022, Table 7-4.7.
11. The Regional Board encourages responsible jurisdictions and agencies to begin feasibility studies and planning for regional solutions to managing wet weather runoff and bacteria loading early in the implementation schedule (prior to 2013) to ensure sufficient time to redirect implementation activities if necessary to include regional solutions and still achieve the final compliance deadline.

I, Jonathan Bishop, 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 April 6, 2006.



Jonathan S. Bishop
Executive Officer