



California Regional Water Quality Control Board Los Angeles Region



Recipient of the 2001 *Environmental Leadership Award* from Keep California Beautiful

Alan C. Lloyd, Ph.D.
Agency Secretary

320 W. 4th Street, Suite 200, Los Angeles, California 90013
Phone (213) 576-6600 FAX (213) 576-6640 - Internet Address: <http://www.waterboards.ca.gov/losangeles>

Arnold Schwarzenegger
Governor

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Mr. Mark Pestrella
Assistant Deputy Director
Watershed Management Division
Department of Public Works
County of Los Angeles
P.O. Box 1460
Alhambra, California 91802

Mr. Yugal K. Lall
Director
Department of Public Works
City of Malibu
23815 Stuart Ranch Road
Malibu, California 90265

COMMENTS ON DRAFT SANTA MONICA BAY BEACHES BACTERIA TOTAL MAXIMUM DAILY LOAD IMPLEMENTATION PLAN FOR JURISDICTIONAL GROUPS 1 AND 4 SUBMITTED ON MARCH 15, 2005

Dear Messrs. Pestrella and Lall,

The Los Angeles Water Board (Water Board) commends the County of Los Angeles Department of Public Works (LAC DPW), City of Malibu and California Department of Transportation (Caltrans) ("agencies")¹ on the draft Implementation Plan (draft Implementation Plan) submitted to the Water Board on March 15, 2005. The draft Implementation Plan for the 17 subwatersheds² in Jurisdictional Groups 1 and 4 is an important first step towards outlining a plan of action for

¹ Collectively referred to as Jurisdictional Groups 1 and 4 in the TMDL. Other responsible agencies named in the TMDLs including the County of Ventura, Cities of Calabasas and Los Angeles, and the State of California Department of Parks and Recreation have opted out of the Implementation Plan development because the extent of their impacted area is limited or located entirely within the reference subwatershed of Arroyo Sequit.

² Arroyo Sequit (designated reference subwatershed for all beaches along Santa Monica Bay), Nicholas, Los Alisos, Encinal, Trancas, Zuma, Ramirez, Escondido, Latigo, Solstice, Corral, Carbon, Las Flores, Piedra Gorda, Pena, Tuna and Topanga subwatersheds.

California Environmental Protection Agency



improving water quality at the region's world class beaches along the northern portion of Santa Monica Bay.

The Water Board also applauds the efforts of the agencies to involve stakeholders and the public by seeking input from an established stakeholder group, the Santa Monica Bay Watersheds Task Force, prior to the development of the draft Plan and then presenting the draft Plan to the Task Force before submittal to the Water Board. The Water Board recognizes that the support of local residents and stakeholders is important to the successful implementation of the plan.

The following letter contains the comments of the Water Board on the draft Implementation Plan dated March 15, 2005. Many of these comments have already been conveyed to the agencies during a meeting held at the Water Board on June 6th to discuss the draft Implementation Plan.

BACKGROUND

Submittal of implementation plans was a requirement of the Wet Weather TMDL. The final wet weather implementation schedules for each Jurisdictional Group³ will be determined on the basis of these implementation plans. The Wet Weather TMDL allows for two broad approaches to implementation – an integrated water resources approach or a non-integrated approach. An integrated water resources approach (IWRA) is one 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 the watershed; addresses multiple pollutants; and may incorporate and enhance other public goals. A non-integrated approach, in contrast, is one in which the sole objective is to reduce or eliminate bacteria from storm water runoff before it reaches the beach.

The Water Board recognized the multiple environmental benefits of an integrated approach as well as the additional complexity of planning, designing and implementing such an approach. In light of this, the Water Board provided *up to* 18 years to achieve compliance using an integrated approach in contrast to *up to* 10 years using a non-integrated approach. In either case, the Wet Weather TMDL emphasizes that the implementation schedules should be *as short as possible* and that the implementation plans must provide a *clear demonstration of the time needed* to achieve compliance with the TMDL.

³ A Jurisdictional Group is a set of subwatersheds and the corresponding responsible agencies in those subwatersheds. Jurisdictional Groups were formed to allow agencies flexibility to prioritize implementation efforts, focusing on achieving exceedance day reductions at certain beach locations ahead of others rather than requiring the same pace and timing of reductions at all beach locations.

GENERAL COMMENTS

1. Describe more clearly and in greater detail how the draft Implementation Plan provides an integrated water resources approach to compliance with the Wet Weather TMDL.

The draft Implementation Plan should provide more explicit detail on how it represents an integrated approach to TMDL compliance. The draft Implementation Plan should both describe how "all the pieces work together" to support an integrated water resources approach as well as clearly enumerate for each of the non-structural and structural solutions meets the IWRA criteria identified in the Wet Weather TMDL. The matrix distributed at the June 6th meeting that lists BMPs and activities and identifies for each the water quality benefits, additional integrated water resources benefits and performance evaluation measure and method should be included in the final Plan.

2. Include specific performance measures (i.e. implementation goals) as well as more detailed schedules for committed and pilot non-structural and structural solutions.

The Phase I and Phase II commitments and pilot projects contained in the Plan will ultimately be included into the Municipal Separate Storm Sewer System (MS4) NPDES Permit for Los Angeles County for these subwatersheds. As currently described in the draft Plan, many of these management measures may be interpreted as recommended courses of action for the agencies to consider. Specific commitments including pilot projects need to be clarified. These commitments need to have specific performance measures and more detailed time schedules associated with them that if met will provide a reasonable expectation that the interim milestones and waste load allocations in the TMDL will be achieved.

The Water Board understands the need for flexibility to allow for contingencies associated with project planning and implementation. Therefore, the schedules may be identified as tentative, with the understanding that the schedules may be changed with good cause upon notification to the Water Board. However, the agencies should be prepared to maintain the pace of implementation proposed in the Implementation Plan.

For the Phase I committed and pilot non-structural solutions identified for each subwatershed specific implementation plan, performance measures for each program and more detailed program-level timelines should be included. For example, for the outreach to pet owners, how many pet owners will be targeted each year? The program commitment to establish guidelines for optimizing frequency of cleaning cycles for drainage facilities should be expanded to not only establish guidelines, but have agencies implement the guidelines in their jurisdictions.

For structural BMPs that will be initiated in Phase I or II, more detailed planning/implementation schedules should be provided that identify timelines for selecting location(s) (from Table 5.1 or

other possible locations), identifying the appropriate BMP(s), and completing planning and design steps.

3. The four regional pilot projects should be accelerated and more detailed schedules for the regional pilot projects should be included.

The schedules for the regional pilot projects should be accelerated for two reasons. First, the agencies should be aggressive in implementing these projects given that the four affected subwatersheds (Ramirez, Las Flores, Corral [Marie Canyon], and Latigo) are identified as high priorities and require larger reductions to meet TMDL requirements. Second, it is important to determine as soon as possible whether the project concept is feasible. If it is not feasible as proposed, this will provide enough time to redesign the project or identify an alternative regional pilot project or a suite of alternative local pilot projects that could achieve the same water quality benefits. Furthermore, once a project is deemed feasible, the Water Board recognizes that even with an accelerated pace these projects will take time to design, permit and construct.

The regional pilot projects or equivalent BMPs will ultimately be included in the Municipal Separate Storm Sewer System (MS4) NPDES Permit for Los Angeles County for these subwatersheds. As with the Phase I and II non-structural and structural commitments and pilots, these regional pilot projects need to have more detailed time schedules associated with them that if met will provide a reasonable expectation that the interim milestones and waste load allocations in the TMDL will be achieved.

As discussed above, the Water Board understands the need for flexibility to allow for contingencies associated with project planning and implementation. Therefore, the schedules may be identified as tentative, with the understanding that the schedules may be changed with good cause upon notification to the Water Board. Furthermore, the Water Board understands that further evaluation is necessary to determine the feasibility of the proposed regional pilot projects. If after further evaluation the agencies determine that the regional pilot project is infeasible, the Water Board is willing to consider alternative pilot projects including a suite of local structural solutions as an alternative to these regional pilot projects if it can be demonstrated that they will have an equivalent benefit to water quality. However, the agencies should be prepared to maintain a pace of implementation consistent with what is approved in the final Plan.

4. Discuss in more detail how the draft Implementation Plan will achieve the TMDL compliance milestones (i.e. exceedance day reductions at the beach).

The draft Implementation Plan does not directly link the proposed actions to specific percent reductions in exceedance days as required by the TMDL. While admittedly difficult, the draft Implementation Plan should provide an estimate of the reductions that are expected to be achieved or at a minimum a more clear description of why the actions proposed are likely to

achieve the required reductions. In particular, the Implementation Plan should demonstrate the linkage between the Phase I and Phase II activities and the 10% reduction interim milestone for the Jurisdictional Groups. This discussion might include the targeting of the highest priority subwatersheds (i.e. those needing the largest reductions to meet TMDL requirements) for early intervention. Clearly identify through maps and tables which non-structural solutions, structural BMPs and regional pilot projects outlined in the Implementation Plan will be implemented in these different subwatersheds and the timeline for these actions. Discuss how the iterative, adaptive approach and watershed and BMP monitoring will allow further targeting of potential "hot spots".

5. The draft Implementation Plan should replace the requests for additional reopeners with periodic reports to the Water Board on implementation progress, monitoring results and updates to the Implementation Plan.

Reopeners do not need to be specifically built into TMDLs in order to reconsider the TMDL, including its requirements and implementation schedule. Because the Water Board adopts TMDLs as Basin Plan amendments, the Water Board may at its discretion reconsider and amend a TMDL at any time. Instead of scheduled reopeners, the Implementation Plan should recommend periodic reports (annually or at key junctures between phases) to the Water Board on implementation progress, monitoring results, and updates to the Implementation Plan. During these periodic reports, agencies may request that the Water Board reconsider the TMDL if appropriate in light of this new information.

6. The draft Implementation Plan should focus on optimizing non-structural solutions given the heavy emphasis on these measures.

The agencies should carefully consider the most effective non-structural solutions given their emphasis in the draft Implementation Plan. Further, the agencies should assess the most effective non-structural solutions and work toward optimizing them based on past lessons learned to achieve the maximum water quality benefits. To effectively deliver public education messages and change behavior, agencies should select target audiences based on the target pollutant, bacteria. Then agencies should evaluate data from two studies conducted by the Los Angeles County Department of Public Works (1997 Stormwater Segmentation Study and 2000 Stormwater Interim Segmentation Study) and identify the target groups most likely to contribute to bacteria loads and most likely to change their behaviors.

Many of these non-structural solutions (particularly related to general outreach and education) have been implemented before and some have been shown to be largely ineffective. The Implementation Plan should also discuss in more detail how the agencies intend to work toward improving compliance with existing ordinances that minimize release of bacteria sources among targeted populations.

7. The draft Implementation Plan should provide additional detail on what could be done at school sites that would complement activities at other publicly owned sites.

Though public schools are not within the agencies' jurisdictions, the Implementation Plan should provide additional detail on what could be done at school sites that would complement activities at other publicly owned sites. The Water Board could ultimately consider these recommendations regarding BMPs such as retrofitting schools with green roofs, target levels of pervious surface and institutional programs in subsequent phases of the municipal stormwater permitting program.

DETAILED COMMENTS

- 1. Section 4.3.1. Water Quality Monitoring Recommendations. Winter Low Flow.** Given the high variability observed in bacteria concentrations, samples collected at monthly intervals are unlikely to provide adequate information to characterize winter low flow periods. At a minimum, weekly sampling should be conducted to characterize winter low flow conditions, including average conditions and the variability in bacteria concentrations.
- 2. Section 4.3.1. Water Quality Monitoring Recommendations. Winter Storm Flows.** Sampling for storm flows should at a minimum follow the sampling design of the reference beach study conducted by SCCWRP under contract to the Water Board. The sampling design for this study was as follows. There were two sampling locations at each beach. The primary sampling location was in the ocean immediately in front of the freshwater input at the "wave wash" where the watershed discharge initially mixes with the ocean waves. All samples were collected between ankle and knee depth on an incoming wave. The secondary sampling location was from the watershed discharge as it crossed the beach at the closest sampleable location prior to mixing with the ocean. Samples at the primary sampling sites were measured for fecal indicator bacteria and salinity. Samples at the secondary sampling sites were measured for fecal indicator bacteria, salinity and flow. Flow was measured using a hand held velocity meter and estimates of wetted cross-sectional area. Wet weather sampling criteria included three or more days of antecedent dry period and predicted minimum rainfall estimates of 0.10 in. Four samples were collected per site corresponding to the day of the storm (defined as within 24 hrs of recorded rainfall) and the three days following recorded rainfall (four days of sampling in total). Four storms were targeted based on two factors; size of storm and seasonality. Size of storm was stratified into small storm events (less than median daily rainfall) and large storm events (greater than median daily rainfall) based on historical rainfall at the nearest rain gage. Seasonality was stratified into early season (before December 31st) and late season (after January 1st) storm events.

3. **Section 4.4.1. Natural Area Bacteria Loading Study.** A separate natural loadings study is unnecessary, since SCCWRP is currently conducting two natural loadings studies under contract to the Water Board and US EPA. The first is examining natural loadings at beaches, while the second is examining natural loadings to inland surface waters and includes bacteria along with many other naturally occurring constituents. These studies and the use of the findings from these studies should be referenced in the Plan rather than recommending a new study.

Again we acknowledge and applaud the agencies for the work that has been put into the draft Implementation Plan. We look forward to continuing to work with you to improve the quality of Santa Monica Bay's beaches. If you have any questions, please feel free to contact either Renee DeShazo at (213) 576-6783 or Xavier Swamikannu at (213) 620-2094.

Sincerely,



Jonathan S. Bishop
Executive Officer

cc: Paul Thakur, Caltrans, District 7
Bob Wu, Caltrans, District 7