

HAND DELIVERED



July 15, 2005

Mr. John Bishop  
Executive Director  
California Regional Water Quality Control Board  
Los Angeles Region  
320 West 4<sup>th</sup> Street, Suite 200  
Los Angeles, CA 90013

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05 JUL 15 AM 9:40  
CALIFORNIA REGIONAL WATER  
QUALITY CONTROL BOARD  
LOS ANGELES REGION

Subject: Santa Monica Bay Beaches Bacteria TMDL -  
Submittal of Final Implementation Plan for Jurisdictional Groups 5 and 6

Dear Mr. Bishop:

The Cities of Redondo Beach and Manhattan Beach are pleased to submit the Santa Monica Bay Beaches Bacteria TMDL (TMDL) Final Implementation Plan on behalf of Jurisdictional Groups 5 and 6 (J5/6) members which include the Cities of Redondo Beach, Hermosa Beach, Manhattan Beach, Torrance, El Segundo, County of Los Angeles, and Caltrans.

Since the effective date of this TMDL, March 15, 2003, the member agencies of J5/6 have been working on developing this implementation plan based on the Integrated Water Resources Approach. Through a series of stakeholder workshops and regular meetings, J5/6 has developed a three phased process using an adaptive management approach to achieve compliance with this TMDL.

Enclosed please find two (2) copies of the Draft Implementation Plan and two (2) compact disks containing an electronic version in PDF format. In addition we have also included a response matrix describing how your comments from the Draft Implementation Plan have been addressed.

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Thank you in advance for assisting Jurisdictional Groups 5 and 6 in reviewing and considering this report for approval. Please contact us if you have any questions.

Very truly yours,



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Mr. Michael Shay  
Principal Civil Engineer  
City of Redondo Beach



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Mr. Steven Didier  
Senior Management Analyst  
City of Manhattan Beach

Enclosures

Response to Regional Board Staff Comments on the  
DRAFT IMPLEMENTATION PLAN REPORT  
SANTA MONICA BAY BEACHES WET WEATHER BACTERIA TMDL  
JURISDICTIONAL GROUPS 5 & 6

Comment #	Document Reference	Issue	Response
1	General Comment	<p><b>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.</b></p> <p>The draft Implementation Plan needs to 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 programmatic solutions, structural BMPs and potential source controls how the program/project meets the IWRA criteria identified in the Wet Weather TMDL.</p>	<p>The TMDL describes an Integrated Water Resources Approach as one that includes the following:</p> <ul style="list-style-type: none"> <li>▪ Integrated planning for future wastewater, stormwater and recycled water needs and systems</li> <li>▪ Focuses on beneficial re-use of storm water, including groundwater infiltration</li> <li>▪ Addresses multiple pollutants</li> <li>▪ May incorporate and enhance other public goals</li> </ul> <p>Section 4.4 elaborates on how this Implementation Plan relies on an Integrated Water Resources Approach.</p>
2	General Comment	<p><b>In light of historical water quality, discuss in more detail why the maximum timeframe of 18 years is necessary to achieve compliance.</b></p> <p>The TMDL states that the implementation schedule should be <i>as short as possible</i> and that there must be a clear demonstration of the time needed under the proposed approach. As proposed, the draft Implementation Plan appears to use the maximum time period allowed by the TMDL (18 years) to achieve compliance with the Wet Weather TMDL. However, most shoreline compliance monitoring sites in the two subwatersheds are subject to the anti-degradation provisions of the TMDL, meaning that the agencies are only required to maintain existing water quality.</p>	<p>Section 4.4 of the Final Implementation Plan now points out that although only two monitoring locations are projected to require exceedance reductions based on historical data, together they drain some 40% of the land area of Jurisdictional Groups 5 and 6 with most of this in the drainage area of SMB 6-1, this makes the problem of source identification quite challenging. This discussion also now refers the reader to Appendix C—Hydrologic Analysis which provides an extensive assessment of dry and wet weather compliance issues for Jurisdictional Groups 5 &amp; 6 that is much more detailed than Table 2-3. The section also provides an</p>

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		<p>Table 2-3 summarizes the required reductions in wet weather exceedance days, indicating that only sites SMB 6-1 and SMB 6-4 have required reductions of two days each. In light of this situation, please explain in greater detail why the maximum time period is needed</p>	<p>expanded discussion regarding how this Implementation Plan has been developed to deal with multiple pollutants, including winter dry weather bacteria TMDLs and associated compliance deadlines.</p> <p>Section 4.5 now provides additional justification for the length of each phase for each of the three management approaches shown in Figure 4-1 Schedule. Implementing a BMP requires time for planning, design, bid/award, and construction. Since this Implementation Plan relies on an adaptive and iterative process, every BMP implemented will require a carefully designed and implemented monitoring plan to measure the effectiveness of that BMP and to provide the basis for decision making at the next step.</p> <p>Use of the iterative adaptive approach is very important for implementing this Bacteria TMDL because there is tremendous uncertainty about what kinds of approaches will actually be effective in reducing indicator bacteria at the shoreline. This plan provides a framework for trying a range of approaches and evaluating their effectiveness and making decisions regarding future courses of action based on these findings. Because by its very nature the iterative approach allows for mid-course corrections in direction, this creates greater</p>

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			<p>uncertainty in attempting to project the length of time required to complete later phases.</p> <p>Never the less the draft plan did attempt to provide an estimate for the length of each phase for each of the approaches. What the schedule figure did not show was the length of time required for additional iterations of Phases I, II and III of a particular course of action. The schedule figure simply showed ongoing maintenance of installed structural BMPs and continued implementation of institutions BMPs and Source Controls, but it did not show further iterations. We will not know until the decision points which of the approaches may require further iteration.</p>
3	General Comment	<p><b>Include specific performance measures (i.e. implementation goals) as well as more detailed schedules for the Phase I programmatic solutions, Phase I pilot site-specific structural BMPs, and Phase I source identification and source controls.</b></p> <p>The Phase I commitments summarized in section 4.1 and Table 4-3 will ultimately be included into the Municipal Separate Storm Sewer System (MS4) NPDES Permit for Los Angeles County for these subwatersheds. These commitments need to have specific performance measures and time schedules associated with them that if met will provide a reasonable expectation that the interim</p>	<p>This Implementation Plan has been developed as a framework to assist the responsible agencies in meeting water quality requirements of the bacteria TMDL and to obtain the Regional Board staff's concurrence with the framework, approaches, methodologies and techniques to be employed. This plan was not developed with the intent that this document, or any portion of it, will be used for the MS4 permit language. The agencies will work with the RB to provide additional details of schedule and potential</p>

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		<p>milestones and waste load allocations in the TMDL will be achieved.</p> <p>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.</p> <p>For the Phase I programmatic solutions described in section 4.1.1, performance measures for each program and program-level timelines should be included. For example, for the speakers' bureau, how many homeowners associations, garden clubs and other groups will be targeted each year? How many groups will be reached in high priority drainages (e.g. Herondo drainage), and what will be the schedule for outreach in these high priority areas?</p> <p>For the Phase I pilot site-specific structural BMPs in section 4.1.2, the first two steps, including (1) selecting drainage area(s) for study and (2) siting data collection and BMP selection process (including a list of applicable site-specific BMPs for each candidate public parcel), should be completed and included in the final Implementation Plan. Additionally, more detailed schedules for the last two steps should be specified (study area conceptual design alternative selection and site-specific BMP design, implementation and monitoring). Finally, the Implementation Plan should more clearly indicate the agencies' commitment in terms of</p>	<p>performance measures over the next year and a half in anticipation of the expiration of MS4 permit.</p> <p>At this stage we do not have sufficient information to be able to project the effectiveness of the proposed BMPs for bacteria, so it would not be prudent to estimate performance of each BMP. The final plan does provide additional detail indicating the subwatersheds that are the planned focus of these BMPs.</p> <p>In response to the comment regarding accelerating Phase I of the source identification and source control element, the agencies believe that it is a first priority to ensure that sanitary sewage infrastructure is not a significant source of elevated shoreline bacteria. The responsible agencies have carefully considered the feasibility of this request and believe that it will be feasible to accelerate the activities described in sections 4.1.3.1 and 4.1.3.2 for completion by July 2007. The agencies will work to expedite the activities in 4.1.3.3 focusing on near-shore portions of high priority drainage areas, however we do not believe it will be feasible to complete all of the work described in 4.1.3.3 by that time and believe we may require an additional year as shown in the schedule to complete all of that</p>

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		<p>the number and type of pilot structural BMPs that will be implemented in Phase I.</p> <p>For Phase I of the source identification and source control element, the general timeline should be accelerated given the significance of this element in achieving reductions in the high priority drainage areas such as the Herondo drainage (SMB 6-1). Phase I should be completed by July 2007 to allow one cycle of Phase II (discussed below) to be completed by the first wet-weather interim compliance deadline in July 2009. The Implementation Plan should also specify task-level timeframes for completing each of the tasks outlined in sections 4.1.3.1, 4.1.3.2, 4.1.3.3, and 4.1.3.4.</p>	<p>work. The prioritization of source controls described in section 4.1.3.4 can not be completed until all the foregoing work in section 4.1.3 (Phase I Source Control Identification) is completed, however if any unexpected urgent findings arise from activities described in 4.1.3.1 regarding potential sanitary sewage sources, the agencies will take prompt action to remedy those conditions.</p>
4	General Comment	<p><b>Include specific performance measures (i.e. implementation goals) as well as program-level schedules for the Phase II programmatic solutions and Phase II source identification and source controls.</b></p> <p>The Phase II programmatic solutions and source control commitments summarized in sections 4.2.1 and 4.2.3 and Table 4-3 will ultimately be included into the Municipal Separate Storm Sewer System (MS4) NPDES Permit for Los Angeles County for these subwatersheds. As with the Phase I commitments, these Phase II activities need to have specific performance measures and 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.</p>	<p>(See response to comment 3 regarding schedule and performance measures.) Specific performance measures for the programmatic solutions and source identification will be developed as the plan is implemented for each program.</p> <p>Until responsible agencies can identify and develop a prioritized list of significant factors and/or sources of indicator bacteria loads during Phase I, agencies will not have sufficient information to commit to their ability to accelerate a schedule of implementation during Phase II. However, if the agencies are able to accelerate the evaluation of potential near-shore</p>

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		<p>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. However, the agencies should be prepared to maintain the pace of implementation proposed in the Implementation Plan.</p> <p>For the Phase II programmatic solutions described in section 4.2.1, the Implementation Plan should indicate which of these program enhancements are commitments versus which will be evaluated for effectiveness during Phase I before further implementation in Phase II. For those that are commitments, performance measures for each program and program-level timelines should be included as described for Phase I programmatic solutions above.</p> <p>For Phase II of the source identification and source control element, the general timeline should be accelerated given the significance of this element in achieving reductions in the high priority drainage areas such as the Herondo drainage (SMB 6-1). Phase II should be completed by the first wet-weather interim compliance deadline in July 2009.</p>	<p>sanitary sewage sources in high priority areas, and such potentially significant sources are in fact identified, responsible agencies commit to prompt remedial action of these sources, i.e., will accelerate such specific Phase II activities in response.</p>
5	General Comment	<p><b>Discuss in more detail how the draft Implementation Plan will achieve the TMDL compliance milestones (i.e. exceedance day reductions at the beach).</b></p> <p>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</p>	<p>Due to lack of data regarding the effectiveness of BMPs throughout a watershed in reducing indicator bacteria at the shoreline, it would not be prudent to make specific reduction claims based on each individual BMP. However, since most of the sites in Jurisdictional Groups 5 and 6 are likely to be subject to</p>

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		<p>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 needs to demonstrate the linkage between the Phase I, Phase II and Phase III activities and the interim milestones of 10% and 25% reductions in exceedance days by 2009 and 2013, respectively, in the Jurisdictional Groups. This discussion might include the targeting of the worst storm drains/subwatersheds for early source identification and controls. Clearly identify through maps and tables which programmatic solutions, structural BMPs and source identification studies outlined in the Implementation Plan will be implemented in these different drainage areas 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"</p>	<p>the anti-degradation clause and due to the efforts included in the implementation plan, we believe that the 25% interim milestones will be met. We are not certain whether the shoreline monitoring data will provide sufficiently accurate data to allow demonstration of a 10% reduction in 4 exceedance days per year, especially when SMB 6-1 has been relocated to the zero point which makes the historical data less useful in a trend analysis. However this section will specify that the agencies believe it is reasonable to expect that implementation of programmatic solutions could provide such a reduction, whether or not it can actually be measured at the shoreline.</p> <p>Additional discussion of the linkage between the implementation framework and the interim milestones is provided in sections 4.4 and 4.5.</p>
6	General Comment	<p><b>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.</b></p> <p>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</p>	<p>Additional reopeners have been removed from the schedule Figure 4-1. The text specifies that the agencies reserve the right to come before the Board at any point to discuss findings of significance.</p> <p>The agencies will provide an Implementation Progress Report to Regional Board staff at each of the interim wet weather milestones documenting achievements, findings and planned course of action.</p>

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		<p>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.</p>	
7	General Comment	<p><b>The draft Implementation Plan should reconsider the use of watershed direct mail pieces as a programmatic solution.</b></p> <p>The agencies should carefully consider the most effective programmatic solutions given their emphasis in the draft Implementation Plan. Further, the agencies should assess the most effective programmatic 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.</p> <p>Many of these programmatic solutions (particularly related to general outreach and education) have been implemented before and some have been shown to be largely ineffective. For example, it was shown that direct mailers are largely ineffective based on the Los Angeles County's Public Participation Evaluation conducted under the LA County MS4 Permit. On the basis of this</p>	<p>Direct mail is not a major component of our Programmatic solutions. The other elements within this suite will be stressed.</p> <p>A discussion of how agencies will work to improve compliance with existing ordinances was provided in Section 4.1.1.4 Public Agency Activities—Roundtable.</p>

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		<p>evaluation, the Water Board does not consider direct mailings a viable programmatic solution relative to others proposed in the draft Implementation Plan. Other more effective programmatic solutions such as a speakers' bureau among others should be emphasized. 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 (see p. ES-2).</p>	
8	General Comment	<p><b>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.</b></p> <p>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.</p>	<p>Section 4.1.1.2 of the Final Implementation Plan lists the schools that are within these jurisdictions. The final plan also provides information regarding the types of BMPs that have been implemented at two schools in LAUSD. These are strictly provided as examples; BMP selection must be site-specific and at schools must place high consideration on safety issues. The agencies are willing to outreach to and work with school districts in implementing appropriate BMPs.</p>

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