



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 REGION IX
 75 Hawthorne Street
 San Francisco, CA 94105-3901

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FEB 28 2000

Mr. Walt Pettit
 Executive Director
 State Water Resources Control Board
 P.O. Box 100
 Sacramento, CA 95814-0100


Dear Mr. Pettit:

Thank you for submitting the total maximum daily loads (TMDLs) and associated implementation plans to address fecal coliform bacteria impairments of Upper Newport Bay and Lower Newport Bay, California. The submission to EPA is dated January 31, 2000. Based on our review, we have concluded that the TMDLs adequately address the pollutant of concern and, upon implementation, will result in attainment of water quality standards. These TMDLs include allocations as needed, take into consideration seasonal variations and critical conditions, and provide an adequate margin of safety. The State has provided adequate opportunities for public review and comment on the TMDLs. All required elements are adequately addressed; therefore, the TMDLs are hereby approved.

We also hereby approve the inclusion of the TMDLs and associated implementation measures in the Basin Plan pursuant to Clean Water Act Section 303(c) and 40 CFR 130.6(c) and (e). The TMDL and implementation plan require attainment of the TMDL and associated allocations as soon as possible or no later than 14-20 years. We note that the implementation plan provides substantial detail concerning studies and monitoring to refine the TMDL, and less detail concerning specific implementation practices to implement the TMDL. In order to ensure that the TMDLs and associated allocations are implemented as soon as possible, we request that the Regional Board describe more specific implementation measures (1) when the NPDES permits for which WLAs are established are next reissued, and (2) when the TMDL implementation plan itself is next reviewed or revised pursuant to the TMDL review and implementation schedule.

The attached review discusses the basis for this approval decision in greater detail. We appreciate the State's work to complete and adopt these TMDLs and look forward to our continuing partnership in TMDL development. If you have questions concerning this approval, please call me at (415) 744-1860 or David Smith at (415) 744-2012.

Sincerely,


 Alexis Strauss
 Director
 Water Division

enclosure

cc: Gerard Thibeault, Santa Ana RWQCB

**Staff Report Supporting Approval of TMDLs:
Fecal Coliform Bacteria- Upper Newport Bay and Lower Newport Bay, CA
February 17, 2000**

Background

Pursuant to a consent decree (*Defend the Bay v. Marcus*, N. D. California No. C-97-3997 MMC), U.S. EPA is required to ensure that TMDLs are approved or established for bacteria for Upper and Lower Newport Bay, California by April 15, 2000. The Santa Ana Regional Water Quality Control Board (Regional Board) developed TMDLs for fecal coliform bacteria for Upper and Lower Newport Bay. The State of California adopted these TMDLs and submitted them for EPA approval in a submittal package dated January 31, 2000. By approving these State-adopted TMDLs, EPA's consent decree requirements are being met.

The implementation plan for each of the TMDLs is contained in the State's basin plan amendment submitted for EPA review. EPA is reviewing the basin plan amendment and implementation measures for the TMDL is submittal pursuant to the provisions of 40 CFR 130.6, based on the requirements of Clean Water Act Section 303(e). EPA is certifying that the implementation plan is consistent with the California water quality management plan and the requirements of the federal regulations at 40 CFR 130.6.

TMDL Review

Pursuant to Clean Water Act Section 303(d) and 40 CFR 130.2 and 130.7, EPA reviewed the State TMDL submittal package to ensure that all required TMDL elements have been adequately addressed. EPA's review is presented in the attached checklist for Upper and Lower Newport Bay, which documents EPA's findings that all required elements and an adequate level of technical justification for each element are included in the State TMDL submission. Therefore, the TMDLs should be approved.

TMDL Checklist

State: California

Waterbodies: Upper Newport Bay, Lower Newport Bay

Pollutant(s): fecal coliform bacteria

Date of State Submission: January 31, 2000

Date Received By EPA: February 3, 2000

EPA Reviewer: David Smith

Review Criteria	Comments
<p>1. Submittal Letter: State submittal letter indicates final TMDL(s) for specific water(s)/pollutant(s) were adopted by state and submitted to EPA for approval under 303(d).</p>	<p>Submittal letter, p. 1</p>
<p>2. Water Quality Standards Attainment: TMDL and associated allocations are set at levels adequate to result in attainment of applicable water quality standards.</p>	<p>Regional Board resolution 99-10, p.2; Attachment to resolution 99-10, p. 3. TMDL is expected to result attainment of applicable water quality standards within 14 years (for the water contact recreation standards) or 20 years (for shellfish standards).</p>
<p>3. Numeric Target(s): Submission describes applicable water quality standards, including beneficial uses, applicable numeric and/or narrative criteria. Numeric water quality target(s) for TMDL identified, and adequate basis for target(s) as interpretation of water quality standards is provided.</p>	<p>TMDL Staff report dated November 24, 1998 , p.5. TMDL applies both acute and chronic numeric standards for fecal coliform.</p>
<p>4. Source Analysis: Point, nonpoint, and background sources of pollutants of concern are described, including the magnitude and location of sources. Submittal demonstrates all significant sources have been considered.</p>	<p>TMDL Staff report dated November 24, 1998, pp. 28-36. TMDL identifies all likely sources and summarizes data describing bacteria levels associated with significant sources at different places in the watershed. Insufficient data were available to generate a specific source-by-source loading estimate; however, TMDL adequately accounts for bacteria loading uncertainty by setting TMDL and associated allocations equal to the applicable standards at all locations in Upper and Lower Newport Bay.</p>
<p>5. Allocations: Submittal identifies appropriate wasteload allocations for point sources and load allocations for nonpoint sources. If no point sources are present, wasteload allocations are zero. If no nonpoint sources are present, load allocations are zero.</p>	<p>Attachment to Resolution 99-10, table 5-9f (p. 5). TMDLs, WLAs and Las are expressed in terms of fecal coliform density. This is an appropriate way to express a bacteria TMDL because both human health and shell fish impacts associated with bacteria are a function of bacteria density in the water column rather than mass loading. This approach is also consistent with 40 CFR 130.2(i).</p>
<p>6. Link Between Numeric Target(s) and Pollutant(s) of Concern: Submittal describes relationship between numeric target(s) and identified pollutant sources. For each pollutant, describes analytical basis for conclusion that sum of wasteload allocations, load allocations, and margin of safety does not exceed the loading capacity of the receiving water(s).</p>	<p>TMDL Staff report dated November 24, 1998, pp. 36-40. By setting the TMDL equivalent to the numeric target and the applicable water quality standards, a direct and exact linkage exist.</p>

<p>7. Margin of Safety: Submission describes explicit and/or implicit margin of safety for each pollutant.</p>	<p>Staff report dated November 24, 1998, pp. 40-41. TMDL provides implicit MOS by not accounting for likely bacteria dilution and dieoff prior to entry into Bay (e.g. likely dieoff due to exposure to sunlight), and after entry into Bay (e.g. due to exposure to salt water in the Bay). TMDL plan also provides rigorous monitoring and review plan and schedule, which provides an ongoing mechanism to adjust the TMDL if needed in the future.</p>
<p>8. Seasonal Variations and Critical Conditions: Submission describes method for accounting for seasonal variations and critical conditions in the TMDL(s)</p>	<p>Staff report dated November 24, 1998, pp. 41-42. TMDL accounts for seasonal variations and, in particular the critical warm weather period by setting the TMDL and allocations to meet WQS at all times and under all conditions. In addition, the implementation schedule calls for implementation of the TMDL to address the most important local beneficial use- warm weather body contact recreation- in the faster timeframe.</p>
<p>9. Public Participation: Submission documents provision of public notice and public comment opportunity; and explains how public comments were considered in the final TMDL(s).</p>	<p>The Regional Board public noticed the TMDL several times in a local newspaper of general distribution and held 4 public workshops and hearings to receive public comments. Regional Board responded to all written comments through responsiveness summaries included in the submittal package.. State Board also provided opportunities for public review and comment by sending notices of availability of the proposed TMDL to an extensive mailing list and by holding a public hearing to receive public comments. We understand that no additional comments were received by the State Board that were not addressed by the Regional Board.</p>
<p>10. Technical Analysis: Submission provides appropriate level of technical analysis supporting TMDL elements.</p>	<p>Staff report and responsiveness summaries provided detailed technical justifications for each TMDL element.</p>
<p style="text-align: center;">Note: The following criteria do not apply to all TMDLs, but must be applied in the situations noted.</p>	
<p>11. Monitoring Plan for TMDLs Under Phased Approach (where phased approach is used): TMDLs developed under phased approach identify implementation actions, monitoring plan and schedule for considering revisions to TMDL.</p>	<p>Submittal includes detailed schedule for implementation-related actions and monitoring and discusses implementation and monitoring approaches (pp. 6- 15). Staff report also discusses implementation and monitoring needs and plans in detail (pp.43-44).</p>

<p>12. Reasonable Assurances (for waters affected by both point and nonpoint sources): Where point source(s) receive less stringent wasteload allocations because nonpoint source reductions are expected and reflected in load allocations, implementation plan provides reasonable assurances that nonpoint implementation actions are sufficient to result in attainment of load allocations in a reasonable period of time. Reasonable assurances may be provided through use of regulatory, non-regulatory, or incentive based implementation mechanisms as appropriate.</p>	<p>Not applicable-- no WLAs were made less stringent based on expected nonpoint source controls.</p>
<p>Implementation Plan Review Criteria Pursuant to 40 CFR 130.6 and 303(e)</p>	
<p>13. Clear Implementation Plan: Submittal describes planned implementation actions or, where appropriate, specific process and schedule for determining future implementation actions . Plan is sufficient to implement all wasteload and load allocations in reasonable period of time. TMDL(s) and implementation measures are incorporated into the water quality management plan. Water quality management plan revisions are consistent with other existing provisions of the water quality management plan.</p>	<p>Attachment to Resolution 99-10 describes implementation plans in detail and notes that all sources for which WLAs are established are regulated either under NPDES permits or local regulatory mechanisms (pp. 6-15). Plan is sufficient to result in attainment of the TMDL and associated allocations within the scheduled timeframe. This finding is based on the rigorous actions to further characterize and identify control mechanisms for significant bacteria sources within the watershed are clearly scheduled for completion, and responsibility for each action is clearly assigned to one or more regulated entities. In addition, the NPDES permitting and local vessel waste discharge program provide a workable regulatory framework for ensuring compliance with WLAs. The TMDL requires compliance <u>as soon as possible</u>, but no later than 14-20 years from adoption, depending upon the applicable standard. This timeframe compels rapid action to comply with the TMDL, but properly recognizes that it will be technically difficult to control urban sources of bacteria discharges at levels which meet the stringent TMDL provisions. The approval letter should note that EPA expects the Regional Board to apply its best efforts to ensure that the TMDLs and associated allocations are implemented as soon as possible. In particular, the Regional Board should ensure that more specific implementation measures be described (1) when the NPDES permits for which WLAs are established are next revised or reissued, and (2) when the TMDL implementation plan itself is next reviewed/revised as scheduled in the implementation schedule provided with the submittal.</p>