# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

## CENTRAL COAST REGION

San Luis Obispo, California

### RESOLUTION NO. R3-2002-0117
### REVISED MAY 16, 2003
### AMENDING THE WATER QUALITY CONTROL PLAN FOR THE CENTRAL COAST BASIN TO INCLUDE A TOTAL MAXIMUM DAILY LOAD AND IMPLEMENTATION PLAN FOR PATHOGENS FOR MORRO BAY AND CHORRO AND LOS OSOS CREEKS

**The California Regional Water Quality Control Board Central Coast Region hereby finds:**

1. The California Regional Water Quality Control Board, Central Coast Region (Regional Board), adopted the Water Quality Control Plan for the Central Coastal Basin (Basin Plan), on September 8, 1994. The Basin Plan includes beneficial use designations, water quality objectives, implementation plans for point source and nonpoint source discharges, and statewide plans and policies.

2. The Regional Board periodically revises and amends the Basin Plan. The Regional Board has determined the Basin Plan requires further revision and amendment to incorporate a Total Maximum Daily Load (TMDL) and Implementation Plan for Pathogens for Morro Bay and Chorro and Los Osos Creeks.

3. The Regional Board proposes to amend the Basin Plan by inserting amendments into Chapter Four, Section IX (Total Maximum Daily Loads).

4. Section 303(d) of the Clean Water Act requires States to identify and to prepare a list of water bodies that do not meet water quality objectives and to establish TMDLs for the listed water bodies. A TMDL is the pollutant loading that a water body can accept while protecting the identified beneficial uses.

5. Morro Bay was identified as impaired by pathogens on the 1998 Clean Water Act Section 303(d) list of impaired water bodies. Therefore, the Regional Board is required to adopt a TMDL for this water body and incorporate the TMDL and associated Implementation Plan into the Basin Plan (40 CFR 130.6(c)(1), 130.7, Water Code section 13242).

6. Morro Bay, Chorro and Los Osos Creeks are located entirely within San Luis Obispo County.

7. The TMDL Report contains a Problem Statement, Numeric Targets, Source Analysis, Total Maximum Load, Linkage Analysis, Load Allocations, Margin of Safety, an Implementation Plan, and a Monitoring Plan.

8. The problem is as follows: Numeric water quality objectives for fecal coliform bacteria set by the Regional Board and standards set by the United States Department of Health Services Food and Drug Administration's National Shellfish Sanitation Program and implemented by California Department of Health Services (DHS) have been exceeded for shellfish harvesting and water contact recreation in Morro Bay. Elevated levels of fecal coliform bacteria in Morro Bay and Chorro and Los Osos Creeks indicate that pathogens are impairing the beneficial use of water contact recreation and shellfish harvesting (in Morro Bay only). High levels of pathogens may cause disease in humans and may also adversely affect marine animals, such as sea otters. Portions of Morro Bay have been closed by DHS for commercial shellfish harvesting since 1996, and advisories have been posted in the past to warn the public to avoid water contact activities.

9. The numeric targets are as follows: Pathogenic input to Chorro and Los Osos Creeks shall not exceed the geometric mean of 200 Most Probable Number (MPN)/100 milliliter (mL) concentration of fecal coliform bacteria based on not less than five samples in any 30-day period and no more than 10% of the samples shall exceed 400 MPN/100 mL fecal coliform bacteria in any 30-day period; at all areas of Morro Bay, the geometric mean of fecal coliform bacteria shall not exceed 14 MPN/100 mL based on monthly sampling evaluated over an annual and triennial basis and not more than 10% of the samples shall exceed 43 MPN/100 mL of fecal coliform evaluated over an annual and triennial basis. These numeric targets will be protective of the beneficial uses of both shellfishing and recreational contact (shellfishing beneficial use being more sensitive than recreational contact).

10. The sources appear to be coming mainly from birds, humans, livestock and domestic animals, in that order. There is also a small percent contribution from wild animals (non-bird wild animals). These sources were identified based on a study that used a DNA fingerprinting technique. Fecal matter most likely enters Morro Bay from Chorro and Los Osos Creeks, groundwater seeps, rangeland runoff, leaking/failing septic systems, stormwater, wastewater treatment plant failures, and direct deposition.

11. A TMDL is the loading capacity of a pollutant that a water body can accept while protecting beneficial uses. Normally, TMDLs are expressed as loads (pollutant concentration multiplied by the volumetric flow rate), but in the case of pathogens, it is more logical for the TMDL to be based only on concentration. TMDLs can be expressed in terms of either mass per time, toxicity or other appropriate measure [40 CFR §130.2(I)]. A concentration based TMDL makes more sense in this situation because the public health risks associated with recreating in, or eating shellfish from, contaminated waters scales with organism concentration, and pathogens are not readily controlled on a mass basis. Therefore, as other regional boards have done, we are establishing a concentration based TMDL for pathogens in Morro Bay.

12. The TMDL will be implemented as follows: The bacterial load to Morro Bay derives from nonpoint sources (NPS) and point sources. As such, implementation will rely on the State Plan for NPS pollution control and continued implementation of regulatory controls as appropriate on point sources, including storm water. For the point source, the implementation relies on the National Pollutant Discharge Elimination System (NPDES) permit in place for the California Men's Colony wastewater treatment plant and the City of Morro Bay/Cayucos wastewater treatment plant, Waste Discharge requirements and on the implementation and enforcement of Section 13267 of the California Water Code.

13. The TMDL will be monitored as follows: Monitoring will take place to ensure that numeric targets are met and implementation actions are taking place.

14. Regional Board Staff has conducted TMDL outreach by coordinating the TMDL with the Morro Bay Shellfish Technical Advisory Committee and presenting status reports at the Morro Bay National Estuary Program's committee meetings. In addition, public review and comment through this board hearing process provides another formal opportunity for public input for adoption of this TMDL as a Basin Plan amendment.

15. The Morro Bay National Estuary Program's Comprehensive Conservation and Management Plan for Morro Bay Estuary advocates Total Maximum Daily Loads for pathogens, as a means to protect the beneficial uses of Morro Bay, Chorro and Los Osos Creeks.

16. The Regional Board submitted the TMDL Report to an external scientific review panel. On July 24 & 25, 2002, the review panel submitted its responses to the Regional Board, which stated that in general, the TMDL Report presented a sound and scientifically justifiable program for [reducing pathogens...]. In addition, the review panel identified several specific areas of concern. The Regional Board revised the proposed Basin Plan amendment in response to the comments submitted by the review panel, or provided a written response which explained the basis for not incorporating their comments.

17. Staff considered costs of preventing pathogen discharges via implementation of Best Management Practices. The cost of implementing actions to reduce pathogens will be incurred by the implementers and offset with grants, loans, in-kind donations, and matching funds as much as possible.

18. This Basin Plan amendment must be submitted for review and approval by the State Water Resources Control Board and the State Office of Administrative Law (OAL). The Basin Plan amendment will become effective upon approval by the State Board OAL. The TMDL must further be approved by the United States Environmental Protection Agency (USEPA).

19. This amendment meets the "Necessity" standard of the Administrative Procedure Act, Government Code §11353(b).

20. The Regional Board has determined that the TMDL for pathogens for Morro Bay and Chorro and Los Osos Creeks is set at levels necessary to attain and maintain the applicable numeric water quality objectives taking into account seasonal variations and any lack of knowledge concerning the relationship between effluent limitations and water quality (40 CFR 130.7(c)(1)).

21. 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 has been prepared. Drafts of the Notice of Filing, staff report, environmental checklist, alternatives analysis and proposed amendment have been prepared and distributed to interested persons and agencies for review and comment in accordance with Title 23 California Code of Regulations section 3777. All public comments were considered. No significant environmental impacts will result from approval of this Basin Plan amendment.

22. The proposed amendments to the Basin Plan were developed in accordance with CWC Section 13240 et seq.

23. Notice of public hearing was given by advertising in newspapers of general circulation within the Region and by mailing a copy of the notice to all persons requesting such notice and applicable government agencies.

24. The amendment to the Basin Plan will result in no potential adverse effect, either individually or cumulatively, on wildlife and so is exempt from fee payments to the Department of Fish and Game under the California Fish and Game Code

25. On December 13, 2002 in San Luis Obispo, California, the Regional Board held a public hearing and heard and considered all public comments and evidence in the record.

26. On December 13, 2002, the Regional Board adopted resolution no. R3-2002-0117.

27. On March 17, 2003, State Board returned the Administrative Record to the Regional Board with a memo stating that Regional Board adoption procedures did not comply with section 3777 of Title 23 California Code of Regulations which requires consideration of reasonable alternatives to the proposed amendment that would achieve the stated goal.

28. On May 16, 2003, in Watsonville, California, the Regional Board held a public meeting and re-heard this item to correct the omission stated above (45 days public notice were given). The Regional Board heard and considered all public comments and evidence in the record.

**THEREFORE, BE IT RESOLVED,**

1. The Regional Board, after considering the entire record, including oral testimony, adopts the Basin Plan amendment shown on "Attachment–Proposed Basin Plan Amendments." The amendment will not take effect until approved by the State Board and OAL.

2. The Regional Board's Executive Officer is authorized to submit the amendment to the State Board. The State Board is requested to approve the Basin Plan Amendment in accordance with requirements of Sections 13245 and 13246 of the California Water Code, and upon approval, the State Board is requested to transmit the amendment to the OAL and USEPA for approval.

3. The environmental document prepared by Regional Board staff pursuant to Public Resource Code Section 21080.5 is hereby certified. Following approval of the revised Basin Plan by the State Board, the Regional Board shall file a Notice of Decision with the Resources Agency following USEPA approval.

4. The Regional Board's Executive Officer is authorized to sign a Certificate of Fee Exemption.

5. If during the 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 Regional Board's Executive Officer may make such changes, and shall inform the Regional Board of any such changes.

**I, ROGER W. BRIGGS, Executive Officer,** do hereby certify the foregoing is a full, true, and correct copy of the resolution adopted by the California Regional Water Quality Control Board, Central Coastal Region, on **May 16, 2003**.

Executive Officer