STATE OF CALIFORNIA
REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION

STAFF REPORT FOR REGULAR MEETING OF MARCH 19-20, 2009
Final Prepared on FEBRUARY 26, 2009

ITEM NUMBER: 17

SUBJECT: Amending the Water Quality Control Plan for the Central Coast Basin to Adopt Total Maximum Daily Loads for Fecal Coliform in Corralitos and Salsipuedes Creeks and add the Corralitos/Salsipuedes Creek Watershed as subject to the Domestic Animal Waste Discharge Prohibition and the Human Fecal Material Discharge Prohibition

KEY INFORMATION

Central Coast Water Board Staff (staff) recommends adoption of proposed Total Maximum Daily Loads (TMDLs) for fecal coliform in Corralitos and Salsipuedes Creeks as a Basin Plan Amendment. The Creeks are referred to individually by name hereafter as necessary, but the watershed is referred to hereafter as the Corralitos/Salsipuedes Creek watershed.

Staff also recommends adding the Corralitos/Salsipuedes Creek watershed to watersheds covered by the Domestic Animal Waste Discharge Prohibition and the Human Fecal Material Discharge Prohibition proposed earlier in today's Agenda item No. 16 (TMDLs for Fecal coliform in the Pajaro River Watershed). Staff is proposing that the Domestic Animal Waste Discharge Prohibition and the Human Fecal Material Discharge Prohibition be used to reduce or eliminate these sources of fecal coliform to waterbodies in the Corralitos/Salsipuedes Creek watershed. The TMDL implementation plan will authorize the Executive Officer or the Central Coast Water Board to require implementation actions for parties responsible for domestic animal waste and human fecal material discharges to comply with the prohibitions.

The Corralitos/Salsipuedes Creek watershed is in Santa Cruz County. Corralitos Creek is tributary to Salsipuedes Creek. The two waterbodies have a confluence approximately 2.25 miles upstream of the Pajaro River. Salsipuedes Creek has a confluence with the Pajaro River, which drains into Monterey Bay.

These TMDLs establish the acceptable load and allocations to parties responsible for sources of fecal coliform that protect the water contact recreation beneficial use in Corralitos and Salsipuedes Creeks. Staff has identified sources of fecal coliform that are causing or contributing to impairment, has identified parties responsible for these sources, has proposed waste load and load allocations necessary to achieve the TMDLs, and has identified implementation and regulatory mechanisms to achieve the TMDLs. The proposed allocations are equal to existing water quality objectives for fecal coliform protective of the water contact recreation beneficial use.

SUMMARY

Corralitos Creek was listed on the Clean Water Act section 303(d) list of impaired waters in 2002. Historic and recent data collected from Salsipuedes Creek and recent data from Corralitos Creek

indicated impairment in both Creeks. Therefore, staff is proposing TMDLs for fecal coliform for both Corralitos and Salsipuedes Creeks.

Staff recommends the Central Coast Water Board adopt these TMDLs as Basin Plan Amendments described in Attachment-1 to this Staff Report. The Final Project Report is the technical report supporting the Basin Plan Amendments. The Final Project Report (listed as Attachment 2 to this staff report) is available at the Central Coast Water Board website at: http://www.waterboards.ca.gov/centralcoast/board_info/agendas/2009/2009_agendas.shtml. (Please click on "view agenda" for March 20, 2009; then click on Item 17, TMDLs for Fecal Coliform in Corralitos and Salsipuedes Creeks). Central Coast Water Board staff did not include the large Project Report in the staff report to save paper. Paper copies are available upon request.

Staff recommends the Central Coast Water Board add the Corralitos/Salsipuedes Creek watershed as a watershed subject to compliance with the Domestic Animal Waste Discharge Prohibition and the Human Fecal Material Discharge Prohibition to restore and protect the beneficial uses of the Corralitos/Salsipuedes Creek watershed. These two prohibitions will be the regulatory mechanisms to address loading of fecal coliform from several identified sources. Staff also proposes the regulation of identified sources of fecal coliform through existing National Pollutant Discharge Elimination System permits and Waste Discharge Requirements. The attachments support recommendations and summary statements made in this staff report.

Staff concluded approval of these TMDLs and addition of the Corralitos/Salsipuedes Creek watershed as a watershed subject to compliance with the discharge prohibitions will result in reduction of fecal coliform loading to impaired waters in the Corralitos/Salsipuedes Creek Watershed, resulting in improved water quality and prevention of future fecal coliform loading causing exceedance of water quality objectives.

DISCUSSION

Project Development of TMDLs

Central Coast Water Board staff used water quality data (both fecal coliform and *Escherichia coli* (together referred to as fecal indicator bacteria; FIB) collected by the County of Santa Cruz, the Coastal Watershed Council and the City of Watsonville to assess FIB conditions in surface waters. Central Coast Water Board staff also used discharger data and reports, land use data, field reconnaissance, and conversations with staff from resource agencies and the respective municipalities to complete the source analysis.

Problem Statement and Numeric Target

The Basin Plan contains fecal coliform water quality objectives to protect water contact recreation. Staff determined current levels of fecal coliform are not supportive of the water contact recreation beneficial use in Corralitos and Salsipuedes Creeks.

The numeric target for the TMDLs is equal to the water quality objectives protecting water contact recreation, which are:

> "Fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 MPN per 100 mL, nor shall more than 10 percent of samples collected during any 30-day period exceed 400 MPN per 100 mL."

Source Analysis

Staff determined the relative order of controllable sources of FIB in the Corralitos/Salsipuedes Creek watershed. Beginning with the largest source first, the controllable sources were: (1) storm drain discharges to municipally owned and operated storm sewer systems required to be covered by an

NPDES permit (MS4s), (2) homeless person/encampment discharges (not regulated by a permit for storm water discharges), (3) pet waste (not regulated by a permit for storm water discharges), (4) farm animal and livestock discharges, (5) onsite wastewater system discharges, (6) sanitary sewer collection system spills and leaks, and (7) private sewer laterals connected to municipal sanitary sewer collection systems. Natural sources also contributed fecal coliform to the Corralitos/Salsipuedes Creek watershed.

TMDLs and Allocations

The TMDLs for fecal coliform in Corralitos and Salsipuedes Creeks are equal to the water quality objective for fecal coliform.

The allocations for fecal coliform in Corralitos and Salsipuedes Creeks, for sources not containing human fecal material, are equal to the water quality objective for fecal coliform. The allocations for fecal coliform in Corralitos and Salsipuedes Creeks for sources containing human fecal material are zero.

The parties responsible for the allocation to controllable sources are not responsible for the allocation to natural sources; natural sources are assigned an allocation equal to the water quality objective protecting water contact recreation. Table IX – N-1. in the Resolution, contained within Attachment 1 shows these allocations to the responsible parties.

The responsible parties for controllable sources of fecal indicator bacteria are the City of Watsonville, the County of Santa Cruz, owners and/or operators of land with activities of homeless persons/encampments, owners of land containing farm animals/livestock, owners of onsite wastewater systems, Freedom County Sanitation District, Salsipuedes Sanitary District, and owners of private sewer laterals.

Implementation Plan

The proposed Implementation Plan, described in Attachment 1 and Attachment 2, outlines the responsibilities of each responsible party and the steps the Central Coast Water Board or the Executive Officer will take to require actions of the responsible parties.

Staff developed an implementation strategy (Plan) to implement these TMDLs that reflects our current understanding of fecal indicator bacteria (FIB) loading in the Corralitos/Salsipuedes Creek watershed. The Plan establishes that the Executive Officer or the Central Coast Water Board will require responsible parties to implement identified actions that will reduce FIB loading, monitor FIB source reductions, and report progress and results of monitoring to the Central Coast Water Board pursuant to an NPDES permit, Waste Discharge Requirements, or demonstration of compliance with discharge prohibitions.

The Implementation Plan explains that if natural sources are found to cause the impairment, and/or if responsible parties demonstrate that controllable sources of FIB are not contributing to the exceedance of water quality objectives in receiving waters, staff will re-evaluate the TMDLs, targets and allocations and propose revisions for the Central Coast Water Board to consider. For example, staff may propose a site-specific objective for Corralitos and Salsipuedes Creeks. A site-specific objective would be proposed as a Basin Plan Amendment through the appropriate adoption and public review procedures required by the Central Coast Water Board, State Water Resources Control Board, and United States Environmental Protection Agency.

Monitoring Plan

The Implementation Plan establishes that the Executive Officer will require responsible parties to monitor fecal indicator bacteria source reductions and report progress and results of monitoring to the Central Coast Water Board. Staff developed a recommended set of locations and will work with

responsible parties to establish on-going monitoring at these locations, or at alternate locations from which responsible parties can efficiently collect relevant water quality data. Responsible parties will conduct the monitoring and submit results to the Central Coast Water Board. Central Coast Water Board staff will evaluate the monitoring data on an on-going basis, as well as during assessments to determine progress toward achieving the allocations and TMDLs (proposed to occur every three years). The implementation plan also requires responsible parties to evaluate and report their progress toward achieving their allocations.

Time-Schedule For Tracking Progress And Achieving The TMDLs

The target date to achieve the TMDLs is 13 years after the effective date of the TMDLs, which is the date of approval by the California Office of Administrative Law.

ENVIRONMENTAL SUMMARY

The California Resources Agency has certified the basin planning process as being in accordance with Section 21080.5 of the Public Resources Code. The process is therefore exempt from Chapter 3 of the California Environmental Quality Act (CEQA). The analysis contained in the Final Project Report (Attachment 2), the CEQA Substitute Document (Attachment 3), this staff report, and the responses to comments (Attachment 6) complies with the requirements of the State Water Board's certified regulatory CEQA process, as set forth in California Code of Regulations, Title 23, section 3775 et seq. Furthermore, the analysis fulfills the Central Coast Water Board's obligations attendant with the adoption of regulations "requiring the installation of pollution control equipment, or a performance standard or treatment requirement," as set forth in section 21159 of the Public Resources Code. All public comments were considered.

ANTI-DEGRADATION

Adoption of these TMDLs and basin plan amendments will not result in any degradation of water quality; in fact, they are designed to improve water quality. As such, these TMDLs and basin plan amendment comply with all requirements of both State and Federal anti-degradation requirements (State Board Resolution 68-16 "Statement of Policy with Respect to Maintaining High Quality of Waters in California, and 40CFR 131.12).

SCIENTIFIC PEER REVIEW

The Peer reviewer provided comments to Central Coast Water Board staff in August 2008. Central Coast Water Board staff prepared responses and revised the Project Report in response to these comments in August 2008, prior to distributing for Public Comments. Peer Review comments and Central Coast Water Board staff responses are included in Attachment 5. These comments resulted in minor changes, mostly with regard to naturalized fecal indicator bacteria, and the reliability of microbial source tracking in determining the fecal indicator bacteria contribution from specific sources. These changes are discussed in staff responses described in Attachment 5.

PUBLIC INVOLVEMENT

Staff held a conference call on August 3, 2004 with John Ricker, County of Santa Cruz Environmental Health Services; Monica Burke-Reid, consultant to Santa Cruz County Public Works for the Proposition 13 grant[1]; and Tamara Doan, Coastal Watershed Council. The focus of the call was the Proposition 13 grant, volunteer monitoring and Carbonera Creek. Staff also discussed

[1] Santa Cruz County Environmental Health Services was awarded $173,560 by the State Water Resources Control Board under the Proposition 13 Nonpoint Source Assessment program to determine the source and health threat of elevated bacteria levels at Santa Cruz County beaches.

current water quality monitoring efforts throughout the County of Santa Cruz, including those in the Corralitos/Salsipuedes Creek watershed and new sites that should be sampled in the watershed.

Central Coast Water Board staff also met with City of Watsonville staff to discuss the possibility of future sampling by the City of Watsonville in Corralitos and Salsipuedes Creeks, on August 19, 2004.

Central Coast Water Board staff conducted a Watershed Assessment Planning Meeting with stakeholders on March 9, 2006 for reviewing existing information regarding data collection, water diversions, and current projects to improve water quality. Staff held phone meetings and communicated via e-mail with key personnel from the City of Watsonville, County of Santa Cruz, various additional water quality associated entities including ranching and farming organizations, and sewer collection system facilities.

Staff also received verbal comments at a June 26, 2006 public workshop/CEQA scoping meeting. At this meeting, staff announced that they would accept (1) verbal comments at the public workshop and (2) written comments received by Wednesday, July 12, 2006. (The workshop notice stated Central Coast Water Board staff would not provide a written response for each comment received, but would incorporate written responses to all significant environmental points in the final reports provided to the Central Coast Water Board.) Central Coast Water Board staff also told stakeholders that written responses to individual comments submitted during the formal public comment period would be prepared.

This Staff Report, the Resolution, and other attachments were made available for formal public comment associated with this Central Coast Water Board Hearing on March 20, 2009. Comments were received by January 23, 2009.

Staff received public comments from two sources: (1) John Ricker, Water Resources Division Director, Santa Cruz County Environmental Health Services, and (2) Robert Ketley, City of Watsonville. The comments covered a range of subjects including:

1. the contribution of FIB from natural sources including from pathogens growing in sediment,
2. controllable versus uncontrollable FIB sources,
3. confidence intervals in data analysis,
4. agricultural land use as a source of FIB,
5. the impairment of Salsipuedes Creek upstream of the confluence with Corralitos Creek,
6. the naming of onsite wastewater systems in the Delaney community as a source,
7. storm water implementation costs, and
8. questions regarding the Storm Water Management Plan and associated Wasteload Allocation Attainment Program.

Public comments and Central Coast Water Board staff responses are included in Attachment 6 to this staff report.

RECOMMENDATION

Adopt Resolution No. R3-2009-0009 contained in Attachment 1, as proposed, to amend the Basin Plan to Adopt Total Maximum Daily Loads for Fecal Coliform in Corralitos and Salsipuedes Creeks, and add Corralitos/Salsipuedes Creeks Watershed as subject to two discharge prohibitions; one for Human Fecal Material, and the other for Domestic Animal Waste. Adopting this resolution will result in actions that reduce fecal coliform loading to waterbodies in the Corralitos/Salsipuedes Creek watershed, thereby improving water quality and adequately protecting beneficial uses of these waterbodies.

ATTACHMENTS:

The attachments are available at:
http://www.waterboards.ca.gov/centralcoast/board_info/agendas/2009/2009_agendas.shtml. Click on "view agenda" for March 19-20, 2009; then click on Item 17, TMDLs for Fecal Coliform in Corralitos and Salsipuedes Creeks.

1. Resolution No. R3-2009-0009,
2. Final Project Report: "Total Maximum Daily Loads for Fecal coliform in Corralitos and Salsipuedes Creeks, Santa Cruz County, California, For the March 20, 2009 Water Board Meeting
3. CEQA Substitute Document
4. Notice of Public Hearing / Notice of Filing
5. Scientific Peer Review Comments and Responses
6. Public Comment and Staff Response

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