

**STATE WATER RESOURCES CONTROL BOARD
BOARD MEETING SESSION – DIVISION OF WATER QUALITY
SEPTEMBER 19, 2011**

ITEM 5

SUBJECT

CONSIDERATION OF A RESOLUTION TO APPROVE AN AMENDMENT TO THE WATER QUALITY CONTROL PLAN FOR THE CENTRAL COAST REGION (BASIN PLAN) TO: 1) ADOPT TOTAL MAXIMUM DAILY LOADS FOR FECAL COLIFORM IN THE LOWER SALINAS RIVER WATERSHED; 2) ADD THE LOWER SALINAS RIVER WATERSHED TO THE DOMESTIC ANIMAL WASTE DISCHARGE PROHIBITION; AND 3) ADD THE LOWER SALINAS RIVER WATERSHED TO THE HUMAN FECAL MATERIAL DISCHARGE PROHIBITION.

DISCUSSION

On September 2, 2010, the Central Coast Regional Water Quality Control Board (Central Coast Water Board) adopted [Resolution No. R3-2010-0017](#) amending the Basin Plan to establish a TMDL for Fecal Coliform in the Lower Salinas River Watershed and add the Lower Salinas River Watershed to both the Domestic Animal Waste Discharge Prohibition and the Human Fecal Material Discharge Prohibition.

The Lower Salinas River Watershed is located within northern Monterey County and includes approximately 400 square miles of the Lower Salinas Valley. The project area is bounded by the Gabilan Range to the east, by the Sierra De Salinas range to the west and to the northwest (downstream) by Monterey Bay. The Salinas River Lagoon and the Old Salinas River are the two receiving water bodies at the downgradient terminus of the project area.

Impairment

States are required to develop TMDLs for water segments listed as impaired on the Clean Water Act section 303(d) list (List). The Lower Salinas River (from Gonzales downstream to the Salinas River Lagoon), Old Salinas River, Tembladero Slough, Salinas Reclamation Canal, Gabilan Creek, Alisal Creek, Natividad Creek, Santa Rita Creek, Quail Creek, and Chualar Creek were listed as impaired on the 2008-2010 List because they did not meet water quality standards for fecal indicator bacteria (e.g., fecal coliform or *E. coli*). Central Coast Water Board staff developed TMDLs for these waterbodies to address these listings. Salinas River Lagoon (north) and Towne Creek are not on the List, but are also impaired because *E. coli* concentrations exceed U.S. EPA recommended criteria. CWA section 303(d)(3) allows states to develop TMDLs for water segments that are not on the List, and a TMDL can constitute a plan of implementation under Water Code section 13242. Consequently, the Central Coast Water Board also developed TMDLs for both Salinas River Lagoon (north) and Towne Creek, which are impaired, but not currently on the List.

A TMDL specifies load allocations for nonpoint sources and wasteload allocations for point sources that, when achieved, are expected to result in attainment of applicable water quality standards. Since these TMDLs are being established as a Basin Plan amendment, state law requires an implementation plan and schedule to ensure that the TMDLs are achieved.

The amendment addresses impairment due to fecal indicator bacteria in the Lower Salinas River Watershed by establishing TMDLs and applying two prohibitions to the watershed. The water quality objectives in the Basin Plan are set at established levels of fecal indicator bacteria, in this case fecal coliform, that demonstrate the presence of fecal pollution. Indicator organisms such as these have long been used to protect bathers from illnesses that may be contracted during recreational activities in surface waters contaminated by fecal pollution. These organisms often do not cause illness directly, but are indicators of the existence of harmful pathogens. Current fecal coliform concentrations in the Lower Salinas River Watershed exceed the existing Basin Plan numeric water quality objectives for protecting the water contact recreation beneficial use.

Sources

The sources of fecal coliform and *E. coli* in the project area differ across varying land uses. Identified sources include:

- Domestic animals/livestock
- Stormwater
- Illegal dumping
- Sanitary sewer collection system leaks, and
- Discharges from homeless persons.

Numeric Target and TMDL Allocations

The amendment establishes a numeric target equal to the Basin Plan water quality objective for the protection of the water contact recreation beneficial use. The numeric target used to develop the TMDLs is:

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.

Responsible parties are assigned one of two possible allocations. Responsible parties are either assigned an allocation equal to the numeric target, or are assigned an allocation equal to zero. The allocation of zero, or no loading, is assigned to responsible parties whose discharge, if one were to occur, is likely untreated human waste.

The responsible parties whose assigned allocations equal the numeric target include: MS4s discharging stormwater, owner/operators of land containing illegal dumping, and owners/operators of land with domestic animals and livestock. The responsible party for each of these sources must not discharge or release a load of fecal coliform that will increase the concentration above the assimilative capacity of a water body.

The responsible parties assigned an allocation of zero fecal coliform are: entities responsible for sewer collection systems and owners/operators of lands containing homeless persons or encampments.

Natural sources are assigned an allocation equal to the Basin Plan water quality objective for fecal coliform. The parties responsible for the allocations to controllable sources are not responsible for the allocation to natural sources.

Responsible parties may demonstrate that although water quality objectives are not being achieved in receiving waters, controllable sources of pathogens are not contributing to the exceedance.

Central Coast Water Board staff incorporated an implicit margin of safety in the TMDLs through conservative assumptions.

Prohibitions

The amendment adds the Lower Salinas River Watershed to the list of watersheds subject to two existing Basin Plan prohibitions. The prohibitions are the Domestic Animal Waste Discharge Prohibition and the Human Fecal Material Discharge Prohibition. The Domestic Animal Waste Discharge Prohibition addresses discharges from pet, farm animal, and livestock sources in the project area; the prohibition essentially requires landowners and operators to manage their discharges to the extent necessary to achieve water quality objectives. The Human Fecal Material Discharge Prohibition addresses spills and leaks from the sanitary sewer collection systems and discharges from homeless persons/encampments; the prohibition essentially prohibits discharge of fecal material from humans into surface waters of the project area, excepting discharges in accordance with waste discharge requirements (which have their own prohibitions).

Implementation

The Central Coast Water Board will regulate the TMDL allocations to stormwater through phase 1 and phase 2 stormwater NPDES permits. Stormwater discharges from the City of Salinas are regulated through its phase 1 NPDES stormwater permit. Stormwater discharges from the County of Monterey are regulated through its phase 2 NPDES stormwater permit. Both the City of Salinas and the County of Monterey are required to develop and forward Wasteload Allocation Attainment Plans to the Central Coast Water Board, outlining their strategies to achieve their allocations.

The Central Coast Water Board will regulate discharges from domestic animals through demonstrated compliance with the Domestic Animal Waste Discharge Prohibition. Central Coast Water Board staff will notify implementing parties of the requirement to comply with the prohibition during the TMDL implementation phase. Requirements demonstrating compliance with the prohibition will be consistent with the *Policy for Implementation and Enforcement of the Nonpoint Source Pollution Control Program* (NPS Policy).

Several entities in the project area manage sewage collection systems. Discharges from these systems are regulated through waste discharge requirements. Responsible parties assigned waste load allocations will demonstrate compliance with their allocations through compliance with their waste discharge requirements. Central Coast Water Board staff will require improvement to the sewage collection systems through waste discharge requirements.

Owners of land with homeless persons must comply with the Human Fecal Material Discharge Prohibition. Central Coast Water Board staff will notify owners of lands with homeless persons who are not in compliance with the prohibition of their requirement to comply.

Owners/operators of lands where illegal dumping occurs are responsible for achieving the load allocations set forth in the TMDLs. The County of Monterey and the City of Salinas currently have programs and ordinances to address illegal dumping and have been proactive in their efforts to control these discharges. No new regulatory mechanisms are warranted at this point, as existing programs and ordinances are anticipated to achieve the allocation. The Central Coast Water Board will assess progress and require changes, if necessary, during TMDL implementation phase.

Evaluation

The TMDLs require the Central Coast Water Board to perform a review of implementation actions and monitoring results every three years beginning three years after the TMDLs are approved by the Office of Administrative Law (OAL). The Central Coast Water Board will use annual reports, nonpoint source pollution control implementation programs, monitoring reports, and other available information to review implementation progress toward achieving the allocations and the numeric target. The Central Coast Water Board will continue three-year reviews until the TMDLs are achieved. The target date to achieve the TMDLs is 13 years after the date of approval by OAL.

Cost Estimate

Most of the implementation actions, monitoring, and reporting costs are currently required under existing Central Coast Water Board permits and requirements. With regards to the stormwater management, implementation is required through the City of Salinas and County of Monterey stormwater permits, with or without the incremental cost associated with a fecal indicator bacteria control program. Cost estimates to the stormwater management program associated with implementing bacteria control measures for both the City of Salinas and the County of Monterey range from \$101,862 per year (2% incremental cost increase) to \$763,963 per year (15% incremental cost increase). Monitoring costs for the City of Salinas and the County of Monterey will total approximately \$11,200. The costs estimated for control of homeless person and encampment discharges include security guards at a wage of \$20-45 per hour, portable waste facilities at \$95 per month, and/or security fencing at a cost of \$1500-1800 per 100 feet. For the control of livestock and domestic animals, the measures could include barriers, bunkers, corrals, and professional stabling with upper estimates of \$4,000 per mile, \$15,000 per structure, \$4,000 per gate, and \$550 per month, respectively. There are no new costs associated with implementation measures for sanitary sewer collection systems.

When the Central Coast Water Board adopted Resolution No. R3-2009-0008, the amendment to the Water Quality Control Plan for the Central Coast Basin to (1) add Total Maximum Daily Loads for fecal coliform in the Pajaro River Watershed, (2) add a Domestic Animal Waste Discharge Prohibition, and (3) add a Human Fecal Material Discharge Prohibition, it identified in the Basin Plan the estimated costs and potential sources of financing for the Domestic Animal Waste Discharge Prohibition as required under section 13141 of the Water Code. Those costs and potential sources of financing apply equally to the agricultural water quality control program in the Lower Salinas River Watershed.

POLICY ISSUE

Should the State Water Board approve the amendment to the Basin Plan to 1) establish a TMDL for fecal coliform in the Lower Salinas River Watershed, 2) add the Lower Salinas River Watershed to the Domestic Animal Waste Discharge Prohibition, and 3) add the Lower Salinas River Watershed to the Human Fecal Material Discharge Prohibition?

FISCAL IMPACT

Central Coast Water Board and State Water Board staff work associated with or resulting from this action will be addressed with existing and future budgeted resources.

REGIONAL BOARD IMPACT

Yes, approval of this resolution will amend the Central Coast Water Board's Basin Plan.

STAFF RECOMMENDATION

That the State Water Board:

1. Approve the amendment to the Basin Plan adopted under Central Coast Water Board Resolution No. R3-2010-0017.
2. Authorize the Executive Director or designee to submit the amendment adopted under Central Coast Water Board Resolution No. R3-2010-0017 as approved and the administrative record for this action to the Office of Administrative Law and the TMDL to the U.S. Environmental Protection Agency for approval.

State Water Board action on this item will assist the Water Boards in reaching Goal 1 of the Strategic Plan Update: 2008-2012 to implement strategies to fully support the beneficial uses for all 2006-listed water bodies by 2030. In particular, approval of this item will assist in fulfilling Objective 1.1 to prepare, adopt, and implement TMDLs, designed to meet water quality standards, for all impaired water bodies on the 2006 list by 2019.

DRAFT

STATE WATER RESOURCES CONTROL BOARD RESOLUTION NO. 2011-

APPROVING AMENDMENTS TO THE WATER QUALITY CONTROL PLAN FOR THE CENTRAL COAST REGION (BASIN PLAN) TO: 1) ADOPT TOTAL MAXIMUM DAILY LOADS FOR FECAL COLIFORM IN LOWER SALINAS RIVER WATERSHED; 2) ADD THE LOWER SALINAS RIVER WATERSHED TO THE DOMESTIC ANIMAL WASTE DISCHARGE PROHIBITION; AND 3) ADD THE LOWER SALINAS RIVER WATERSHED TO THE HUMAN FECAL MATERIAL DISCHARGE PROHIBITION.

WHEREAS:

1. On September 2, 2010, the Central Coast Water Board adopted [Resolution No. R3-2010-0017](#) amending the Basin Plan to establish a Total Maximum Daily Load (TMDL) and implementation plan for fecal coliform in the Lower Salinas River Watershed, add the Lower Salinas River Watershed to the Domestic Animal Waste Discharge Prohibition, and add the Lower Salinas River Watershed to the Human Fecal Material Discharge Prohibition.
2. The Central Coast Water Board found the Basin Plan amendment was consistent with the provisions of State Water Resources Control Board (State Water Board) [Resolution No. 68-16](#), "Statement of Policy with Respect to Maintaining High Quality of Waters in California" and 40 CFR section 131.12.
3. The Central Coast Water Board may, pursuant to California Water Code section 13243, specify certain conditions or areas where the discharge of waste, or certain types of waste, will not be permitted (i.e., prohibitions). The Implementation Plan for the TMDLs for the Lower Salinas River Watershed requires compliance with the Human Fecal Material Discharge Prohibition and the Domestic Animal Waste Discharge Prohibition for discharges in the Lower Salinas River Watershed. Supporting documentation for adding the Lower Salinas River Watershed to the above-named prohibitions is provided in the Final Project Report for Total Maximum Daily Loads for Fecal Coliform in the Lower Salinas River Watershed. Consistent with California Water Code section 13244, the Central Coast Water Board complied with public notice and hearing requirements for adding the Lower Salinas River Watershed to the Human Fecal Material Discharge and the Domestic Animal Waste Discharge Prohibitions.
4. The elements of a TMDL are described in 40 CFR sections 130.2 and 130.7 and section 303(d) of the CWA and U.S. Environmental Protection Agency guidance documents. A TMDL is defined as "the sum of individual waste load allocations for point sources and load allocations for nonpoint sources and natural background" (40 CFR §130.2). The Central Coast Water Board has determined that the TMDLs for fecal coliform in the Lower Salinas River Watershed are 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)). The regulations in 40 CFR section 130.7 also state that TMDLs shall take into account critical conditions for stream flow, loading, and water quality parameters. TMDLs are often expressed as a mass load of the pollutant but can be expressed as a unit of concentration if appropriate (40 CFR §130.2(i)). Expressing these TMDLs as units of concentration is appropriate in this case because an existing concentration-based water quality objective was used as the basis for determining the impairment.

5. The Central Coast Water Board concurred with the analyses contained in the [Final Project Report, the California Environmental Quality Act "Substitute Environmental Document"](#) for the Basin Plan amendments (including the CEQA Checklist), the staff report, and responses to comments, and found that these analyses comply 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 Central Coast Water Board found that these analyses fulfill 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. The Central Coast Water Board's environmental analysis has taken into account a reasonable range of environmental, economic, and technical factors.
6. The State Water Board finds that the Basin Plan amendment is in conformance with Water Code section 13240, which specifies that regional water quality control boards may revise Basin Plans, section 13242, which requires a program of implementation to achieve water quality objectives, and section 13243, which authorizes regional water quality control boards to specify certain conditions or areas where the discharges of certain types of waste will not be permitted. The State Water Board also finds that the TMDLs, as reflected in the Basin Plan amendment, are consistent with the requirements of CWA section 303(d).
7. The regulatory action meets the "Necessity" standard of the Administrative Procedures Act, Government Code, section 11353, subd. (b). The necessity of developing the TMDL is established in the TMDL project report, the section 303(d) list, and the data contained in the administrative record documenting the pathogen impairments of the Lower Salinas River Watershed.
8. A Basin Plan amendment does not become effective until approved by the State Water Board and until the regulatory provisions are approved by OAL. The TMDL must also receive approval from the U.S. Environmental Protection Agency.
9. Central Coast Water Board staff determined that minor, non-substantive changes to the language of the Basin Plan amendment were necessary to correct minor clerical errors, to improve clarity, and to ensure that the amendment is consistent with the Basin Plan update adopted under Resolution No. R3-2010-0017. The Central Coast Water Board's Executive Officer submitted these minor changes in a memorandum dated October 7, 2010.

THEREFORE BE IT RESOLVED THAT:

The State Water Board:

1. Approves the amendment to the Basin Plan adopted under Central Coast Water Board Resolution No. R3-2010-0017.

2. Authorizes the Executive Director or designee to submit the amendment adopted under Central Coast Water Board Resolution No. R3-2010-0017 as approved and the administrative record for this action to the Office of Administrative Law and the TMDL to the U.S. Environmental Protection Agency for approval.

CERTIFICATION

The undersigned Clerk to the Board does hereby certify that the foregoing is a full, true, and correct copy of a resolution duly and regularly adopted at a meeting of the State Water Resources Control Board held on September 19, 2011.

Jeanine Townsend
Clerk to the Board