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## STATE WATER RESOURCES CONTROL BOARD BOARD MEETING SESSION - DIVISION OF WATER QUALITY DATE - TBD

### ITEM

#### SUBJECT

CONSIDERATION OF A RESOLUTION APPROVING AN AMENDMENT TO THE WATER QUALITY CONTROL PLAN FOR THE CENTRAL COAST REGION (BASIN PLAN) TO: (1) ADD THE CORRALITOS/SALSIPUEDES CREEK WATERSHED TO THE DOMESTIC ANIMAL WASTE DISCHARGE PROHIBITION AND THE HUMAN FECAL MATERIAL DISCHARGE PROHIBITION, AND (2) ESTABLISH TOTAL MAXIMUM DAILY LOADS FOR FECAL COLIFORM IN CORRALITOS/SALSIPUEDES CREEK WATERSHED

#### DISCUSSION

On March 20, 2009, the Central Coast Regional Water Quality Control Board (Central Coast Water Board) adopted [Resolution No. R3-2009-0009](#) amending the Basin Plan to: (1) add the Corralitos Creek Watershed (including its subwatershed, Salsipuedes Creek Watershed, hereafter referred to as the Corralitos/Salsipuedes Creek Watershed) as a named area subject to the Domestic Animal Waste Discharge Prohibition and the Human Fecal Material Discharge Prohibition, and (2) establish Total Maximum Daily Loads (TMDLs) for fecal coliform in the Corralitos/Salsipuedes Creek Watershed.

#### Impairment

Corralitos Creek was listed on the 2006 federal Clean Water Act section 303(d) List of Water Quality Limited Segments (List) because it did not meet water quality standards, as demonstrated by elevated pathogen indicator levels. Salsipuedes Creek is not on the 303(d) List but fecal coliform levels exceed water quality objectives. Because Corralitos Creek is listed, CWA section 303(d) requires the establishment of a TMDL. TMDLs are also authorized under CWA section 303(d)(3) for water bodies not on the List, and a TMDL can constitute a plan of implementation under Water Code section 13242. As a result, a TMDL was also developed for Salsipuedes Creek. A TMDL specifies load allocations for nonpoint sources and wasteload allocations for point sources that, when implemented, are expected to result in attainment of applicable water quality standards. Since these TMDLs are being established through a Basin Plan amendment, state law requires an implementation plan and schedule to ensure that the TMDLs are achieved.

The amendment addresses the pathogen impairment of the Corralitos/Salsipuedes Creek 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 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 illnesses directly, but are good indicators of the existence of other harmful pathogens. Current fecal coliform concentrations in the Corralitos/Salsipuedes Creek Watershed exceed the existing Basin Plan numeric water quality objectives for protecting the Water Contact Recreation beneficial use.

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## Sources

In decreasing order of contribution, the controllable sources contributing pathogens (as indicated by fecal coliform) to the Corralitos/Salsipuedes Creek Watershed are: (1) storm drain discharges to municipally owned and operated separate storm sewer systems (MS4s), which must be governed by a National Pollutant Discharge Elimination System (NPDES) permit, (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.

## Targets and TMDL Allocations

The amendment establishes a numeric target equal to the Basin Plan water quality objectives 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 most probable number (MPN) per 100 milliliters (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, either an allocation equal to the numeric target or an allocation of zero. The allocation of zero, or no loading, is assigned to responsible parties whose discharge would include untreated human waste and thus pose a greater health risk than most bacteria of other origins.

The responsible parties who were assigned allocations equal to the TMDLs' numeric target include the MS4s governed by an NPDES permit, owners/operators of land used for/containing pets, and owners/operators of land used for/containing farm animals and livestock. All responsible parties for sources of fecal coliform to the Corralitos/Salsipuedes Creek Watershed will be accountable to attain these allocations. Under the TMDLs, parties that have been assigned allocations are not responsible for natural (uncontrollable) sources.

Responsible parties that must comply with the Human Fecal Material Discharge Prohibition are assigned an allocation of zero; no discharge of fecal coliform bacteria load originating from human sources is allowed. These responsible parties include the Freedom County Sanitation District (FCSD) for Corralitos Creek and the Salsipuedes Sanitary District (SSD) in Salsipuedes Creek for sources from spills or leaks of the sewer collection systems, owners of private laterals who are responsible for sources from private lateral leaks, owners/operators of land that include homeless persons/encampments, and owners of onsite wastewater systems for discharges from onsite system failure. An implicit margin of safety is incorporated in the TMDLs through conservative assumptions.

## Prohibitions

The amendment adds the Corralitos/Salsipuedes Creek Watershed onto the list of affected areas of two Basin Plan prohibitions. The two Basin Plan prohibitions are the Domestic Animal Waste Discharge Prohibition and the Human Fecal Material Discharge Prohibition. The Domestic Animal Waste Discharge Prohibition is intended to address pet, farm animal, and livestock discharges in areas that do not drain to MS4s. The Human Fecal Material Discharge

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Prohibition is intended to address spills and leaks from the sanitary sewer collection systems, private sewer lateral leaks, discharges from land that include homeless persons/encampments, and surface water discharges from onsite wastewater systems.

## Implementation

The purpose of the implementation plan is to describe the steps necessary to reduce fecal coliform loads in order to achieve the TMDLs. The TMDL Implementation Plan addresses fecal indicator bacteria discharged from the County of Santa Cruz and the City of Watsonville MS4 entities by regulating them under the provisions of the State Water Board's General Permit for the Discharges of Storm Water from Small MS4s (General Permit) (NPDES No. CAS000004), and any subsequent iteration of the General Permit. As enrollees under the General Permit, the MS4s must develop and implement a Storm Water Management Plan (SWMP) that controls urban runoff discharges into and from their storm water system. To address the MS4 entities wasteload allocations, the TMDL Implementation Plan requires the County of Santa Cruz and the City of Watsonville MS4s to specifically target fecal indicator bacteria in urban runoff through incorporation of a Wasteload Allocation Attainment Program in their SWMPs.

The TMDL includes a Domestic Animal Waste Discharge Prohibition to address sources of fecal material from domestic animals that do not drain to the MS4s. Owners and/or operators of lands containing domestic animals in the Corralitos/Salsipuedes Creek Watershed must comply with the prohibition. Compliance with the prohibition implies compliance with the load allocation for these TMDLs.

The entities with jurisdiction over the sewer collection system in the Corralitos/Salsipuedes Creek Watershed are the FCSD and the SSD. The TMDL requires both entities to comply with the Human Fecal Material Discharge Prohibition, thus their wasteload allocations from sewer system spills and leaks are zero. To comply with the prohibition, the FCSD and the SSD must continue to implement their Collection System Management Plan and Infiltration/Inflow and Spill Prevention Program, as required by their Waste Discharge Requirements (WDRs). In addition, the FCSD and SSD are required by their WDRs to improve maintenance of their sewage collection system, including identification, correction, and prevention of sewage leaks in portions of the collection system that run through or adjacent to, impaired surface waters within the Corralitos/Salsipuedes Creek Watershed. Compliance with their WDRs is intended to demonstrate compliance with their wasteload allocations and the Human Fecal Material Discharge Prohibition.

Individual owners and operators of private laterals to sanitary sewer collection systems are responsible for maintenance and are, therefore, responsible for complying with the Human Fecal Material Discharge Prohibition; compliance with the prohibition implies compliance with applicable load allocations for these TMDLs.

The TMDL Implementation Plan addresses onsite wastewater disposal system discharges with the Human Fecal Material Discharge Prohibition. Owners of onsite wastewater systems within the defined problematic area must demonstrate to the satisfaction of the Executive Officer or the Central Coast Water Board that they are in compliance with the prohibition, unless it is determined that the County of Santa Cruz is making adequate progress towards implementing an approved Wastewater Management Plan, or similar implementation program as it pertains to controlling the waste loads from onsite wastewater systems in the Corralitos/Salsipuedes Creek Watershed. Compliance with the Human Fecal Material Discharge Prohibition implies compliance with the load allocation for these TMDLs.

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The TMDL Implementation Plan addresses discharges from homeless persons/encampments that do not drain to the MS4s with the Human Fecal Material Discharge Prohibition. Owners of land with homeless persons must demonstrate to the satisfaction of the Executive Officer or the Central Coast Water Board that they are in compliance with the Human Fecal Material Discharge Prohibition; compliance with the prohibition implies compliance with the load allocation for these TMDLs. The Central Coast Water Board intends to identify properties with homeless encampments. Identified responsible parties are required to submit reports to the Central Coast Water Board. These reports must either document the measures that are in place that are effectively minimizing discharges or demonstrate that no discharge is occurring from homeless encampments.

## **Evaluation**

The Central Coast Water Board has committed 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 plans to use annual reports, nonpoint source pollution control implementation programs, monitoring results and other available information, to review implementation progress toward achieving the allocations and the numeric target. The Central Coast Water Board plans to 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 the OAL.

## **Cost Estimate**

Most of the implementation actions, including monitoring and reporting are currently required under existing Water Board permits and requirements. However, costs for additional measures that may be required to implement these TMDLs have been estimated as follows: Additional pathogen-specific management measures for local agencies (City of Capitola and County of Santa Cruz) that are responsible for stormwater management ranges from an estimated 2 to 15 percent increase to their annual program budget. Additional monitoring costs are estimated to be approximately \$4,400 per year. The cost associated with repair of a leaking private lateral is estimated to be \$5,000, with the cost to test for leaks in a private lateral approximately \$1,000. For the control of livestock and domesticated animals, the measures could include barriers, bunkers, corrals and professional stabling with upper estimates at \$4,000 per mile, \$15,000 per structure, \$4000 per gate, and \$550 per month respectively. 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 security fencing at a cost of \$1500-1800 per 100ft. The cost of bags that can be used to pick up pet waste start at approximately \$2.50 to \$4.50 per box. Cost for a standard repair of an onsite wastewater system is approximately \$861 with a standard upgrade costing \$2,049. Maintenance pumping costs range from \$495-\$990 with labor costs about \$125 per hour. Central Coast Water Board staff concluded that these costs are reasonable relative to the water quality benefits to be derived from adopting these TMDLs.

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 included in the Basin Plan the estimated costs and potential sources of financing for the Domestic Animal Waste Discharge Prohibition. Those potential sources of financing apply equally to the agricultural water quality control program in the Corralitos/Salsipuedes Creek Watershed.

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## POLICY ISSUE

Should the State Water Board approve the amendment to the Basin Plan to: (1) add the Corralitos/Salsipuedes Creek Watershed as a named area subject to the Domestic Animal Waste Discharge Prohibition and the Human Fecal Material Discharge Prohibition and (2) establish Total Maximum Daily Loads for fecal coliform in Corralitos/Salsipuedes Creek Watershed?

## 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 WATER 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. Approves the amendment to the Basin Plan adopted under Central Coast Water Board Resolution No. R3-2009-0009.
2. Authorizes the Executive Director or designee to submit the amendment adopted under Central Coast Water Board Resolution No. R3-2009-0009, as approved, and the administrative record for this action to the OAL and the TMDLs 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 Action 1 to prepare, adopt, and take steps to carry out Total Maximum Daily Loads (TMDLs), designed to meet water quality standards, for all impaired water bodies on the 2006 list.

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## STATE WATER RESOURCES CONTROL BOARD RESOLUTION NO. 2011-

APPROVING AN AMENDMENT TO THE WATER QUALITY CONTROL PLAN FOR THE CENTRAL COAST REGION (BASIN PLAN) TO 1) ADD THE CORRALITOS/SALSIPUEDES CREEK WATERSHED TO THE DOMESTIC ANIMAL WASTE DISCHARGE PROHIBITION AND THE HUMAN FECAL MATERIAL DISCHARGE PROHIBITION, AND (2) ESTABLISH TOTAL MAXIMUM DAILY LOADS FOR FECAL COLIFORM IN CORRALITOS/SALSIPUEDES CREEK WATERSHED

### WHEREAS:

1. On March 20, 2009, the Central Coast Regional Water Quality Control Board (Central Coast Water Board) adopted [Resolution No. R3-2009-0009](#) amending the Basin Plan to: (1) add the Corralitos/Salsipuedes Creek Watershed (Corralitos Creek Watershed including its subwatershed, Salsipuedes Creek Watershed)(Watershed) as an area subject to the Domestic Animal Waste Discharge Prohibition and the Human Fecal Material Discharge Prohibition and (2) establish Total Maximum Daily Loads for fecal coliform in Corralitos/Salsipuedes Creek Watershed.
2. 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 Watershed requires compliance with the Human Fecal Material Discharge Prohibition and the Domestic Animal Waste Discharge Prohibition for discharges in the Watershed. Supporting documentation for adding the Watershed to the above-named prohibitions is provided in the Final Project Report for Total Maximum Daily Loads for fecal coliform in Corralitos and Salsipuedes Creeks. Consistent with California Water Code section 13244, the Central Coast Water Board complied with public notice and hearing requirements for adding the Watershed to the Human Fecal Material Discharge and the Domestic Animal Waste Discharge Prohibitions.
3. 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. EPA 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 Watershed have been 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 must 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 because an existing concentration-based water quality objective is used as the basis for the TMDLs numeric target.

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4. The Central Coast Water Board found that the establishment of these TMDLs is consistent with the provisions of the 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. Adoption of these TMDLs will result in improved water quality throughout the region and maintain the level of water quality necessary to protect present and potential beneficial uses.
5. The Central Coast Water Board concurred with the analysis contained in the Final Project Report, the California Environmental Quality Act "substitute environmental documentation" for the Basin Plan amendment, including the CEQA Checklist, the staff report and the 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.
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 federal Clean Water Act (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 TMDLs is established in the TMDLs staff report, the section 303(d) list, and the data contained in the administrative record documenting the fecal coliform impairments of the Corralitos/Salsipuedes Creek 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 the Office of Administrative Law (OAL). The TMDLs must also receive approval from the U.S. Environmental Protection Agency.

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. R3-2009-0009.

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2. Authorizes the Executive Director or designee to submit the amendment adopted under Central Coast Water Board Resolution No. R3-2009-0009, as approved, and the administrative record for this action to the OAL and the TMDLs 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 (TBD).

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Jeanine Townsend  
Clerk to the Board