CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION
895 Aerovista Place, Suite 101
San Luis Obispo, California

RESOLUTION NO. R3-2008-0003
MARCH 20-21, 2008

Amending the Water Quality Control Plan for The Central Coast Basin to Adopt Total Maximum Daily Loads for Pathogens in Aptos Creek, Valencia Creek, and Trout Gulch

The Regional Water Quality Control Board, Central Coast Region (Central Coast Water Board) finds:

1. The Central Coast Water 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, prohibitions, implementation plans for point source and nonpoint source pollution discharges, and statewide plans and policies.

2. The Central Coast Water Board periodically revises and amends the Basin Plan. The Central Coast Water Board has determined the Basin Plan requires further revision and amendment to incorporate Total Maximum Daily Loads (TMDLs) and Implementation Plan for pathogens in Aptos Creek, Valencia Creek, and Trout Gulch. The term Aptos Creek Watershed elsewhere in this document refers only to these water bodies.

3. The Central Coast Water Board proposes to amend the Basin Plan by inserting an amendment into the following sections:
   a. Chapter Four, Section IX (Total Maximum Daily Loads).

4. On May 20, 2004, the State Water Resources Control Board (State Water Board) adopted the *Policy for Implementation and Enforcement of the Nonpoint Source Pollution Control Program* (NPS Policy). This policy requires the Water Boards to regulate all nonpoint sources of pollution using the administrative permitting authorities provided by the California Water Code. This policy requires Regional Water Boards to regulate nonpoint source pollution discharges with Waste Discharge Requirements, Waivers of Waste Discharge Requirements, or Basin Plan Prohibitions.

5. Section 303(d) of the Clean Water Act requires states to identify and prepare a list of water bodies that do not meet water quality standards. Water bodies on the 303(d) list are referred to as listed water bodies, or impaired waters. Section 303(d) of the Clean Water Act requires states to establish TMDLs for listed waterbodies.

6. Aptos Creek and Valencia Creek are listed on Clean Water Act 303(d) list as impaired due to non-attainment of existing Basin Plan water quality objectives for pathogens. Trout Gulch is not yet listed, but this water body is also impaired, as it was not meeting the Basin Plan water quality objective for fecal coliform. TMDLs and associated allocations are being established for the Aptos Creek Watershed.

7. The Central Coast Water Board's goal for establishing TMDLs in the Aptos Creek Watershed is to rectify the impairment due to pathogens, thereby providing support for the beneficial uses of contact and non-contact water recreation.

8. The mouth of Aptos Creek is the receiving water for approximately 13,190 acres of land. Water from the Creek flows into northern Monterey Bay. Trout Gulch flows into Valencia Creek and Valencia Creek flows into Aptos Creek.

9. The elements of a TMDL are described in 40 CFR 130.2 and 130.7 and section 303(d) of the CWA, and USEPA 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 pathogens in the Aptos Creek 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 CFR130.7 (c) (1)). The regulations in 40 CFR 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 because an existing concentration-based water quality objective is used as the basis for the TMDL numeric target.

10. Upon establishment of TMDLs by the State or USEPA, the State is required to incorporate the TMDLs, along with appropriate implementation measures, into the State Water Quality Management Plan (40 CFR 130.6(c)(1) and 130.7; and California Water Code sections 13050(j) and 13242). The Basin Plan and applicable statewide plans serve as the State Water Quality Management Plan governing the watersheds under the jurisdiction of the Central Coast Water Board.

11. Pursuant to California Water Code section 13241, the Central Coast Water Board considered several factors in developing this Basin Plan amendment. The Central Coast Water Board concluded the following.
    a. The TMDLs will protect present and probable future beneficial uses.
    b. Environmental characteristics of the waterbody will be protected.
    c. Improved water quality conditions can reasonably be achieved through the coordinated management of all controllable factors that affect water quality in the area, as provided in the Implementation Plan.
    d. Costs to achieve compliance with the TMDLs are reasonable relative to the benefit of improved water quality.
    e. The need for developing housing within the region is not relevant.
    f. The need to develop and use recycled water is not relevant.

12. Central Coast Water Board staff submitted the Project Report for the TMDLs to an external scientific review panel in July 2007. Staff received comments from the scientific review panel. Central Coast Water Board staff edited the Project Report or provided a written response that explained the basis for not incorporating the comments, or the comments did not result in any changes to the proposed Basin Plan Amendment. The TMDLs and implementation plan are based on sound scientific knowledge, methods, and practices in accordance with Health & Safety Code section 57004.

13. Central Coast Water Board staff implemented a process to inform interested persons and the public about the TMDLs. Central Coast Water Board staff's efforts to inform the public and

solicit comment included a public meeting and numerous telephone conversations with interested parties. Public notification of the amendment to the Basin Plan occurred for a 45 day period preceding the Central Coast Water Board hearing. 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. Central Coast Water Board staff responded to oral and written comments received from the public. All public comments were considered.

14. The Central Coast Water Board considered costs of implementing measures to comply with the TMDLs. The costs will be incurred by identified responsible parties. These costs are reasonable relative to the water quality benefits to be derived from the amendment.

15. Anti-Degradation — The adoption of these TMDLs are consistent with the provisions of the State Water Board Resolution No. 68-16, "Statement of Policy with Respect to Maintaining High Quality of Waters in California" and 40 CFR 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.

16. The Central Coast Water Board concurs with the analysis contained in the Final Project Report, the California Environmental Quality Act "Substitute Environmental Document" for the Basin Plan Amendment, including the CEQA Checklist, the staff report and the responses to comments, and finds that these analyses comply with the requirements of the State 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 finds 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.

17. The Central Coast Water Board will request that the State Water Board approve the Basin Plan amendment incorporating the TMDLs for pathogens in the Aptos Creek Watershed. The TMDLs and Implementation Plan for the TMDLs will become effective upon approval by the California Office of Administrative Law.

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

19. On March 21, 2008 in Salinas, California, the Central Coast Water Board held a public hearing and heard and considered all public comments and evidence in the record.

20. The regulatory action meets the "Necessity" standard of the Administrative Procedures Act, Government Code, section 11353, subdivision (b). As specified in Finding-15, federal regulations require that TMDLs be incorporated into the water quality management plan. The Central Coast Water Board's Basin Plan is the Central Coast Water Board's component of the water quality management plan, and the Basin Plan is how the Central Coast Water Board takes quasi-legislative, planning actions. Moreover, the TMDL is a program of implementation for existing water quality objectives, and is, therefore, appropriately a component of the Basin Plan under California Water Code section 13242. The necessity of developing a TMDL is established in the TMDL staff report, the section 303(d) list, and the data contained in the administrative record documenting the pathogen impairments of the Aptos Creek Watershed.

21. The proposed amendment meets the "Necessity" standard of the Administrative Procedure Act, Government Code, section 11352, subdivision (b).

THEREFORE, be it resolved that:

1. Pursuant to sections 13240, 13241, 13242, 13243, and 13244 of the California Water Code, the Central Coast Water Board, after considering the entire record, including the oral testimony at the hearing, hereby adopts the amendment in "Attachment-Proposed Basin Plan Amendment".

2. The Executive Officer is directed to forward copies of the Basin Plan amendment to the State Water Board in accordance with the requirements of section 13245 of the California Water Code.

3. The Central Coast Water Board requests that the State Water Board approve the Basin Plan amendment in accordance with the requirements of sections 13245 and 13246 of the California Water Code and forward them to the California Office Of Administrative Law and the USEPA.5

4. The Executive Officer is authorized to sign a Certificate of Fee Exemption or transmit payment of the applicable fee as may be required to the Resources Agency.

5. If, during its approval process, Central Coast Water Board staff, State Board staff, the State Water Board or the California Office of Administrative Law determines that minor, non-substantive corrections to the language of the amendment are needed for clarity or consistency, the Executive Officer may make such changes, and shall inform the Central Coast Water Board of any such changes.

6. The environmental documents prepared by the Central Coast Water Board staff pursuant to Public Resources Code 21080.5 are hereby certified.

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 March 21, 2008.

Roger W. Briggs
Executive Officer

RESOLUTION NO. R3-2008-0003

ATTACHMENT - PROPOSED BASIN PLAN AMENDMENT

Revise the September 8, 1994 Basin Plan, as follows:

AMENDMENT NO. 1. ADOPT THE APTOS CREEK, VALENCIA CREEK, AND TROUT GULCH TOTAL MAXIMUM DAILY LOADS FOR PATHOGENS

Add the following to Chapter 4 after IX. K.:

IX. L. TOTAL MAXIMUM DAILY LOADS FOR PATHOGENS IN APTOS CREEK, VALENCIA CREEK, AND TROUT GULCH

The Regional Water Quality Control Board adopted these TMDLs on March 21, 2008.
These TMDLs were approved by:
The State Water Resources Control Board on _____.
The California Office of Administrative Law on _____. *(Effective date)*
The U.S. Environmental Protection Agency on _____.*(Effective date)*

Problem Statement

The beneficial use of water contact recreation is not being attained in Aptos Creek, Valencia Creek and Trout Gulch because fecal coliform concentrations exceed existing Basin Plan numeric water quality objectives protecting this beneficial use. Staff concluded Aptos Creek was impaired below the confluence with Valencia Creek. The entire reach of Trout Gulch was considered impaired. Staff also considered Valencia Creek impaired from its confluence with Aptos Creek, upstream to both the east and west forks. The east fork was impaired upstream to the intersection of McKay and Cox Roads. The west fork was impaired upstream to its intersection with Valencia Road.

Numeric Target

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

The relative order of controllable sources contributing pathogens to Aptos Creek, Valencia Creek, and Trout Gulch (from largest to smallest source) is: (1) storm drain discharges to municipally owned and operated storm sewer systems required to be covered by an NPDES permit (MS4s), (2) pet waste in areas that do not drain to MS4s, (3) County of Santa Cruz Sanitation District sanitary sewer collection system spills and leaks, (4) private sewer laterals connected to municipal sanitary sewer collection systems, and (5) farm animals/livestock discharges.

TMDLs and Allocations

The TMDLs for all impaired waters of Aptos Creek, Valencia Creek, and Trout Gulch are concentration based TMDLs applicable to each day of all seasons and are equal to the following:

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.

The allocations to responsible parties are shown in Table IX-K-1.

Table IX – K - 1. Allocations and Responsible Parties

WASTELOAD ALLOCATIONS		Receiving Water Fecal Coliform (MPN/100mL)
Waterbody	**Responsible Party (Source)**	
Aptos Creek[1], Trout Gulch[2], Valencia Creek[3]	Santa Cruz County (Storm drain discharges to municipally owned and operated storm sewer systems required to be covered by an NPDES permit (MS4s))	Allocation 1
LOAD ALLOCATIONS		**Receiving Water Fecal Coliform (MPN/100mL)**
Waterbody	**Responsible Party (Source)**	
Aptos Creek[1], Trout Gulch[2], Valencia Creek[3]	Owners/Operators of land used for/containing pets (Pet waste in areas that do not drain to MS4s)	Allocation 1
Aptos Creek[1], Trout Gulch[2], Valencia Creek[3]	Santa Cruz County Sanitation District (Sanitary sewer collection system spills and leaks)	Allocation 1
Aptos Creek[1], Trout Gulch[2], Valencia Creek[3]	Owners of private sewer laterals (Private laterals connected to municipal sanitary sewer collection system)	Allocation 1
Aptos Creek[1], Trout Gulch[2], Valencia Creek[3]	Owners/Operators of land used for/containing farm animals/livestock (Farm animals and livestock discharges)	Allocation 1
Aptos Creek[1], Trout Gulch[2], Valencia Creek[3]	Natural sources	Allocation 1

[1] Aptos Creek from the Pacific Ocean to the confluence of Aptos and Valencia Creeks
[2] All reaches of Trout Gulch
[3] Valencia Creek from the confluence with Aptos Creek upstream to the west fork, where it intersects with Valencia Road, and to the east fork at the intersection of McKay and Cox Roads.

Allocation 1: 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 200/100mL, nor shall more than ten percent of total samples during any 30-day period exceed 400/100 mL.

The parties responsible for the allocations to controllable sources are not responsible for the allocation to natural sources.

The TMDLs are considered achieved when the allocations assigned to all individual responsible parties are met, or when the numeric targets are consistently met in Aptos Creek, Valencia Creek, and Trout Gulch.

Margin of Safety

A margin of safety is incorporated implicitly in the TMDLs through conservative assumptions.

Implementation

STORM DRAIN DISCHARGES

Enrollees of the State Water Resources Control Board's General Permit for the Discharges of Storm Water from Small Municipal Separate Storm Sewer Systems (General Permit for storm water discharges) must control discharges of pathogens to and in storm drains (currently NPDES No. S000004).

The County of Santa Cruz must control discharges of pathogens to and in storm drains when enrolled in the General Permit for stormwater discharges.

Within one year following approval by the Office of Administrative Law (OAL) of these TMDLs, or if enrolled in the General Permit for stormwater discharge, then when the next annual report is due, or to meet any other Water Board-issued storm water requirements (e.g. when the State General Permit for stormwater discharges is renewed), the County of Santa Cruz will be required to:

1. Submit for approval a management program that identifies pathogen-specific best management practices targeting pathogen sources from:
    a. Birds, pets, rodents and wildlife, dumpster leachate, and humans.

    The best management practices should include, but not be limited to: those identified in a Storm Water Management Plan (if existing or being developed), public education, participation and outreach regarding sources of pathogens in surface waters, health risks associated pathogens in surface waters, and specific actions the public can take to reduce pathogen loading into surface waters.
2. Submit for approval a fecal indicator bacteria (e.g. fecal coliform) monitoring and reporting plan. Receiving water and storm water outfall monitoring will be required.
3. Incorporate a description of implementation and monitoring activities in any existing or developing Storm Water Management Plan, and corresponding reporting, associated with a General Permit for storm water discharges.

The Executive Officer or the Central Coast Water Board will require information that demonstrates implementation of the actions described above, pursuant to applicable sections of the California Water Code and/or pursuant to authorities provided in the General Permit for storm water discharges.

COUNTY OF SANTA CRUZ SANITARY SEWER COLLECTION SYSTEM SPILLS AND LEAKS

The Santa Cruz County Sanitation District (SCCSD) must continue to implement its Collection System Management Plan, as required by Waste Discharge Requirements (WDRs) (Order No. R3-2005-0043).

Staff will continue to assess the effectiveness of the SCCSD Collection System Management Plan. Staff will utilize annual reporting associated with the SCCSD WDR, and other information, to make this assessment. If staff determines that the SCCSD is not satisfactorily implementing their Collection System Management Plan, or the Collection System Management Plan is not likely to result in the SCCSD achieving their allocation, the Executive Officer or the Central Coast Water Board may require modifications to the Collection System Management Plan (e.g. through revisions of WDRs), and/or require actions pursuant to applicable sections of the California Water Code.

Within one year following approval of these TMDLs by the California Office of Administrative Law, the Executive Officer or the Central Coast Water Board will amend the Monitoring and Reporting Program of the SCCSDs WDRs to incorporate stream monitoring for fecal coliform and reporting of such stream monitoring activities.

PRIVATE SEWER LATERAL DISCHARGES

Individual owners of private laterals to sanitary sewer collection systems are responsible for maintenance of their private laterals. However, the County of Santa Cruz has the authority to require private lateral upgrades. The County of Santa Cruz may choose to implement a program to detect and require repair of leaks from private laterals. The Central Coast Water Board would consider implementation (by the County of Santa Cruz) of such a program, as proof of compliance by owners with private laterals with the Aptos-Soquel Subbasin prohibition. If the County of Santa Cruz implements such a program, the Central Coast Water Board will request and use reporting from the County of Santa Cruz to evaluate individual private lateral owner compliance with the Aptos-Soquel Subbasin prohibition.

Within one year following approval of these TMDLs by the California Office of Administrative Law, if the County of Santa Cruz does not submit an approved program to detect and repair leaks from private laterals, or if the Central Coast Water Board or Executive Officer determines that such an existing or proposed program is insufficient, then landowners with private laterals must demonstrate compliance individually with the Aptos-Soquel Subbasin prohibition.

If landowners with private laterals must demonstrate compliance individually with the Aptos-Soquel Subbasin prohibition, then within one year following approval of the TMDLs by the California Office of Administrative Law, the Executive Officer will notify owners and/or operators of land that have private lateral connections to the sanitary sewer system of the County of Santa Cruz, of the Aptos-Soquel Subbasin prohibition and conditions for compliance with the prohibition. Compliance with the Aptos-Soquel Subbasin prohibition is described in Chapter Five, section IV.B. of the Water Quality Control Plan.

DOMESTICATED ANIMAL DISCHARGES

Owners and/or operators of land used for/containing domesticated animals (including, but not limited to: horses, cattle, goats, sheep, dogs, cats, or any other animals in the care of owners/operators) in the Aptos Subbasin must comply with the Aptos-Soquel Subbasin prohibition.

Within one year following approval of the TMDLs by the California Office of Administrative Law, the Executive Officer will notify owners and/or operators of lands used for/containing domesticated

animals of the Aptos-Soquel Subbasin prohibition and conditions for compliance with the prohibition, as described in Chapter Five, section IV.B. of the Water Quality Control Plan.

Tracking and Evaluation

Every three years beginning three years after TMDLs are approved by the California Office of Administrative Law, Central Coast Water Board staff will perform a review of implementation actions and monitoring results. Central Coast Water Board staff will use annual reports, nonpoint source pollution control implementation programs, and other available information, to review implementation progress toward achieving the allocations and the numeric target.

Central Coast Water Board staff may conclude that ongoing implementation efforts are insufficient to ultimately achieve the allocations and numeric target. If staff makes this determination, staff will recommend that additional reporting, monitoring, or implementation efforts be required either through approval by the Executive Officer or by the Central Coast Water Board. Central Coast Water Board staff may conclude, at the time of review, that they expect implementation efforts to result in achieving the allocations and numeric target. In that case, staff will recommend that existing and anticipated implementation efforts should continue.

Responsible parties will continue monitoring according to this plan for at least three years, at which time Central Coast Water Board staff will determine the need for continuing or otherwise modifying the monitoring requirements. Responsible parties may also demonstrate that controllable sources of pathogens are not contributing to exceedance of water quality objectives in receiving waters. If this is the case, staff may propose a re-evaluation of the numeric target and allocations. For example, staff may propose a site-specific objective to be approved by the Central Coast Water Board. The site-specific objective would be based on evidence that natural, or background sources alone were the cause of exceedances of the Basin Plan water quality objective for pathogen indicator organisms.

Three-year reviews will continue until the TMDLs are achieved. The target date to achieve the TMDLs is 13 years after the date of approval by the California Office of Administrative Law.