



# California Regional Water Quality Control Board

## Central Coast Region



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Arnold Schwarzenegger  
Governor

### MEMORANDUM

TO: Darrin Polhemus  
Deputy Director, Division of Water Quality  
State Resources Control Board

FROM:   
Roger Briggs, Executive Officer

DATE: June 23, 2010

SUBJECT: SOQUEL LAGOON BASIN PLAN AMENDMENT/TMDL

The Regional Water Quality Control Board, Central Coast Region (Central Coast Water Board) adopted an amendment to the Water Quality Control Plan for the Central Coast Region (Basin Plan) on May 8, 2009, in Resolution No. R3-2009-0024. The Basin Plan amendment establishes Total Maximum Daily Loads for Fecal Coliform in the Soquel Lagoon Watershed located in Santa Cruz County, adds a prohibition on domestic animal waste discharge and a prohibition on human fecal material discharge in the Soquel Lagoon Watershed waters, and removes the shellfish harvesting beneficial use for Soquel Lagoon.

Central Coast Water Board Resolution No. R3-2009-0024 grants the Executive Officer the authority to make minor, non-substantive changes to the language of the adopted Basin Plan amendment.

The State Water Resources Control Board intends to consider approval of the Basin Plan amendment at a meeting scheduled for July 6, 2010. It has come to my attention that there are needed wording clarifications requiring corrections to the Basin Plan amendment. The corrections are not substantive; they add consistency, and therefore clarity, to the language of the Basin Plan amendment.

I am hereby making the following minor, non-substantive changes to Attachment-1 (Resolution No. R3-2009-0024) that clarify existing language:

1. Page 10, bullet 1, under the section "Source Analysis," striking the word "from" and replacing with the word "of." The corrected bullet reads:

Storm drain discharges... (including but not limited to discharges of fecal material from domestic animals and humans).

2. Page 12, under "STORM DRAIN DISCHARGES," striking the word "Resource" and replacing it with the word "Resources." The corrected wording reads:

"The Central Coast Water Board will address fecal indicator bacteria...State Water Resources Control Board's..."

3. Page 12, bullet-2, under the section "STORM DRAIN DISCHARGES," adding the following underlined language (the corrected language is consistent with existing language in the section "PRIVATE LATERALS TO THE SANITARY SEWER COLLECTION SYSTEM" on page 13):

"Source identification and prioritization (including leaks to storm sewers from private laterals);"

4. Page 13, third paragraph under the section titled "SANITARY SEWER COLLECTION SYSTEM SPILLS AND LEAKS," striking the word "adoption" and replacing with the word "approval." The corrected wording reads:

"To this end, within six months following approval of these TMDLs by the Office of Administrative Law, the Executive Officer..."

5. Page 14, the first paragraph under the section titled "DOMESTIC ANIMALS NOT REGULATED BY WQ ORDER NO. 2003-0005-DWQ [STORM WATER GENERAL PERMIT," striking the wording "Soquel Creek Watershed and Noble Gulch Watershed" and replacing with the wording "Soquel Lagoon Watershed." The corrected language is consistent with the existing language on page 9, first bullet under the section titled "AMENDMENT NO.2..." The corrected wording reads:

"Owners and/or operators of lands containing domestic animals...in the Soquel Lagoon Watershed must comply with the Domestic Animal Waste Discharge Prohibition..."

If you have any questions about this request, please contact Kim Sanders at (805) 542-4771 or Harvey Packard at (805) 542-4639.

cc:

Central Coast Water Board Members  
Steven Blum, OCC  
Frances McChesney, OCC  
Rik Rasmussen, DWQD  
Paul Hann, DWQ  
Michael Buckman, DWQ

**RESOLUTION NO. R3-2009-0024**

**ATTACHMENT - PROPOSED BASIN PLAN AMENDMENTS**

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

**AMENDMENT NO. 1.**

Amend Chapter 2, Table 2-1. Identified Uses of Inland Surface Waters

Waterbody Names	MUN	AGR	PRO	IND	GWR	REC1	REC2	WILD	COLD	WARM	MIGR	SPWN	BIOL	RARE	EST	FRESH	NAV	POW	COMM	AQUA	SAL	SHELL	
Soquel Lagoon						X	X	X	X		X	X		X	X				X				X

**AMENDMENT NO. 2. Revise the September 8, 1994 Basin Plan, Chapter Five, as follows:**

Amend Chapter Five, section IV.B. as follows:

Add the following watershed to the end of the bulleted list of applicable areas of the Human Fecal Material Discharge Prohibition and the Domesticated Animal Waste Discharge Prohibition.

- Soquel Lagoon Watershed

**AMENDMENT NO. 3. ADOPT THE TOTAL MAXIMUM DAILY LOADS FOR PATHOGENS IN SOQUEL LAGOON, SOQUEL CREEK, AND NOBLE GULCH**

*Add the following to Chapter 4 after IX. J.:*

**IX. K. TOTAL MAXIMUM DAILY LOADS FOR PATHOGENS IN SOQUEL LAGOON, SOQUEL CREEK, AND NOBLE GULCH**

The Regional Water Quality Control Board adopted these TMDLs on May 8, 2009.  
These TMDLs were approved by:

The State Water Resources Control Board on: \_\_\_\_\_ (insert date).

The California Office of Administrative Law on: \_\_\_\_\_ (insert date).

The U.S. Environmental Protection Agency on: \_\_\_\_\_ (insert date).

**Problem Statement**

The beneficial use of water contact recreation is not protected in the impaired reaches of Soquel Lagoon, Soquel Creek, and Noble Gulch because fecal coliform concentrations exceed water quality objectives protecting this beneficial use. The impaired reaches are:

- 1) Soquel Lagoon and Soquel Creek: beginning from the mouth of Soquel Lagoon, upstream and along Soquel Creek to the bridge at Porter Street.
- 2) All reaches of Noble Gulch.

**Numeric Targets**

The numeric targets used to develop the TMDLs and allocations are as follows:

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 controllable sources of fecal coliform contributing to impairment in Soquel Lagoon, Soquel Creek, and Noble Gulch are, in decreasing order of contribution:

1. Storm drain discharges to municipally owned and operated separate storm sewer systems (MS4s) required to be covered by an NPDES permit (including but not limited to discharges ~~from~~ fecal material from domestic animals and humans).
2. Sanitary sewer collection system spills and leaks (including but not limited to discharges from private laterals connected to municipal sanitary sewer collection systems).
3. Domestic animal waste discharges in areas that do not drain to MS4s (including but not limited to farm animals, livestock and pets).
4. Homeless person/encampment discharges in areas that do not drain to MS4s.

### **Total Maximum Daily Load (TMDL)**

The TMDLs for the impaired reaches of the following water bodies are concentration based TMDLs applicable for each day for all seasons and are equal to the following:

Soquel Lagoon, Soquel Creek, and Noble Gulch:

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.

### **Allocations and Responsible Parties**

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

**Table IX K-1. Allocations to Responsible Parties**

<b>Waste Load Allocations</b>		
<b>Waterbody Subject to Allocation</b>	<b>Responsible Party (Source) NPDES/ORDER Number</b>	<b>Receiving Water Fecal Coliform (MPN/100mL)</b>
Soquel Lagoon <sup>1</sup>	City of Capitola  (Storm drain discharges to MS4s required to be covered by and NPDES permit)  Storm Water General Permit NPDES No. CAS000004	Allocation-1 <sup>a</sup>
Soquel Creek <sup>2</sup> Noble Gulch <sup>3</sup>	County of Santa Cruz and City of Capitola  (Storm drain discharges to MS4s required to be covered by and NPDES permit)  Storm Water General Permit NPDES No. CAS000004	Allocation-1 <sup>a</sup>
Soquel Lagoon <sup>1</sup> Soquel Creek <sup>2</sup> Noble Gulch <sup>3</sup>	Santa Cruz County Sanitation District  (Sanitary sewer collection system spills and leaks ) Order No. R3-2005-0043	Allocation-2 <sup>b</sup>
<b>Load Allocations</b>		
<b>Waterbody Subject to Allocation</b>	<b>Responsible Party (Source)</b>	<b>Receiving Water Fecal Coliform (MPN/100mL)</b>
Soquel Lagoon <sup>1</sup> Soquel Creek <sup>2</sup> Noble Gulch <sup>3</sup>	Owners and operators of land used for/containing pets  (Pet waste not draining to MS4s)	Allocation-1 <sup>a</sup>
Noble Gulch <sup>3</sup>	Owners and operators of land used for/containing farm animals and livestock  (Farm Animals and Livestock discharges)	Allocation-1 <sup>a</sup>
Soquel Lagoon <sup>1</sup> Soquel Creek <sup>2</sup> Noble Gulch <sup>3</sup>	Owners/operators of land that include homeless persons/encampments  (Homeless person/encampment discharges not draining to MS4s)	Allocation-2 <sup>b</sup>
Soquel Lagoon <sup>1</sup> Soquel Creek <sup>2</sup> Noble Gulch <sup>3</sup>	No responsible party  (Natural sources)	Allocation-1 <sup>a</sup>

<sup>1</sup> All waters of the Soquel Lagoon

<sup>2</sup> Beginning and including the downstream most reach of Soquel Creek, up to and including Soquel Creek at the bridge crossing at Porter Street.

<sup>3</sup> All reaches of Noble Gulch.

<sup>a</sup> 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 MPN per 100 mL, nor shall more than 10 percent of samples collected during any 30-day period exceed 400 MPN per 100 mL.

<sup>b</sup> Allocation 2: Allocation of zero; no loading allowed from this source.

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 numeric target is consistently met in the impaired waters of Soquel Lagoon, Soquel Creek, and Noble Gulch.

### Margin of Safety

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

### Implementation Plan

#### STORM DRAIN DISCHARGES:

The Central Coast Water Board will address fecal indicator bacteria (FIB), e.g., fecal coliform and/or other indicators of pathogens, discharged from the County of Santa Cruz and the City of Capitola by regulating the MS4 entities under the provisions of the State Water ~~Resource~~ Resources Control Board's General Permit for the Discharges of Storm Water from Small Municipal Separate Storm Sewer Systems (General Permit) (NPDES No. CAS000004). As enrollees under the General Permit, the MS4 entities must develop and implement Storm Water Management Plans (SWMPs) that control urban runoff discharges into and from their MS4s. To address the MS4 entities' TMDL wasteload allocations, the Central Coast Water Board will require the MS4 entities to specifically target FIB in urban runoff through incorporation of Wasteload Allocation Attainment Programs in their SWMPs.

The Central Coast Water Board will require the Wasteload Allocation Attainment Programs to include descriptions of the actions that will be taken by the MS4 entities to attain the TMDL wasteload allocations, and specifically address:

1. Development of an implementation and assessment strategy;
2. Source identification and prioritization (including leaks to storm sewers from private laterals);
3. Best management practice identification, prioritization, implementation schedule, analysis, and effectiveness assessment;
4. Monitoring program development and implementation;
5. Reporting; including evaluation whether current best management practices are progressing towards achieving the wasteload allocations within thirteen years of the date that the TMDLs are approved by the Office of Administrative Law;
6. Coordination with stakeholders; and
7. Other pertinent factors.

The Wasteload Allocation Attainment Program will be required by the Central Coast Water Board to address each of these TMDLs that occur within the MS4 entities' jurisdictions.

The Central Coast Water Board will require the Wasteload Allocation Attainment Program to be submitted at one of the following milestones, whichever occurs first:

1. Within one year of approval of the TMDLs by the Office of Administrative Law;
2. When required by any other Water Board-issued storm water requirements (e.g., when the Phase II Municipal Storm Water Permit is renewed).

For those MS4 entities that are enrolled under the General Permit at the time of Wasteload Allocation Attainment Plan submittal, the Wasteload Allocation Attainment Program must be incorporated into the SWMPs when they are submitted. For those MS4 entities that are not enrolled under the General Permit at the time of Wasteload Allocation Attainment Program submittal, the Wasteload Allocation Attainment Program must be incorporated into the SWMPs when the SWMPs are approved by the Central Coast Water Board.

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.

#### SANITARY SEWER COLLECTION SYSTEM SPILLS AND LEAKS:

Entities with jurisdiction over sewer collection systems can demonstrate compliance with these TMDL load allocations through Waste Discharge Requirements and/or NPDES permits.

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

In addition, the SCCSD is required to improve maintenance of their sewage collection system, including identification, correction, and prevention of sewage leaks in portions of the collection systems that run through, or adjacent to, impaired surface waters within the Soquel Creek Watershed.

To this end, within six months following ~~adoption~~ approval of these TMDLs by the Office of Administrative Law, the Executive Officer will issue a letter pursuant to Section 13267 of the California Water Code requiring: 1) submittal within one year of, a technical report that describes how and when the SCCSD will conduct improved collection system maintenance in portions of the collection system most likely to affect impaired surface water bodies, with the end result being compliance with its TMDL allocation, 2) stream monitoring for fecal coliform or another fecal indicator bacteria and reporting of these monitoring activities, and 3) annual reporting of self-assessment as to whether the SCCSD is in compliance with the TMDL allocation.

#### PRIVATE LATERALS TO THE SANITARY SEWER COLLECTION SYSTEM:

The Central Coast Water Board has identified leaks from private laterals located in the City of Capitola and County of Santa Cruz as a source of fecal indicator bacteria in municipal separate storm sewer systems (MS4s). Therefore, enrollees for the City of Capitola and County of Santa Cruz General Permit for the Discharges of Storm Water from Small Municipal Separate Storm Sewer



Systems will address fecal indicator bacteria from private lateral leaks in the Wasteload Allocation Attainment Program (as described in the Storm Drain Discharges section).

**DOMESTIC ANIMALS NOT REGULATED BY WQ ORDER NO. 2003-0005-DWQ [STORM WATER GENERAL PERMIT]:**

Owners and/or operators of lands containing domestic animals (including pets, farm animals, and livestock) in the ~~Soquel Creek Watershed and Noble Gulch Watershed~~ Soquel Lagoon Watershed must comply with the Domestic Animal Waste Discharge Prohibition; compliance with the Domestic Animal Waste Discharge Prohibition implies compliance with the load allocation for these TMDLs.

Within three years of approval of these TMDLs by the Office of Administrative Law, the Executive Officer will notify owners and/or operators of lands used for/containing domestic animals of the requirement to comply with the Domestic Animal Waste Discharge Prohibition. In his notification, the Executive Officer will also describe the options owners/operators of lands containing domestic animals have for demonstrating compliance with the Domestic Animal Waste Discharge Prohibition; pursuant to California Water Code section 13267 and within six months of the notification by the Executive Officer, owners/operators of lands containing domestic animals will be required to submit the following for approval by the Executive Officer or the Water Board:

- 1) Clear evidence that the owner/operator of lands containing domestic animals is and will continue to be in compliance with the Domestic Animal Waste Discharge Prohibition; clear evidence could be documentation submitted by the owner/operator to the Executive Officer validating current and continued compliance with the Prohibition, or
- 2) A plan for compliance with the Domestic Animal Waste Discharge Prohibition. Such a plan must include a list of specific management practices that will be implemented to control discharges containing fecal material from domestic animals. The plan must also describe how implementing the identified management practices are likely to progressively achieve the load allocations to domestic animals, with the ultimate goal achieving the load allocations no later than thirteen years after Office of Administrative Law approval of these TMDLs. The plan must include monitoring and reporting to the Central Coast Water Board, demonstrating the progressive progress towards achieving load allocations for discharges from domestic animals, and a self-assessment of this progress. The plan may be developed by an individual discharger or by or for a coalition of dischargers in cooperation with a third-party representative, organization, or government agency acting as the agents of owners/operators of lands containing domestic animals, or
- 3) Submittal of a Report of Waste Discharge pursuant to California Water Code Section 13260 (as an application for waste discharge requirements).

**HOMELESS PERSON/ENCAMPMENT DISCHARGES NOT REGULATED BY WQ ORDER NO. 2003-0005-DWQ [STORM WATER GENERAL PERMIT]:**

Owners of land that contain homeless persons and/or homeless encampments in the Soquel Lagoon Watershed must comply with the Human Fecal Material Discharge Prohibition.

Owners of land with homeless persons must demonstrate to the satisfaction of the Executive Officer or the Water Board that they are in compliance with the Human Fecal Material Discharge Prohibition; compliance with the Human Fecal Material Discharge Prohibition implies compliance with the load allocation for these TMDLs.

Within three years of approval of these TMDLs by the Office of Administrative Law, the Executive Officer will notify owners of land containing homeless persons of the requirement to comply with the Human Fecal Material Discharge Prohibition. In his notification, the Executive Officer will also describe owner's options for demonstrating compliance with the Human Fecal Material Discharge Prohibition; pursuant to California Water Code 13267 and within six months of the notification by the Executive Officer, owners will be required to submit the following for approval by the Executive Officer or the Water Board:

- 1) Clear evidence that the owner is and will continue to be in compliance with the Human Fecal Material Discharge Prohibition; clear evidence could be documentation submitted by the owner to the Executive Officer validating current and continued compliance with the Prohibition, or
- 2) A plan for compliance with the Human Fecal Material Discharge Prohibition. Such a plan must include a list of specific management practices that will be implemented to control discharges containing fecal material from homeless persons. The Plan must also describe how implementing the identified management practices are likely to progressively achieve the load allocation for homeless persons, with the ultimate goal achieving the load allocation no later than three years from the date of the Executive Officer's notification to the owner requiring compliance. The plan must include monitoring and reporting to the Central Coast Water Board, demonstrating the progressive progress towards achieving load allocations for discharges from homeless persons, and self-assessment of this progress, or
- 3) Submittal of a Report of Waste Discharge pursuant to California Water Code Section 13260 (as an application for waste discharge requirements).

### **Tracking and Evaluation**

Every three years, beginning three years after TMDLs are approved by the Office of Administrative Law, the Central Coast Water Board will perform a review of implementation actions, monitoring results, and evaluations submitted by responsible parties of their progress towards achieving their allocations. The Central Coast Water Board will use annual reports, nonpoint source pollution control implementation programs, evaluations submitted by responsible parties, and other available information to determine progress toward implementing required actions and achieving the allocations and the numeric target.

Responsible parties will continue monitoring and reporting according to this plan for at least three years, at which time the Central Coast Water Board will determine the need for continuing or otherwise modifying the monitoring requirements. Responsible parties may also demonstrate that although water quality objectives are not being achieved in receiving waters, controllable sources of pathogens are not contributing to the exceedance. If this is the case, the Central Coast Water Board may re-evaluate the numeric target and allocations. For example, the Central Coast Water Board may pursue and approve a site-specific objective. 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 fecal indicator bacteria.

Three-year reviews will continue until the water quality objectives are achieved. The compliance schedule for achieving the allocations and numeric target required under these TMDLs is 13 years after the date of approval by the Office of Administrative Law.