

## 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	
San Lorenzo River Estuary						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 Domestic Animal Waste Discharge Prohibition:

- San Lorenzo River Watershed

**AMENDMENT NO. 3. ADOPT THE TOTAL MAXIMUM DAILY LOADS FOR PATHOGENS IN SAN LORENZO RIVER ESTUARY, SAN LORENZO RIVER, BRANCIFORTE CREEK, CAMP EVERS CREEK, CARBONERA CREEK, AND LOMPICO CREEK**

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

**IX. J. TOTAL MAXIMUM DAILY LOADS FOR PATHOGENS IN SAN LORENZO ESTUARY, SAN LORENZO RIVER, BRANCIFORTE CREEK, CAMP EVERS CREEK, CARBONERA CREEK, AND LOMPICO CREEK**

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: March 1, 2011.

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 the San Lorenzo River Estuary (also known as San Lorenzo River Lagoon), San Lorenzo River , Branciforte Creek, Camp Evers Creek, Carbonera Creek, and Lompico Creek because fecal coliform concentrations exceed existing Basin Plan numeric water quality objectives protecting this beneficial use. All reaches in these waterbodies are impaired with the exception of Carbonera Creek, where the impairment extends from the mouth of Carbonera Creek upstream to its intersection with Bethany Road.

**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**

### San Lorenzo River Estuary

The relative order of controllable sources, in descending order, is:

1) City of Santa Cruz sanitary sewer collection system spills and leaks (including private laterals connected to municipal sanitary sewer collection systems), 2) storm drain discharges to municipally owned and operated separate storm sewer systems (MS4s) required to be covered by an NPDES permit, 3) pet waste in areas that do not drain to MS4s, 4) homeless person/encampment discharges in areas that do not drain to MS4s, 5) onsite wastewater disposal system discharges, and 6) farm animal and livestock discharges.

### San Lorenzo River, and Lompico Creek

The relative order of controllable sources, in descending order, is:

1) Onsite wastewater disposal system discharges, 2) storm drain discharges to MS4s required to be covered by an NPDES permit, 3) City of Santa Cruz sanitary sewer collection system spills and leaks (including private laterals connected to municipal sanitary sewer collection systems) within the City limits of Santa Cruz [does not include Lompico Creek], 4) pet waste in areas that do not drain to MS4s, 5) homeless person/encampment discharges in areas that do not drain to MS4s, and 6) farm animal and livestock discharges.

### Branciforte Creek,

The relative order of controllable sources, in descending order, is:

1) Storm drain discharges to MS4s required to be covered by an NPDES permit, 2) pet waste in areas that do not drain to MS4s, 3) City of Santa Cruz sanitary sewer collection system spills and leaks (including private laterals connected to municipal sanitary sewer collection systems) within the City limits of Santa Cruz, 4) homeless person/encampment discharges in areas that do not drain to MS4s, 5) onsite wastewater disposal system discharges, and 6) farm animal and livestock discharges.

### Carbonera and Camp Evers Creeks:

The relative order of controllable sources, in descending order, is:

1) Storm drain discharges to MS4s required to be covered by an NPDES permit, 2) pet waste in areas that do not drain to MS4s, 3) homeless person/encampment discharges in areas that do not drain to MS4s, 4) onsite wastewater disposal system discharges (only for Carbonera Creek) 5) farm animal and livestock discharges, and 6) City of Santa Cruz sanitary sewer collection system spills and leaks (including private laterals connected to municipal sanitary sewer collection systems; only for Carbonera Creek).

## **TMDLs and Allocations**

The TMDLs are for the impaired reaches of the following water bodies, and are applicable for each day for all seasons:

San Lorenzo River Estuary, San Lorenzo River, Branciforte Creek, Camp Evers Creek, Carbonera Creek, and Lompico Creek. TMDLs:

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 J-1.**

**Table IX J-1. Allocations and Responsible Parties**

<b>WASTE LOAD ALLOCATIONS</b>		
<b><u>Waterbody Assigned Allocation</u><sup>1</sup></b>	<b><u>Responsible Party (Source) NPDES/Order number</u></b>	<b><u>Receiving Water Fecal Coliform (MPN/100mL)</u></b>
<u>San Lorenzo River Estuary, San Lorenzo River, Branciforte Creek, and Carbonera Creek</u>	<u>City of Santa Cruz</u>  (Storm drain discharges to MS4s required to be covered by an NPDES permit)  NPDES No. CAS000004	<u>Allocation-1<sup>a</sup></u>
<u>Camp Evers Creek and Carbonera Creek</u>	<u>City of Scotts Valley</u>  (Storm drain discharges to MS4s required to be covered by an NPDES permit)  NPDES No. CAS000004	<u>Allocation-1<sup>a</sup></u>
<u>San Lorenzo River, Branciforte Creek, Lompico Creek, and Carbonera Creek</u>	<u>Santa Cruz County</u>  (Storm drain discharges to MS4s required to be covered by an NPDES permit)  NPDES No. CAS000004	<u>Allocation-1<sup>a</sup></u>
<u>San Lorenzo River Estuary, San Lorenzo River, Branciforte Creek, and Carbonera Creek</u>	<u>City of Santa Cruz</u>  (Sanitary sewer collection system spills and leaks)  NPDES No. CA 0048194, Order R3-2005-003	<u>Allocation-2<sup>b</sup></u>
<u>San Lorenzo River Estuary, San Lorenzo River, Branciforte Creek, Carbonera Creek, and Lompico Creek</u>	<u>Owners of onsite wastewater disposal systems residing in the County of Santa Cruz</u>  (Onsite wastewater disposal system discharges)	<u>Allocation-2<sup>b</sup></u>
<b>LOAD ALLOCATIONS</b>		
<b><u>Waterbody</u></b>	<b><u>Responsible Party (Source)</u></b>	<b><u>Receiving Water Fecal Coliform (MPN/100mL)</u></b>
<u>San Lorenzo River Estuary, San Lorenzo River, Branciforte Creek, Carbonera Creek, and Lompico Creek</u>	<u>Owners of onsite wastewater disposal systems residing in the County of Santa Cruz</u>  (Onsite wastewater disposal system discharges)	<u>Allocation-2<sup>b</sup></u>
<u>San Lorenzo River Estuary, San Lorenzo River, Branciforte Creek, Camp Evers Creek, Carbonera Creek, and Lompico Creek</u>	<u>Owners/operators of land used for/containing pets</u>  (Pet waste not draining to MS4s)	<u>Allocation-1<sup>a</sup></u>
<u>San Lorenzo River Estuary, San Lorenzo River, Branciforte Creek, Carbonera Creek, Camp Evers Creek, and Lompico Creek</u>	<u>Owners/operators of land used for/containing farm animals and livestock</u>  (Farm Animals and Livestock discharges)	<u>Allocation-1<sup>a</sup></u>
<u>San Lorenzo River Estuary, San Lorenzo River, Branciforte Creek, Lompico Creek, Camp Evers Creek, and Carbonera Creek</u>	<u>Owners and/or operators of land that include homeless persons/encampments</u>  (Discharges from homeless persons/encampments not regulated by a permit for storm water discharges)	<u>Allocation-2<sup>b</sup></u>

<u>San Lorenzo River Estuary, San Lorenzo River, Branciforte Creek, Lompico Creek, Camp Evers Creek, and Carbonera Creek</u>	<u>No responsible party</u> <u>(Natural sources)</u>	<u>Allocation-1<sup>a</sup></u>
<p><sup>1</sup> <u>All reaches of the following water bodies are assigned allocations, excepting Carbonera Creek, where the allocations are assigned from the mouth to the intersection with Bethany Road.</u></p> <p><sup>a</sup> <u>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/100mL, nor shall more than ten percent of total samples during any 30-day period exceed 400 MPN/100 mL.</u></p> <p><sup>b</sup> <u>Allocation-2= Allocation of zero; no loading allowed from this source.</u></p>		

The parties responsible for the allocation 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 the San Lorenzo River Estuary, San Lorenzo River, Branciforte Creek, Camp Evers Creek, Carbonera Creek, and Lompico Creek.

### **Margin of Safety**

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

### **Implementation Plan**

#### **SANITARY SEWER COLLECTION SYSTEM LEAKS**

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

The City of Santa Cruz and City of Scotts Valley must continue to implement their sewer Collection System Management Plans as required by their respective NPDES permits and Waste Discharge Requirements (WDR) (City of Santa Cruz NPDES No. CA 0048194 and WDR Order R3-2005-003; City of Scotts Valley NPDES No. CA 0048828, WDR Order R3 2002-0016).

In addition, the City of Santa Cruz is required to improve maintenance of their sewage collection system, including identification, correction, and prevention of sewage spills and leaks in portions of the collection systems that run through or adjacent to, impaired surface waters within the San Lorenzo River Estuary or San Lorenzo River. To this end, within six months following 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 City of Santa Cruz 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 City of Santa Cruz is in compliance with the TMDL allocation.

## PRIVATE LATERALS TO THE SANITARY SEWER COLLECTION SYSTEMS

The Central Coast Water Board has identified leaks from private laterals located in the City of Santa Cruz as a source of fecal indicator bacteria in municipal separate storm sewer systems (MS4s). Therefore, enrollees for the City 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 following section).

## STORM DRAIN DISCHARGES TO MUNICIPALLY OWNED AND OPERATED SEPARATE STORM SEWER SYSTEMS

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 Cities of Santa Cruz and Scotts Valley municipal separate storm sewer systems (MS4 entities) by regulating the MS4 entities under the provisions 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) (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 Program 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 Central Coast 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 Program 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.

### PET WASTE, FARM ANIMALS AND LIVESTOCK DISCHARGES

Owners and/or operators of lands containing domestic animals (including pets, farm animals, and livestock) in the San Lorenzo River 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 one of the following for approval by the Executive Officer or the Central Coast 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.
- 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 of achieving the load allocations no later than thirteen years after Office of Administrative Law approval of the TMDL. The plan must include monitoring and reporting to the Central Coast Water Board, demonstrating the 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.
- 3) Submittal of a Report of Waste Discharge pursuant to California Water Code Section 13260 (as an application for waste discharge requirements).

### ONSITE WASTEWATER DISPOSAL SYSTEM DISCHARGES

Owners of onsite wastewater disposal systems in the San Lorenzo River Watershed must comply with the Human Fecal Material Discharge Prohibition.

Owners of onsite wastewater disposal systems 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 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 either 1) determine that the County of Santa Cruz is making adequate progress towards implementing an approved Santa Cruz County Onsite Wastewater Management Plan (or another Implementation Program to address onsite wastewater disposal systems) as it pertains to controlling the waste loads from onsite wastewater disposal systems in the San Lorenzo River Watershed, or 2) notify owners of onsite wastewater disposal systems (owners) in the area described above of the requirement to comply with the Human Fecal Material Discharge Prohibition. In his notification, the Executive Officer will also describe owners' 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 one of the following for approval by the Executive Officer or the Central Coast 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 verification by the County of Santa Cruz, or similar, that the owner's onsite wastewater disposal system is in compliance with the Human Fecal Material Discharge Prohibition.
- 2) A schedule for compliance with the Human Fecal Material Discharge Prohibition. The compliance schedule must include a monitoring and reporting program and milestone dates demonstrating progress towards compliance with the Human Fecal Material Discharge Prohibition, with the ultimate milestone being compliance with the Human Fecal Material Discharge Prohibition no later than three years from the date of the Executive Officer's notification to the owner requiring compliance.
- 3) Submittal of a Report of Waste Discharge pursuant to California Water Code Section 13260 (as an application for waste discharge requirements; WDRs).
- 4) Clear evidence of current or scheduled compliance with the Human Fecal Material Discharge Prohibition (as described in number 1 and number 2 above, respectively) through the submittal of the required information by the County of Santa Cruz, acting as the voluntary agents of owners of onsite wastewater disposal systems. Note that an owner of an onsite wastewater disposal system cannot demonstrate compliance with the Human Fecal Material Discharge Prohibition through this option if: 1) the County of Santa Cruz is not their voluntary agent, 2) if the owner of the onsite wastewater disposal system does not choose the County of Santa Cruz as their agent, or 3) the Executive Officer or Central Coast Water Board does not approve the evidence submitted by the County of Santa Cruz on behalf of the owners of onsite wastewater disposal systems.

#### HOMELESS PERSONS/ENCAMPMENT DISCHARGES NOT REGULATED BY A PERMIT FOR STORM WATER DISCHARGES

Owners of land that contain homeless persons and/or homeless encampments in the San Lorenzo River 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 Central Coast 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 owners' 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 one of the following for approval by the Executive Officer or the Central Coast 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.
- 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 of 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 progress towards achieving load allocations for discharges from homeless persons, and self-assessment of this progress.
- 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 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 TMDL numeric target is 13 years after the date of approval by the Office of Administrative Law.