

City of Santa Cruz TMDL Update-FY2017-2018

San Lorenzo River, Branciforte Creek and Carbonera Creek

City of Santa Cruz Improved/New BMPs for Next Permit Year (s):

TMDL for Pathogens

1. Existing BMP #MO-11 (City's SWMP/Guidance Document): Development and Implementation of a Lateral Inspection Program:

In the City of Santa Cruz, the maintenance of the 16,000 private sewer laterals, which carry wastewater from toilets, sinks and drains to City's public sewer pipelines, is the responsibility of each property owner. As private sewer laterals age they can develop leaks, become clogged by fats, oils and grease, and become cracked by roots. Cracked and damaged sewer laterals can cause sewer spills and backups which threaten public health and the environment.

Thus in order to improve private sewer infrastructure and protect the environment and local waterways from bacteria-laden human waste coming from undetected sewer leaks or sanitary sewer spills, the City Council adopted changes to the Sanitary Sewer System Ordinance on June 26, 2018. Prior to the preparation and adoption of these amendments, Staff conducted an extensive outreach program to local realtors, plumbers and other stakeholders.

The new amendments to the City Sewer Use Ordinance regarding private sewer laterals are three-fold:

- The owner of a property with a sewer spill is responsible for stopping the spill immediately and will be subject to fines and penalties if inspections and repairs are not completed within 14 days.
- Prior to the sale of a property, the property owner must have the sewer lateral inspected by an authorized inspector, make any needed repairs, and submit an inspection form to verify compliance. The property is exempted from inspection for newer laterals or laterals that have passed inspection within the past five years.
- Private sanitary sewer collection systems and pumps (at apartment buildings, homeowner associations and businesses) must pass inspection every 10 years. Their pipelines must be cleaned every two to five years depending on size. Privately-owned pump stations must pass inspection every one to five years depending on size.

Effective dates for these new amendments are follows: Laterals spill requirements is August 1, 2018; Inspection of private sewer collection system effective date is Jan 1, 2019; Lateral inspection on sale of house effective July 1, 2019. We offer an incentive program to help offset fees related to the ordinance changes.

<https://www.cityofsantacruz.com/government/city-departments/public-works/wastewater-treatment-facility/wastewater-and-storm-water-collections/sanitary-sewer-system/proposed-changes-to-the-city-s-sanitary-sewer-system-ordinance>

2. *New Pilot BMP- Pet Waste Campaign:*

Beginning in FY16-17, the City and Coastal Watershed Council (CWC) have partnered on pilot pet waste campaign with the goal of educating pet owners to pick up pet waste in order to reduce bacteria loadings to the SLR and tributaries. The Campaign uses volunteers and CWC staff to help conduct outreach to dog owners in areas that drain to the San Lorenzo River, and also to conduct before and after surveys. City and CWC staff did the initial research, planned the campaign and CWC ordered colorful doggie waste bags that are given out to dog owners. An informational tag was developed and printed to be attached to the doggie waste bags.



CWC staff also began outreach to local vets, pet shampoo services, and local pet shelters. The campaign logo is based on the "There is no Poop Fairy" signage above used by City Parks and Recreation along the San Lorenzo River and West Cliff Drive.

In FY17-18, the campaign continued including conducting “before” surveys along the San Lorenzo River levee. On November 1 and 22, 2017, CWC staff and volunteers surveyed pet waste along the Santa Cruz Riverwalk, a recreational path adjacent to the San Lorenzo River. Over 100 dropping were tallied near the river while only two "Poop Fairy" pet waste educational signs were counted. Surveys identified hot spots for pet waste and the best locations for additional "Poop Fairy" signs. As a result of these efforts, the City Parks & Recreation Department is planning to install additional “Poop Fairy” signage (up to new 10 signs) along the Santa Cruz Riverwalk in FY18-19.

Also in FY17-18, CWC worked with BirchBark Foundation, with WoofPack, a hiking camp that leads monthly dog walks along the San Lorenzo River, and with the Santa Cruz SPCA to distribute 350 doggie bag holders with water quality information cards to Santa Cruz dogs and their parents.

Lastly, in June 2017 CWC conducted a pilot volunteer neighborhood cleanup in an area adjacent to the San Lorenzo River. The area is dubbed the “Oceans 11” neighborhood and residents that participated in the cleanup each received a doggie waste bag.

In FY18-19, the City and CWC are planning to work with local organizations and veterinary clinics and pet stores located near the San Lorenzo River to distribute an additional 300 doggie bag holders with water quality information cards. CWC staff and volunteers will visit the Mimi de Marta Dog Park, adjacent to the San Lorenzo River to pilot a pet waste education program with dog owners visiting the River and nearby park spaces. Education regarding pet waste and water quality will also be included in outreach efforts to residents in selected neighborhoods draining to the San Lorenzo River, and doggie waste bags may also be distributed to volunteers during future cleanup events.

3. New Pilot Neighborhood Outreach and Cleanup Program:

In FY 17-18, the Coastal Watershed Council (CWC) and the City coordinated efforts to increase neighborhood awareness regarding trash/littering, pet waste, illegal dumping and water quality issues in order to improve water quality in the San Lorenzo River. On June 23, 2018, CWC led the first pilot neighborhood volunteer cleanup in an area adjacent to the San Lorenzo River dubbed the “Oceans 11” neighborhood. Residents along primarily Felker and Pryce Streets participated in the cleanup. As part of the project, volunteers kept track of the trash items collected, such as: cigarette butts, dog poop, plastic bottles, cans, wrappers, etc. Each participant also received a doggie waste bag, with an educational message (see Pet Waste Campaign below), as a thank you.



In FY19-18, the City plans to co-fund similar CWC led volunteer neighborhood cleanups. For example, CWC plans to organize and cohost 2 neighborhood cleanups each in the Beach Flats and Ocean’s 11 neighborhoods. CWC will partner with interested neighbors to identify cleanup areas, hear community concerns, and also conduct storm water and water quality outreach. CWC will also create pre- and post-surveys, in conjunction with City staff, to assess trash levels and measure increases in storm water knowledge among clean-up participants. Also, City staff and CWC are collaborating on an educational post-card that will be mailed to residents in these two neighborhoods.

4. Additional Source Investigations re Branciforte Creek

Monitoring results have shown that Branciforte Creek has the highest percentage of fecal coliform exceedances compared to the other TMDL waterbodies in the City of Santa Cruz. The City intends to investigate potential contamination sources including sewer main lines, septic systems and sewer lateral lines.

TMDL for Sediment

The City currently reviews Building Permit plans for erosion and sediment control BMPs including for small residential projects. Project applications are required to include erosion and sediment control BMPs, as appropriate, and related standard notes are required on plan sheets. Open construction sites are inspected multiple times, especially during the rainy season, by various City staff including Building Inspectors, Green Building staff, PW Inspectors and PW Storm Water Staff.

The City also conducts extensive street sweeping as detailed in storm water program’s suite of Municipal Operations BMPs. However, the City will consider options such as enhanced street sweeping in certain areas and/or whether to implement a "no parking" policy during scheduled street sweeping days/time. Additional BMPs will be developed and implemented as needed upon review of further analyses of long-term sediment monitoring results by the County and City.

TMDL Wasteload Allocations and Milestones:

TMDL for Pathogens

Wasteload Allocation:

The City of Santa Cruz, County of Santa Cruz and the City of Scotts Valley are assigned the following concentration based wasteload allocation for fecal coliform: Based on a minimum of not less than five samples for any 30-day period, fecal coliform 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.

Effective date is June 8, 2011

Allocations shall be achieved no later than June 8, 2024.

Permit Year 5 Milestone Date: December 2017

Next Milestone Date: December 2020

Milestone Goal: Discernable, sustained trends showing a reduction in the number of samples exceeding the wasteload allocation (see above) in the San Lorenzo River (SLR), Branciforte Creek and Carbonera Creek.

Summary: In general, City monitoring results show that the fecal coliform levels in the SLR watershed did not decrease in any appreciable trend in spite of the continued implementation of BMPs. Also, monitoring has shown that the fecal coliform exceedances trend less frequently at the upstream SLR locations than the downstream SLR locations; which reflects the more urbanized setting of the downstream SLR. Of the three waterbodies, Branciforte Creek was found to have the highest average percentage levels of fecal coliform exceedances. Levels in the San Lorenzo River were, in general, lower than Branciforte Creek but higher than Carbonera Creek which had the lowest percentage number of exceedances.

TMDL for Sediment

Wasteload Allocation:

The County of Santa Cruz, City of Santa Cruz, and City of Scotts Valley are assigned the following wasteload allocations: sediment discharges from public roads to the San Lorenzo River shall be reduced by 27%, sediment discharges from public roads to Lompico Creek shall be reduced by 24%, sediment discharges from public roads to Carbonera Creek shall be reduced by 27%, sediment discharges from public roads to Shingle Mill Creek shall be reduced by 27%.

Effective date is December 18, 2003

Allocations shall be achieved by December 18, 2028.

Permit Year 5 Milestone Date: December 2017

Next Milestone Date: December 2020

Milestone Reductions/Improvements Goal: Discernable, sustained improvement (a reduction) in sediment loads at the various monitoring stations within the City.

Summary: The City data for sediments is not yet sufficient to present a year-to-year analysis of trends in SLR, Branciforte Creek and Carbonera Creek within the city. However, monitoring data indicates that sediment loading to the waterbodies is affected by the frequency and intensity of storm events. Please see the County of Santa Cruz (County) October 2018 “TMDL Report for the San Lorenzo River, Soquel Creek, and Aptos Creek Watersheds” for additional information as the County has conducted long-term monitoring for sediment in the SLR watershed including sites within the City.

The City will continue to collaborate with the County of Santa Cruz and City of Scotts Valley to ensure a comprehensive monitoring program and further analyses regarding the input and transport of sediments through the SLR watershed. This will allow us to further and more effectively evaluate results and, in turn, modify existing BMPs or implement additional BMPs.

In summary, the City will continue to collaborate with the County of Santa Cruz and the City of Scotts Valley in a comprehensive approach to address the TDMLs in the San Lorenzo River watershed and achieve TMDL goals. In addition, the City will continue to coordinate and implement programs with local NGOs such as the Coastal Water Council, the San Lorenzo River Alliance, and Save Our Shores, and other interested parties in order to reduce pollutant sources and improve water quality in the SLR watershed.