

4.5 Disposal

During cleaning of sewer lines if fats, oil and grease (FOG) are found, the FOG is removed and placed in a dumpster at the Calistoga Wastewater Treatment Plant headworks facility where it is disposed of through the treatment facility waste disposal contract.

**City of Calistoga
Sanitary Sewer System
Sewer System Management Plan
Element No. 2**

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Introduction

The City of Calistoga's (City) sanitary sewer collection system conveys wastewater for the area within the city limits to the Dunaweal Wastewater Treatment Plant (WWTP). The WWTP has an average dry weather flow design capacity of 0.84 million gallons per day (MGD) and can treat up to 4.0 MGD during wet weather flow events. The City's sewer collection system serves a population of approximately 5,200. Inputs to the sewer system are mainly domestic in origin and include residences, hotels, and geothermal spas. However, there are also several restaurants, a micro-brewery, and two mineral water bottling companies that discharge to the sanitary sewer system.

The City typically has 1-3 small (less than 1,000 gallons) collection system overflows per year. In addition, occasional severe flooding events have caused collection system overflows in excess of 1,000 gallons. These more significant events, which result from substantial rainfall events over several days, occur approximately every 2 to 3 years. However, the number of overflows is decreasing as older pipelines are replaced and repairs are made. The City has an up-to-date map of its collection system. The current version was prepared in 2002 and is updated yearly whenever a new sewer line or structure is added. There are approximately 16 miles of sewer lines, 250 manholes, and 4 lift stations within the City's collection system.

5.0 Legal Authority

The City of Calistoga Municipal Code Chapter 13.08 (Sewer Service) authorizes the City of Calistoga to require permits for installation or repair of sewer lines. The purpose of the Chapter is to provide rules and regulations for the use, maintenance, construction, alteration and repair of all sanitary sewer facilities within the City. This Chapter applies to all sanitary sewer facilities now and hereafter in use within the City of Calistoga.

The Chapter includes regulations for use of public sewers, has conditions for private sewage disposal, and includes regulations for public sewer construction. The Chapter also includes a section related to use of public sewers for domestic, commercial and industrial waste discharges.

The Chapter prohibits discharge of rainwater, stormwater, groundwater, street drainage, subsurface drainage, yard drainage, water from yard fountains, geothermal well water, ponds or lawn sprays or any other uncontaminated water into any sewer system facility which directly or indirectly discharges to facilities owned by the City.

Article XI of the Chapter relates to enforcement of the Municipal Code. This section authorizes the City to fine violators of the Chapter or prosecute violations as a misdemeanor. The Article sets out procedures for correction of violations and authorizes the City to disconnect a user from the sewer system for violations. Chapter 13.08 is attached as Appendix A.

6.0 Measures and Activities

6.1 Collection System Map

The City of Calistoga maintains up-to-date maps of wastewater collection system facilities. These maps include:

- All gravity line segments
- Manholes
- Pumping facilities
- Pressure pipes and valves
- Applicable stormwater conveyance facilities

6.2 Resources and Budget

The City of Calistoga maintains a two-year rolling budget that includes operations and maintenance as well as capital improvements for the wastewater collection system. The budget for FY 08/09 for the wastewater collection systems was \$770,050 for Operations & Maintenance and \$5,000 for Capital Improvements. The proposed budget for FY 09/10 for the wastewater collection systems is \$792,550 for Operations & Maintenance and \$165,000 for Capital Improvements.

Capital improvements for the two year period include a sewer lateral replacement program and a sewer system assessment and master plan.

6.3 Prioritized Preventive Maintenance

The City of Calistoga schedules regular maintenance of certain sewer lines that are known to have problems with oil and grease on a quarterly and semi-annual basis. Foothill Blvd., Cedar Street, sewer line across the Fairgrounds property from Washington to Grant St., and Grant Street in the vicinity of the Fairgrounds are cleaned every six months. Lincoln Avenue, Washington Street, and Fair Way are cleaned quarterly. All other sewer lines are cleaned on an annual basis. This maintenance includes using a hydro machine to flush and clean the sewer lines.

6.4 Scheduled Inspection and Condition Assessment

The current FY 09/10 budget includes a budget item (\$160,000) for a Sewer System Assessment and Master Plan. This Assessment will include identification of the sewer system's structural deficiencies and will include a program to implement a prioritized short-term and long-term action plan for improvements.

Currently, the City has various sewer lines inspected annually using a video camera to check condition.

6.5 Contingency Equipment and Replacement Inventories

The City of Calistoga owns six (6) backhoes and loaders as well as other equipment needed for sewer line repair. In addition, the City maintains a list of Contractors that are available in

emergencies with equipment and personnel. (See attached list in Appendix B) The City has a large inventory on hand of miscellaneous parts that allow the City to handle emergencies.

6.6 Training

The Maintenance Superintendent arranges for his staff to attend seminars regarding sanitary sewer overflow prevention as well as providing in-house weekly training sessions related to a wide variety of issues, including sewer line maintenance and cleaning. Certifications for classes/seminars attended are maintained by the Administrative Secretary.

6.7 Outreach to Plumbers and Building Contractors

The City of Calistoga currently distributes an information sheet for plumbers and contractors discussing how sanitary sewer overflows can be prevented when sewer laterals are being repaired as well as steps to take during new construction to prevent future problems. (See attached information sheet in Appendix C)

7.0 Design and Construction Standards

7.1 Standards for Installation, Rehabilitation and Repair

The City of Calistoga Municipal Code Chapter 16, Construction of Improvements requires that all streets, drainage facilities, water distribution and fire protection facilities, sanitary sewer facilities and other required improvements shall be constructed in accordance with the provisions of this chapter and with the following specifications, as applicable: the Public works Standard Specifications of the City of Santa Rosa, CalTrans Standard Specifications, the American Water Works Association, Board of Fire Underwriters.

All improvement plans must be prepared and signed by a registered civil engineer and must be approved by the City Engineer prior to construction. (See Appendix D)

7.2 Standards for Inspection and Testing of New and Rehabilitated Facilities

All improvements are subject to inspection by the City per Municipal Code Chapter 16.18.040. Inspections shall include testing by a certified testing firm to insure all facilities meet the requirements of the specifications for that particular item. If it is determined that construction of any particular improvement is deficient, a deficiency list will be prepared by the inspector and transmitted to the contractor. Upon completion of all corrections or additional work outlined in the deficiency list, the contractor is required to request a final inspection by the Director of Public Works. (See Appendix D)

**City of Calistoga
Sanitary Sewer System
Sewer System Management Plan
Element No. 3**

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8.0 Capacity Management

8.A Capacity Assessment

(Note: This item is not required by Region 2 for systems that serve a population of $\leq 10,000$).

Currently, capacity studies are performed in isolated areas, during development planning.

8.B System Evaluation and Capacity Assurance Plan

(Note: This item is not required by Region 2 for systems that serve a population of $\leq 10,000$).

The Capital Improvement Plan includes measures for evaluating the system and ensuring capacity. Current capital improvements include reconditioning of manholes, a sewer system assessment and master plan, sewer trunkline replacement, a sewer lateral replacement program, and inflow and infiltration improvements.

Although the sewer system assessment and master plan has been budgeted, this project has been delayed due to budget constraints related to the current economic climate.

9.0 Monitoring, Measurement, and Program Modifications

The intention of this section is to monitor the effectiveness of each SSMP element and update and modify SSMP elements to keep them current, accurate, and available for audit as appropriate. The SSMP elements prepared to date include:

1. Goals
2. Organization
3. Overflow Emergency Response Plan
4. Fats, Oils, & Grease Control Program
5. Legal Authority
6. Measure and Activities
7. Design and Construction Standards

One way to track the effectiveness of each SSMP element is to use performance indicators. Performance indicators will be used during the audit process to determine any deficiencies in the SSMP. Examples of performance indicators that will be used to assess the SSMP include:

- Number of SSOs over the past 12 months
- SSOs by cause (roots, grease, debris, etc.)
- Average time to respond to an SSO
- Backlog of repair, rehabilitation, and replacement projects

Status updates for each of the previously prepared sections can be found below.

1.0 Goals

The City of Calistoga's goals still include:

- Maintaining a safe and secure environment and high quality of life.
- Preserving and enhancing the community's unique beauty and character.
- Managing our resources efficiently, effectively and equitable.
- Recognizing the value and benefits of our diversity.
- Achieving long-term fiscal stability and self-sufficiency.
- Encouraging full public participation and ongoing communication.
- Strengthening partnerships with the private, non-profit and other public sectors for the cohesive and innovative delivery of government services.

2.0 Organization

The City's organization chart and roles have not changed since originally described in 2006.

3.0 Overflow Emergency Response Plan

Anyone wishing to report an SSO should contact the Department of Public Works. No changes have been made to the contact information since 2006.

Address: 414 Washington Street, Calistoga CA 94515

Hours: 8:00 a.m. - 4:30 p.m.

Phone: 707-942-2828

After Hours Phone: 707-942-2810

Fax: 707-942-9472

4.0 Fats, Oils, and Grease (FOG) Control Program

The City continues to identify and clean sections of the sewer system that are subject to grease blockages. The City continues to distribute materials regarding source control activities to educate local businesses about FOG control. Random inspections and inspections upon notice of an issue continue to take place. The outreach materials are distributed in many ways, including a booth at the Napa County Fair, local newspapers and publications, and door hangers. Program evaluation is conducted periodically to determine if the program is meeting its goals of reducing oil and grease discharged from residential areas. The initial focus of the City's FOG program has been on residential sources of oils and grease. The necessity for inspection of local food service establishments was evaluated. Food service establishments are now being inspected by the Napa County Department of Environmental Management for proper disposal of oil and grease.

5.0 Legal Authority

The City's Sewer Service Ordinances (Chapter 13) demonstrates the City's legal authority to control the use, maintenance, construction, alteration and repair of all sanitary sewer facilities within the City limits. No changes have been made to these ordinances in the past year.

6.0 Measure and Activities

6.A Collection System Map

A map of the City's collection system is maintained and updated periodically. The map is currently up to date.

6.B Resources and Budget

The City of Calistoga maintains a two-year rolling budget that includes operations and maintenance as well as capital improvements for the wastewater collection system. The current budget for FY 09/10 for the wastewater collection system is \$792,550 for Operations & Maintenance and \$165,000 for Capital Improvements. This budget has been approved. The proposed budget for FY 10/11 for the wastewater collection system

is \$808,400 for Operations & Maintenance and \$168,300 for Capital Improvements; however, these may change due to the current economic climate.

6.C Prioritized Preventive Maintenance

The City of Calistoga continues to schedule regular maintenance of certain sewer lines that are known to have problems with oil and grease.

6.D Schedule Inspections and Condition Assessment

A planned Sewer System Assessment and Master Plan will include identification of the sewer system's structural deficiencies and will include a program to implement a prioritized short-term and long-term action plan for improvements

6.E Contingency Equipment and Replacement Inventories

The City of Calistoga continues to upkeep, and replace as necessary, backhoes and loaders as well as other equipment needed for sewer line repair. In addition, the City maintains a list of Contractors that are available in emergencies with equipment and personnel. The City has a large inventory on hand of miscellaneous parts that allow the City to handle emergencies.

6.F Training

The Maintenance Superintendent continues to arrange for his staff to attend seminars regarding sanitary sewer overflow prevention as well as providing in-house weekly training sessions related to a wide variety of issues, including sewer line maintenance and cleaning.

6.G Outreach to Plumbers and Building Contractors

The City of Calistoga continues to distribute an information sheet for plumbers and contractors discussing how sanitary sewer overflows can be prevented when sewer laterals are being repaired as well as steps to take during new construction to prevent future problems.

7.0 Design and Construction Standards

The City of Calistoga Municipal Code Chapter 16, Construction of Improvements requires that all streets, drainage facilities, water distribution and fire protection facilities, sanitary sewer facilities and other required improvements shall be constructed in accordance with outlined provisions of this chapter. Chapter 16 is periodically reviewed, and updated as necessary. No updates have been made in the past year.

10.0 SSMP Audits

(Note: This item is not required by Region 2 for systems that serve a population of $\leq 10,000$).

The City plans to complete a review of the SSMP every two years, or as appropriate with the number of overflows, to identify any deficiencies and steps to correct them, and will submit a report of such audit. These audits will begin in 2010 and will be submitted with the Annual Reports of Sanitary Sewer System Overflows.

11.0 Communication Program

The City maintains a website (<http://www.ci.calistoga.ca.us/index.html>) to inform the public about City activities. The City's website is an effective communication channel for providing alerts and news to the public. The main page of the website provides important announcements, agendas and minutes for City Council meetings, and other key information for City residents. The City plans to publish this SSMP on the Public Works Department page of the City website. The completed SSMP will be certified by the City Council during a public city council meeting. The City will also use the website to notify the public of important upcoming activities related to sewer system management, its development, and implementation, and performance.

The City does not need have any tributary or satellite collection systems; there is no need to establish communication protocols with any such agencies.