

FEBRUARY 2026

CITY OF GRASS VALLEY

---

# Sewer System Management Plan

PREPARED BY:

**lwa**  
LARRY WALKER  
ASSOCIATES

PREPARED FOR:



**GRASS VALLEY**  
A PLACE TO LIVE AND THRIVE



# TABLE OF CONTENTS

---

Section	Page
1. INTRODUCTION AND GOALS.....	3
Regulatory Context.....	3
Sewer System Management Plan Goals .....	3
SSMP Updates .....	4
Collection System Asset Overview.....	4
2. PUBLIC WORKS DEPARTMENT ORGANIZATIONAL STRUCTURE .....	5
3. LEGAL AUTHORITY .....	5
4. OPERATIONS AND MAINTENANCE PROGRAM.....	6
Sewer Collection System Mapping .....	6
Preventive Operations and Maintenance .....	6
Training .....	7
Equipment and Replacement Parts .....	7
5. DESIGN AND PERFORMANCE PROVISIONS .....	8
6. SPILL EMERGENCY RESPONSE PLAN.....	8
Goals .....	8
Notification Process.....	9
Public Observation.....	9
Receipt of Lift Station and/or Treatment Plant Alarm .....	9
Staff Observations .....	9
Safety .....	9
Spill Response Procedures.....	10
Dispatch and Initial Assessment of the Situation .....	10
Restore Flow .....	11
Initiate Spill Containment Measures.....	11
Clean-up .....	12

Follow-up Activities .....	13
Water Quality Sampling and Analysis .....	13
Public Notification .....	14
Estimated Volume of Spilled Sewage.....	15
Internal Spill Reporting Procedures .....	16
External Spills Reporting Procedures .....	16
Spill Documentation and Recordkeeping Requirements.....	18
Post-Spill Event Debriefing and Training.....	25
<b>7. SEWER PIPE BLOCKAGE CONTROL PROGRAM .....</b>	<b>25</b>
<b>8. SYSTEM EVALUATION, CAPACITY ASSURANCE AND CAPITAL IMPROVEMENTS.....</b>	<b>26</b>
Rehabilitation and Replacement Plan.....	26
Capital Improvement Plan .....	26
<b>9. MONITORING, MEASUREMENT AND PROGRAM MODIFICATIONS .....</b>	<b>27</b>
<b>10. INTERNAL AUDITS .....</b>	<b>27</b>
<b>11. COMMUNICATION PROGRAM .....</b>	<b>27</b>

## LIST OF TABLES

Table 1: SSMP Implementation Schedule .....	4
Table 2: City’s Authorized Representatives (LROs).....	5

## LIST OF APPENDICES

- Appendix A: Public Works Department Organization Chart
- Appendix B: Emergency Contact Numbers
- Appendix C: City of Grass Valley Standby Call Flow Chart
- Appendix D: Sewer Backup Prevention & Response
- Appendix E: Sanitary System Overflow Initial Assessment Form
- Appendix F: Example Spill Warning Sign
- Appendix G: Log of SSMP Revisions

# 1. INTRODUCTION AND GOALS

A Sewer System Management Plan (SSMP) is a document that describes the activities that public agencies use to effectively manage their wastewater collection systems. The City of Grass Valley (City) SSMP outlines the City's policies, procedures, and activities for managing its sanitary sewer system, preventing and responding to spills, and maintaining compliance with applicable regulations. Implementation of the SSMP is coordinated across City departments and includes regular training, field inspections, asset management, and system performance evaluations.

The City has dedicated funds for both short- and long-term repair and replacement of critical mechanical and non-mechanical infrastructure elements of the sewer collection system contained both in annual operating budgets and within the City's Capital Improvement Plan (CIP). Two funding sources (user rates and impact fees) are reviewed annually during the budget process to ensure that program priorities are consistent with the needs of operating an effective utility.

## REGULATORY CONTEXT

On May 2, 2006, the California State Water Resources Control Board (SWRCB or State Water Board) promulgated a waste discharge requirement (WDR) permit to provide a consistent, statewide regulatory approach to regulate sanitary sewer systems and address spills. The 2006 Order and its subsequent amendments were superseded by in 2022, with the issuance of Statewide General Waste Discharge Requirements for Sanitary Sewer Systems Order No. WQ 2022-0103-DWQ (2022 SSS WDR). The 2022 SSS WDR was issued on December 6, 2022 and became effective on June 5, 2023.

The 2022 SSS WDR, among other things, requires local public sewer collection system agencies, referred to as "Enrollees," to develop SSMPs.

## SEWER SYSTEM MANAGEMENT PLAN GOALS

The goals of the City's Sanitary Sewer System Management Plan (SSMP) are:

- To efficiently and effectively manage, operate, and maintain all components of the City's sewer collection system
- To provide adequate capacity to convey peak wastewater flows. Adequate capacity, for the purposes of this SSMP, is defined as the capacity to convey peak wastewater flows per the City Improvement Standards
- To prevent and reduce the frequency of spills/sanitary sewer overflows (SSO)
- To mitigate the impacts that are associated with any spill that may occur
- To meet all applicable regulatory requirements
- To provide and make available comprehensive staff training on the proper operations and maintenance of the sewer collection system, its infrastructure and equipment

## SSMP UPDATES

The City’s SSMP was first developed to comply with the 2006 SSS WDR. As required by 2006 regulation, the City has been self-auditing its SSMP and updated it several times over the years. The updates were needed in order to comply with amendments to the 2006 Order and as well as to reflect changing City practices. The most recent update to the SSMP was completed in December 2022. This current update, in 2026, is driven by the 2022 SSS WDR; this update incorporates changes from the 2022 WDR and addresses deficiencies noted in the City’s latest SSMP Audit from November 2025. A list of revisions in this latest version of the SSMP is provided in **Appendix G**.

Upon certification by City Council, the City’s Legally Responsible Official (LRO) will upload the SSMP to the California Integrated Water Quality System (CIWQS) database, which is the State Water Board’s regulatory and water quality information management system.

Per the 2022 SSS WDR, the SSMP must be self-audited at least once every three (3) years and updated every six (6) years from the original adoption date by the Enrollee’s governing board. The schedule for required future audits and SSMP updates is provided in **Table 1**.

**Table 1: SSMP Implementation Schedule**

Activity	Due Date
2028 Internal Audit	February 2, 2028
2031 Internal Audit	February 2, 2031
2031 SSMP Update and Certification	August 2, 2031

## COLLECTION SYSTEM ASSET OVERVIEW

The City owns and operates a sewer collection system that collects wastewater from a total service population of approximately 12,800. The City has 3,478 residential and 518 commercial and industrial and sewer connections.

The system is comprised of 1,385 manholes and approximately 98,300 feet of sewer collection system pipelines of varying sizes dependent upon the area dynamics of location and number of customers served. The system also has eight (8) lift stations that are maintained by utility operations personnel. The City owns and manages the lower section of sewer laterals, from the start of public right-of-way to the sewer main. There are no structures diverting storm water to the sewer system. Maps of the City’s collection system are available on the City website at: [https://www.cityofgrassvalley.com/sites/main/files/fileattachments/11x17\\_sewer\\_full\\_set.pdf?1601677529](https://www.cityofgrassvalley.com/sites/main/files/fileattachments/11x17_sewer_full_set.pdf?1601677529)

The City utilizes NEXGEN Asset Management software for comprehensive sewer collection system work order tracking and asset management. NEXGEN provides asset inventory management, work order tracking, preventive maintenance scheduling, condition assessment capabilities, and integration with the City's GIS database.

## 2. PUBLIC WORKS DEPARTMENT ORGANIZATIONAL STRUCTURE

This section of the SSMP identifies City staff responsible for implementing this SSMP, responding to spill events, and meeting the spill reporting requirements.

The City's authorized representative in all sewer system matters is the City Manager or his designee. The Utilities Director and the City Engineer have designated authority to submit verbal, electronic, and written reports on behalf of the City to the Central Valley Regional Water Quality Control Board (Central Valley Water Board), State Water Resources Control Board (State Water Board), Nevada County Department of Environmental Health, California, Department of Fish and Game (CDFG), Nevada Irrigation District (NID), and California Office of Emergency Services (CAL-OES).

The City Manager, Utilities Director, and City Engineer are currently enrolled to certify electronic SSO reports submitted to the State Water Board via CIWQS. All management personnel mentioned in this section are authorized to submit CIWQS reports. The contact information for the LROs is provided in **Table 2**.

Organizationally, the Utilities Division and its labor allocation is part of the Department of Public Works and under the direction of the Utilities Director or designee. Ultimately, the Utilities Director is responsible for developing, implementing, and maintaining all elements of the SSMP. Emergency contact information for all personnel, including management staff is readily available to all department staff and on-call personnel.

A copy of the organizational structure is included in **Appendix A**. Further details on the chain of communication for reporting spills is provided in the section, Spill Emergency Response Plan.

**Table 2: City's Authorized Representatives (LROs)**

Title	Name	Email	Phone Number
City Manager	Timothy Kiser	timk@cityofgrassvalley.com	(530) 274-4312
City Engineer	Bjorn Jones	bjornj@cityofgrassvalley.com	(530) 274-4353
Utilities Director	Trever van Noort	treverv@cityofgrassvalley.com	(530) 274-4371

## 3. LEGAL AUTHORITY

The City of Grass Valley Municipal Code, Title 13, is the legal authority for regulating the sewer collection system. The City has enforcement authority over sewer violations as established in Title 13 of the Grass Valley Municipal Code. The City has authority for all facilities installed on private property to be maintained, repaired or replaced by the water department without consent or interference of the owner of the property per Municipal Code Section 13.04.200. The City's Building Standards Code is also part of the Municipal Code, Title 13. The Municipal Code can be easily accessed at [www.cityofgrassvalley.com](http://www.cityofgrassvalley.com) in a searchable format.

The City also owns and manages the stormwater infrastructure in the City jurisdiction. At this time, there is no potential for spills to reach a stormwater system outside of the City jurisdiction.

Additionally, the City has authority for designing, constructing, installing, testing, and inspecting all public improvements. The Design Standards and Construction Standards and Standard Details, collectively referred to as "Improvement Standards" were revised most recently in May 2016. The Improvement Standards apply to, regulate, and guide the design and construction of all public improvements, and set guidelines for certain private improvements within the City. The Improvement Standards are posted on the City's website at [www.cityofgrassvalley.com](http://www.cityofgrassvalley.com).

## 4. OPERATIONS AND MAINTENANCE PROGRAM

### SEWER COLLECTION SYSTEM MAPPING

The City's Engineering Division maintains sewer collection system maps in AutoCAD and record drawings. Sewer collection system maps are available electronically to all field crews, which can submit map change work orders to the Engineering Division if they discover a discrepancy or need to add/remove an element of infrastructure onto the mapping system. The Engineering Division confirms the changes and incorporates the updates into the system through a third-party contractor. The goal is to complete critical revisions within three (3) months and minor revisions annually. These maps are also available on the City website at:

[https://www.cityofgrassvalley.com/sites/main/files/fileattachments/11x17\\_sewer\\_full\\_set.pdf?1601677529](https://www.cityofgrassvalley.com/sites/main/files/fileattachments/11x17_sewer_full_set.pdf?1601677529)

### PREVENTIVE OPERATIONS AND MAINTENANCE

Preventive maintenance is a key component in the proper operation of the sewer collection system. The City schedules approximately 30 percent of the sewer collection system for cleaning annually. Maintenance equipment includes a truck-mounted hydraulic sewer cleaner and closed circuit television (CCTV) inspection equipment. Increased maintenance priorities are given to those areas that have demonstrated an ability to potentially experience operational difficulties. The City schedules regular maintenance of certain sewer lines with a higher potential for blockages (e.g., locations with a reduced slope, a history of fats, oils, and grease [FOG] or root problems, customer complaints, odor issues) on a more frequent basis. There are currently 19 segments cleaned on a quarterly basis with another 5 segments being cleaned annually, for a total of approximately 1.5 miles of pipe on an increased cleaning frequency. Other areas are added to the list as needed — based on field observations, spill frequency, etc. Once a particular system segment is identified as a "Hot Spot", a reoccurring work order is developed, and field crews are assigned to perform required maintenance on an increased frequency.

The City continually learns from deficiency events such as spills in order to redefine and possibly expand existing maintenance and frequency of service programs. At team meetings, staff regularly discusses "field findings" such as identification of problem areas requiring repair before potential failures, continued maintenance concerns, and development of future individual CIP program elements. Staff add known or suspected problem areas (e.g., frequent spills/stoppages, root intrusion, high flows during storm events) to a tracking spreadsheet. Crews also identify manholes that have high flow during off hours that may indicate inflow and infiltration (I&I).

In the past few years, the City converted its maintenance system to a new work order and mapping software (NEXGEN). Using NEXGEN, each asset (e.g., manhole to manhole gravity sewer



segments, manholes, lift stations, force mains) was assigned a unique identifier and all data associated with that asset (e.g., service calls, spills, repairs, condition assessment, flows) are being recorded with the assets unique identifier. The City will be able to analyze the performance and cost of each asset over time, which, in turn, will become the basis for maintenance and capital improvement decisions.

The City has a goal of conducting CCTV inspections for five miles per year, plus all the segments with a reoccurring work order or where a spill has recently been observed. All CCTV inspections are conducted to Pipeline Assessment Certification Program (PACP) standards. The City also has a push cable camera system capable of inspecting segments of smaller pipe.

Mechanical elements of the system such as lift stations are checked for operational effectiveness at least two times per week; maintenance records for lift stations are kept at each site and in the NEXGEN work order system. Generators at these sites are also tested on a weekly basis. The City is in the process of making improvements at the lift stations to ensure their continued operational reliability:

- Pending future development of the Berriman Ranch housing project, add a new lift station and eliminate the need for the Taylorville lift station.
- Schedule emergency generator fuel polishing every two years to prevent bacterial growth in the fuel tanks.

## TRAINING

The City implements a spill training program for first responders that provide training for operation of sewer response equipment (vacuum/jet truck, Ring-O-Matic vacuum, etc.). Standby personnel are required at least 16 hours per year of actual operation of sewer response equipment to increase operational proficiency. Staff are also encouraged to attend trainings, certification seminars, and industry conferences such as those organized by California Water Environment Association (CWEA) on a wide variety of issues, including collection system maintenance and spill prevention. The City also hosts training on their Spill Emergency Response Plan, estimation of spill volume, and electronic CIWQS reporting procedures. The most recent training by the City was conducted on July 23, 2025.

## EQUIPMENT AND REPLACEMENT PARTS

The City owns two vacuum/jet trucks, a skid-mounted vacuum on a flatbed, lights, pumps, generators, backhoe, Bobcat, dump truck, and miscellaneous service/utility trucks as well as other equipment needed for sewer line repair. The City also has a large inventory of miscellaneous parts that allow crews to handle emergencies. The City maintains a list of contractors and suppliers that are available in emergencies with equipment and personnel. This list is available in the utility system trucks and at the Corporation Yard.

City staff periodically test and rebuild sewer-cleaning equipment (e.g., root cutter, hydro-pressure) to ensure its performance supports field crew effectiveness and productivity.

The equipment on the City's 'initial-response' truck includes traffic control and containment/cleanup equipment sufficient to respond to a 100 gallon spill. The truck is stocked at all times



and a supply list will be kept on the truck for crews to re-stock any time supplies have been used.

## 5. DESIGN AND PERFORMANCE PROVISIONS

In May 2016, the City revised its most recent version of the City's Design Standards and Construction Standards and Standard Details, collectively, the "Improvement Standards". The Improvement Standards apply to, regulate, and guide the design and construction of all public improvements, and set guidelines for certain private improvements within the City.

The Improvement Standards contain inspection and testing methods and acceptance thresholds in order for improvements to achieve acceptance. The Engineering Division has licensed professional engineers and competent construction field inspection staff available to ensure strict adherence to the stated design, construction, and testing standards.

Section 8 of the *Design Standards* and Section 5 of the *Construction Standards* apply specifically to the design and construction standards for the sewer collection system and reflect a collaborative effort between the Utilities Divisions to ensure competent design and construction of utility infrastructure.

The Design and Construction Standards are posted on the City's website at: [www.cityofgrassvalley.com](http://www.cityofgrassvalley.com).

## 6. SPILL EMERGENCY RESPONSE PLAN

The purpose of the Spill Emergency Response Plan is to convey an orderly, consistent, efficient, and effective response to spill events.

### GOALS

The City's goals in responding to spills are to:

- Respond quickly to minimize the volume of the spill
- Eliminate the cause of the spill and restore flow
- Contain spilled wastewater to the maximum extent feasible
- Minimize public contact with the spilled wastewater
- Mitigate the impact of the spill
- Meet the regulatory reporting requirements
- Provide effective public notification when a threat to public health exists
- React to spill events in a manner that instills confidence in the public that the system operators are protecting public health

## NOTIFICATION PROCESS

The processes employed to notify the City staff of a spill include: observation by the public, receipt of an alarm, or observation by City staff during the normal course of their work. The notification procedures for working hours and after-hours are presented in **Appendix C**.

### **Public Observation**

Public observation is one of the most common ways that the City is notified of blockages and spills. Contact information for reporting sewer spills and backups are available on the City's website: [www.cityofgrassvalley.com](http://www.cityofgrassvalley.com). The business hours telephone number for reporting sewer problems is (530) 274-4350 although additional City personnel are trained to respond to these emergency calls and make appropriate staff notifications. The after-hours telephone number is (530) 265-7880 (Sheriff Dispatch).

### ***Normal Work Hours Response Protocol***

The City's regular working hours for its sewer staff is Monday through Friday from 7:00 a.m. to 3:30 p.m., except holidays. When a report of a sewer spill or backup is made, City staff receives the call, takes the information from the caller, and communicates the information immediately to the field crew who provide prompt emergency response to the site. Management staff also respond to spill events to ensure protocols and reporting requirements are followed.

### ***After-Hours Response Protocol***

Reports from the public are initially received by the Nevada County's Emergency Dispatch Call Center. Once a Dispatcher receives the call and the pertinent information from the caller, the dispatcher communicates the information to the Public Works On-Call Standby Person. Public Works On-Call is staffed at all times outside of those identified as regular working hours. The Dispatcher leaves a message on the City's emergency call line and the message immediately relays to all Public Works On-Call staff member(s).

### **Receipt of Lift Station and/or Treatment Plant Alarm**

If a lift station or treatment plant alarm is received, the appropriate City staff or on-call duty staff is notified via the Wastewater Treatment Plant cellular phones. Treatment plant staff monitor the treatment plants and lift stations via the Supervisory Control and Data Acquisition (SCADA) system.

### **Staff Observations**

City staff conducts periodic inspections of the sewer system facilities as part of their routine maintenance activities. Any issues, concerns, or problems observed with the sewer system facilities are reported to appropriate City personnel who, in turn, respond to potentially emergency situations.

## SAFETY

All department first responders are generally responsible for the job site safety and following safety procedures and protocols at all times. In conjunction with the City's National Incident Management System (NIMS) Training, the first employee on site is responsible for all safety

concerns and considerations of the site until he/she is relieved of these responsibilities formally by a more senior employee or responding management personnel. It is understood by all department staff that specialized and possibly extraordinary safety precautions must be observed when performing sewer system emergency and routine maintenance work. These safety precaution considerations include not only working with the potential contamination aspects of sewage but also the work unique environment hazards such as active traffic lanes, working with high pressure water such as that generated by a sewer jet, and other specialized and sometime excessively noisy equipment.

During non-regular work hours, it is critical that City personnel responding to a sewer system event become fully compliant and recognize potential safety hazards of sewer system work. All On-Call Primary Responders are trained in proper sewer system maintenance protocols. In such cases, it is appropriate to take the time to discuss safety issues, consider the order of work, and check safety equipment and make duty assignments according to level and knowledge of assignments before beginning the tasks of the job.

## SPILL RESPONSE PROCEDURES

Sewer service calls and lift station alarms are considered high-priority events that require immediate response to the reported location of the event to minimize or eliminate any spills. Crews must respond to the reporting party, lift station, or site of the problem immediately and visually check for potential sewer stoppages or overflows. The goal of each spill response is to preserve and protect public health, environment, and property and to restore the affected area to normalcy as soon as possible.

Responding personnel will work to contain and control the discharge to the maximum extent possible. They will establish safe perimeters and control zones with traffic cones, barricades, vehicles, or terrain to ensure that spill material exposure is contained to as small an area as possible and to eliminate a potential expansion of contamination by outside forces such as vehicles or pedestrians. Every effort is made to prevent the discharge of sewage into waterways or conveyances to waterways both above and below ground. Staff also promptly identify cause and effect of the spill event and/or the need for additional resources (e.g., people, equipment). The Spill Response Procedures are summarized in **Appendix D**.

### Dispatch and Initial Assessment of the Situation

- Receive a brief description of the nature of the problem from the person making the report. Fill out the SSO Spill Report Form (**Appendix E**).
- Determine appropriate response measures based on the circumstances and information provided by the caller (e.g., location, weather and traffic conditions, small backup vs. sewage flowing on the ground) and begin the emergency mobilization of manpower, equipment, and resources to the site.
- Verify the existence of an spill or backup upon arrival at the reported location.
- Call the appropriate Public Works Management personnel (during working hours) or the Police Dispatcher or Public Works/Utility Management staff (after-hours) to request additional Public Works/Utility staff to assist in the spill response as necessary.

- Take detailed job notes including notification and arrival time(s), conditions, and any other required information for purposes of external formal notification.
- Use the SSO Spill Report Form (**Appendix E**).
- Take photos to document the incident.
- Take the necessary measures to contain and/or mitigate spilled sewage to the maximum extent feasible regardless of whether the spill or backup is caused by a private lateral or another agency sewer system. City staff is relieved of this duty when representatives of the responsible third party arrive and take control of the site/event. Third party spills are considered as incidents and forms detailing the event are required to be completed.

### **Restore Flow**

- In the event of a sewer system failure event, relieve the stoppage or restore the lift station operation as soon as possible through the use and application of the appropriate equipment.
- If addressing a main blockage, set up downstream of the blockage and hydro-clean or rod upstream from a clear manhole. Attempt to remove the blockage from the system and observe the flow to ensure that the blockage does not recur or transition downstream.
- If the blockage cannot be cleared within 15 minutes of arrival or the sewer requires construction repairs to restore flow, or if the lift station operation cannot be restored within the wet well holding time, initiate expanded containment efforts to the degree practical and/or bypass pumping. If assistance is required, immediately contact the Public Works Director/City Engineer, or designee (all hours) and other required employees.

### **Initiate Spill Containment Measures**

The first responder(s) should attempt to the extent possible to contain as much of the spilled sewage as possible using the following steps:

- Keep sewage from entering the storm drain system to the maximum extent practicable by blocking storm drain inlets and catch basins or by containing and diverting the sewage away from open channels and other storm drain facilities using sandbags, inflatable dams, plastic mats, etc. Sandbags and a spill containment kit are standard equipment in the On-Call Vehicle at all times.
- Review sewer maps for possible temporary upstream flow diversion through bypassing.
- Pump around the blockage/pipe failure/lift station.
- Dike/dam (or sandbag) the spill by building a temporary berm to collect and control the spilled sewage.
- If overflowing sewage has contacted the storm drain system, attempt to contain the spilled sewage by plugging the nearest unaffected downstream storm drain.

- Modify these methods as needed to accommodate wet weather conditions where the feasibility of containment may be impacted by the quantity of stormwater runoff.
- If containing spilled sewage in storm drain system methods are used, thoroughly clean, vacuum, wash, and disinfect the storm drain system as part of the recovery and clean-up phase.

## **Clean-up**

The recovery and clean-up phase begins immediately after the flow is restored and the spilled sewage has been contained to the extent possible. Depending on the situation, the spill recovery and clean up may include:

### ***Recovery of Spilled Sewage***

To the extent practicable, crews will vacuum up or pump the spilled sewage and return it back into the sewer collection system.

### ***Clean-up and Disinfection***

When disinfecting a sewage-contaminated area, crews will take every effort to ensure that the disinfectant or sewage treated with the disinfectant is not discharged to the storm drain system or surface waters. Methods may include blocking storm drain inlets, containing and diverting disinfectant and sewage away from open channels and other storm drain fixtures, and removing the material with vacuum equipment.

The following clean-up and disinfection procedures should be implemented to reduce the potential for human health issues and adverse environmental impacts that are associated with a spill event. The following procedures described are for dry weather conditions and should be modified as required for wet weather conditions.

#### **Hard Surface Areas**

- Collect all sewage solids and sewage-related material either by gloved hand or with the use of various hand tools such as rakes, brooms, and/or shovels.
- Disinfect all areas that were contaminated from the spill using the disinfectant solution of household bleach diluted 10:1 with water. Apply minimal amounts of the disinfectant solution using a hand sprayer.
- Flush wash any affected area with clean water until the water runs clear. Take all safe and reasonable steps to contain and vacuum up the wastewater.
- Repeat the process as often as necessary until it is obvious that additional cleaning is not required, and the area is safe again.

#### **Landscaped and Unimproved Natural Vegetation**

- Collect all signs or examples of sewage solids and sewage-related material either by gloved hand or with the use of various hand tools such as rakes, brooms, and/or shovels.
- Wash down the affected area with clean water until the water runs clear. The flushing volume should be approximately three times the estimated volume of the spill.

- Either contain or vacuum up the wash water so that none is released.
- Allow the area to dry. Repeat the process if additional cleaning is required.
- Do not apply disinfectant solution to landscaped areas or unimproved natural vegetation.

### ***Wet Weather Modifications***

Management staff may decide to omit flushing and or disinfection during heavy storm events with heavy runoff where spill area flushing is determined not to be required.

### **Follow-up Activities**

In situations where sewage has reached the storm drain system, crews will vacuum/pump out the catch basin and any other portion of the storm drain system that may have contacted the sewage. All vacuumed or pumped material collected is deemed contaminated material and must be returned to the sewer collection system.

During nighttime spill events, a re-inspection should be conducted at first adequate light the following day. The field crew should look for signs of sewage solids and sewage-related material that may warrant additional clean-up activities. Staff shall always err on the side of caution and reinstitute clean-up activities when any doubt exists regarding public safety and overall public health.

Following any re-inspection, the staff will investigate to identify determine the probable cause of the spill event and to identify proactive action(s) that will minimize or eliminate future potential for a spill to reoccur. The investigation should include reviewing all relevant data to determine appropriate positive or corrective action(s), the investigation should include:

- Reviewing and completing the SSO Spill Report Form (**Appendix E**)
- Reviewing past maintenance records
- Reviewing available photographs, where applicable
- Conducting a CCTV inspection within the next two (2) business days after an event, where necessary to determine the line condition
- Interviewing staff who responded to the spill

### **Water Quality Sampling and Analysis**

To determine the extent of any impact of a spill, the City makes every effort to conduct water quality sampling and testing whenever 1,000 gallons or more of untreated sewage enters a surface water. The sampling procedures are summarized below:

- The first responder collects samples as soon as practical after the discovery of the spill event. Sampling kits are available in the Utility System trucks, standby trucks, and at the Corporation Yard.
- For discharges into flowing water (e.g., rivers, creeks), water quality samples should be collected from as near as possible to 100 feet upstream of the spill, from the spill area,

and at 100 feet downstream of the spill at determined intervals. (Coordinate with Nevada County Environmental Health.)

- For discharges into stationary water (e.g., lakes, ponds), water quality samples should be collected from the spill area, at determined sample collection points on either side of the spill. (Coordinate with Nevada County Environmental Health.)
- A certified laboratory will analyze the samples to determine the nature and impact of the discharge. First responders are responsible for collecting the samples and contacting the contract lab to arrange timely pickup of the samples. Information on the contracted laboratory is kept on file at the Corporation Yard. Additional samples will be taken to determine when posting of warning signs can be discontinued. The basic analyses will include *Escherichia coli* (*E. coli*) and ammonia nitrogen.

## Public Notification

The public could be at risk and must be warned to avoid all contact with raw sewage and/or contaminated water resulting from a spill or other hazardous material or chemical release which may cause a risk of illness. The extent of public notification shall be at the direction of the Public Works Director/City Engineer, or designee, in conjunction with Nevada County Environmental Health. The design of these procedures and the extent of public notification is needed to preserve public health are unique to each event. Procedures may include:

- Local agencies and individuals may need to be contacted as soon as possible, depending on the situation. For example, the Police Department may be called upon to assist with public notification where determined practical. Public Works staff may decide to close public areas such as parks and will need assistance to communicate with local residents and/or businesses who may be impacted by the sewage spill. Posting of warning signs and control of all contaminated areas and or job site(s) with "Yellow Caution Tape" and barricades may be necessary to keep vehicles and pedestrians away from contact with spilled sewage.
- Warning signage, where deemed as a necessary or appropriate means of public notification shall not be removed until such time as directed by the Public Works Director/City Engineer, or designee. In situations where water sampling is required by environmental health authorities, warning sign posting shall remain in place until analytical results demonstrate that the area is safe for human contact and confirmation authority is received from the Nevada County Department of Environmental Health (A sample of the public notification warning sign is included as **Appendix F**).
- Property and creeks that have been contaminated as by a spill or other hazardous material release should be posted at visible access locations until the risk of contamination has subsided to background levels. The warning signs, once posted, should be checked daily at a minimum to ensure that they are still in place.
- Major spills may warrant broader public notice and possible use of local media. The Public Works Director/City Engineer or designee, in conjunction with Nevada County Environmental Health, will contact local media when deemed appropriate for the



preservation of public health. As with any effective use of media as a public communication tool, it is important that there be a single point of contact to disseminate information and in these instances the Public Works Director/City Engineer or designee is the sole responsible person sanctioned for media contact. The Nevada County Department of Environmental Health may also issue media releases when deemed appropriate.

### **Estimated Volume of Spilled Sewage**

Crews will use standardized industry photograph materials or accepted mathematical calculation means to estimate the volume of the spilled sewage. When possible, the volume estimate will be documented using photos of the spill site before and during the recovery operation. Initial volume estimates will be recorded using the SSO Spill Report Form. Final spill volumes will be reviewed by the City Engineer.

### **Spill Categories**

The State Water Board established guidelines for classifying and reporting spills. Reporting and documentation requirements vary based on the type of spill. The categories of spills are:

- Category 1 – A spill of any volume of sewage that results in a discharge to:
  - A surface water, including a surface water body that contains no flow or volume of water; or
  - A drainage conveyance system that discharges to surface waters when the sewage is not fully captured and returned to the sanitary sewer system or disposed of properly.

Any spill volume not recovered from the storm drain system is considered a discharge to surface water unless the storm drain system discharges to a stormwater infiltration basin or facility.

- Category 2 – A spill of 1,000 gallons or greater that does not discharge to a surface water.:
  - A spill of 1,000 gallons or greater that spills out of a lateral and is caused by a failure or blockage in the sanitary sewer system, is a Category 2 spill.
- Category 3 –A spill of equal to or greater than 50 gallons and less than 1,000 gallons, from or caused by a sanitary sewer system regulated under the 2022 SSS WDR that does not discharge to a surface water.
  - A spill of equal to or greater than 50 gallons and less than 1,000 gallons, that spills out of a lateral and is caused by a failure or blockage in the sanitary sewer system is a Category 3 spill.
- Category 4 – A spill of less than 50 gallons, from or caused by a sanitary sewer system regulated under the 2022 SSS WDR that does not discharge to a surface water.
  - A spill of less than 50 gallons that spills out of a lateral and is caused by a failure or blockage in the sanitary sewer system is a Category 4 spill.

## Internal Spill Reporting Procedures

Flow charts outlining internal spill reporting procedures are presented in **Appendix C**.

### *Category 1 Spills*

The first responder will immediately notify, as practical, the Public Works Director/City Engineer or designee. Where deemed appropriate the Public Works Director/City Engineer or appropriate management staff on-call, or designee will meet with field crew(s) at the spill site to assess the situation and document the conditions or potential hazards, possibly with photos. The first senior management staff member is responsible for documenting the spill event using the spill Spill Report Form (**Appendix E**) and turning it in to management staff. A second senior management staff member will review the form for completeness and accuracy and complete CIWQS online form within the time limits required by the State Water Board. In the event of a large spill or one that has increased exposure to diminishing public health, management staff will notify the Public Works Director/City Engineer who may deem it necessary to notify the City Manager and/or City Council.

### *Other Spills*

The first senior management staff member will complete the SSO Spill Report Form (**Appendix E**) and turn it in to the appropriate management staff and complete the CIWQS form within the time limits required by the State Water Board. Management staff will review the form for completeness and accuracy and will forward it to the Public Works Director/City Engineer or designee for further action where appropriate.

## External Spills Reporting Procedures

For any spills 1,000 gallons or greater, the responsible LRO will notify the California Office of Emergency Services (Cal-OES) at 800-852-7550 within two hours of being notified of a spill and obtain a spill number to reference in other reports. The following information must be provided in the notification to Cal-OES:

- Name and phone number of the person notifying Cal-OES
- Estimated spill volume (gallons)
- Estimated spill rate from the system (gallons per minute)
- Estimated discharge rate (gallons per minute) directly to surface waters or into the storm drain system where it is not fully captured
- Spill incident description including a brief narrative of the spill event and location (address, city, zip code, closest cross streets and/or landmarks)
- Contact information for the person on-scene
- Date and time the City was informed of the spill event
- Name of the sanitary sewer system causing the spill
- Spill cause or suspected cause (if known)

- Amount of spill contained (gallons)
- Name of surface water receiving or potential receiving discharge
- Description of surface water impact and/or potential impact to beneficial uses

Following the initial notification to Cal-OES and until the LRO or designee certifies the spill report to CIWQS, the LRO or designee must provide updates to Cal-OES if there are substantial changes to the following information:

- Estimated spill volume (increase or decrease in gallons initially estimated)
- Estimated discharge volume discharged directly to surface waters or into the storm drain system where it is not fully captured (increase or decrease in gallons initially estimated)
- Additional impact(s) to surface waters and beneficial uses

CIWQS will be used for reporting spill information to the State Water Board.

The following section details the external reporting response requirements based on the type of spill. Flow charts outlining external spill reporting procedures are also presented in **Appendix C**.

For **Category 1 Spills**, the following reporting requirements apply:

- Within 15 calendar days of the conclusion of spill response and remediation, the LRO or designee will certify the final report in CIWQS. The LRO or designee can update the certified report as new or changed information becomes available up to 90 days after the spill end date. After 90 days, a request must be made directly to the State Water Board at [sanitarysewer@waterboards.ca.gov](mailto:sanitarysewer@waterboards.ca.gov) to amend the report. The updates can be submitted at any time and must be certified.
- In addition, for Category 1 Spills where 50,000 gallons or more of sewage reach a surface water or enter the storm drain system and is not fully captured and returned to the sewer collection system, the LRO will prepare and certify in CIWQS a *Spill Technical Report* within 45 calendar days after the end date of the spill. The requirements for the *Spill Technical Report* are detailed in the *SSO Documentation and Record Keeping Requirements* section.

For **Category 2 Spills**, the LRO or designee must submit a Draft Spill Report to CIWQS within three business days of being notified of the spill event. Within 15 calendar days, the LRO or designee must submit the Certified Spill Report to CIWQS. Upon completion of the Certified Spill Report, a final spill event identification number will be issued by CIWQS. The LRO or designee can update the certified report as new or changed information becomes available up to 90 days after the spill end date. After 90 days, a request must be made directly to the State Water Board at [sanitarysewer@waterboards.ca.gov](mailto:sanitarysewer@waterboards.ca.gov) to amend the report. The updates can be submitted at any time and must be certified.

For **Category 3 Spills**, the LRO or designee must submit a certified report to CIWQS within 30 business days after the end of the calendar month for all Category 3 Spills that occurred in the calendar month (e.g., all Category 3 spills occurring in the month of February must be reported and certified by March 30). The LRO or designee can update the certified report as new or

changed information becomes available up to 90 days after the spill end date. After 90 days, a request must be made directly to the State Water Board at [sanitarysewer@waterboards.ca.gov](mailto:sanitarysewer@waterboards.ca.gov) to amend the report. The updates can be submitted at any time and must be certified.

For **Category 4 Spills**, the LRO or designee must submit a certified report to CIWQS within 15 days after the end of a calendar quarter for all Category 4 Spills that occurred in that calendar quarter (e.g., all Category 4 spills occurring in the January to March quarter must be reported and certified by April 15). The LRO or designee can update the certified report as new or changed information becomes available up to 90 days after the spill end date. After 90 days, a request must be made directly to the State Water Board at [sanitarysewer@waterboards.ca.gov](mailto:sanitarysewer@waterboards.ca.gov) to amend the report. The updates can be submitted at any time and must be certified.

For **privately-owned sanitary sewer systems or privately-owned lateral spills**, images and documentation shall be filed for the City's own records. This documentation should specify that the sewage discharge was caused by a private lateral and identify the responsible party (other than the City), if known. Reporting private lateral spills to the CIWQS database is not required.

If CIWQS is not available, the Utilities Superintendent/City Engineer or designee will email all required information to the Central Valley Water Board office (916-464-4660) in accordance with the time schedules identified above. In such event, the City will submit the appropriate reports using CIWQS as soon as practical.

## **Spill Documentation and Recordkeeping Requirements**

The first management responder will complete an electronic work order and make any final changes to the SSO Spill Report Form.

### ***Category 1 SSO Spill Report***

The Draft SSO Spill Report for a **Category 1 Spill** must include, at a minimum, the following information:

- Contact information, including the name and telephone number of the City's contact person to respond to spill-specific questions
- Spill location name
- Date and time the City was notified of, or self-discovered, the spill
- Arrival time of first responder
- Estimated spill start date and time
- Date and time the City notified Cal-OES and the assigned control number
- Description, photographs, and global positioning system (GPS) coordinates of the sewer collection system where the spill originated
  - If a single spill event results in multiple appearance points, provide GPS coordinates for the appearance point closest to the failure point and describe each additional appearance point in the spill appearance point explanation
- Estimate total spill volume exiting the sewer collection system

- Description and photographs of the extent of the spill and its boundaries
- Did the spill reach the storm drain system? If yes:
  - Description of the storm drain system transporting the spill
  - Photographs of the storm drain system entry location(s)
  - Estimate spill volume fully recovered from the storm drain system
  - Estimated spill volume remaining in the storm drain system
- Description and photographs of all discharge point(s) into the surface water
- Estimated spill volume discharged to surface water
- Estimated total spill volume recovered

The Certified SSO Spill Report for a **Category 1 Spill** must include the information in the Draft SSO Spill Report and, at a minimum, the following information:

- Description of the spill event destination(s), including GPS coordinates, if available, that represent the full spread and reach of the spill
- Spill end date and time
- Description of how the spill volume estimations were calculated, including at a minimum:
  - The methodology, assumptions, and type of data, such as SCADA records, flow monitoring, or other telemetry information, used to estimate the volume of the spill discharged and the volume of the spill recovered
  - The methodology, assumptions, and type of data used to estimate the spill start and end times
- Spill cause(s) (e.g., root intrusion, grease deposit)
- System failure location (e.g., main, lateral, lift station)
- Description of the pipe material and estimated age of the pipe material at the failure location
- Description of the impact of the spill
- Whether or not the spill was associated with a storm event
- Description of the spill response activities including description of the immediate spill containment and clean-up efforts
- Description of spill corrective action, including steps planned or taken to reduce, eliminate, and prevent recurrence of the spill, and a schedule for major milestones for those steps
- Spill response completion date
- Detailed narrative of the investigation and investigation findings of cause of spill
- Reasons for on-going investigation (if applicable) and the expected completion date

- Name and type of receiving water(s)
- Description of the receiving water(s), including, but not limited to:
  - Impacts on aquatic life
  - Public closure, restricted public access, temporary restricted use, and/or posted health warnings due to spill
  - Responsible entity for closing/restricting use of receiving water
  - Number of days closed/restricted as a result of the spill
- Whether or not the spill was located within 1,000 feet of a municipal water intake or municipal groundwater well
- If water quality samples are collected, identify the sample locations and the parameters for which the samples were analyzed. If no samples were taken, it should be reported as N/A

For spills where 50,000 gallons or more reach surface water drainage channel or surface water or enter the storm drain system and is not fully captured and returned to the sewer collection system, the LRO will prepare a *Spill Technical Report*. At a minimum, the *Spill Technical Report* will include the following information:

- Causes and circumstances of the spill
  - Complete and detailed explanation of how and when the spill was discovered
  - Photographs illustrating the spill origin, the extent and reach of the spill, storm drain system entrance and exit, receiving water, and post-clean-up site conditions
  - Diagram showing the spill failure point, appearance point(s), spill flow path, and final destination(s)
  - Detailed description of the methodology employed and available data used to calculate the volume of the spill and, if applicable, the spill volume recovered
  - Detailed description of the cause(s) of the spill
  - Description of the pipe material and the estimated age of the pipe material at the failure location
  - Description of the impact of the spill
  - Copies of original field crew records used to document the spill
  - Historical maintenance records for the failure location
- The City's response to spill
  - Chronological narrative description of all actions taken by enrollee to terminate the spill
  - Explanation of how the Spill Emergency Response Plan was implemented to respond to and mitigate the spill
  - Final corrective action(s) completed and/or planned to be completed, including a schedule for actions not yet completed

- Local regulatory enforcement action taken against an illicit discharge in response to this spill, as applicable
- Identifiable system modifications and operations and maintenance program modifications needed to prevent recurrence
- Necessary modifications to the Spill Emergency Response Plan to incorporate lessons learned in responding to and mitigating the spill
- Water Quality Monitoring
  - Description of all water quality sampling activities conducted
  - List of pollutants and parameters monitored, sampled, and analyzed
  - Laboratory results, including laboratory reports
  - Detailed location map illustrating all water quality sampling points
  - Other regulatory agencies receiving sample results (if applicable)
- Evaluation of spill impact(s), including a description of short- and long-term impact(s) to beneficial uses of the surface water

### ***Category 2 SSO Spill Report***

The Draft SSO Spill Report for a **Category 2 Spill** must include, at a minimum, the following information:

- Contact information, including the name and telephone number of the City’s contact person to respond to spill-specific questions
- Spill location name
- Date and time the City was notified of, or self-discovered, the spill
- Arrival time of first responder
- Estimated spill start date and time
- Date and time the City notified Cal-OES and the assigned control number
- Description, photographs, and GPS coordinates of the sewer collection system where the spill originated
  - If a single spill event results in multiple appearance points, provide GPS coordinates for the appearance point closest to the failure point and describe each additional appearance point in the spill appearance point explanation
- Estimate total spill volume exiting the sewer collection system
- Description and photographs of the extent of the spill and its boundaries
- Did the spill reach the storm drain system? If yes:
  - Description of the storm drain system transporting the spill
  - Photographs of the storm drain system entry location(s)
  - Estimate spill volume fully recovered from the storm drain system



- Estimated spill volume remaining in the storm drain system
- Estimated total spill volume recovered

The Certified SSO Spill Report for a **Category 2 Spill** must include the information in the Draft SSO Spill Report and, at a minimum, the following information:

- Description of the spill event destination(s), including GPS coordinates, if available, that represent the full spread and reach of the spill
- Spill end date and time
- Description of how the spill volume estimations were calculated, including at a minimum:
  - The methodology, assumptions, and type of data, such as SCADA records, flow monitoring, or other telemetry information, used to estimate the volume of the spill discharged and the volume of the spill recovered
  - The methodology, assumptions, and type of data used to estimate the spill start and end times
- Spill cause(s) (e.g., root intrusion, grease deposit)
- System failure location (e.g., main, lateral, lift station)
- Description of the pipe/infrastructure material and estimated age of the pipe material at the failure location
- Description of the impact of the spill
- Whether or not the spill was associated with a storm event
- Description of the spill response activities including description of the immediate spill containment and clean-up efforts
- Description of spill corrective action, including steps planned or taken to reduce, eliminate, and prevent recurrence of the spill, and a schedule for major milestones for those steps
- Spill response completion date
- Detailed narrative of the investigation and investigation findings of cause of spill
- Reasons for on-going investigation (if applicable) and the expected completion date
- Whether or not the spill was located within 1,000 feet of a municipal water intake or municipal groundwater well

### ***Category 3 SSO Spill Report***

The monthly reporting for all **Category 3 Spills** must include, at a minimum, the following information:

- Contact information, including the name and telephone number of the City’s contact person to respond to spill-specific questions

- Spill location name
- Date and time the City was notified of, or self-discovered, the spill
- Arrival time of first responder
- Estimated spill start date and time
- Description, photographs, and GPS coordinates of the sewer collection system where the spill originated
  - If a single spill event results in multiple appearance points, provide GPS coordinates for the appearance point closest to the failure point and describe each additional appearance point in the spill appearance point explanation
- Estimate total spill volume exiting the sewer collection system
- Description and photographs of the extent of the spill and its boundaries
- Did the spill reach the storm drain system? If yes:
  - Description of the storm drain system transporting the spill
  - Photographs of the storm drain system entry location(s)
  - Estimate spill volume fully recovered from the storm drain system
  - Estimated spill volume discharged to a groundwater infiltration basin or facility (if applicable)
- Estimated total spill volume recovered
- Description of the spill event destination(s), including GPS coordinates, if available, that represent the full spread and reach of the spill
- Spill end date and time
- Description of how the spill volume estimations were calculated, including at a minimum:
  - The methodology, assumptions, and type of data, such as SCADA records, flow monitoring, or other telemetry information, used to estimate the volume of the spill discharged and the volume of the spill recovered
  - The methodology, assumptions, and type of data used to estimate the spill start and end times
- spill cause(s) (e.g., root intrusion, grease deposit)
- System failure location (e.g., main, lateral, lift station)
- Description of the pipe/infrastructure material and estimated age of the pipe material at the failure location
- Description of the impact of the spill
- Whether or not the spill was associated with a storm event

- Description of the spill response activities including description of the immediate spill containment and clean-up efforts
- Description of spill corrective action, including steps planned or taken to reduce, eliminate, and prevent recurrence of the spill, and a schedule for major milestones for those steps
- Detailed narrative of the investigation and investigation findings of cause of spill

### **Category 4 SSO Spill Report**

The quarterly reporting for all **Category 4 Spills** must include, at a minimum, the following information:

- Contact information, including the name and telephone number of the City’s contact person to respond to spill-specific questions
- Spill location name
- Date and time the City was notified of, or self-discovered, the spill
- Description and GPS coordinates for the sewer collection system location where the spill originated
- Did the spill reach the storm drain system? If yes:
  - Description of the storm drain system transporting the spill
  - Estimate spill volume fully recovered from the storm drain system
  - Estimated spill volume remaining in the storm drain system
- Estimated total spill volume exiting the sewer collection system
- Spill date and start time
- Spill cause(s) (e.g., root intrusion, grease deposit)
- System failure location (e.g., main, lateral, lift station)
- Description of the spill response activities including description of the immediate spill containment and clean-up efforts
- Description of how the spill volume estimations were calculated, including at a minimum:
  - The methodology, assumptions, and type of data, such as SCADA records, flow monitoring, or other telemetry information, used to estimate the volume of the spill discharged and the volume of the spill recovered
  - The methodology, assumptions, and type of data used to estimate the spill start and end times
- Description of the implemented system and/or operations and maintenance modifications

The Sanitary Sewer System Waste Discharge Requirements (SSS WDR) requires that individual spill records be maintained by the City for a minimum of five (5) years from the date of the spill.

This period may be extended if requested by the Central Valley Water Board Executive Officer. All records are made available upon request from State or Central Valley Water Board staff.

### **Post-Spill Event Debriefing and Training**

Every spill is an opportunity to evaluate the response and reporting procedures. Each spill event is unique, with its own elements and challenges including volume, cause, location, terrain, and other parameters.

Monthly staff meetings include a detail discussion of spills to discuss what worked and where improvements could be made in responding to and mitigating future spills. The meetings will identify corrective actions that could have prevented most recent spills from occurring. Participants will also review reports, investigation results, and status of corrective actions for most recent spill events.

Training related to the Spill Emergency Response Plan is scheduled annually. All employees are required to attend, and a log of attendees is kept. Other informal training sessions take place throughout the year as needed, but informal training sessions are not logged. Staff are also encouraged to attend trainings, certification seminars, and industry conferences such as those organized by CWEA on a wide variety of issues, including collection system maintenance, spill prevention, and spill emergency response.

## **7. SEWER PIPE BLOCKAGE CONTROL PROGRAM**

Section 13.12.040 of the City's Municipal Code prohibits discharges of wastes which contain more than 200 mg/L of fats, oils, and grease (FOG) materials, as well as any solid or viscous substance capable of causing obstruction to the flow in sewers or other interference with the proper operation of the sewerage system, including rags and debris.

The City operates a FOG Control Program requiring all Food Service Establishments (FSEs) to register with the program by contacting the City's FOG Program administrator. The City has the authority to require installation of grease interceptors at facilities with the potential to discharge FOG and maintains a list of businesses with grease traps and other grease capturing devices. The City inspects commercial user grease traps to ensure operability and monitors monthly grease hauler reports from grease producing facilities. Businesses that fail inspections receive compliance assistance including specified service deadlines and follow-up re-inspections.

Collection system personnel are continually on alert during routine system maintenance activities for the existence of grease, roots, and other potential blockage-causing substances, identification of new areas of possible concern, and additional maintenance requirements. The City conducts routine jetting cycles with increased frequency in areas with known issues.

The City provides public education and outreach to promote proper disposal of FOG and other pipe-blocking substances through multiple channels. Educational information is maintained on the City's Water & Wastewater Systems webpage, advising residents and businesses against disposing of grease, pharmaceuticals, herbicides, oil-based paints and solvents, chlorine, and other substances that can cause blockages or interfere with system operations.

Some local FOG disposal facilities are the City of Auburn Recycling Drop-off Center and Recology Auburn Placer Transfer Station. Commercial food service establishments in Grass Valley must contract with licensed IKG (Inedible Kitchen Grease) haulers who are registered with the California Department of Food and Agriculture to collect and recycle their FOG waste.

## **8. SYSTEM EVALUATION, CAPACITY ASSURANCE AND CAPITAL IMPROVEMENTS**

Utility System personnel work closely with the Engineering Division to identify and prioritize structural deficiencies within the system as part of the CIP. The CIP is updated at least annually with priorities shifting as needed to reflect the urgency of system segment rates of deterioration. The City typically budgets annually for collection system improvements, including manhole and sewer line rehabilitation, lift station upgrades, and improvements need on specific segments. The manhole and sewer line rehabilitation projects are mainly intended to reduce and/or eliminate spill and I&I issues. Rehabilitation involves slip-lining, cured-in-place lining, and pipe bursting and replacement.

In 2017 Stantec completed a Sewer System Master Plan for Grass Valley. The objectives of the Sewer System Master Plan were to determine the capacity and limitations of the existing collection system under three future development / service area expansion scenarios and to identify physical modifications, renovations, and additions to the existing sewer collection system necessary to meet current and future needs. Analyses indicated that most sewer lines are adequately sized for the anticipated flows and identified sections of the sewer collection system that needed to be upsized to meet future conditions.

The City uses the Sewer System Master Plan to review collection system capacity, assess needed improvements, and as a general planning tool to ensure adequate wastewater collection and treatment to meet future needs.

### **REHABILITATION AND REPLACEMENT PLAN**

Utility system personnel work closely with the Engineering Division to identify and prioritize structural deficiencies within the system as part of the CIP. Segments of pipe at risk of failure are treated with urgency and repaired or replaced either through the deployment of in-house maintenance crews or by external licensed contractors who have extensive experience with the type of system repair that is required. The CIP is re-evaluated as part of the preparation of the City's annual budget with priorities shifting as needed to reflect the urgency of particular system segment rates of deterioration. The City typically plans collection system improvements including manhole and sewer line rehabilitation, lift station upgrades, and improvements need on specific segments annually. The manhole and sewer line rehabilitation projects are mainly intended to reduce and/or eliminate spill and address I&I issues. Rehabilitation involves slip-lining, cured-in-place lining, and pipe bursting and replacement.

### **CAPITAL IMPROVEMENT PLAN**

Sewer CIP projects are primarily funded through the Sewer Enterprise Fund, which is supported by sewer user rates. The FY 2025-26 Sewer Enterprise Fund budget totals \$10.43 million in

expenditures, with revenues of \$5.64 million from rate collections and the use of fund reserves for capital project completion. Sewer rates are established based on the adopted Sewer Rate Study to ensure adequate funding for ongoing operations, maintenance, and capital improvements. The annual operations and maintenance budget for the collection system is \$862,000. The City also pursues external funding opportunities including state and federal grants when available for eligible sewer infrastructure projects. The Sewer Enterprise Fund is projected to maintain a fund balance of approximately \$4.65 million at the end of FY 2025-26, with \$4.38 million reserved for specific capital purposes.

## **9. MONITORING, MEASUREMENT AND PROGRAM MODIFICATIONS**

As noted earlier in the Spill Emergency Response Plan, the City learns from deficiency events such as spills in order to redefine and possibly expand existing maintenance and frequency of service programs. Additionally, at team meetings, staff regularly discuss "field findings" such as needs for repair, and increased attention discussions that are fruitful not only in identifying problem areas before potential failure but also for the continued maintenance as well as development of future individual CIP program elements. During these meetings, staff discuss current maintenance methods and how or if they can be improved.

The City also tracks the effectiveness of the SSMP through performance indicators. The City keeps track of the number of spills over the past 12 months, total volume of spills, spill causes (roots, grease, debris, etc.), and miles of sewer lines evaluated using CCTV. Maintenance activities such as ratio of planned sewer cleaning to unplanned sewer cleaning and the backlog of repair, rehabilitation, and replacement projects are also closely monitored to inform any needed SSMP modifications. Based on this information, the Utilities Director, in collaboration with the Engineering Department, will assess and update the SSMP as appropriately.

## **10. INTERNAL AUDITS**

The City plans to complete a review of the SSMP every three years or more often if deficiencies are noticed. The audits evaluate the SSMP effectiveness and identify any deficiencies and steps to correct them. Audit reports are kept on file, as well as uploaded to CIWQS.

## **11. COMMUNICATION PROGRAM**

The City regularly updates its website with information about City activities as an effective method for providing alerts and news to the public. The main page of the website provides important announcements, public hearings notices, links to agendas and minutes for City Council meetings, and other key information for City residents. The SSMP is certified by the City Council during a public hearing. The SSMP will be updated and re-certified by City Council every six years, or more frequently, if significant updates are necessary. The SSMP is also available on the City's website at: <https://www.grassvalleyca.gov/post/water-wastewater-systems>.

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

## APPENDICES

---

**Appendix A: Public Works Department Organization Chart**

**Appendix B: Emergency Contact Numbers**

**Appendix C: City of Grass Valley Standby Call Flow Chart**

**Appendix D: Sewer Backup Prevention & Response**

**Appendix E: Sanitary System Overflow Initial Assessment Form**

**Appendix F: Example Spill Warning Sign**

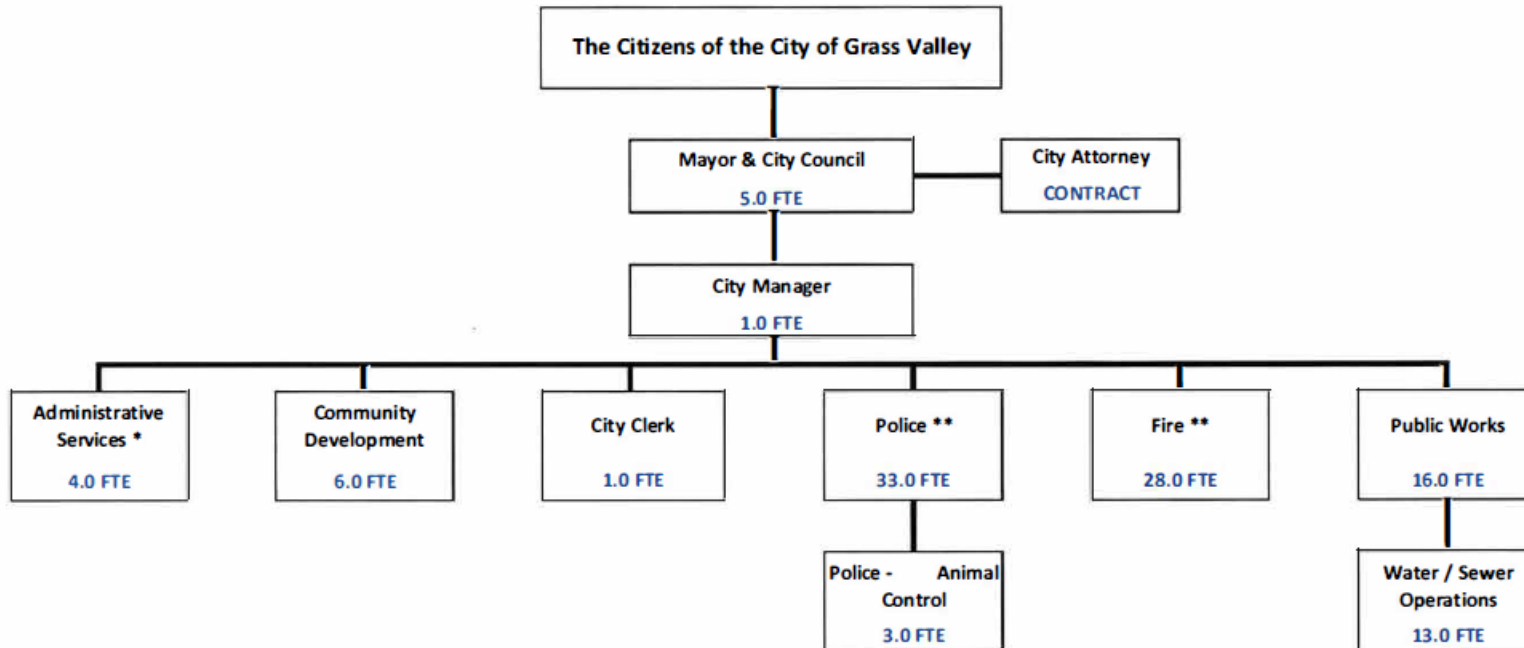
**Appendix G: SSMP Revisions**



---

**APPENDIX A**

**Public Works Department Organization Chart**



Total Full Time Equivalent Positions Funded - FY 2022-23: 110.0 FTE

Frozen / De-Funded Positions (not included in above chart): 0.0 FTE

\* Contracted Positions / Functions - Police:

- Information Technology Operations

\*\* Contracted Functions - Police / Fire:

- Dispatching Services

- Includes Nevada City Contracted Services Provided by City of Grass Valley

---

## APPENDIX B

### Emergency Contact Numbers

# EMERGENCY CONTACT NUMBERS

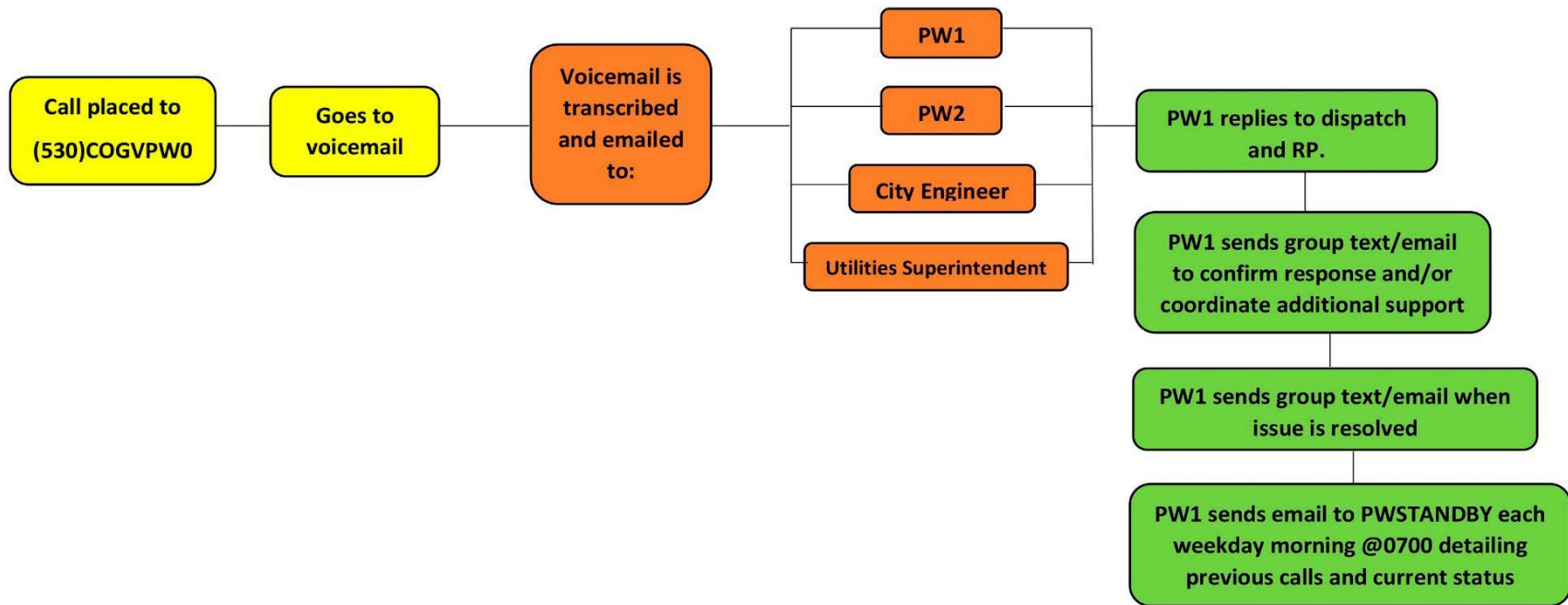
Emergency	911
Sheriff Dispatch	530-265-7880
Fire Department	911
Integral Networks	916-626-4000
Nevada Irrigation District	530-273-6185
	530-273-3346 (after hours)
Ferguson/Groeniger	916-455-3333
KNCO	530-272-3424
Beekeeper Hotline	530-675-2924
Robinson Enterprises	530-265-5844
Grey Electric	530-273-0686
Mr. Rooter Plumbing	530-802-2407
<b>Contractors</b>	
C&D	530-265-6938
Hansen Brothers	530-273-3381 (office)
	530-913-3935 (Jeff Hansen)
<b>Rentals</b>	
Rain for Rent	530-662-1024
United Rentals	530-743-8989
<b>Pump Trucks</b>	
Navo & Sons	530-273-2964
Tall Boots	530-274-78-67
Urke	530-274-3902
<b>Fuel Trucks</b>	
JH Petroleum	530-273-6925 (office)
	530-432-1791 (Dave Knappen)
	530-320-4432 (Dean Southerland)

---

**APPENDIX C**

**City of Grass Valley Standby Call Flow Chart**

# City of Grass Valley Standby Call Flow Chart



---

**APPENDIX D**

**Sewer Backup Prevention & Response**



# SEWER BACKUP PREVENTION & RESPONSE

**INCIDENT REPORTED TO MEMBER**

**Backup is NOT due to Agency's Sewer Line Failure**

Field Crew Initial Response:  
**Refer to Response Procedures**

- Advise Customer to keep pets, children and others away from spill area
- Initial Assessment/Determine Cause
- Document spill completely with photographs, diagrams, narrative, etc.
  - Do not contaminate unaffected areas
- Always Use the Buddy System when entering private property
- Remain Calm and Professional

**Backup is due to a Sewer Line Failure**

**Inform Customer:**

- Agency not responsible
- Crew may not service private lines
- If plumbing work was completed recently, advise to contact plumber
- Recommend using cleaning contractor

**Inform Customer:**

- SPLM and Restoration Firm will arrive soon
- Do not attempt to clean affected area yourself
- Do not remove items from affected area

Field Crew Immediately:

- Relieve cause
- Notify on-call supervisor and **Sierra Pacific Loss Management (SPLM)**. SPLM will call Restoration Firm.
- If Restoration Firm arrives before SPLM, authorize **emergency cleaning only**
- Ensure complete photo documentation of affected and unaffected areas
- Complete Initial Assessment Form

**Provide Response Kit and all documentation to Sierra Pacific Loss Management (SPLM)**

**SPLM**

**Review with Customer:**

- Customer Information brochure (including instructions for obtaining a claim form).
- Customer Information Letter & Cleaning Release.
- Hotel Selection & Release Form.
- Only emergency services are authorized in the field.
- Future expenses/questions are referred to the George Hills Claims Adjuster (contact information is included in Customer Information Letter).

SPLM will:

- Review Scope of Work with Restoration Firm
- Contact George Hills Claims Adjuster and provide Customer contact information, extent of backup, and approved scope of emergency services
- Review documentation to ensure cause and extent of backup is evident
  - Complete Sewer Backup Incident Report
  - Take additional photos, if necessary

**If ANY of the following circumstances exist:**

- Overflow exceeds 1,000 gal.
- Imminent and Substantial danger to human health
- Fish killed
- Spill reaches receiving waters
- Discharged to Storm Drain and not fully recovered

**IMMEDIATE REGULATORY NOTIFICATIONS ARE REQUIRED**

Forward completed Response Kit to Claims Adjuster

**Complete Regulatory Notifications Worksheet**

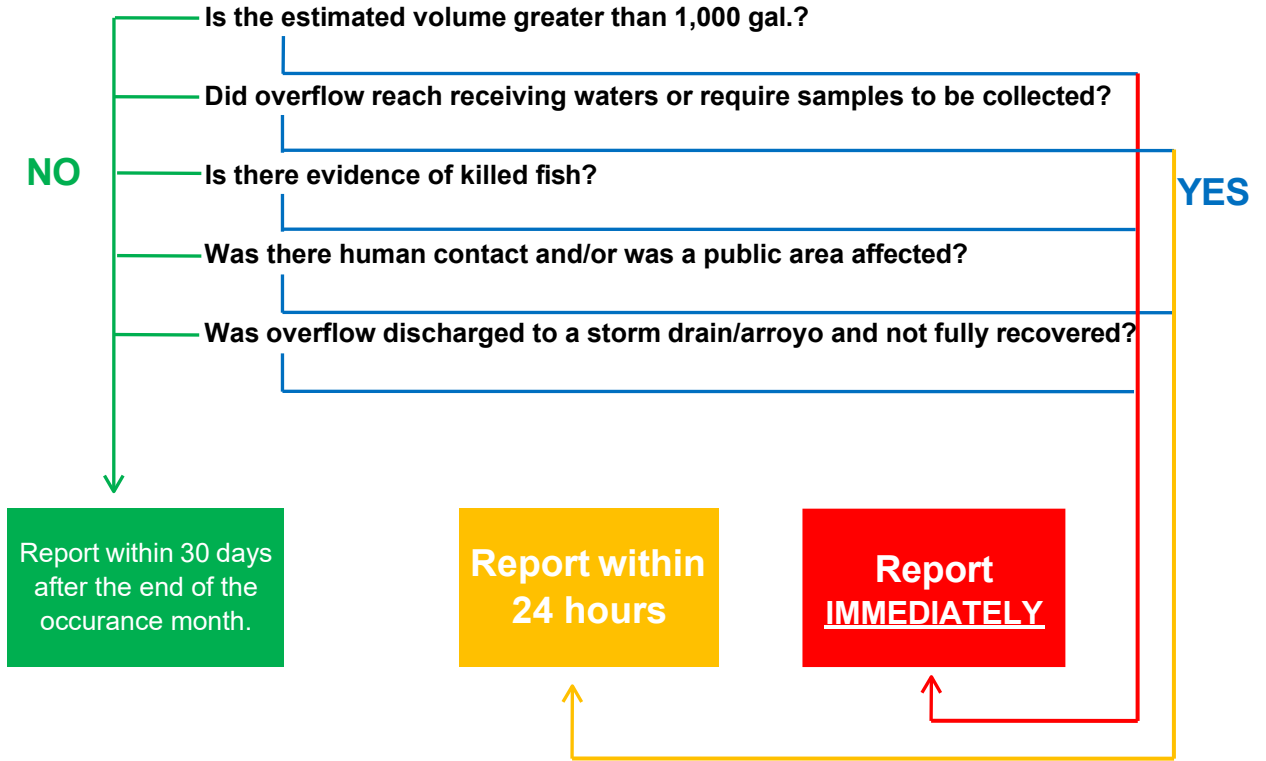
---

**APPENDIX E**

**Sanitary System Overflow Initial Assessment Form**

# Sanitary System Overflow Regulatory Notice Worksheet

**EVALUATE INCIDENT**



**REPORT INCIDENT**

OVERFLOW CIRCUMSTANCE:	NOTIFICATION REQUIRED TO:				
	OES	RWQCB	SWRCB	Cnty. Health Department	DFG
≥ 1,000 gal.	Red	Red	Red	Red	White
Imminently and substantially endangers human health	Red	Red	Red	Red	White
Fish have been killed	Red	Red	Red	Red	Red
Any amount discharged to storm drain; not fully recovered	White	White	Red	White	White
Receiving waters reached and/or required sampling	White	Yellow	Red	Yellow	Red
Posting of public warning signs were required	White	Yellow	White	Yellow	White
<b>ALL SSO Incidents</b> (including incidents when regulatory notices are not otherwise required)	White	White	Green	White	White
Optional Report: Incident due to problem in private service lateral	White	Blue	Blue	White	White

*Contact information for each agency is on the other side of this form.*

# Sanitary System Overflow Regulatory Notice Worksheet

If you are not authorized to perform regulatory reporting, please notify one of the following agency personnel immediately:

Name: _____	Phone: _____	<i>day</i>	_____	<i>after hours</i>	<input type="checkbox"/>
Name: _____	Phone: _____	<i>day</i>	_____	<i>after hours</i>	<input type="checkbox"/>
Name: _____	Phone: _____	<i>day</i>	_____	<i>after hours</i>	<input type="checkbox"/>

\*SWRCB Legally Responsible Official (LRO) is the person authorized to complete and sign SSO reports online.

## REGULATORY CONTACT INFORMATION

<b>OES</b>	Governor's Office of Emergency Services	800-852-7550	Volume is ≥ 1,000 gal., human health is substantially and imminently endangered, and/or fish have been killed.	
<b>RWQCB</b>	Regional Water Quality Control Board	916-464-3291	Volume is ≥ 1,000 gal., human health is substantially and imminently endangered, and/or fish have been killed.	
		RB5sSpillReporting@waterboards.ca.gov	Reached and/or required sampling of receiving waters, and/or required posting of public warnings	
		v	Optional Report when caused by a problem in a private service lateral	
<b>SWRCB</b>	State Water Resources Control Board	<b>LRO only:</b> Report Online www.swrcb.ca.gov/ciwqs	Volume is ≥ 1,000 gal., human health is substantially and imminently endangered, fish have been killed, discharged to storm drain and not fully recovered, reached and/or required sampling of receiving waters.	
			All overflow and backup incidents, including incidents where other regulatory notice is not required.	
			Incomplete reports must be finished within 15 days.	Optional report when caused by problems in a private service lateral. Provide as much information as possible, indicate cause and identify responsible party.
<b>County Health Department</b>	Nevada County Public Health Department	530-265-1222 Press "3" for Env'tl Health env.health@co.nevada.ca.us	Volume is ≥ 1,000 gal., human health is substantially and imminently endangered, and/or fish have been killed.	
			Discharged to storm drain and not fully recovered, reached and/or required sampling of receiving waters, and/or required posting of public warnings.	
<b>DFG</b>	Department of Fish and Game, Spill Prevention & Response	24 Hr Dispatch: 916-445-0380  Press "2" to report pollution incident.	Fish have been killed, reached and/or required sampling of receiving waters.	

---

## APPENDIX F

### **Example Spill Warning Sign**

# **WARNING**

## **SEWAGE POLLUTED WATER**

**AVOID CONTACT UNTIL  
THIS SIGN HAS BEEN REMOVED**

For further information regarding this incident call  
The City of Grass Valley Public Works (530) 274-4350

For information Regarding Health Concerns call  
Nevada County Environmental Health Dept. (530) 265-1222

---

## APPENDIX G

### Log of SSMP Revisions

# SSMP REVISIONS

Date	Revisions Made
February 2026	<p>Following an internal SSMP Audit conducted in 2025, in early 2026 revisions were made to address updated requirements from the 2022 SSS WDR and to account for any changes to the City’s procedures since the previous SSMP update in 2022. These revisions are listed below.</p> <p><i>Element 1. Introduction and Goals</i></p> <ul style="list-style-type: none"> <li>• Added discussion on regulatory background</li> <li>• Added schedule for the required SSMP audits and updates</li> <li>• Updated the SSMP goals</li> <li>• Expanded the collection system inventory discussion</li> </ul> <p><i>Element 2. Public Works Department Organizational Structure</i></p> <ul style="list-style-type: none"> <li>• Added the names and contact information for the City’s LROs and other staff responsible for implementing the SSMP</li> </ul> <p><i>Element 3. Legal Authority</i></p> <ul style="list-style-type: none"> <li>• Added references to Section 13 of the City’s Municipal Code detailing access to private property for sewer maintenance and repair</li> </ul> <p><i>Element 4. Operations and Maintenance Program</i></p> <ul style="list-style-type: none"> <li>• Added information on availability of sewer system maps on City website</li> <li>• Updated information on City’s transition to Nexgen software</li> </ul> <p><i>Element 6. Spill Emergency Response Plan</i></p> <ul style="list-style-type: none"> <li>• Updated spill categories and reporting requirements to conform with revised specifications in the 2022 SSS WDR</li> </ul> <p><i>Element 7. Sewer Pipe Blockage Control Program</i></p> <ul style="list-style-type: none"> <li>• Added discussion on other pipe-blocking substances, in addition to FOG</li> </ul> <p><i>Element 8. System Evaluation, Capacity Assurance and Capital Improvements</i></p> <ul style="list-style-type: none"> <li>• Updated information on the City’s current CIP, including budgets and funding</li> <li>• Added discussion on Rehabilitation and Replacement planning (previously in Element 4)</li> </ul> <p><i>Element 9. Internal Audits</i></p> <ul style="list-style-type: none"> <li>• Information was added to note that audits are now available in CIWQS</li> </ul> <p><i>Element 11. Communication Program</i></p> <ul style="list-style-type: none"> <li>• Added information for City website where SSMP will be posted, once certified by City Council</li> </ul> <p><i>Appendices</i></p> <ul style="list-style-type: none"> <li>• Updated the Public Works Organizational Chart in Appendix A</li> <li>• Updated Regulatory Contacts in Appendix E</li> <li>• Removed old Appendix G which included an internal SOP for claims and liability</li> <li>• Created new Appendix G to track SSMP updates</li> </ul>