

# GROVELAND COMMUNITY SERVICES DISTRICT



## SEWER SYSTEM MANAGEMENT PLAN UPDATE

January 2019

Prepared by:



---

---

## TABLE OF CONTENTS

EXECUTIVE SUMMARY .....	1
Overview .....	1
Definitions, Acronyms, and Abbreviations .....	4
SECTION 1 - GOALS .....	5
1.1. Purpose .....	5
1.2. Goals .....	5
SECTION 2 - ORGANIZATION .....	6
2.1. Regulatory Requirement.....	6
2.2. Department Organization .....	6
2.2.1. Description of General Responsibilities .....	8
2.2.2. Chain of Communication.....	9
SECTION 3 - LEGAL AUTHORITY .....	11
3.1. Regulatory Requirements .....	11
3.2. Responsible Party.....	11
3.3. Provisions.....	11
3.3.1. Sanitary Sewer Connections .....	12
3.3.2. Connection Permit .....	12
3.3.3. Connection Fees and Schedule .....	12
3.3.4. Payment of Sewer Charges .....	13
3.3.5. Charges for Service .....	13
3.3.6. Proper Design and Construction of Sewer Connections.....	14
3.3.7. Sanitary Sewer Design, Construction, and Inspection Standards .....	14
3.3.8. Prohibited Wastes.....	15
3.3.9. Enforcement.....	17
3.3.10. Violations .....	17
SECTION 4 - OPERATION AND MAINTENANCE PROGRAM .....	18
4.1. Regulatory Requirements .....	18
4.2. Collection System Maps and Description of Existing Facilities .....	18
4.3. Preventative Operation and Maintenance .....	19

---

---

4.3.1.	Gravity Sewers .....	19
4.3.2.	Lift Stations and Force Mains.....	19
4.3.3.	Non-routine Maintenance .....	20
4.3.4.	Information Systems/Data Collection.....	21
4.3.5.	Special Needs Maintenance.....	21
4.3.6.	Emergency Maintenance .....	21
4.4.	Rehabilitation and Replacement Program.....	21
4.5.	Wastewater System Budget.....	22
4.6.	Wastewater Staff and Training .....	22
4.6.1.	Initial and Annual Refresher Training .....	22
4.6.2.	SSO Response Drills.....	22
4.6.3.	Safety Training .....	22
4.6.4.	Record Keeping .....	26
4.6.5.	Additional Training.....	26
4.6.6.	Contractors Working on District Sewer Facilities .....	26
4.7.	Equipment and Parts Inventory .....	26
SECTION 5 - DESIGN AND PERFORMANCE PROVISIONS.....		27
5.1.	Regulatory Requirements .....	27
5.2.	Design and Construction Standards for Sewer Systems .....	27
5.2.1.	New Sewer Systems.....	27
5.2.2.	Pump Stations and Other Appurtenances .....	28
5.2.3.	Rehabilitation and Repair of Existing Sewer Systems.....	28
5.3.	Inspection and Testing .....	28
SECTION 6 - SANITARY SEWER OVERFLOW EMERGENCY RESPONSE PLAN.....		29
6.1.	Regulatory Requirements .....	29
6.2.	Internal Notification and Response Procedures .....	30
6.2.1.	Receipt of a Potential SSO Event.....	30
6.2.2.	Sewer Pump Station Alarms.....	30
6.2.3.	Dispatch of Response Crew for Field Inspection of Potential SSO.....	30
6.2.4.	Overflow Correction, Containment and Cleanup .....	32
6.2.5.	Responsibilities of Response Crew Upon Arrival .....	32

---

---

---

---

6.2.6.	Additional Measures for Prolonged Overflow Conditions .....	33
6.2.7.	Cleanup .....	33
6.2.8.	Overflow Report.....	33
6.3.	Public Notification.....	34
6.3.1.	Temporary Signage .....	34
6.3.2.	Other Public Notices .....	34
6.4.	Regulatory Notification and Reporting .....	34
6.4.1.	SSO Categories .....	35
6.4.2.	SSO Notification Requirements.....	36
6.4.3.	SSO Reporting Timelines .....	37
6.4.4.	Reporting Documentation .....	38
6.4.5.	Monthly No-Spill Reporting Procedures .....	39
SECTION 7 - FATS, OILS, AND GREASE (FOG) CONTROL PROGRAM.....		40
7.1.	Regulatory Requirements .....	40
7.2.	Public Education and Outreach.....	40
7.3.	FOG Source Control.....	40
7.4.	Disposal of FOG.....	41
7.5.	Legal Authority.....	41
7.6.	Design and Construction Standards.....	41
7.6.1.	Interceptor Requirements .....	41
7.7.	Authority to Inspect Grease Producing Facilities.....	42
7.8.	Identification of Grease Problem Areas and Sewer Cleaning .....	43
SECTION 8 - SYSTEM EVALUATION AND CAPACITY ASSURANCE PLAN .....		44
8.1.	Regulatory Requirements .....	44
8.2.	Service Area .....	44
8.3.	Wastewater Flows.....	44
8.4.	System Evaluation.....	45
8.4.1.	Wastewater Master Plan .....	45
8.4.2.	Computer Modeling.....	46
8.5.	Recommended Capacity Projects .....	49
8.5.1.	Design Criteria.....	49

---

---

8.5.2. Recommended Capacity Improvements.....	49
SECTION 9 - MONITORING, MEASUREMENT AND PROGRAM MODIFICATIONS .....	50
9.1. Regulatory Requirements .....	50
9.2. Monitoring and Measures .....	50
9.3. Performance Monitoring and Program Changes.....	50
SECTION 10 - SSMP PROGRAM AUDITS .....	52
10.1. Regulatory Requirements .....	52
10.2. Audits .....	52
SECTION 11 - COMMUNICATION PLAN.....	53
11.1. Regulatory Requirements .....	53
11.2. Plans for Communication.....	53
APPENDIX A FY 18/19 SANITARY SEWER SYSTEM BUDGET	
APPENDIX B SEWER COLLECTION SYSTEM MAPS	
APPENDIX C TRAINING	
APPENDIX D CONSUMABLES INVENTORY AND VEHICLE LIST	
APPENDIX E SANITARY SEWER OVERFLOW EMERGENCY RESPONSE PLAN	
Appendix F AUDIT CHECKLIST	
APPENDIX G GCSD CONTACT INFORMATION	

## LIST OF TABLES

Table 2-1 SSMP Contact Information.....	6
Table 2-2 Responsibility for SSMP Implementation .....	9
Table 6-1 GCSD SSO Action Plan .....	31
Table 8-1 Groveland CSD Projected Population .....	44
Table 8-2 Average and Maximum Daily Wastewater Flows .....	45

## LIST OF FIGURES

Figure 2-1 Wastewater Collection and Treatment System Organization Chart .....	7
Figure 2-2 SSO Reporting Chain of Communication .....	10

Figure 4-1 Maintenance Schedule: Lift Station/Collection System Cleaning..... 20  
Figure 4-2 Big Oak Flat Proposed Sewer Collection System Improvements..... 23  
Figure 4-3 Groveland Proposed Sewer Collection System Improvements ..... 24  
Figure 4-4 Pine Mountain Lake Proposed Sewer Collection System Improvements..... 25

DRAFT

## ABBREVIATIONS

ARV	Air Relief Valve
BWF	Base Wastewater Flow
BMP	Best Management Practice
BOD	Biochemical Oxygen Demand
Cal EMA	California Emergency Management Agency
CIWQS	California Integrated Water Quality System
CWEA	California Water Environment Association
CPO	Chief Plant Operator
CWSRF	Clean Water State Revolving Fund
CCTV	Closed-Circuit Television
C&D	Collections and Distribution
CAD	Computer Automated Drafting
CMMS	Computerized Maintenance Management System
C&D	Collections and Distribution
ERP	Emergency Response Plan
FOG	Fats, Oils, and Grease
GWDR	General Waste Discharge Requirements
GPS	Global Positioning System
GCSD	Groveland Community Services District
I/I	Infiltration and Inflow
LS	Lift Station
LRO	Legally Responsible Official
MS4	Municipal Separate Storm Sewer System
MGD	Million Gallons per Day
MG/yr	Million Gallons per year
OSHA	Occupational Safety and Health Administration
OES	Office of Emergency Services
O&M	Operations and Maintenance

RWQCB	Regional Water Quality Control Board
SSOERP	Sanitary Sewer Overflow Emergency Response Plan
SSMP	Sewer System Management Plan
SSO	Sewer System Overflow
SSORP	Sanitary Sewer Overflow Response Plan
SERMA	Special District Risk Management Authority
SWRCB	State Water Resources Control Board
SCADA	Supervisory Control and Data Acquisition
SECAP	System Evaluation and Capacity Assurance Plan
TCEH	Tuolumne County Environmental Health
WWTP	Wastewater Treatment Plant
WDR	Waste Discharge Requirement

DRAFT



## EXECUTIVE SUMMARY

The Groveland Community Services District (GCSD or District) is located on the western slope of the Sierra Nevada Mountains due east from San Francisco. GCSD is in Tuolumne County, 30 miles south of Sonora and 26 miles from the west entrance to Yosemite National Park. GCSD provides sewer service to the communities of Groveland, Big Oak Flat and Pine Mountain Lake.

GCSD provides sewer service to approximately 1,590 connections including residents and businesses. The District's sewer collection system consists of laterals, manholes, 35 miles of gravity mains, 7 miles of force mains and 16 lift stations. The collection system conveys wastewater to the District's Wastewater Treatment Plant (WWTP) located in north Groveland, west of Ferretti Rd. The District owns and operates the WWTP under WDRs No. 87-121. Wastewater is primarily domestic in origin. Treated effluent is discharged to one surface storage reservoir and disposed of on approximately 15 acres of spray fields.

The collection system within Big Oak Flats and Groveland consists of 241 connections. Wastewater from Big Oak Flat flows by gravity to Lift Station 16, where it is pumped into a force main connecting to the gravity flow collection system in Groveland. This wastewater, along with wastewater from connections in Groveland, then flows by gravity to the WWTP. Additional collection system elements serve the Pine Mountain Lake area, which will also be evaluated in this study.

GCSD is required to comply with the State Water Resources Control Board (SWRCB), Order No. 2006-0003 DWQ, entitled "General Waste Discharge Requirements for Sanitary Sewer Systems" (General WDRs). AM Consulting Engineers has prepared this update to the District's Sewer System Management Plan (SSMP) to comply with the WDR.

### Overview

This updated SSMP is organized according to the format indicated in the General WDRs, with eleven structured Sections. Each Section provides essential information describing the procedures, methods, operations, and maintenance tools employed by GCSD staff to provide required wastewater capacity and control Sanitary Sewer Overflows (SSOs). The information provided in these 11 Chapters is summarized below.

**Section 1 – Goals:** The General WDRs requires each participating agency to develop goals to properly fund, manage, operate, and maintain all parts of the sanitary sewer collection system owned and operated by the District in a manner that will lead to a reduction in SSOs.

The District's goal for the SSMP is as follows:

To maintain and improve the condition of the sewer collection system, minimize inflow and infiltration cost-effectively, provide adequate capacity for future growth, and minimize the number and impact of SSOs.

**Section 2 – Organization:** The General WDRs requires each participating agency to designate a responsible individual for their agency. It also requires having the names and telephone numbers for the management and administrative positions responsible for implementing specific measures of the SSMP documented.

Figure 2-1 displays the District's Organization Chart which identifies staff responsible for SSMP related activities. Table 2-1 contains the names, telephone numbers, and responsibilities GCSDD staff based on the requirements of the WDR. The O&M Manager serves as the Legally Responsible Official in charge of implementing the SSMP. The O&M Manager is assisted by the General Manager, the District Engineer, and the Chief Plant Operator in carrying out the day-to-day tasks required to properly implement the SSMP.

Figure 2-2 shows the chain of communication for responding to all SSOs that occur within the District's sewer collection system, including first receipt of notification that an SSO has occurred, field response, determination of the nature of the problem, formulation of appropriate steps to contain and rectify the SSO, reporting to proper authorities, safeguarding of the public health, and investigation of the cause of the SSO to reduce the risk of repeated events.

**Section 3 – Legal Authority:** The WDR requires that each public agency have the legal authority to implement the provisions of the SSMP. Section 3 cites the sewer collection system use ordinances that enables the District to:

- Prevent illicit discharges into the sanitary sewer system;
- Require proper design and construction of new and rehabilitated sewers and connections;
- Ensure access for maintenance, inspection, or repairs for all portions of lateral connections owned by the District;
- Limit the discharge of fats, oils, and grease and other debris that may cause blockages in the sanitary sewer system; and
- Enforce any violation of the District's sewer ordinances.

**Section 4 – Operations and Maintenance:** This Section of the SSMP discusses the District's documented performance measures and activities associated with the preventative maintenance performed on its sanitary sewer system. The following information is provided in Section 4:

- The District, through the District's Engineer, maintains a Computed Automated Drafting (CAD) map of the sanitary sewer collection system, which includes manholes, sewer pipelines, and pipe sizes. Copies of the sewer collection system maps are provided in Appendix B of this Report.
- The District's preventative operation and maintenance program consists of routinely scheduled cleaning of potential problem areas. The District's Collection and Distribution Operators and Contractors perform hydro-flushing activities on the entire collection system every five years, while problem areas are hydro-cleaned every six-months.
- There are 16 sewer lift stations that assists in the conveyance of raw wastewater to the WWTP. Lift stations are monitored by SCADA (Supervisory Control and Data Acquisition) 24HRS a day and inspected by the Collection and Distribution System Operators on a weekly basis.
- The District maintains an annual budget for the wastewater system. A copy of the 18/19 FY budget is presented in Appendix A.

**Section 5 – Design and Performance Provisions:** Proper design and installation of sewer system pipelines and appurtenances is one of the most important aspects in maintaining a functioning, problem-free sewer system. A properly designed and installed sewer system can minimize system deficiencies that could create or contribute to future overflows and reduce operation and maintenance requirements. The District Engineer is responsible for preparing the Standard Specifications and Standard Drawings which govern all sewer collection system projects within the District’s service area.

**Section 6 – Overflow Emergency Response Plan:** All SSOs are reported on the State Water Resources Control Board(SWRCB)Sanitary Sewer Overflow eReporting Program (<http://ciwqs.waterboards.ca.gov/>) and are available to the general public. Section 6 details the District’s Sanitary Sewer Overflow Emergency Response Plan (OERP).

Included in Section 6 are detailed steps taken by the District in response to every SSO. A list of agencies that must be notified of an SSO, including phone numbers, is provided in Table 6-1.

**Section 7 – FOG Control Program:** Fats, oils, and grease (FOG) are discharged to sanitary sewer systems by residential users, food handling facilities, and other commercial and industrial establishments. Commonly, FOG can cause pipe blockages leading to SSOs. The SWRCB requires each wastewater collection system agency to develop a FOG control program as part of the SSMP. The FOG control program includes the following:

- An implementation plan and schedule for a public education outreach program that promotes proper disposal of FOG;
- A plan for the disposal of FOG generated within the sanitary sewer system service area;
- The legal authority to prohibit discharges to the system and identify measures to prevent SSOs and blockages caused by FOG;
- Requirements to install grease removal devices (such as traps or interceptors) design standards for the grease removal devices, maintenance requirements, Best Management Practices (BMPs) requirements, record keeping and reporting requirements;
- Authority to inspect grease producing facilities, enforcement authorities, and inspect and enforce the FOG ordinance;
- An identification of sewer system sections subject to FOG blockages and establish a cleaning maintenance schedule for each section; and
- Development and implementation of source control measures, for all sources of FOG discharged to the sewer system, for each sewer system section identified as a problem.

**Section 8 – System Evaluation and Capacity Assurance Plan:** Currently, the District owns its own WWTP that operates at an average daily flow of approximately 0.108 MGD. The District sewer collection system consists of 35 miles of gravity mains, 7 miles of force mains and 16 lift stations. Since the inception of the SWRCB SSO Reduction Program in 2007, the District has experienced and recorded 17 SSO incidents.

**Section 9 – Monitoring, Measurements, and Program Modifications:** In accordance with SWRCB requirements, each wastewater collection system agency shall monitor the effectiveness of the SSMP and update and modify SSMP chapters to keep them current, accurate, and available for audit, as appropriate. GCSO has developed a program for monitoring plan that will allow the effectiveness of the SSMP in reducing SSOs to be measured.

**Section 10 - Program Audits:** The SWRCB requirements state that each wastewater collection system agency shall conduct an audit of their SSMP at least every two years. GCSO has developed a program to audit the SSMP every year. Details of the auditing program are provided in Section 10.

**Section 11 – Communication Program:** The SWRCB requires that the District communicate, on a regular basis, with the public on the development, implementation, and performance of the SSMP. The communication system shall provide the public the opportunity to provide input to the District as the program is developed and implemented.

The District will conduct public outreach and education for residents and businesses related to sanitary sewer overflows. The District will disseminate information, in meetings and/or by flyers, to land developers, and consulting engineers regarding the need and methods to reduce SSOs. Plumbers and sewer contractors will have access to all available GCSO plans, specifications, and standard details to ensure that projects are properly designed and built to the District Standards.

## Definitions, Acronyms, and Abbreviations

The following is a list of definitions, acronyms, and abbreviations that will be used throughout this SSMP:

- **Best Management Practices (BMP)** – Refers to the procedures employed in commercial kitchens to minimize the quantity of grease that is discharged to the sanitary sewer system. Examples include scraping food scraps into a garbage can and dry wiping dishes and utensils prior to washing.
- **Closed Circuit Television (CCTV)** – Refers to the process and equipment that is used to internally inspect the condition of gravity sewers.
- **Fats, Oils, and Grease (FOG)** – Refers to fats, oils, and grease typically associated with food preparation and cooking activities that can cause blockages in the sanitary sewer system.
- **General Waste Discharge Requirements (GWDR)** – Refers to the State Water Resources Control Board Order No. 2006-0003 Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, dated May 2, 2006.
- **Global Positioning System (GPS)** – Refers to the handheld unit that is recommended to determine the longitude and latitude of sanitary sewer overflows for use in meeting CIWQS reporting requirements.
- **Sanitary Sewer Overflows (SSOs)** – Refers to the overflow or discharge of any quantity of partially treated or untreated wastewater from the sanitary sewer system at any point upstream of the wastewater treatment plant. SSOs are typically caused by blockages, pipe failure, pump station failure, or capacity limitation.

## SECTION 1 - GOALS

The GCSD is required to comply with the State Water Resources Control Board (SWRCB), Order No. 2006-0003 DWQ, entitled “General Waste Discharge Requirements for Sanitary Sewer Systems” (General WDRs). In January 2012, the District prepared and adopted a Sewer System Management Plan (SSMP). This chapter describes the goals of the SSMP in light of this regulation. The purpose and goals of the SSMP have not changed since the General WDR was adopted.

### 1.1. Purpose

The purpose of the General WDRs is to:

- Provide a consistent and unified statewide approach for the reporting and tracking of SSOs.
- Establish consistent and uniform requirements for SSMP development and implementation.
- Facilitate consistent enforcement of the WDR regulation and violations.

GCSD shall properly fund, manage, and operate and maintain all parts of the sewer collection system owned and operated by the District. GCSD staff and/or contractors responsible for the operation and maintenance of the sewer collection system shall possess the appropriate level of knowledge, skills, and abilities, verifiable through participation in a validated program at all times.

### 1.2. Goals

The District’s goals for the SSMP remains to be as follows:

- Properly manage, operate, and maintain the sewer collection system.
- Minimize the occurrence of Sanitary Sewer Overflows (SSOs).
- Respond to sanitary sewer overflows quickly and mitigate the impact of the overflow in a timely manner.
- Maintain a Fats, Oil and Grease (FOG) program to limit the amount of fats, oil and grease and other debris from entering the wastewater collection system.
- Meet all applicable regulatory notification and reporting requirements.

As required by the WDR, a copy of this Updated SSMP will be available to the District’s Engineering and Collection System Operation and Maintenance staff. The Updated SSMP document will be presented to the GCSD Board of Directors for approval prior to its certification.

## SECTION 2 - ORGANIZATION

This chapter describes the District’s organization and chain of communication.

### 2.1. Regulatory Requirement

As required by the SWRCB, the SSMP must identify the following:

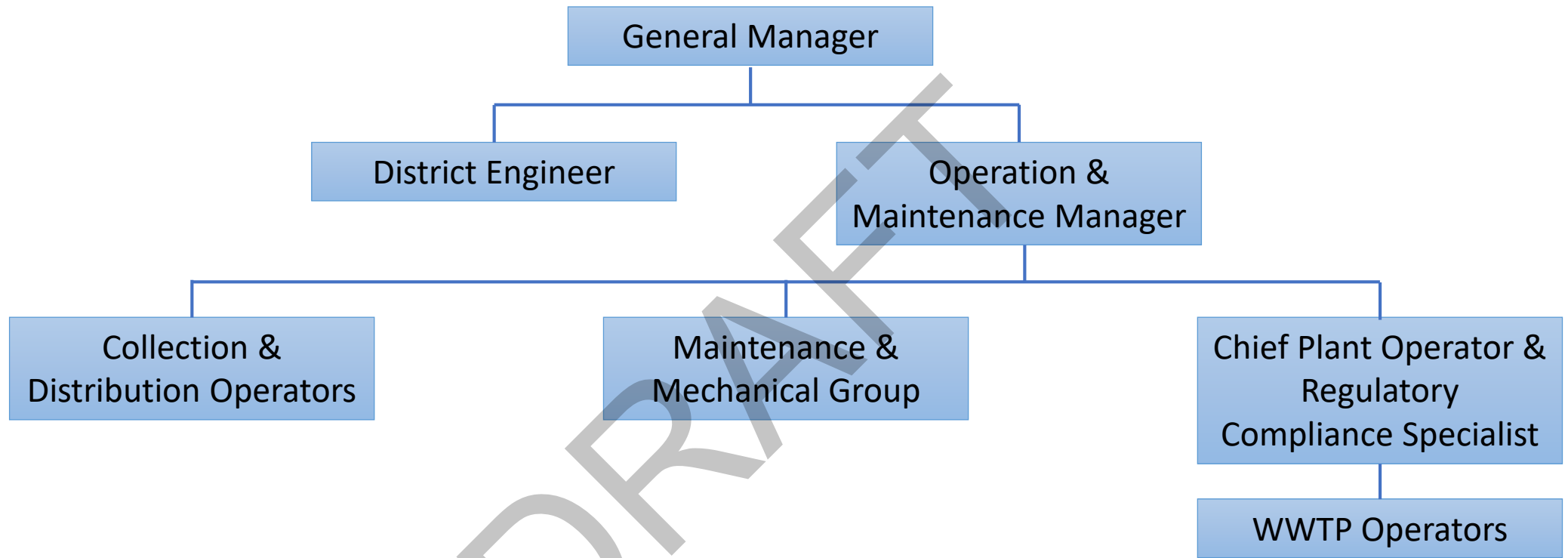
- The name of the responsible or authorized representative.
- The names and telephone numbers for management, administrative and maintenance positions responsible for implementing specific measures in the SSMP program. The SSMP must identify lines of authority through an organization chart or similar document with a narrative explanation
- The chain of communication for reporting SSO’s, from receipt of a complaint or other information, including the person responsible for reporting SSO’s to the State and Regional Water Board and other agencies if applicable (such as County Health Officer, County Environmental Health Agency, Regional Water Board, and/or State Office of Emergency Services (OES)).

### 2.2. Department Organization

Figure 2-1 displays the District’s updated organization chart, which identifies the authority of management, operations and maintenance of the GCSD’s sewer collection system. Table 2-1 contains updated names, telephone numbers, and responsibilities of GCSD staff based on the requirement of the WDR.

**Table 2-1 SSMP Contact Information**

WDR Position Responsibility	Title	Name	Telephone Number
General Manager	General Manager	Peter Kampa	Office: (209) 962-7161 Cell: (209) 591-7100
Oversee SSMP	O&M Manager	Luis Melchor	Office: (209) 962-7161 Cell: (209) 206-8002
District Engineer	District Engineer	Alfonso Manrique	Office: (559) 473-1371
Collection System Manager	O&M Manager	Luis Melchor	Office: (209) 962-7161 Cell: (209) 206-8002
Permit Compliance Specialist & FOG Program Administrator	O&M Manager	Luis Melchor	Office: (209) 962-7161 Cell: (209) 206-8002
Inspector & Environmental Compliance Officer	O&M Manager	Luis Melchor	Office: (209) 962-7161 Cell: (209) 206-8002
Design Standards	District Engineer	Alfonso Manrique	Office: (559) 473-1371
Field Crew/Operators	O&M Manager	Luis Melchor	Office: (209) 962-7161 Cell: (209) 206-8002
Board Secretary	Board Secretary	Jennifer Flores	Office: (209) 962-7161 Cell: (209) 840-2113





### 2.2.1. Description of General Responsibilities

The following are the roles and responsibilities of the GCSD staff for compliance with the current WDR:

- O&M Manager – Enforces, plans strategy; leads staff; allocates resources, delegate’s responsibilities; authorizes outside contracts to perform services; serves as a Legally Responsible Official (LRO) or duly authorized representative to prepare, certify, and submit electronic spill reports to the RWQCB, SWRCB, and to notify other government agencies. The O&M Manager reports to the General Manager who reports to the District’s Board of Directors.
- Operations and Maintenance Manager (O&M Manager) – Oversees the operations of the wastewater treatment and conveyance facilities, grounds and buildings, laboratory and SCADA systems, and plans, organizes, coordinates, reviews, and evaluates the operational activities of the District’s Wastewater Treatment Group, Collection & Distribution Systems Group, and Maintenance & Mechanical Systems Group. Duties also consist of acting as liaison between the District and other private and governmental agencies; reviewing and commenting on engineering plans and any wastewater facilities plans; working with the public, developers, utilities and others to resolve complaints, explain requirements, and coordinate operations, as needed; ensuring compliance with District and governmental safety policies, procedures, and regulations; developing and implementing formal policies and procedures for Department operations; developing and implementing training programs for employees within the Department; and planning, initiating, managing, and tracking the financial and scheduling performance of capital projects undertaken for the Department,
- The O&M Manager oversees employees in the Collections and Distributions (C&D) Department, performing maintenance tasks for the sewer collection system and distribution system, and manages and maintains GCSD infrastructure. Duties also consist of preventative maintenance of the collections and distribution systems, including pipelines, lift stations, backflow and cross connection control systems, and the SCADA system. The position is responsible for assisting in developing and maintaining standard operating procedures for the C&D Department and for routine maintenance and systematic upgrading of the collections and distribution system. The C&D Supervisor is also responsible for ensuring proper training and certifications are obtained by C&D personnel.
- Chief Plant Operator (CPO) – Manages the District’s WWTP operators. Wastewater Treatment Operators collectively perform a broad range of duties associated with the inspection, operation, maintenance, and repair of the WWTP.
- 
- Collections and Distribution Operators and Maintenance Mechanical Group – Collectively perform a broad range of duties associated with inspection, maintenance, and repair of the sewer collection system.

Table 2-2 displays the GCSD staff members responsible for implementing the various elements of the SSMP.

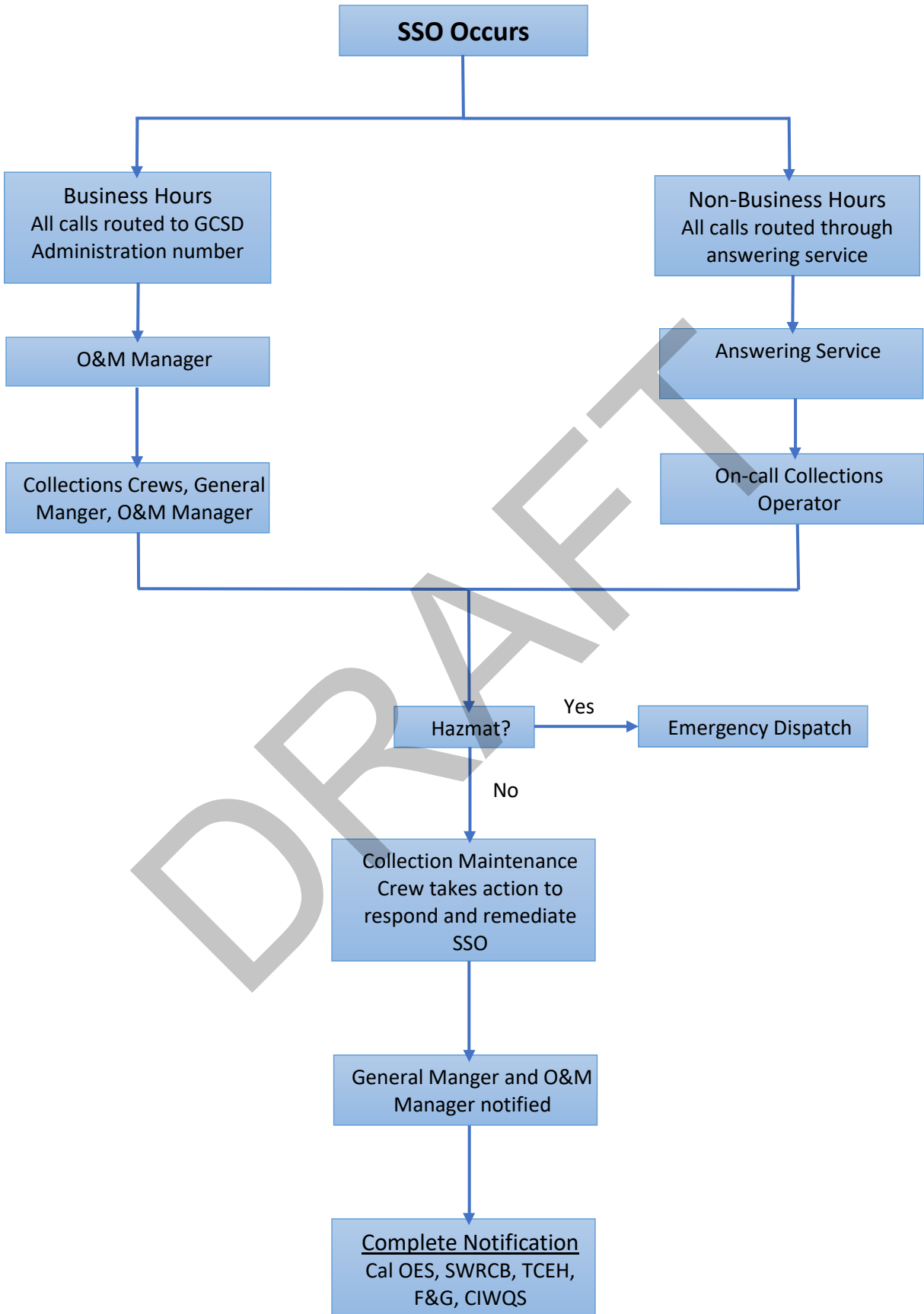


**Table 2-2 Responsibility for SSMP Implementation**

SSMP Element	Description	GCSO Staff Responsible
Goals	Leads staff in the support and updating of SSMP goals	O&M Manager
Organization	Update organizational information; identify and update SSO responding and reporting chains of communication and other SSMP assignments	O&M Manager
Legal Authority	Uphold the District's codes and ordinances; draft new ordinances as needed.	General Manager
Operation & Maintenance Program	Update sanitary sewer maps, implement O&M activities and rehabilitation/replacement program; implement staff training activities.	O&M Manager
Design and Performance Provisions	Ensure that all construction projects meet GCSO's design standards; update standards as needed and facilitate provisions.	District Engineer & O&M Manager
Overflow Emergency Response Plan	Implement and update plan; implement OERP training program.	O&M Manager
FOG Control Program	Update and implement FOG program.	O&M Manager
System Evaluation and Capacity Assurance Plan	Regularly assess capacity requirement for the sewer collection system; incorporate recommendations in the District's Capital Improvement Plan; implement necessary improvements.	District Engineer
Monitoring, Measurements, and Program Modifications	Implementation of and assess success of the overall SSMP program elements; identify trends in key performance measures and provide recommendations for improvement.	General Manager & O&M Manager
Program Audits	Oversees SSMP audits.	General Manager & O&M Manager
Communication Program	Manage communication of SSMP activities.	General Manager & O&M Manager

### 2.2.2. Chain of Communication

The flowchart depicted in Figure 2-2 displays the chain of communication for responding to and reporting SSO's to the appropriate regulatory agencies. The SSO reporting procedure is describe in more detail in Section 6 of this SSMP.



## **SECTION 3 - LEGAL AUTHORITY**

### **3.1. Regulatory Requirements**

This Section describes the legal authority of the GCSD, through sewer use ordinances, service agreements or other legally binding procedures, to implement the provisions of the SSMP to:

- Prevent illicit discharges into its sanitary sewer system;
- Require proper design and construction of new and rehabilitated sewers and connections;
- Ensure access for maintenance, inspection, or repairs for portions of the lateral connections owned by the District;
- Limit the discharge of fats, oils and grease and other debris that may cause blockages in the sanitary sewer system, and;
- Enforce any violation of its sewer ordinances.

### **3.2. Responsible Party**

The District is created pursuant to the Community Services District Law, California Government Code Section 61000, et seq. (the “CSD Law”) and has the powers provided therein. Government Code Section 61100 authorizes the District to “collect, treat, or dispose of sewage, wastewater, recycled water, and storm water in the same manner as a sanitary district formed pursuant to the Sanitary District Act of 1923, Division 6 (commencing with Section 6400) of the Health and Safety Code.” California Government Code Section 61060 provides the District with the authority to “exercise all rights and powers, necessary and implied, to carry out the purposes” of the Community Services District Law, including those set forth in Section 61100, and “to adopt ordinances and enforce rules and regulations for the administration, operation, and use and maintenance of the facilities and services authorized” by Section 61100.

Applicable ordinances pertinent to the GCSD’s sanitary sewer collection system are outlined in the District’s Sewer Ordinance No. 1-10 (Sewer Ordinance). Adopted by the GCSD Board of Directors on March 8, 2010, the Sewer Ordinance sets uniform requirements for discharges into the GCSD’s sewer collection and treatment system and enables the District to comply with administrative provisions of the Clean Water Grant Regulations, the water quality requirements set by the RWQCB and applicable effluent limitations, national standards of performance, toxic and pretreatment effluent standards, and any other discharge criteria which are required or authorized by State or Federal law, and to derive the maximum public benefit by regulating the quality and quantity of wastewater discharged into those systems. Updates of the District Sewer Ordinance are incorporated herein by reference and do not require separate revisions to this Plan.

### **3.3. Provisions**

GCSD’s Sewer Ordinance includes sections on sewer connections, sewer charges, and restrictions and prohibitions of discharges to the sewer system. The Sewer Ordinance outlines the specific requirements for users of the District’s publicly owned sewer collection and treatment system and provides the District the authority to comply with and enforce all applicable State and Federal laws.

An electronic copy of the Sewer Ordinance is available through the District’s website ([www.gcsd.org](http://www.gcsd.org)). The following sections contain excerpts the Sewer Ordinance and are applicable to the SSMP.

### **3.3.1. Sanitary Sewer Connections**

Article II of the Sewer Ordinance discuss the requirements to connect to the GCSD’s sanitary sewer collection system. According to Section 2.01, it is unlawful to construct or maintain any privy, septic tank, cesspool, or other facility intended or used for the disposal of sewage. Subject to the provisions of Section 2.01, the Owner of all new housing, buildings, or properties used for human occupancy, employment, recreation or other purposes, situated within 300 feet down gradient or 100 feet upslope within the District, and abutting on any street, alley or right-of-way in which there is now located, or when in the future there is located therein a public, gravity-flow sewer, is required at his/her expense to install suitable toilet facilities and to connect such facilities directly with the public sewer, provided there is a gravity flow from said premises to the sewer.

### **3.3.2. Connection Permit**

Section 4.06, Connection Permit and Fees Required, states that no connection shall be made of any kind to the public sanitary sewer or to a private sewer without first obtaining a Connection Permit from the District and paying the application, inspection and connection fees. Each person applying for a service connection must complete an application in a manner and on a form prescribed by the General Manager prior to making connection. The application form shall include as a minimum the following information:

- Name and mailing address of the Owner of the premises
- Assessor’s parcel number of the premises
- Service address
- Name and mailing address of the parcel Owner to be billed for user charges
- Type of service requested
- Date service is required
- Date of application
- Signature of Applicant

The applicant will be notified if the application is disapproved within ten business days of receipt of the application. Permits cannot be issued, or connection charges determined until the use of the premises being connected is determined. Additionally, any owner or property occupier shall make no enlargement, addition or change in any use for which a connection permit has been issued without securing a new connection permit and the payment of any additional connection fee required to be paid.

### **3.3.3. Connection Fees and Schedule**

According to Section 4.06 of the GCSD Sewer Ordinance, no permit shall be issued by the GCSD unless the following charges, when applicable, have been paid:

- Sewer Connection Application Fee: A sewer connection application fee shall be required for all sewer connection permits and is specified in Exhibit A of the Sewer Ordinance.
- Sewer Connection Inspection Fee: A sewer connection inspection fee shall be required for all sewer connection permits and is specified in Exhibit A of the Sewer Ordinance. Depending on project scope, most connection projects require only one inspection. Projects that require

additional inspections will be charged for the additional inspections. A deposit may be required, and all required fees and deposits shall be paid prior to District's review of construction plans.

- Sewer Participation Fees: Sewer participation fees shall be based on the equivalent use or impact upon the sewer system of a single-family residence. The purpose of the participation fee is to reimburse the District for the use of excess capacity within the existing system, and to create a fund for future expansion of the system to maintain an appropriate level of excess capacity.

### **3.3.4. Payment of Sewer Charges**

The Sewer Ordinance states that all bills shall be for monthly periods or for other periods determined by resolution of the Board of Directors of the District. Bills are due and payable upon receipt. Payment for utility bills must be received in the District office by the last business day of the month. If the bill is not paid by the 15th of the following month, the sewer service will be shut off.

Sewer service may be shut off to the premises by any appropriate means. At least five days prior to such discontinuance, the customer will be sent a final notice informing them that discontinuance will be enforced if payment is not made within the time specified in the notice. A customer's sewer service may be discontinued if sewer service furnished at a previous location is not paid for within the time provided for payment of bills. If a customer receives sewer service at more than one location and the bill for service at any one location is not paid within the time provided for payment, sewer service at all locations may be shut off. Reconnection shall be made only upon prior payment of charges, penalties and interest due, plus the actual cost of disconnection and reconnection, as determined by the General Manager, and payment of a security deposit in the amount equal to the monthly combined water and sewer rate averaged over the preceding six months times three.

Upon discontinuance of service, the usual and normal monthly minimum usage charge will continue to be billed to the customer for each month, or portion thereof, that the connection remains disconnected and must be paid along with all other charges before service will be restored. In each case where premises are disconnected from the sewer system, the District shall take or request any authorized public officer to take such steps as may be legally taken to abate such premises and to prohibit occupancy of such premises, until they shall be reconnected to the sewer system.

### **3.3.5. Charges for Service**

Sewer service charges are established at the amount necessary to provide funding for sewer collection system and wastewater treatment plant operation, administration, maintenance, replacement and upgrade; including full implementation of this SSMP. The District General Manager is responsible to develop sewer system budgets based on historical operating expenses, required regulatory upgrades and plan/program implementation, and District Board approved Master Plans and Capital Improvement Plans. The Board of Directors is responsible to adopt budgets that include the recommendations of professional management, supported by sound financial data and technical engineering/operations expertise.

Multi-year financial projections are developed by management to serve as the basis for sewer rate studies to be completed by a qualified independent financial/rate consultant. The amount of consultant recommended sewer service charges are then calculated based on the estimated annual revenue needs to cover the budgeted expenses. Board adoption of the recommended sewer rate structure is critical to the success of this Plan.

The District charges a monthly service charge to each connection that discharges wastewater to the public sewer system. Each separate dwelling unit, when connected to a single sewer connection and non-single family dwellings and/or commercial facilities that house separate tenant units, whether occupied or not, shall be charged a monthly minimum charge for each tenant unit as if each tenant unit is a single-family dwelling.

All connected residential and non-residential users of the District's sewer system shall be billed a monthly volume usage charge as set forth in Exhibit A of the Sewer Ordinance, for each gallon of water supplied per month from District or private source (estimated) water. The monthly volume usage charge provides for the variable costs of operation and maintenance of the system.

### **3.3.6. Proper Design and Construction of Sewer Connections**

The Sewer Ordinance discusses the relevant provisions related to design and construction of District's sewers connections. A separate and independent private sewer shall be provided for each house, habitable structure, mobile home, occupied habitable space and single commercial use connecting with the public sanitary sewer. No sewer customer using sewer service supplied by the District shall supply any other sewer service or allow any other person the use of such sewer service from the sewer customer's sewer connection or permit a further connection to be made to the sewer customer's connection on his or any other premises. A separate connection is required for each occupied mobile home, habitable space, except those habitable spaces that are located within a campground.

### **3.3.7. Sanitary Sewer Design, Construction, and Inspection Standards**

The Sewer Ordinance establishes design, construction, and inspection standards for the District's sanitary sewer system. All sewer service connections to the public sanitary sewer shall be made under the supervision of the General Manager of the District, or his/her authorized representative. Additionally, private sewers shall comply with the latest District Standard Specifications, Standard Details, latest edition of the Uniform Plumbing Code and other regulatory agency requirements.

In all buildings in which any plumbing fixture is too low to permit gravity flow to the public sewer, sewage carried by such drain shall be lifted by artificial means approved by the District and discharged to the public sewer at the sole cost of user, including required maintenance of the equipment. Design of such systems shall be performed by a registered Civil Engineer and approved by the District's Engineer prior to issuance of the permit.

All excavations required for the installation of a private sewer shall be open trench work unless otherwise approved by the District. No backfill shall be placed until the work has been inspected. Excavation on public rights of way shall be done only after permission has been received from the authority having jurisdiction thereof. Any installation not approved by the District shall be redone or replaced at the expense of the person making the connection.

The applicant for the connection permit shall notify the District when the private sewer is ready for inspection and connection to the public sewer. A 24-hour advance notice is required prior to any inspections. Additional inspection fees may be charged if the work is not ready for inspection or requires additional inspections due to non-compliance with District Standard Specifications and Details.

### 3.3.8. Prohibited Wastes

No person shall discharge or cause to be discharged to any public sewer which directly or indirectly connects to the District sewer system any toxic or other wastes if in the opinion of the Manager such wastes may have an adverse or harmful effect on service maintenance personnel, WWTP personnel or equipment, treatment plant effluent quality, public or private property or may otherwise endanger the public, the environment, or create a public nuisance.

No person shall discharge to a community sewer or District treatment facilities, wastes that cause, threaten to cause, or are capable of causing either alone or by interaction with other substances conditions at or near the District's treatment works that violate any statute or any rule, regulation, or Ordinance of any public agency of county, State or Federal regulatory body, including, but not limited by:

- Fire or Explosion
  - Wastes that create a fire or explosion hazard in the treatment works, such as any flammable or explosive substances, including, but not limited to, gasoline, benzene, naphtha, fuel oil, or other flammable or explosive liquid, solid, or gas.
- Corrosive Structural Damage
  - Wastes that will cause corrosive structural damage to treatment works.
- Flow Obstruction or Interference Substances
  - Solid or viscous wastes in amounts that cause obstruction of flow in sewers or injury of the system or damage to the wastewater collection, treatment or disposal facilities, or which cause other interference with proper operation or treatment works, such as, but not limited to any ashes, cinders, sand, mud, straw, shavings, metal, glass, rags, feathers, tar, plastics, wood, or manure.
- Treatment Inhibition or Disruption
  - Any waste, including oxygen demanding pollutants such as Biochemical Oxygen Demand (BOD) substances or other unusual suspended solids, released in such volume or strength as to cause inhibition or disruption in the treatment works, and subsequent treatment process upset and loss of treatment efficiency. Any water or wastes containing suspended solids of such character and quantity that unusual attention or expense is required to handle such materials at the sewage treatment plant, including any waste that negatively impact the District's effluent or any other product of the treatment process, residues, sludges, or scums, to be unsuitable for reclamation and reuse, or to interfere with the reclamation process.
- Harmful or Destructive Temperature
  - Heat in amounts that inhibit or disrupt biological activity in the treatment works, or that raise influent temperatures above 40 degrees C (104 degrees F).
- Fat, Oil or Grease (FOG) Causing Interference or Pass-through
  - No petroleum oil, non-biodegradable cutting oil, or products of animal or mineral oil origin in amounts that will cause interference or pass through.
- Toxic or Poisonous Substances



- Pollutants that result in the presence of toxic gases, vapors, or fumes within the treatment works in a quantity that may cause acute worker health and safety problems. Any waters or waste containing a toxic or poisonous substance in sufficient quantity to injure or interfere with any sewage treatment process, constitute a hazard to human or animals, or create any hazard in the receiving waters of the sewage treatment plant.
- Substances Causing Public Nuisance or Air Pollution
  - Any noxious or malodorous gas or substance capable of creating a public nuisance or preventing the effective maintenance and operation of the sewer system through having a strong, unpleasant odor, as well as any substance causing air pollution by the release of toxic or malodorous gases or malodorous gas-producing substances.
- Disruptive Discoloration
  - Discoloration or any other condition in the quality of the District's treatment works effluent in such a manner that achieving water quality requirements established by law cannot be met.
- Quantities or Flow Rate Overloads
  - Quantities or rates of flow that overload the District's collection or treatment facilities or cause excessive District collection or treatment costs, or which use a disproportionate share of the District facilities.
- Trucked or Hauled Pollutants
  - Any trucked or hauled pollutants, except as specified and permitted within the Sewer Ordinance, and discharged only at specifically pre-designated points by the Manager.
- Life or Safety Threatening Substances
  - Any substances that are a danger to life or safety of personnel.

No person shall discharge or cause to be discharged any storm water, surface water, ground water, roof runoff, subsurface drainage, cooling water, garbage, or polluted industrial wastes to any sanitary sewer. Storm water, ground water, rainwater, street drainage, subsurface drainage or yard drainage shall not be discharged through direct or indirect connections to a community sewer unless a permit is issued by the District. The District may approve the discharge of such water only when no reasonable alternative method of disposal is available. If a permit is granted for the discharge of such water into a community sewer, the User shall pay the applicable service connection fees and user charges and fees and meet such other conditions as required by the District.

No person shall discharge or cause to be discharged, any radioactive waste into a community sewer, except:

- Authorized Use of Radioactive Materials
  - When the person is authorized to use radioactive materials by the State Department of Health or other governmental agency.
- Discharged in Strict Conformity
- When the waste is discharged in strict conformity with current California Radiation Control Regulations (California Administrative Code, Title 17) and the Atomic Energy Commission regulations and recommendations for safe disposal.



- In Full Compliance
  - When the person is in compliance with all rules and regulations of all other applicable regulatory agencies.
- District is Notified
  - When the District has been notified of intent to discharge such radioactive materials, and the District has issued a conditional use permit specific to acceptable discharges, restrictions on the time of day and day(s) allowed to discharge, intervals between discharges, record keeping and notification requirements that demonstrate strict compliance, proof of financial responsibility as may be required by the District, and/or any other terms and conditions required by the District.

### **3.3.9. Enforcement**

The purpose of the GCS D’s Sewer Ordinance s to safeguard health, property, and public welfare by regulating and controlling the design, construction and quality of materials used in private and public sanitary sewers. All of the provisions of the Ordinance shall apply to all buildings and structures erected or to be erected, and all connections made or to be made to the public sanitary sewer in the District.

In the case of unusual hardship or economic oppression resulting from the enforcement of any of the terms of the Ordinance, the GCS D Board of Directors in its sole judgment and discretion may grant a variance in the application and enforcement of any of the terms of the Sewer Ordinance. Furthermore, the Board of Directors recognizes that some customers may have difficulty in paying their sewer bill and for that reason will support the efforts of charitable organizations in the community and county in assisting these customers.

### **3.3.10. Violations**

Any violation of the Sewer Ordinance shall be a misdemeanor and shall be punishable by imprisonment in the County Jail for a term not exceeding six months, or by fine, not exceeding \$500.00 or by both. Every day the violation of the Ordinance continues shall constitute a separate offense.

## **SECTION 4 - OPERATION AND MAINTENANCE PROGRAM**

### **4.1. Regulatory Requirements**

This Section of the SSMP discusses the District’s documented performance measures and activities associated with the preventative maintenance performed on its sanitary sewer system. This Chapter fulfills the following requirements of both the Regional Water Quality Control Board and State Water Board:

- Each wastewater collection system agency shall maintain up-to-date maps of its wastewater collection system facilities, showing all gravity line segments and manholes, pumping facilities, pressure pipes and valves, and applicable storm water pumping and piping facilities;
- Each wastewater collection system agency shall allocate adequate resources for the operation, maintenance, and repair of its collection system;
- Each wastewater collection system shall prioritize its preventative maintenance activities and establish a routine preventative operation and maintenance schedule. Describe routine preventative maintenance activities by staff and contractors, including a system for scheduling regular maintenance and cleaning of the sanitary sewer system with more frequent cleaning and maintenance targeted at known problem areas. The preventative maintenance program should have a system to document scheduled and conducted activities, such as work orders;
- Each wastewater collection system agency shall identify and prioritize structural deficiencies and implement a program of prioritized short-term and long-term actions to address them. The program should include regular visual and TV inspections of manholes and sewer pipes, and system for ranking the conditions of sewer pipes and scheduling rehabilitation. Rehabilitation and replacement should focus on sewer pipes that are at risk of collapse or prone to more frequent blockages due to pipe defects. Finally, the rehabilitation and replacement plan should include a capital improvement plan that addresses proper management and protection of the infrastructure assets. The plan shall include a time schedule for implementing the short-and long-term plans plus a schedule for developing the funds needed for the capital improvement plan;
- Each wastewater collection system agency shall provide contingency equipment to handle emergencies and spare/replacement parts intended to minimize equipment/facility downtime. Each wastewater collection system agency shall provide training on a regular basis for its staff in collection system operation, maintenance, and monitoring;
- Implement an outreach program to educate commercial entities involved in sewer construction or maintenance about the proper practices for preventing blockages in private laterals. This requirement can be met by participating in a region-wide outreach program.

### **4.2. Collection System Maps and Description of Existing Facilities**

The GCSD’s sewer collection system includes approximately 35 miles of gravity sewer mains, 5.5 miles of force mains, 692 manholes, and 16 lift stations. Within the communities of Groveland and Big Oak Flat, the collection system includes approximately 35,000 feet of gravity sewer mains, 7,000 feet of force main, 192 manholes and flushing branches, and 1 lift station. Lift Station 16 collects gravity flows from

Big Oak Flat and pumps into a 4" force main. The force main conveys wastewater to gravity mains in Groveland, which lead to the WWTP.

Currently, the District maintains a map of the sewer collection system which includes manholes, force mains, gravity sewer pipelines, and pumping facilities. Copies of this map are available from the District Administrative Department and at the WWTP. A copy of the sewer collection system maps are provided in Appendix B of this SSMP. Corrections noted by field crews are submitted to the District Engineer for later correction to the map.

### **4.3. Preventative Operation and Maintenance**

The elements of the GCS D's Sewer System Operation and Maintenance (O&M) Program includes the following:

- Proactive, preventative, and corrective maintenance of the sanitary sewer collection system;
- Cleaning of the sanitary sewer system;
- Rehabilitation and replacement of sewer mains that are in poor condition;
- Periodic inspection and preventative maintenance of pump stations.

The following paragraphs provide a description of the District's O&M Program in more detail.

#### **4.3.1. Gravity Sewers**

As part of their O&M Program, the District performs routine in-house maintenance and may utilize contract services for routine and emergency sewer videoing, flushing and cleaning of the sewer collection system. The District cleans their entire sewer system on five-year cycle. Figure 4-1 displays the District's maintenance cycle for sewer collection system. The District started the first five-year cycle in 2005 using in-house crews. The District continues to utilize in-house cleaning with some contract videoing, flushing and cleaning services.

The District uses its collections crew and/or contractors to complete all emergency repairs. Repairs are completed in priority order. The primary focus of the District's preventive maintenance activities is on grease. This has been confirmed by District maintenance personnel and a trouble sewer list has been developed for tracking within the maintenance trouble sewer program. Trouble sewers, primarily grease problem lines, are cleaned on a six-month cycle.

#### **4.3.2. Lift Stations and Force Mains**

The District's force mains O&M program consists of periodic inspections and corrective maintenance activities which are conducted by District staff. The District's Collections and Distribution Department is responsible for the District's sixteen lift stations. The District has developed an inspection and maintenance plan for the lift stations, which includes weekly, monthly and quarterly activities for each lift station. Figure 4-1 displays the inspection and maintenance plan for the District's lift stations. Lift station inspections and maintenance are tracked in log books, as well as on inspection forms and in maintenance reports. The log books are kept at each lift station, while the inspection forms and maintenance reports are kept in the Collections and Distribution Office. Backup generators for the lift stations are tested weekly. The District upgraded all of its satellite and hub lift stations with new PLCs and radios. The lift

stations currently are connected to the District’s SCADA system via radio and have alarms that page an on-duty or on-call collections operator.

**Figure 4-1 Maintenance Schedule: Lift Station/Collection System Cleaning**

Lift Station Cleaning Schedule												
Location	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
<b>LIFT STATIONS</b>												
LS- 1,2,3,4												
LS- 5,6,7,8												
LS-9,10,11,12												
LS- 13,14,15,16												
<b>Lift Station Preventative Maintenance Check Sheet (PMCS) Checks every Friday</b>												
SEWER MANHOLE VISUAL INSPECTION SCHEDULE												
SEWER LINES	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
<b>Groveland</b>												
To LS-1												
To LS-2												
To LS-3												
To LS-4												
To LS-5												
To LS-6												
To LS-7												
To LS-8												
To LS-9												
To LS-10												
To LS-11												
To LS-12												
To LS-13												
To LS-14												
To LS-15												
To LS-16												
<b>Bass Pond</b>												
<b>PML Club to LS-5</b>												
<b>Twin Pines to STP</b>												
<b>Tenaya to STP</b>												
<b>LS-16 to STP</b>												
<b>Fox/Malloy Building</b>												
<b>Park to STP</b>												
<b>Creek to STP</b>												
	Cleaned and Flushed/Visually Inspected											

**4.3.3. Non-routine Maintenance**

Non-routine maintenance activities include investigation and response to any complaints regarding a manhole overflow, missing or shifted manhole covers, manhole covers that are excessively noisy,

residential plumbing troubles, lift station malfunction, unexpected sewer odor, etc. All sewer complaints are investigated, and appropriate actions are taken to resolve the source of the problem. The District may also contract services for emergency videoing and flushing or utilize a combination of contract and in-house services for known troubled areas.

#### **4.3.4. Information Systems/Data Collection**

The District is currently utilizing a SCADA system to monitor and collect data from its lift stations. Data collected includes lift station pump times, wet well level, and generator status. Backup generators have been added at each lift station except Lift Station No. 4 (LS-4), which has a portable unit brought on site if necessary. The SCADA system allows collection operators to input lag and lead pump set points, high and low set points for the wet wells, and will page the collections operators should a lift station experience power failure or alarms.

#### **4.3.5. Special Needs Maintenance**

As discussed above, the District has a trouble sewer cleaning program for identified problematic line segments to prevent blockages and SSOs with a six-month cleaning cycle. Frequencies of cleaning cycles may be adjusted based on the observations during the sewer cleaning. The frequency will be shortened for line segments with moderate to heavy results and extended for line segments with light or clear results.

#### **4.3.6. Emergency Maintenance**

The District's collection system facilities have periodically experienced blockages and/or SSOs that require unplanned maintenance under emergency conditions. The District has developed and updated emergency maintenance procedures. Refer to Section 6, Sanitary Sewer Overflow Response Plan (SSORP) for more information.

### **4.4. Rehabilitation and Replacement Program**

The District utilizes a combination of in-house and contract services for condition assessment of the collection system. Each year before the winter season, the District conducts inflow and infiltration (I/I) inspections on the collections system access holes. The District began I/I inspections for the 2018/19 winter season in August 2018.

The District has made minor system repairs when roots and intrusion have been discovered during inspections. The District uses closed-circuit television (CCTV) inspections to determine the condition of the gravity sewers as well as the cause of sewer blockages and SSOs. On an annual basis the District is utilizing contract services for closed-circuit television (CCTV) inspection of 10,000-20,000 linear feet, approximately 10% of the system. Inspection data collected during the CCTV inspections is reviewed by the O&M Manager and/or District Engineer, to determine whether repairs or rehabilitation/ replacement are warranted. As inspection data is collected, the District will develop a prioritized deficiency list and rehabilitation to be completed in a priority order.

In the spring of 2016, the District conducted a comprehensive CCTV inspection on the parts sewer collection system within Groveland and Big Oak Flat. Presidio Systems, Inc. was retained by the District to perform a CCTV inspection assessment of approximately 35,037 feet of sanitary sewer. The CCTV

inspection has revealed the poor condition of some of the lines. Defects found in the lines include a crushed pipe, delamination, infiltration runners, sags, medium to large joint displacements, deposits and root intrusion. The District is currently applying for grant funding through the State Water Resources Control Board (SWRCB) Clean Water State Revolving Fund (CWSRF) to fund the rehabilitation of approximately 2,205 linear feet of sewer mains, rehabilitation of 19 existing manholes, replacement of approximately 1,211 linear feet of sewer mains, and replacement of 4 existing manholes. Figures 4-2, 4-3, and 4-4 display the location of the proposed sewer collection system improvements that will be replaced or rehabilitated as part of the District's Sewer Collection System Improvements Project. For nonemergency rehabilitation and replacement projects, the District plans to utilize in-house services or qualified contractors.

#### **4.5. Wastewater System Budget**

The District maintains an annual budget for the sanitary sewer system and WWTP. A copy of the FY 18/19 sewer fund budget is provided in Appendix A.

#### **4.6. Wastewater Staff and Training**

The District utilizes a combination of in-house training, on-site training, and other training opportunities to train the wastewater collection system staff. The following paragraphs describe the District's training program in more detail.

##### **4.6.1. Initial and Annual Refresher Training**

All District personnel who have a role in responding to, reporting, and/or mitigating an SSO (including those who serve as the after-hours/on-call collection crew members) receive training by industry professionals and established associations. All new employees receive training before they are placed in a position where they may have to respond to an SSO. Current employees receive annual refresher training on the SSO Emergency Response Plan (ERP) and the procedures to be followed.

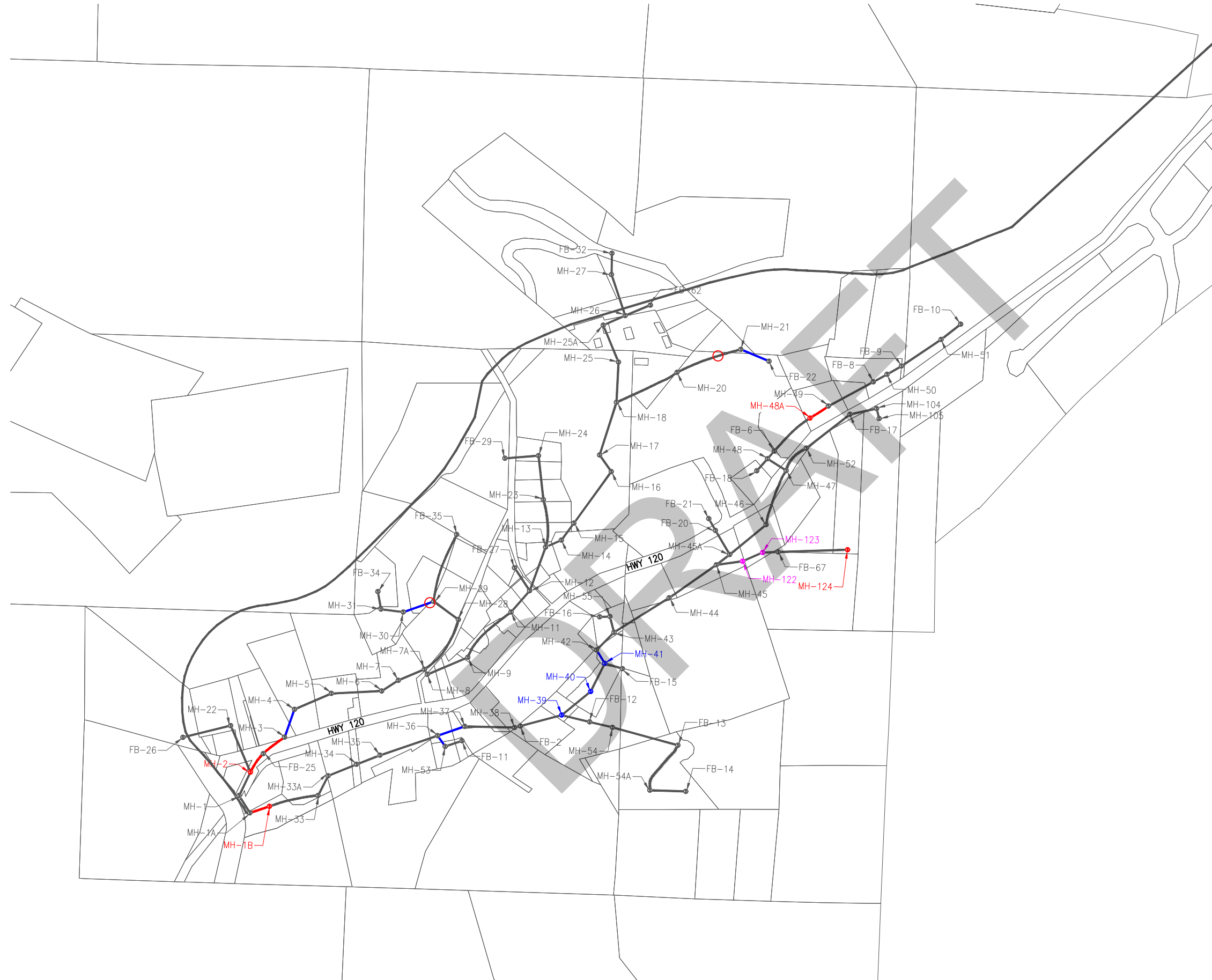
##### **4.6.2. SSO Response Drills**

Periodic training drills are held to ensure that employees are up to date on the procedures, the equipment is in working order, and the required materials are readily available. The training drills cover scenarios typically observed during sewer related emergencies (e.g. mainline blockage, mainline failure, force main failure, pump station failure, and lateral blockage). The results and the observations during the drills are recorded and action items are tracked to ensure completion.

##### **4.6.3. Safety Training**

The District's current division training record based on identified Occupational Safety & Health Administration (OSHA) mandated trainings are attached in Appendix C. Additionally, the District

GROVELAND COMMUNITY SERVICES DISTRICT  
SANITARY SEWER MANAGEMENT PLAN



LEGEND

- REHABILITATE SEWER MAIN —
- REPLACE SEWER MAIN —
- KEEP EXISTING SEWER MAIN —
- SPOT REPAIR ○
- NEW MANHOLE ↗ MH(N)
- SEALED MANHOLE LID ↗ MH(R)
- BRING LID TO GRADE ↗ MH(R)

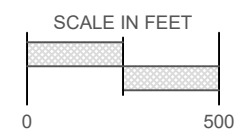
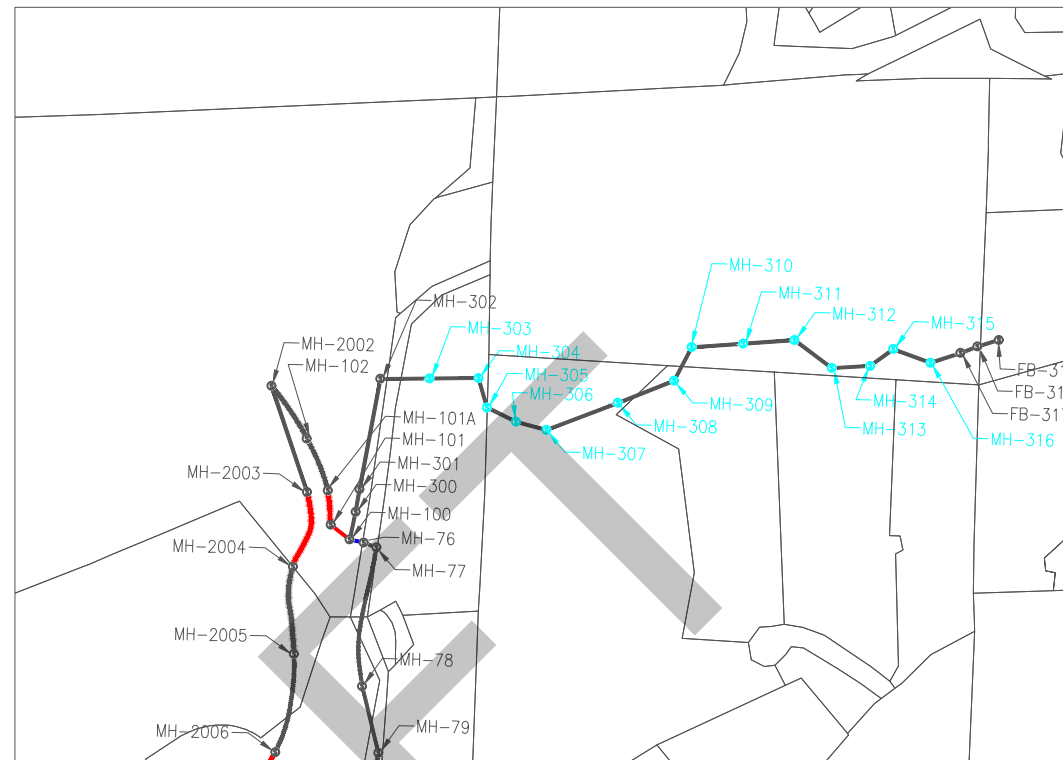
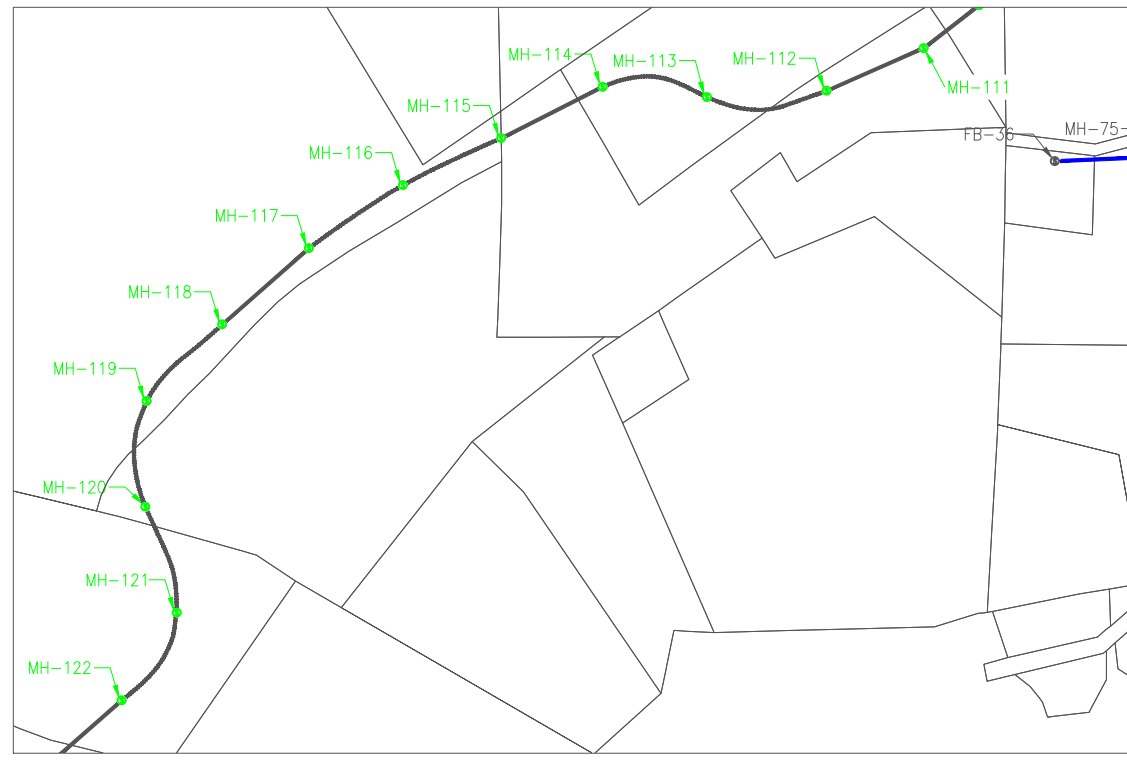
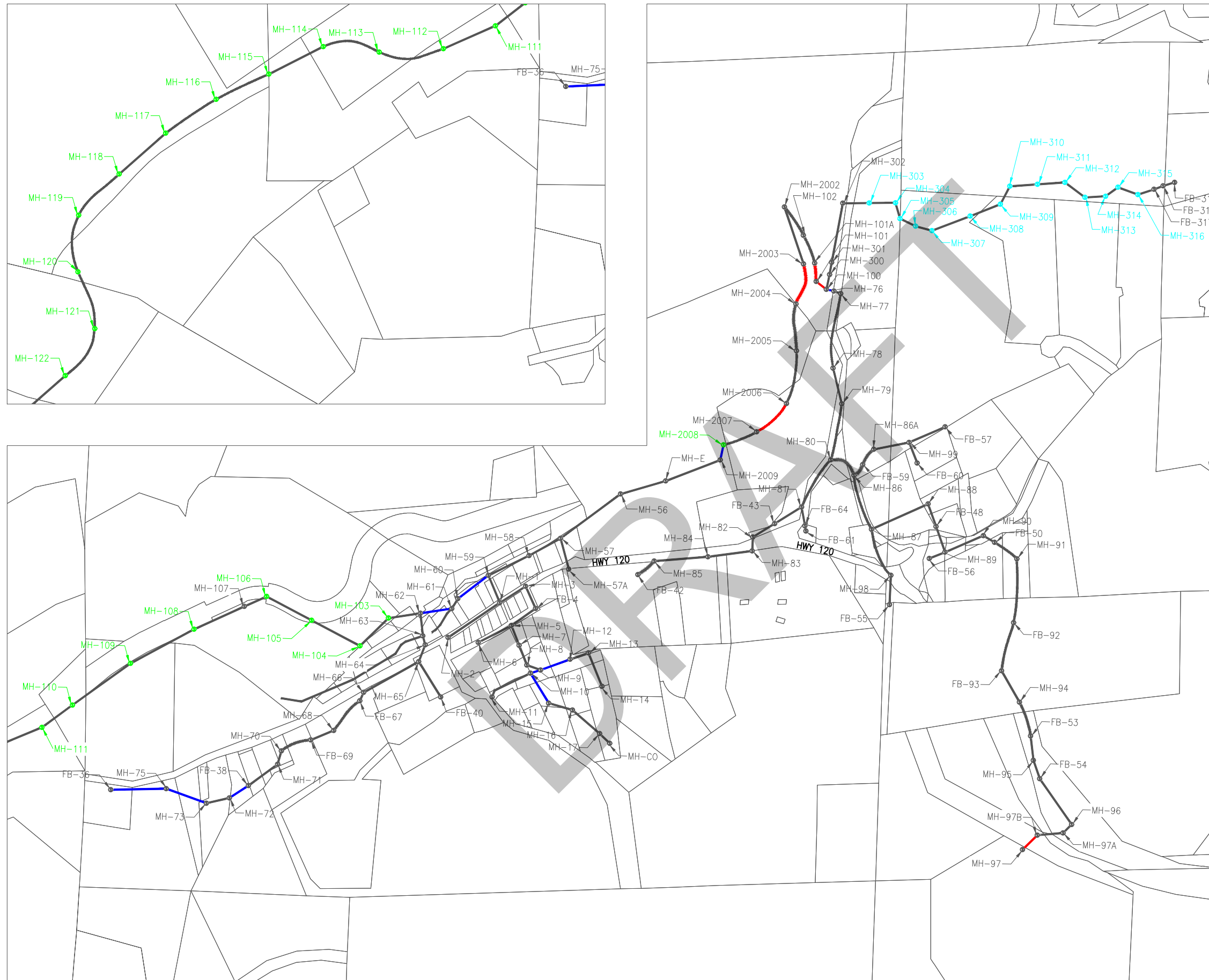


FIGURE 4-2  
BIG OAK FLAT PROPOSED  
SEWER COLLECTION SYSTEM  
IMPROVEMENTS



GROVELAND COMMUNITY SERVICES DISTRICT  
SANITARY SEWER MANAGEMENT PLANT



LEGEND

- REHABILITATE SEWER MAIN —
- REPLACE SEWER MAIN —
- KEEP EXISTING SEWER MAIN —
- MANHOLE REHABILITATION ↗ MH(N)
- LOCKING MANHOLE LID ↗ MH(N)

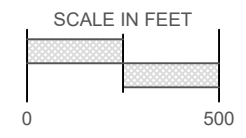
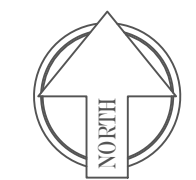
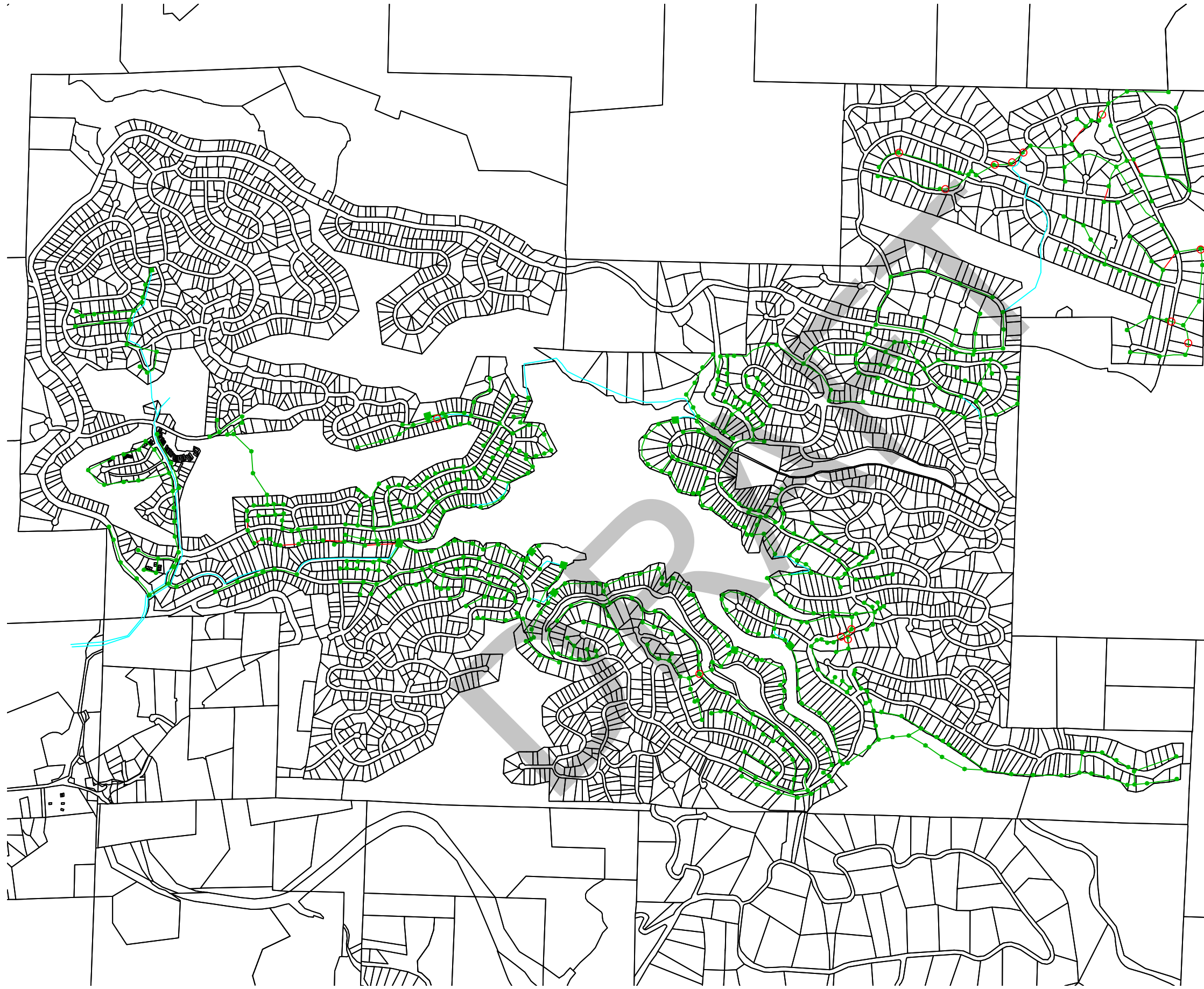








FIGURE 4-3  
GROVELAND PROPOSED SEWER  
COLLECTION SYSTEM  
IMPROVEMENTS



GROVELAND COMMUNITY SERVICES DISTRICT  
SANITARY SEWER MANAGEMENT PLAN



LEGEND

- EXISTING SEWER 
- EXISTING FORCEMAIN 
- PROPOSED REPLACEMENT 
- PROPOSED SPOT REPAIR 
- EXISTING MANHOLE 
- EXISTING LIFT STATION 

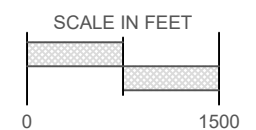


FIGURE 4-4  
PINE MOUNTAIN LAKE  
PROPOSED SEWER COLLECTION  
SYSTEM IMPROVEMENTS

participates in the Special District Risk Management Authority (SDRMA) on-line safety program. Individual employees are required to complete at least one on-line safety module bi-weekly. On-line courses include Trenching and Shoring, Confined Space Entry, Lock out/Tag out, etc. Employees earn certifications and Continuing Education Units for participation, and the District receives a discount on its insurance rates.

#### **4.6.4. Record Keeping**

Records are kept of all training that is provided in support of the SSO ERP. The records for all scheduled training courses and for each overflow emergency response training event includes the date, place, content, name of trainer(s), and names of attendees.

#### **4.6.5. Additional Training**

The District reviews and updates its training schedule to accommodate training needs for the following: preventive and emergency procedures, overflow emergency response, CCTV and other types of inspection activities, record keeping, and health and safety procedures.

#### **4.6.6. Contractors Working on District Sewer Facilities**

All contractors working on District sewer facilities (installing new sewers, cleaning and/or videoing sewer lines) are made familiar with the District's SSO ERP and are required to follow the SSO ERP in the event that they cause or observe an SSO. The District requires contractors working in the collection system to have OSHA-required training (i.e. confined space certification, etc.).

#### **4.7. Equipment and Parts Inventory**

The District conducts an inventory and inputs data concerning pipes, manholes, and other assets, and stores inspections results and other maintenance data into its maintenance program. This program enables the District to generate work orders for cleaning, inspection, maintenance, and repair activities; and maintaining histories of problems, blockages, complaints, etc.

The District's list of the major equipment that is used in the operation and maintenance of its sewer system has been developed. The inventory list and the District's vehicle list are included in Appendix D. The District maintains an inventory of parts, supplies and critical equipment such as redundant pumps to ensure rapid response to any infrastructure breakdown or SSO. The District currently has equipment on hand to bypass sewer failures and lift station failures, such as portable pumps, quick connections for hoses, and the capacity to conduct long run flows.

## **SECTION 5 - DESIGN AND PERFORMANCE PROVISIONS**

### **5.1. Regulatory Requirements**

Proper design and installation of sewer system pipelines and appurtenances is one of the most important aspects in maintaining a functioning, problem-free sewer system. A properly designed and installed sewer system can minimize system deficiencies that could create or contribute to future overflows and reduce operation and maintenance requirements.

In accordance with WDR 2006-0003, each wastewater collection agency shall identify minimum design and construction standards and specifications for the installation of new sewers, pump stations, force mains, and other appurtenances, and for the rehabilitation and repair of existing sewer systems. In addition, procedures and standards for inspecting and testing the installation of new sewers, pump stations, and other appurtenances, shall be described in the SSMP.

This Section describes the District's method of utilizing design and construction standards, along with a routine inspection and testing program, to ensure that the quality of Huron sewer collection system is maintained.

### **5.2. Design and Construction Standards for Sewer Systems**

The District's Design and Construction Standards, adopted in April 1994, contain standards, specifications, and details for the water system, sewer system, streets, drainage and grading applications, and construction. These standard specifications and details are to be updated in early 2019, and reviewed for adequacy on a five year basis or more frequently as needed.

#### **5.2.1. New Sewer Systems**

Sewer system design standards are included in Chapter 3 of the District's Design and Construction Standards and include design standards for the following:

- Connecting to an existing public sewer
- Pipe materials and alignment
- Manholes and cleanouts
- Access
- Capacity and design flows
- Slopes and pipe depths
- Clearance from other utilities
- Required fittings

Sewer system construction standard specifications are in Chapter 4 of the District's Design and Construction Standards and include construction standards for the following:

- Sewer pipeline materials
- Excavation and backfill
- Manhole and pipeline installation
- Sewer laterals and services
- Trench resurfacing;

- Sewer line testing
- Sewer structures

Standard drawings for sewer details are included in Chapter 8 of the District’s Design and Construction Standards. These requirements provide reasonable assurance that sewers constructed to these specifications and standards will perform adequately with minimal infiltration or maintenance problems and will maintain their structural integrity for the duration of their intended useful lives.

### **5.2.2. Pump Stations and Other Appurtenances**

Lift station plans and specifications are not included in the District’s standards. Design standards and construction specifications for lift stations have historically been developed on a case-by-case basis as needed for construction of specific lift station facilities or for improvements to existing lift station facilities. Specifications for lift stations will be developed as needed on a project-specific basis for any new lift stations or lift station rehabilitation projects being implemented.

### **5.2.3. Rehabilitation and Repair of Existing Sewer Systems**

Rehabilitation and repair of existing sewer lines are not included in the District’s standards. Design standards and construction specifications for rehabilitation and repair of existing sewer systems have historically been developed on a case-by-case basis as needed for a specific project. Specifications for rehabilitation and repair of existing sewer systems will be developed as needed on a project-specific basis for any new rehabilitation projects being implemented.

## **5.3. Inspection and Testing**

Standards for testing and inspecting new and rehabilitated gravity sewers and force mains are detailed in Chapter 4, Section 10 of the District’s standards. The District requires infiltration and exfiltration tests using water to be completed on all portions of the sewer including the manhole. Low pressure air testing may be used in lieu of water testing upon District approval. Closed circuit television inspection is required for all newly constructed sewers.

## **SECTION 6 - SANITARY SEWER OVERFLOW EMERGENCY RESPONSE PLAN**

### **6.1. Regulatory Requirements**

This Section describes the Sanitary Sewer Overflow Emergency Response Plan (SSOERP) for the GCSD. The flow chart depicted in Figure 2-2 displays the chain of communication for responding and reporting sewer system overflows (SSO's) to the appropriate District personnel and regulatory agencies. SSO reporting procedures for both the GCSD and regulatory agencies is described in more detail in the following sections.

The purpose of the SSOERP is to identify measures to protect public health and the environment. At a minimum, this plan must include the following:

- Proper notification procedures so that the primary responders and regulatory agencies are informed of all SSO's in a timely manner;
- A program to ensure an appropriate response to all overflows
- Procedures to ensure prompt notification to appropriate regulatory agencies and other potentially affected entities (e.g. health agencies, Regional Water Boards, water suppliers, etc.) of all SSO's that potentially affect public health or reach the waters of the State in accordance with the SSMP. All SSO's shall be reported in accordance with this SSMP, the California Water Code, other State Law, and other applicable Regional Water Board WDR's or NPDES permit requirements. The SSMP should identify the officials who will receive immediate notification
- Procedures to ensure that appropriate staff and contractor personnel are aware of and follow the Emergency Response Plan and are appropriately trained
- Procedures to address emergency operations, such as traffic and crowd control and other necessary response activities.

A program to ensure that all reasonable steps are taken to contain and prevent the discharge of untreated and partially treated wastewater to waters of the United States and to minimize or correct any adverse impact on the environment resulting from the SSO's including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the discharge.

The District's SSOERP is a stand-alone document that contains key elements necessary for an appropriate SSO response: notification, response, reporting, and impact mitigation. The latest SSOERP is attached as Appendix E. The purpose of the SSOERP is to provide a standardized course of action for District staff to follow and to ensure that the District is adequately prepared to respond to an SSO event. In all SSO situations, the District's goal is to quickly respond to the SSO event, secure the wastewater overflow area, relieve the cause of the overflow, and ensure that the affected area is cleaned as soon as possible to minimize health hazards to the public and protect the environment. The SSOERP addresses each of the regulatory requirements described above.

In an effort to reduce or minimize SSOs having impacts to the public health and safety or to the environment, the District strives for a proactive approach to maintaining the sewer collection system. Staff responds to all reported SSOs within the District, and all overflows or stoppages are documented, including those in private laterals for which the District is not legally responsible.



## **6.2. Internal Notification and Response Procedures**

### **6.2.1. Receipt of a Potential SSO Event**

This subsection provides the contact information and chain of communication for receiving overflow reports, including pump station failures, and a description of the formation that should be obtained regarding the overflow. Refer to Section 2 of this SSMP for a flowchart depicting the chain of communication. The list of contact numbers and chain of communication should be displayed at the District's Administration office and WWTP.

The GCSO is comprised of certified operators who operate and maintain the WWTP and entire sanitary sewer collection system. It is the District's administration office responsibility to route all potential overflow information to the General Manager, O&M Manager, , and the Chief Plant Operator (CPO).

#### **6.2.1.1. Telephone Calls**

During business hours, all telephone calls from the general public, District employees, plumbers, contractors and other public and private agencies regarding suspected sewer overflows are forwarded to the District's Administration Office at (209) 962-7161. After hours emergency calls are directed to the on-call Collections and Distribution operator through Mother Lode Answering Service via pager. This emergency phone line is staffed twenty-four (24) hours per day.

The following relevant information regarding the sewer overflow event shall be obtained:

- Time and date call was received;
- Location of reported event (address, street name, cross streets);
- Description of problem
  - Type of overflow (eg. Fresh water, storm water, street drainage, sewage, etc.);
  - Severity of overflow;
- Date and time the overflow was first detected by caller;
- Caller's name and phone number'
- Observations of the caller (e.g., odor, duration, back or front of property);
- Other relevant information that will enable the responding investigator.

The individual receiving the call records the overflow information and creates a service request for assignment to the Collections and Distribution Department.

### **6.2.2. Sewer Pump Station Alarms**

Lift station problems/failures are monitored via SCADA, which sends emergency pages to the on-call Collections and Distribution operator(s). The operator on call shall immediately convey all information regarding alarms or pages to the O&M Manager to initiate the investigation.

### **6.2.3. Dispatch of Response Crew for Field Inspection of Potential SSO**

The occurrence of a potential SSO triggers an emergency response to immediately conduct a field inspection of the reported event. If an SSO has occurred, a response crew must isolate and mitigate the failure of any element within the District's owned and operated sanitary sewer collection system. This

subsection details protocols for dispatching a response crew and necessary equipment for a field inspection of a reported SSO event. Table 6-1 summarizes the steps of the District’s SSO action plan.

**Table 6-1 GCSO SSO Action Plan**

Step	Event
1	Report of possible SSO received by District or on call C&D operator.
2	Dispatcher relays information and/or completes work order.
3	Contact is made with O&M Manager and/or on-call staff, to investigate.
4	The investigator reports the significance of the overflow to the O&M Manager and ensures that appropriate response crews are dispatched. The General Manager is notified.
5	The O&M Manager completes an overflow report. Cal OES (California Office of Emergency Services) shall be notified within two (2) hours of the event. A report is faxed to CRWQCB and Tuolumne County Environmental Health. The report is given to the General Manager
6	The incident is logged in the SSO History Data file.
7	Follow up letters are completed and mailed

Upon receipt of the reported SSO, the response crew will be notified by radio or or phone and should receive instructions from the individual investigating or their supervisor regarding appropriate crews, materials, supplies, and equipment needed. Generally, O&M Manager should receive notification of sewer overflows as outlined in Section 6.2.1 and will dispatch an individual to investigate the potential SSO and/or the appropriate response crews and resources as required. Response crews and equipment will be available to respond to any SSO location and will be dispatched to any site of a reported SSO immediately. Additional personnel may be placed "on call" should extra crews be needed.

All employees being dispatched to the site of a potential SSO shall proceed immediately to the site. Any delays or conflicts in assignments must be immediately reported to the supervisor for resolution. Response crews must report their findings, including possible damage to private and public property, to the O&M Manager immediately upon completing their investigation. The investigation findings shall also be reported to the General Manager. If a supervisor has not received findings from the field crew within thirty (30) minutes, the supervisor shall contact the response crew to determine the status of the investigation.

If necessary, the O&M Manager should receive requests for additional personnel, material, supplies, and equipment from crews working at the site of an SSO and convey such requests to the appropriate parties. In the event that a suspicious substance (oil sheen, foamy residue, ect.) is found on the ground surface when the response crew arrives on the scene of an SSO or should a suspicious odor not common with the sewer system be detected, the SSO investigator or response crew should immediately contact the O&M Manager for guidance before taking further action. If the O&M Manager determines the need to alert the hazardous material response team, the SSO investigator or crew shall await for the arrival of the Fire Department who will then take over the site. Upon arrival of the Fire Department, the SSO investigator or crew will take direction from the person with the lead authority of that team. Only when that authority determines it is safe and appropriate for the SSO investigator and crew to proceed can they proceed under the SSOERP with the containment, clean-up activities and correction.

#### **6.2.4. Overflow Correction, Containment and Cleanup**

Despite prevention efforts, SSO's may occur from time to time. These overflows may be a result of blocked sewers, pipe failures, or mechanical malfunctions among other natural or manmade causes. This Section describes the specific responsibilities and action to be performed by the first personnel to arrive at the site of a potential sewer overflow. The objectives of these actions are:

- To protect public health, environment and property from SSO's and restore surrounding area back to normal as soon as possible;
- To establish perimeters and control zones with appropriate traffic cones and barricades, vehicles or use of natural topography (e.g., hills, berms);
- To promptly notify the regulatory agency's communication center of preliminary overflow information and potential impacts; and
- To contain the SSO to the maximum extent possible including preventing the discharge of sewage into surface waters.

Under most circumstances, the District will handle all response actions with its own maintenance and operations forces. However, circumstances may arise when the District could benefit from the support of private sector construction assistance or mutual aid assistance. This may be true in the rare event of a multiple incidents or large-scale system failures.

#### **6.2.5. Responsibilities of Response Crew Upon Arrival**

It is the responsibility of the first personnel who arrive at the site of an SSO to protect the health and safety of the public by mitigating the impact of the overflow to the extent possible and restore surrounding area back to normal as soon as possible. Upon. Should the overflow not be the responsibility of the District, but there is imminent danger to public health, public or private property, or to the quality of waters of the U. S., then prudent emergency action should be taken until the responsible party assumes responsibility and provides actions. Upon arrival at an SSO, the response crew should do the following:

- Determine the cause of the overflow, e.g. sewer line blockage; pump station mechanical or electrical failure, sewer line break, etc.
- Identify and request, if necessary, assistance or additional resources to correct the overflow or to assist in the determination of its cause.
- Determine if private property is impacted. If private property is impacted, customer service should be informed to notify the impacted individual.
- Take photos in order to visually document the incident.
- Take immediate steps to stop the overflow, e.g. relieve pipeline blockage, manually operate pump station controls, vacuum pump, repair pipe, etc. Extraordinary steps may be considered where overflows from private property threaten public health and safety (e.g., an overflow running off of private property into the public right-of-way).
- Request additional personnel, materials, supplies, or equipment that will expedite and minimize the impact of the overflow.



### **6.2.6. Additional Measures for Prolonged Overflow Conditions**

In the unlikely event of a prolonged sewer line blockage or a sewer line collapse, a portable bypass pumping operation around the obstruction will be set up. During this type of operation, the response crew should do the following:

- Determine the proper size and number of required pumps to effectively and efficiently handle the sewage flow.
- Implement continuous or periodic monitoring of the by-pass pumping operation as required.
- Address regulatory agency issues in conjunction with emergency repairs.

### **6.2.7. Cleanup**

Sewer overflow sites are to be promptly cleaned to the highest degree possible after an overflow event. Where practical, the area is to be thoroughly flushed and cleaned of any sewage or wash-down water. Solids and debris are to be flushed, swept, raked, picked-up, and transported for proper disposal. The overflow site is to be secured to prevent contact by members of the public until the site has been thoroughly cleaned. Where appropriate, the overflow site is to be disinfected and deodorized.

Where sewage has resulted in ponding, the pond should be pumped dry and the residue disposed of in accordance with applicable regulations and policies. If a ponded area contains sewage that cannot be pumped dry, it may be treated with bleach. If sewage has discharged into a body of water that may contain fish or other aquatic life, bleach or other appropriate disinfectant should not be applied, and the State Department of Fish and Game should be contacted for specific instructions. Use of portable aerators may be required where complete recovery of sewage is not practical and where severe oxygen depletion in existing surface water is expected.

### **6.2.8. Overflow Report**

When the overflow has been eliminated by the response personnel, an overflow report shall be completed by the O&M Manager. To properly complete an overflow report, the following must be provided:

- Determine if the SSO impacted surface waters.
- Characterize the SSO by evaluating the following:
  - Sewage overflows to stormwater system.
  - Preplanned or emergency maintenance jobs involving bypass pumping.
  - Overflows where observation or onsite evidence clearly indicates all sanitary sewage was retained on land and did not reach surface water and where cleanup occurs.
  - Any other pertinent information relating to each individual SSO.
- Use one of the following criteria to estimate the start date/time of the SSO:
  - Information reported to the District and later substantiated by a sewer investigation or response crew.
- Use one of the following criteria to estimate the end date/time of the SSO:
- When the blockage is cleared, or flow is controlled or contained.
- The arrival time of the field inspector or response crew if the overflow stopped between the time it was reported and the time of arrival.

- Estimate the flow rate of the SSO in gallons per minute by direct observations of the overflow or estimated measurement of actual overflow.
- Estimate the volume of the sanitary sewer overflow when rate of overflow is known by multiplying the duration of the overflow event by the overflow rate.
- Photograph the event if possible.
- Describe any damage to the exterior areas of public/private property.

Refer to the California Water Environment Association (CWEA) SSMP resource center website for guidance tables on estimating sewer overflow volumes and flow rates.

### **6.3. Public Notification**

The following paragraphs describe the actions the District will implement, in cooperation with the General Manager, to limit public access to areas potentially impacted by unauthorized discharges of pollutants to surface water bodies from wastewater collection system.

#### **6.3.1. Temporary Signage**

The District is responsible for determining when to post notices of polluted surface water bodies or ground surfaces that result from uncontrolled wastewater discharges from its facilities. The objective of posting of signs is to provide warning of potential public health risks due to sewage contamination. Generally, signs are posted where sewage enters a water body, where an overflow cannot be cleaned, or when directed by regulatory agencies. The postings do not necessarily prohibit use of recreational areas, unless posted otherwise, but provide a warning of potential public health risks due to sewage contamination.

As directed by the Tuolumne County Environmental Health Department, the District shall post warning signs prohibiting the use of recreational areas. The postings shall remain until the results of lab tests indicate contamination levels have returned to safe limits, as determined by the Tuolumne County Environmental Health Department.

#### **6.3.2. Other Public Notices**

Should the posting of surface water bodies or ground surfaces subjected to a sewer overflow be deemed necessary, the General Manager shall also determine the need for further public notification through the use of pre-scripted notices made available to the printed or electronic news media for immediate publication or airing, or by other measures (front door hangers, ect.).

### **6.4. Regulatory Notification and Reporting**

All SSOs are reported on the State of California Water Resource Control Board's Sanitary Sewer Overflow Reporting Program (<http://ciwqs.waterboards.ca.gov/>). The following is the latest notification and reporting requirements based on the State Water Resources Control Board Order No. WQ 2013-0058-EXEC, Adopted Amended Monitoring and Reporting Requirements for Statewide General Waste Discharge Requirements for Sanitary Sewer Systems. This report replaces the previous Monitoring and Reporting Requirements for Statewide General Waste Discharge Requirements for Sanitary Sewer Systems Order No. 2008-0002-DWQ. The notification procedures are as follows:

- For any discharges of sewage that results in a discharge to a drainage channel or a surface water, the Discharger shall, as soon as possible, but not later than two (2) hours after becoming aware of the discharge, notify the State Office of Emergency Services, the local health officer or directors of environmental health with jurisdiction over affected water bodies, and the appropriate Regional Water Quality Control Board.
- As soon as possible, but no later than twenty-four (24) hours after becoming aware of a discharge to a drainage channel or a surface water, the Discharger shall submit to the appropriate Regional Water Quality Control Board a certification that the State Office of Emergency Services and the local health officer or directors of environmental health with jurisdiction over the affected water bodies have been notified of the discharge.

The following table summarizes the time frame, specific agency and agency contacts required for notification of an SSO.

Communication Type	Agency Being Contacted	Time Requirements	Method of Contact
Initial Notification	Office of Emergency Services	As soon as possible, but not later than 2 hours after becoming aware of the SSO	800-852-7550 916-845-8911
	Tuolumne County Health Department	As soon as possible, but not later than 2 hours after becoming aware of the SSO	209-533-7401
	Region 5 Water Board	As soon as possible, but not later than 2 hours after becoming aware of the SSO	559-445-5116
Notification	Region 5 Water Board	As soon as possible, but not later than 2 hours after becoming aware of the SSO	ciwqs@waterboards.ca.gov
State Reporting	State Water Board	<u>Category 1</u> <ul style="list-style-type: none"> <li>• Initial Report within 3 business days (Category 1).</li> <li>• Final Report within 15 calendar days after response activities are completed.</li> </ul> <u>Category 2</u> <ul style="list-style-type: none"> <li>• Report online within 30 days after the end of the calendar month in which the SSO occurs.</li> </ul>	ciwqs@waterboards.ca.gov

#### 6.4.1. SSO Categories

The State Water Resources Control Board (SWRCB) Order No. WQ- 2013-0058-EXEC updated the SSO Categories based on the quantity of sewage spilled and/or the location that the spill occurred. The following are the newly defined SSO Categories:

- Category 1 – All discharges of untreated or partially treated wastewater of any volume resulting from an enrollee’s sanitary sewer system failure or flow condition that:
  - Reach surface water and/or reach a drainage channel tributary to a surface water; or
  - Reach a Municipal Separate Storm Sewer System (MS4) and are not fully captured and returned to the sanitary sewer system or not otherwise captured and disposed of properly. Any volume of wastewater not recovered from the MS4 is considered to have reached surface water unless the storm drain system discharges to a dedicated storm water or groundwater infiltration basin (e.g., infiltration pit, percolation pond).

- Category 2 – Discharges of untreated or partially treated wastewater of 1,000 gallons or greater resulting from an enrollee’s sanitary sewer system failure or flow condition that do not reach surface water, a drainage channel, or a MS4 unless the entire SSO discharged to the storm drain system is fully recovered and disposed of properly.
- Category 3 - All other discharges of untreated or partially treated wastewater of sewage resulting from a failure in the Enrollee’s sanitary sewer system.
- Private Lateral Sewage Discharges – Discharges of untreated or partially treated wastewater resulting from blockages or other problems within a privately-owned sewer lateral connected to the enrollee’s sanitary sewer system or from other private sewer assets. PLSDs that the enrollee becomes aware of may be voluntarily reported to the California Integrated Water Quality System (CIWQS) Online SSO Database.

#### **6.4.2. SSO Notification Requirements**

Per Order No. WQ 2013-0058-EXEC, the following are notification requirements that must be adhered to for each SSO Category:

- For any Category 1 SSO greater than or equal to 1,000 gallons that results in a discharge to a surface water or spilled in a location where it probably will be discharged to surface water, either directly or by way of a drainage channel or MS4, the enrollee shall, as soon as possible, but not later than two (2) hours after (A) the enrollee has knowledge of the discharge, (B) notification is possible, and (C) notification can be provided without substantially impeding cleanup or other emergency measures, notify the Cal OES and obtain a notification control number.
- To satisfy notification requirements for each applicable SSO, the enrollee shall provide the information requested by Cal OES before receiving a control number. Spill information requested by Cal OES may include:
  - Name of person notifying Cal OES and direct return phone number.
  - Estimated SSO volume discharged (gallons).
  - If ongoing, estimated SSO discharge rate (gallons per minute).
  - SSO Incident Description:
    - Brief narrative.
    - On-scene point of contact for additional information (name and cell phone number).
    - Date and time enrollee became aware of the SSO.
    - Name of sanitary sewer system agency causing the SSO.
    - SSO cause (if known).
  - Indication of whether the SSO has been contained.
  - Indication of whether surface water is impacted.
  - Name of surface water impacted by the SSO, if applicable.
  - Indication of whether a drinking water supply is or may be impacted by the SSO.
  - Any other known SSO impacts.
  - SSO incident location (address, city, state, and zip code).

- Following the initial notification to Cal OES and until such time that an enrollee certifies the SSO report in the CIWQS Online SSO Database, the enrollee shall provide updates to CalOES regarding substantial changes to the estimated volume of untreated or partially treated sewage discharged and any substantial change(s) to known impact(s).
- PLSDs: The enrollee is strongly encouraged to notify Cal OES of discharges greater than or equal to 1,000 gallons of untreated or partially treated wastewater that result or may result in a discharge to surface water resulting from failures or flow conditions within a privately-owned sewer lateral or from another private sewer asset(s) if the enrollee becomes aware of the PLSD.

#### **6.4.3. SSO Reporting Timelines**

GCSD must use the CIWQS Online SSO Database account to report SSOs. For reporting purposes, if one SSO event results in multiple appearance points in a sewer system asset, the enrollee shall complete one SSO report in the CIWQS Online SSO Database, which includes the GPS coordinates for the location of the SSO appearance point closest to the failure point, blockage or location of the flow condition that caused the SSO, and provide descriptions of the locations of all other discharge points associated with the SSO event.

The following are the reporting timeframes listed in WQ-2013-0058-EXEC:

Category 1 and Category 2 SSOs – All SSOs that meet the above criteria for Category 1 or Category 2 SSOs shall be reported to the CIWQS Online SSO Database:

Draft reports for Category 1 and Category 2 SSOs shall be submitted to the CIWQS Online SSO Database within three (3) business days of the enrollee becoming aware of the SSO.

A final Category 1 or Category 2 SSO report shall be certified through the CIWQS Online SSO Database within 15 calendar days of the end date of the SSO.

Category 3 SSOs – All SSOs that meet the above criteria for Category 3 SSOs shall be reported to the CIWQS Online SSO Database and certified within 30 calendar days after the end of the calendar month in which the SSO occurs (e.g., all Category 3 SSOs occurring in the month of February shall be entered into the database and certified by March 30).

“No Spill” Certification – If there are no SSOs during the calendar month, the enrollee shall either 1) certify, within 30 calendar days after the end of each calendar month, a “No Spill” certification statement in the CIWQS Online SSO Database certifying that there were no SSOs for the designated month, or 2) certify, quarterly within 30 calendar days after the end of each quarter, “No Spill” certification statements in the CIWQS Online SSO Database certifying that there were no SSOs for each month in the quarter being reported on. For quarterly reporting, the quarters are Q1 - January/ February/ March, Q2 - April/May/June, Q3 - July/August/September, and Q4 - October/November/December. If there are no SSOs during a calendar month but the enrollee reported a PLSD, the enrollee shall still certify a “No Spill” certification statement for that month.

Amended SSO Reports – The enrollee may update or add additional information to a certified SSO report within 120 calendar days after the SSO end date by amending the report or by adding an attachment to the SSO report in the CIWQS Online SSO Database. SSO reports certified in the CIWQS Online SSO Database

prior to the adoption date of this SSMP may only be amended up to 120 days after the effective date of this SSMP. After 120 days, the enrollee may contact the SSO Program Manager to request to amend an SSO report if the enrollee also submits justification for why the additional information was not available prior to the end of the 120 days.

#### **6.4.4. Reporting Documentation**

At a minimum, the following mandatory information shall be reported prior to finalizing and certifying an SSO report for each category of SSO:

- **Draft Category 1 SSOs:** At a minimum, the following mandatory information shall be reported for a draft Category 1 SSO report:
  1. SSO Contact Information: Name and telephone number of enrollee contact person who can answer specific questions about the SSO being reported.
  2. SSO Location Name.
  3. Location of the overflow event (SSO) by entering GPS coordinates. If a single overflow 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 SSO appearance point explanation field.
  4. Whether or not the SSO reached surface water, a drainage channel, or entered and was discharged from a drainage structure.
  5. Whether or not the SSO reached a municipal separate storm drain system.
  6. Whether or not the total SSO volume that reached a municipal separate storm drain system was fully recovered.
  7. Estimate of the SSO volume, inclusive of all discharge point(s).
  8. Estimate of the SSO volume that reached surface water, a drainage channel, or was not recovered from a storm drain.
  9. Estimate of the SSO volume recovered (if applicable).
  10. Number of SSO appearance point(s).
  11. Description and location of SSO appearance point(s). If a single sanitary sewer system failure results in multiple SSO appearance points, each appearance point must be described.
  12. SSO start date and time.
  13. Date and time the enrollee was notified of, or self-discovered, the SSO.
  14. Estimated operator arrival time.
  15. For spills greater than or equal to 1,000 gallons, the date and time Cal OES was called.
  16. For spills greater than or equal to 1,000 gallons, the Cal OES control number.
- **Certified Category 1 SSOs:** At a minimum, the following mandatory information shall be reported for a certified Category 1 SSO report, in addition to all fields required for a Draft Report (see above):
  1. Description of SSO destination(s).
  2. SSO end date and time.
  3. SSO causes (mainline blockage, roots, etc.).

4. SSO failure point (main, lateral, etc.).
  5. Whether or not the spill was associated with a storm event.
  6. Description of spill corrective action, including steps planned or taken to reduce, eliminate, and prevent reoccurrence of the overflow; and a schedule of major milestones for those steps.
  7. Description of spill response activities.
  8. Spill response completion date.
  9. Whether or not there is an ongoing investigation, the reasons for the investigation and the expected date of completion.
  10. Whether or not a beach closure occurred or may have occurred as a result of the SSO.
  11. Whether or not health warnings were posted as a result of the SSO.
  12. Name of beach(es) closed and/or impacted. If no beach was impacted, NA shall be selected.
- Draft Category 2 SSOs: At a minimum, the following mandatory information shall be reported for a draft Category 2 SSO report:
    1. Items 1-14 for Draft Category 1 SSO.
  - Certified Category 2 SSOs: At a minimum, the following mandatory information shall be reported for a certified Category 2 SSO report:
    1. Items 1-14 for Draft Category 1 SSO and Items 1-9, and 17 for Certified Category 1 SSO.
  - Certified Category 3 SSOs: At a minimum, the following mandatory information shall be reported for a certified Category 3 SSO report:
    1. Items 1-14 for Draft Category 1 SSO and Items 1-5, and 17 for Certified Category 1 SSO.

#### **6.4.5. Monthly No-Spill Reporting Procedures**

The State Department of Water Resources requires that monthly reports shall be filed online to document that no sewer overflow events occurred during that specific month. The website for filing the monthly no-spill report is: <https://ciwqs.waterboards.ca.gov/>. The District's procedure for filing a monthly no-spill report is as follows:

1. Log on to CIWQS webpage (<https://ciwqs.waterboards.ca.gov>)
2. Go to SSO Monthly
3. Log onto system with appropriate username and password
4. Click SSO
5. Click "Generate No Spill Certification"
6. Enter Month and Year of Report
7. Click "Certify"
8. Print report and save in a binder at the District's Wastewater Treatment Plant.
9. SSO Standard Operating Procedure



## **SECTION 7 - FATS, OILS, AND GREASE (FOG) CONTROL PROGRAM**

### **7.1. Regulatory Requirements**

Fats, oils, and grease (FOG) are discharged to sanitary sewer systems by residential users, food handling facilities, and other commercial and industrial establishments. Commonly, FOG can cause pipe blockages leading to sanitary sewer overflows (SSO). The State Water Resources Control Board (SWRCB) requires each wastewater collection system agency to evaluate its service area to determine whether a FOG control program is needed to reduce the risk of SSO. If so, a FOG control program shall be developed as part of the SSMP. The FOG control program shall include the following:

- An implementation plan and schedule for a public education outreach program that promotes proper disposal of FOG;
- A plan for the disposal of FOG generated within the sanitary sewer system service area. This may include a list of acceptable disposal facilities and/or additional facilities needed to adequately dispose of FOG generated within a sanitary sewer system service area;
- The legal authority to prohibit discharges to the system and identify measures to prevent SSOs and blockages caused by FOG;
- Requirements to install grease removal devices (such as traps or interceptors) design standards for the grease removal devices, maintenance requirements, Best Management Practices (BMPs) requirements, record keeping and reporting requirements;
- Authority to inspect grease producing facilities, enforcement authorities, and whether the GCSO has sufficient staff to inspect and enforce the FOG ordinance;
- An identification of sewer system sections subject to FOG blockages and establish a cleaning maintenance schedule for each section; and
- Development and implementation of source control measures, for all sources of FOG discharged to the sewer system, for each sewer system section identified as a problem.

### **7.2. Public Education and Outreach**

The District has not implemented a public education and outreach program; however, staff is currently developing a public education outreach program that will incorporate awareness of the District's SSMP and FOG Program. The District plans to educate the public on the proper disposal of household grease by mailing brochures to District customers. Additionally, the District is developing a FOG Project that will provide the public with a list of locations where large and small quantities of cooking oil can be deposited for proper disposal and bio-diesel processing. All public education and outreach material and FOG Program will be available for the public on the District's website and social media.

### **7.3. FOG Source Control**

The District does not have significant grease issues; however, the District proactively addresses FOG issues by performing commercial/industrial inspection services, including notification to non-compliance users,



issuing and renewing discharge permits, interviews, sampling and monitoring, reporting, record keeping, and related services in the District's service area.

The District's FOG program is primarily focused on FOG source control at food service establishments and includes plan review and specification of grease removal equipment (based on Uniform Plumbing Code sizing criteria), permitting, compliance inspections, and enforcement.

#### **7.4. Disposal of FOG**

Local grease haulers can dispose of grease at a variety of regional locations including wastewater treatment plants and rendering facilities. The District plans to provide a list of locations where residents can take grease for disposal in their FOG Program. The list and FOG program will also be made available on the District's website.

#### **7.5. Legal Authority**

The District has the legal authority to prohibit discharges of FOG to the wastewater collection system. See Section 3 of this SSMP for discussion of the District's legal authority relating to FOG control.

#### **7.6. Design and Construction Standards**

Design and construction of grease, oil, and sand interceptors are outlined in the District Sewer Ordinance. According to the Ordinance, when the District believes that grease, oil and sand interceptors are necessary for the proper handling of liquid wastes containing grease in excessive amounts, or any flammable wastes, sand and other harmful ingredients, such interceptors shall be installed and maintained at Owner's expense. Grease, oil and sand interceptors are required for garages, service stations and any building that prepares food or could be used to prepare food in the future. These interceptors shall not be required for family dwelling units or structures.

##### **7.6.1. Interceptor Requirements**

All interceptors shall be of a type and capacity approved by the District. Interceptors shall conform to the requirements of the District's Specifications and be manufactured by a company regularly engaged in manufacturing such devices for the particular intended use.

###### **7.6.1.1. Interceptor Cover**

The cover for grease interceptors shall be designed for the loads imposed on the structure as required by the General Manager. The cover shall be gas-tight on all interceptors and the waste shall enter the interceptor through the inlet pipe only. Buildings remodeled for use requiring interceptors shall also be subject to these regulations.

###### **7.6.1.2. Owner/Occupant Maintained**

Interceptors shall be maintained in efficient operating condition by periodically removing accumulated grease. No such collected grease shall be emptied or discharged into any drainage piping or public or private sewer. Interceptors shall be maintained by the Owner or occupant of the premises, at their expense, and shall be in continuously efficient operation at all times.

### **7.6.1.3. Interceptor Installation**

Each interceptor shall always be installed and connected and easily accessible for the inspection, cleaning and removal of the intercepted grease. A grease interceptor may not be installed in any part of a building where food is handled. Proper location of the grease interceptor shall meet the Plumbing Code and the approval of the General Manager.

Each business establishment for which a grease interceptor is required shall have an interceptor, which shall serve only that business establishment. Interceptors shall be installed in such a manner as to prevent drainage from outside the intended area of use.

### **7.6.1.4. Limits on Interceptor Use**

Waste discharge from fixtures and equipment in establishments required to have an interceptor which may contain grease or other objectionable materials, including, but not limited to, scullery sinks, pot and pan sinks, dishwashers, food waste disposals, etc., and floor drains located in areas where such objectionable materials may exist, may be drained into the sanitary waste line through the interceptor if approved by the District Engineer. Toilets, urinals, and other fixtures containing fecal material may not flow through the interceptor.

### **7.6.1.5. Interceptor Inspection**

If, upon inspection by the District, a grease interceptor is found to be absent or ineffective as solely determined by the General Manager or District Engineer, the Owner/User shall be required to make immediate repairs or corrections within thirty (30) days after receiving written notification of deficiency from the District. If the grease interceptor requires pumping and servicing, as determined by the inspector, the Owner/User shall be required to have the interceptor pumped by a licensed hauler within ten (10) days after receiving notification by the inspector. Failure to make such repairs or corrections shall result in disconnection from the public sewer.

### **7.6.1.6. Interceptor Records**

The Owner/User may be required to keep records of grease interceptor device cleaning, maintenance, and grease removal and report on such maintenance to the District in the format and at the frequency required by the General Manager. The General Manager may require the Owner/User to provide results of periodic measurements of its discharge, which is to include chemical analysis of oil and grease content.

### **7.6.1.7. Interceptor Abandonment**

Abandoned grease interceptors shall be emptied and filled as required for abandoned septic tanks in Section 1119 of the Uniform Plumbing Code.

## **7.7. Authority to Inspect Grease Producing Facilities**

As discussed in Section, the District has the authority to conduct “inspection, observation, measurement, sampling and testing” of dischargers to the District’s sewer system. The District has the authority to contract with an outside entity for inspection services.

## **7.8. Identification of Grease Problem Areas and Sewer Cleaning**

The District currently keeps records of sewer lines with grease-related problems. These grease-related problem lines are part of the Trouble Sewer group of sewers that are cleaned at least every six months. Lines with grease problems are identified during routines cleanings, from customer calls, during manhole inspections, or during CCTV inspection.

DRAFT

---

---

## SECTION 8 - SYSTEM EVALUATION AND CAPACITY ASSURANCE PLAN

### 8.1. Regulatory Requirements

The requirements for the System Evaluation and Capacity Assurance Plan (SECAP) section of the SSMP are as follows:

- Each wastewater collection system agency shall establish a process to assess the current and future capacity requirements for the collection system facilities.
- Each wastewater collection system agency shall prepare and implement a capital improvement plan to provide hydraulic capacity of key sewer system elements under peak flow conditions.

This Section evaluates the sanitary sewer system’s existing capacity under both dry and wet weather conditions, and determines future capacity, and identifies related system deficiencies and improvement priorities, based on anticipated population growth. The following sections describe the District’s current procedure for evaluating their sewer system to ensure adequate capacity for proper function of their sewer system facilities.

### 8.2. Service Area

The service area of the GCS D is the communities of Groveland, Big Oak Flat, and Pine Mountain Lake. A Wastewater Master Plan (Master Plan) was completed for the District in October 2001. According to the Master Plan, population within the District was expected to grow at a rate between 1.9 and 3 percent annually through the year 2021. However, historical data indicates a projected population growth rate of approximately 0.25 percent. Future growth within the Pine Mountain Lake area is not expected to have a significant effect on the collection system within Big Oak Flat and Groveland.

The district covers approximately 146 square miles, some of which is undeveloped and not served by the sewer collection system. The sewer collection system provides service to approximately 25 square miles. The collection system within Groveland and Big Oak Flat covers a much smaller area. The total population of the District is 3,414. The population within the Big Oak Flat and downtown Groveland area is 601. The remaining population resides in Pine Mountain Lake. Table 8-1 provides population projections through 2040 using the annual growth rate of 0.25 percent described above.

**Table 8-1 Groveland CSD Projected Population**

	2020	2025	2030	2035	2040
Groveland-Big Oak Flat	608	616	624	632	640
Pine Mountain Lake	2,842	2,878	2,915	2,952	2,990
<b>Total</b>	<b>3,450</b>	<b>3,494</b>	<b>3,539</b>	<b>3,584</b>	<b>3,630</b>

### 8.3. Wastewater Flows

Wastewater Flows at the WWTP averaged 0.122 MGD over the last five years. Raw wastewater is primarily domestic in origin. The District does not accept any industrial discharges at this time. Wastewater flows include a base wastewater flow (BWWF), and rainfall dependent infiltration and inflow (I&I). I&I is the

increased portion of flow that occurs during or immediately after a rainfall event. I&I is typically higher in older sewer collection systems and is an indicator of the condition of the sewer collection system. Table 8-2 displays the average daily flow and maximum daily flows from January 2014 to December 2018.

**Table 8-2 Average and Maximum Daily Wastewater Flows**

	2014	2015	2016	2017	2018	Average
Average Daily Flow (MGD)	0.119	0.108	0.120	0.136	0.125	0.122
Maximum Daily Flow (MGD)	0.174	0.155	0.205	0.190	0.184	0.182

## 8.4. System Evaluation

The District completed a comprehensive Wastewater Master Plan in October 2001. The Wastewater Master Plan included a capacity evaluation and identified capacity-related improvement projects. The Wastewater Master Plan is a separate document from this SSMP. This section of the SSMP summarizes key capacity-related portions of the 2001 Master Plan. The Wastewater Master Plan and its capacity evaluation is planned for update in 2019.

### 8.4.1. Wastewater Master Plan

The District contracted with RBF Consulting of Irvine, California, and Tulloch Engineering of Mariposa, California, to draft and finalize its Master Plan. This document was finalized in October of 2001, and included an Immediate Action Plan, a Rehabilitation Program (1 to 5 years), and a replacement program for sewer lift station improvements to the District’s collection system.

The Master Plan attributed the majority of previous SSOs to mechanical failures or blockages and stated that the chronic mechanical problems resulted from poor design and age. The Master Plan concluded that all lift stations should be rehabilitated. In early 2005, the District utilized reserve funds to start upgrades to its hub lift stations (5, 6, 7, 8, and 13) and the collection system. The District also arranged for a \$2,000,000 line of credit from which it could draw as necessary. On June 29, 2007, the District received a \$4,529,000 loan from LaSalle National Bank Association (now AIG Equipment Finance). The District used the loan proceeds to partially reimburse its reserves, repay money borrowed from the credit line, and upgrade the satellite lift stations.

Since early 2005 to the present, the District has taken the following action pursuant to the Wastewater Master Plan:

1. A preventative maintenance program has been instituted which established weekly and quarterly inspections/maintenance of the lift stations and collection system pipelines.
2. The District went through several upgrades of its SCADA, communications, and alarm systems for its lift stations and collection system.
3. Replacement of vacuum primed centrifugal pumps with submersible sewage pumps.
4. Inspection and repair/replacement Air Relief Valves (ARVs) on a quarterly basis.
5. Conducted odor, root, corrosion, grease control, and grease trap inspection programs.
6. Installed new standby generators at all lift stations
7. Installed auto transfer switches on the standby generators

8. Instituted a CCTV camera inspection schedule for gravity mains and purchased its own limited use push camera for sewer line inspections.
9. By November of 2007, completed a 12-week inspection, cleaning, repairing, and testing of 500 manholes and 20 miles of pipeline.
10. Performed electrical upgrades at numerous hub and satellite lift stations.
11. Installed/upgraded RUGID PLC's, and auto dialers at all lift stations, and then upgraded to Radio Mobile's HiPR and ViPR VHF/UHF radios and Allen Bradley PLCs in 2008.
12. Implemented a new on call schedule with backup personnel assigned
13. By June of 2006, it was estimated that point repairs to the collections system had reduced I & I by approximately 50%.
14. By November of 2007 hub lift stations 5, 6, 7, and 8 were modified by installing second wet wells, doubling their storage capacities.
15. By January 2008, lift stations 9 and 10 had new electrical panels installed, were upgraded to the new radio system, and had second wet wells installed, doubling their storage capacity.
16. All satellite stations have been completed. There still is minor plumbing at LS-2, but radio/electric has been upgraded.
17. Lined Reservoir # 1. Reservoir 1 is used for emergency storage during high flow events or wastewater plant upsets.
18. Constructed a new bio-solids containment structure at the wastewater treatment plant to better handle sludge.
19. Purchased and installed 2 turbo blowers and sensors to automate the dissolved oxygen requirements of the wastewater treatment plant.
20. A PLC and new telemetry radio were purchased and installed for LS-11.
21. Installed inspection tee's on LS-13 force main.
22. Recoated the wet well of LS-16, installed new motor control center (MCC), installed inspection tee's on force main, and installed new valves and piping.

Uncompleted tasks:

1. Inspect PVC force mains at critical and major lift stations.
2. Pumping and pipe upgrades to LS-2.

Partially completed tasks:

1. Videotaping of critical pipelines (Board approved multi-year budget).

The District's collections staff have made great strides in upgrading lift station pumps, wet wells, electrical, and communications. Additionally, they have implemented and effectively carried out maintenance and flushing schedules, and odor, root, corrosion, and grease control programs.

#### **8.4.2. Computer Modeling**

As previously stated, the District's Engineer maintains a Computed Automated Drafting (CAD) map of the sanitary sewer collection system, which includes manholes, sewer pipelines, and pipe sizes. Currently, the District does not maintain a computer modeling system to monitor the sewer collection systems of

Groveland, Big Oak Flat, and Pine Mountain Lake. As part of the Wastewater Master Plan update and system capacity evaluation planned for 2019, a hydraulic model will be used to determine if the system is experiencing capacity deficiencies. If identified, the Wastewater Master Plan update will determine if improvements are needed to the system.

The District has developed a computer model of its sewer system based on as-built records, to evaluate the existing trunk sewer system. The computer model was used to identify overloaded reaches caused by peak flows associated with present service area population as well as build-out conditions within the District's boundaries. Based on pipe diameter and slope, each trunk sewer reach was assigned a capacity in million-gallons per day (MGD). Projected wastewater contribution criteria for each land use category was developed from historical flow data associated with various land uses within the District's existing service area. Where historical information was not adequate, criteria for a particular land use was assigned based on reference material recommendations. Based on land use(s) in the subarea, each subarea in the District was assigned an average dry weather flow, a peak dry weather flow, a peak wet weather flow with infiltration only, and a peak wet weather flow with infiltration and inflow. A trunk sewer reach was defined as having "adequate capacity" when the assigned capacity was greater than the peak wet weather flow (including infiltration and inflow) from the upstream subarea(s) feeding that trunk sewer reach.

The District is using H2OMAP Sewer GIS, created by MWH Soft. The software has been licensed to GCSD and is used to monitor the sewer systems of Groveland, Big Oak Flat, and Pine Mountain Lake. H2OMAP Sewer GIS generates a digital map which is capable of tracking all activities necessary to the proper function of a District's sewer system as waste flows into the WWTP. The information for H2O Sewer GIS can be imported from another database or entered directly. The information is stored in a database generated within the program. This allows any person, with proper clearance, to make alterations based on upgrades or changes of and/or to any portion of the existing sewer system. The map electronically compiles all information and returns results to the end user.

The program is comprehensive and is designed to enable the coordination of given pipe dimensions and manholes, wet wells and pumps, outlets and WWTP, and all other physical aspects and other related information of a sewer system, such as diurnal curves and expected loads for manholes, pump specifications, wet well elevations and other significant information, returning necessary values to determine viability of the given configuration. This allows the District to prioritize repair, replacement and rehabilitation projects. It also allows the District to project the system's ability to handle anticipated changes in the population. By adjusting input upward or downward based on expected growth or attrition, the District can monitor the flow for capacity analysis and thus prepare for projected changes in the sewer system. This allows the District to adopt a proactive approach to maintenance.

The manholes have unique identifiers which reference their location in regard to their specific location. For example, a manhole on the system is given the identifier 05GRR01. The first 2 numbers tell the lift station servicing the manholes. The next two letters are the first letters of the street on which the manhole is located, in this case Grizzly Circle (GR), the next letter (R) directs the location, looking up the trunk. If the manhole were actually in the street, that location would be designated by an 'X'. The final two numbers define location on the trunk in ascending order. Should depth, rim elevation and size be required,



the information is stored in the GIS database associated with the map and can be accessed by clicking on the desired node on the computer screen.

Pipes also have their own identifier. Pipe identifiers were auto assigned. The GIS database describes location by identifying which manholes frame the given line. Size, direction of flow, length and invert elevation is given for each pipe. Pump stations are given with location and performance standards listed in the Database. Extensive information is required for accurate readings. To clearly describe the program's functionality some assumptions must be made. The user must be familiar with the various aspects of a sewer system like diurnal curves and headloss coefficients.

For manholes, the elevation, depth, size, headloss coefficient, load, type of flow and diurnal pattern are required. The pipes need inverts in and out, length, diameter, friction coefficient, and whether or not there are parallel pipes. The wet wells require elevation headloss coefficient, pump start and stop level and well diameter. Pumps can be configured with an overall capacity number or by giving shutoff, design and High Head and flow. This allows H2OMAP Sewer to determine when to shut off the pump and what the static and hydraulic head is at any given moment. The program can then be designed to run simulation at any given time, for any period of time, and for any duration. Different diurnal patterns can be applied to individual parts of the system with said parts receiving different loads in an effort to simulate a realistic application of waste load and to determine model efficiency. The program returns a tremendous amount of information. For manholes, the program returns Base flow, storm flow, total storm flow, grade, and status at any chosen point in time along the timeline tested, hydraulic jump and unfilled depth. For pipes, the model returns flow, flow type, velocity, water depth, Froude number, overflow, backwater, adjusted depth, adjusted velocity,  $d/D$ ,  $q/Q$ , type of pipe, location and slope. The program performs this type of analysis for all aspects of the sewer system and the information can be compared and modified as needed, exported and then further modifications can be made to the map to determine the current structure's ability to handle increased loads or extensions for continued comparisons or standalone evaluation.

The District's WWTP currently receives a daily average volume of approximately 138,000 gallons. There is an anticipated increase in volume of 1% per year over the next 20 years. At this rate, inflow volume can be expected to increase to approximately 166,719 gallons per day.

There are currently 1,100 manholes in the collections system. Not all of the lots lining the existing system are inhabited. It is expected that the lots will continue to be purchased and utilized into the future. The system is expected to fill out before having a great need to extend. With appropriate adjustments being made for commercial and industrial variations, the average load per manhole is 0.095 gpm, with the highest  $d/D$  record of 0.480. The acceptable ratio of  $d/D$  is 0.5 and after the expected 1% annual growth in population, over a period of twenty years  $d/D$  is expected to increase to only 0.481. Given the current configuration it is expected that the existing sewer mains, with general upkeep and maintenance, will be sufficient to provide continuous, uninterrupted service for the foreseeable future. Should there arise a need to extend the system into the future, the simulations with expected loads would return calculations needed for GCSD to make any necessary adjustments.



## **8.5. Recommended Capacity Projects**

This section discusses criteria used to size replacement pipes and summarizes the recommended capacity improvement projects. Refer to Chapter 5 of the 2001 Wastewater Master Plan for a complete discussion of the capacity evaluation recommendations.

### **8.5.1. Design Criteria**

The minimum size for relief sewer is 8-inch diameter. New sewers, 8 inches in diameter, were sized to flow 2/3 full under peak wet weather flow conditions. Larger pipes were sized to flow full under peak wet weather flow conditions. No change from the existing pipe slope was assumed.

### **8.5.2. Recommended Capacity Improvements**

Full development of the District is an ongoing process that will take decades to complete, with many factors influencing the sequence of development in various parts of the District. It is the policy of the District to provide necessary infrastructure in advance of or concurrent with associated development. Thus, the actual sequence and timing of construction of improvements projects will generally match the sequence and timing of development in various areas of the District.

At this time there are not any capacity improvement projects scheduled. There have not been any reported SSO's caused by the system being over capacity. The District's upcoming Wastewater Master Plan will evaluate the capacity of the sewer collection system and WWTP, and determine if any improvements will be needed to expand the system's capacity.

## **SECTION 9 - MONITORING, MEASUREMENT AND PROGRAM MODIFICATIONS**

### **9.1. Regulatory Requirements**

In accordance with SWRCB requirements, each wastewater collection system agency shall monitor the effectiveness of the SSMP and update and modify SSMP Chapters to keep them current, accurate, and available for audit, as appropriate. The following describes the District's procedure for monitoring the effectiveness of the SSMP and the procedures used to minimize Sanitary Sewer Overflows.

The WDR requirements for the Monitoring, Measurement, and Program Modifications element of the SSMP are summarized below:

- Maintain relevant information that can be used to establish and prioritize appropriate SSMP activities;
- Monitor the implementation and, where appropriate, measure the effectiveness of each element of the SSMP;
- Assess the success of the preventative maintenance program;
- Update program elements, as appropriate, based on monitoring or performance evaluations;
- Identify and illustrate SSO trends, including: frequency, location, and volume.

### **9.2. Monitoring and Measures**

The District currently monitors for the following items through regular monthly reports:

- Number, cause, and location of blockages
- Number and reason for customer complaints
- Date, length of pipe cleaned, and debris found.

As required by the General WDRs, each agency must report all SSO's to the online SSO System, including no-spill events. Refer to Section 6 for reporting requirements and time constraints.

The District plans to continue with this monitoring plan. In addition, the following items will also be monitored and/or measured to determine the overall effectiveness of the SSMP, and update program elements as appropriate.

- Total number of SSO locations per 100 miles of sewer
- Volume of spilled wastewater recovered (million gallon per year) compared to total volume of wastewater spilled (MG/yr)
- Volume of spilled wastewater discharged to surface waters (MG/yr) compared to total volume of wastewater spilled (MG/yr)

### **9.3. Performance Monitoring and Program Changes**

As required by the General WDR, each element of this SSMP will be audited periodically to maintain current information and to review and/or modify the maintenance and monitoring practices currently in place. The General Manager and O&M Manager will review the above listed information at least annually

to assess the effectiveness of the various elements of the SSMP. Significant information such as a contact numbers, names, chain of communication, etc. will be updated as required. The annual assessments/audits will be utilized to determine whether additional changes need to be made to the SSMP.

DRAFT

## **SECTION 10 - SSMP PROGRAM AUDITS**

### **10.1. Regulatory Requirements**

SWRCB requirements state that each wastewater collection system agency shall conduct periodic audits of their SSMP, with a minimum frequency of bi-annually. The periodic audits shall be at a level of detail commensurate with the size of the Enrollee and the number of SSOs experienced and shall identify any deficiencies in the current SSMP and describe the steps required to correct those deficiencies (if applicable). The program audit shall cover the period from the previous program audit to the current date. The Enrollee shall prepare a written report to be kept on file. The report must be made available to employees of the Regional Water Quality Control Board in the event of an investigation.

### **10.2. Audits**

The District General Manger/O&M Manger will appoint a team to conduct the audit on an annual or bi-annual basis. The audit team may include members from the Collections and Distribution Department, other staff members of District, outside agencies, and/or contractors. Calendar year 2018 was the first year audited. Each of the major sections of the SSMP were addressed during the audit.

The 2018 SSMP Audit is included as Appendix F and shows the categories evaluated. Where results of the evaluation indicate deficiencies, corrective measures were developed. The results of future audits will be included in an Annual Audit Report. A hardcopy of the Annual Audit Report will be printed and filed in the District's Administration office.

The District will update its SSMP at least every five years. The District will determine the need to update its SSMP more frequently based on the results of the annual audit and the performance of its sanitary sewer system using information from the Monitoring and Measuring Program. In the event that the District decides that an update is warranted, the process to complete the update will be identified at that time. The District will complete the update within one year following identification of the need for the update.

The District Staff will seek the approval from the District's Board of Directors for any changes to the SSMP. The General Manager and O&M Manager shall have the authority to make changes to the Appendices provided that the intent of the SSMP and SWRCB Order is being followed and does not require a revision and/or any amendments to documents that are solely within the authority of the Board of Directors.

## **SECTION 11 - COMMUNICATION PLAN**

### **11.1. Regulatory Requirements**

The SWRCB requires that the District communicate, on a regular basis, with the public on the development, implementation, and performance of the SSMP. The communication system shall provide the public the opportunity to provide input to the District as the program is developed and implemented.

This Section of the SSMP outlines the process involved in communicating with interested members of the public regarding development, implementation, and performance of this plan.

### **11.2. Plans for Communication**

The District has several methods for communicating information to and receiving information from the public. The following methods have been identified as methods that would be effective as part of the District's Communication Plan.

- District Board Meetings – District Board Meetings are held each month. District Board meetings are open to the public. Adoption of the SSMP and any revisions thereto shall be considered at Board Meetings and members of the public will be given an opportunity to provide input.
- District Website – The District currently utilizes a webpage on the District's existing website to facilitate the transfer of information to the public regarding the SSMP. This webpage will include the entire SSMP as it is finalized and updated audit performance information, and other associated information. The webpage will also serve as a venue for soliciting input from the public on the SSMP.
- Monthly Water and Sewer Billing – An annual notice regarding the sanitary sewer system performance may be included in monthly water and sewer billings. The notice would contain general SSMP information. The notice could also refer the customers to the District website for additional details.
- Notices in Public Spaces – Notices of adoption and revisions to the SSMP will be posted and handouts made available in public spaces such as the Groveland Community Hall and library. Information would reference the District's website for additional information, when an SSMP webpage is implemented.

The District does not have any tributary or satellite systems; therefore, communication with satellite systems would not be required as part of the communication plan.

DRAFT

**APPENDIX A**  
**FY 18/19 SANITARY SEWER SYSTEM BUDGET**

**Groveland Community Services District  
Proposed 2018/2019 Annual Budget  
SEWER-EXPENSES**

BUDGET ITEM	BUDGET		CHANGE		REASON FOR CHANGE
	17/18 Approved	18/19 Requested	\$	%	
<b>Salaries</b>					
Regular Time	241,200	258,776	17,576	7%	Increased maintenance effort
Overtime	16,600	16,480	(120)	-1%	
On Call	21,900	21,900	-	0%	
Leave	610	608			
Vacation Leave	12,350	13,562	1,212	10%	Tied to salaries above
Sick Leave	11,000	12,405	1,405	13%	Tied to salaries above
Holiday Pay	10,050	11,378	1,328	13%	Tied to salaries above
<b>TOTAL SALARIES</b>	<b>313,710</b>	<b>335,109</b>	<b>21,401</b>	<b>7%</b>	
<b>Benefits</b>					
CalPERS Retirement	21,500	21,414	(86)	0%	
FICA	17,585	18,939	1,354	8%	
Medicare	4,125	4,429	304	7%	
SUI	2,175	2,239	64	3%	
Workers Comp	14,350	13,086	(1,264)	-9%	
Health/Vision/Dental Insurance	86,000	84,127	(1,873)	-2%	Estimated Increase
<b>TOTAL BENEFITS</b>	<b>145,735</b>	<b>144,235</b>	<b>(1,500)</b>	<b>-1%</b>	
<b>Retiree Medical</b>					
Retiree Medical	52,400	26,240	(26,160)	-50%	
<b>TOTAL RETIREE MEDICAL</b>	<b>52,400</b>	<b>26,240</b>	<b>(26,160)</b>	<b>-50%</b>	
<b>Equipment, Automotive, Maintenance &amp; Repairs</b>					
Fuel	23,687	12,200	(11,487)	-48%	Diesel, Gas & Oil combined
Uniform/Clothing	8,259	5,760	(2,499)	-30%	
Tools/Equipment	4,652	5,600	948	20%	
Lab Supplies & Equipment	3,500	4,000	500	14%	
Repair & Maintenance-General	62,556	34,000	(28,556)	-46%	Moved funds to new repair & maint. line items
Repair & Maintenance-Vehicles	-	17,000	17,000		
Repair & Maint. -Trans/Collections	5,305	10,000	4,695	89%	Redistributed funds from repair & maint. general
Repair & Maintenance- Treatment	4,500	19,500	15,000	333%	Redistributed funds from repair & maint. general
Repair & Maintenance- Equipment	16,060	20,000	3,940	25%	
Safety Equipment/Traffic Control	6,154	6,200	46	1%	Operating, Safety, Traffic Control combined
<b>TOTAL EQUIP, AUTO, MAINT &amp; REPAIRS</b>	<b>134,673</b>	<b>134,260</b>	<b>(413)</b>	<b>0%</b>	



**Groveland Community Services District  
Proposed 2018/2019 Annual Budget  
SEWER-EXPENSES**

BUDGET ITEM	BUDGET		CHANGE		REASON FOR CHANGE
	17/18 Approved	18/19 Requested	\$	%	
<b>Outside Services</b>					
Janitorial Service & Supplies	4,000	3,100	(900)	-23%	
Engineering	3,000	8,000	5,000	167%	Additional system evaluation
Aqua Labs-Lab Tests	23,870	22,000	(1,870)	-8%	
Programing/Support	8,013	5,000	(3,013)	-38%	More accurate based on actuals
Annual Collections System Camera Insp.	55,000	55,000	-	0%	
Biosolids Disposal	12,200	7,000	(5,200)	-43%	Change in disposal methods reduces annual cost
Groundwater Monitoring	5,305	3,000	(2,305)	-43%	More accurate based on actuals
Conservation Crew	3,000	2,000	(1,000)	-33%	Split with water
Master Plan Development		60,000	60,000		
<b>TOTAL OUTSIDE SERVICES</b>	<b>114,388</b>	<b>165,100</b>	<b>50,712</b>	<b>44%</b>	
<b>Other</b>					
Utilities	120,652	115,000	(5,652)	-5%	Propane added
Training, Conferences & Travel	4,242	7,000	2,758	65%	More training/ moved funds from emp. cert.
Employee Certification	5,212	3,700	(1,512)	-29%	
Employee Medical Testing	2,818	2,500	(318)	-11%	
Chemicals/Odor Control	36,071	35,000	(1,071)	-3%	
Dam Monitoring Survey	1,857	2,000	143	8%	
Permits & Licenses	40,692	40,000	(692)	-2%	Based on actuals
<b>TOTAL OTHER</b>	<b>211,544</b>	<b>205,200</b>	<b>(6,344)</b>	<b>-3%</b>	
<b>Lease Expense</b>					
Screwpress	38,000	36,395	(1,605)	-4%	Will be paid off this fiscal year
<b>TOTAL LEASE EXPENSE</b>	<b>38,000</b>	<b>36,395</b>	<b>(1,605)</b>	<b>-4%</b>	
<b>TOTAL SEWER EXPENSES</b>	<b>1,010,450</b>	<b>1,046,539</b>	<b>36,091</b>	<b>4%</b>	
Admin Allocation Transfer Out	556,884	\$530,919	(25,965)	-5%	
<b>TOTAL SEWER WITH ADMIN</b>	<b>1,567,334</b>	<b>1,577,458</b>	<b>10,126</b>	<b>1%</b>	
<b>Capital Outlay</b>					
See Capital Outlay Sheet	417,000	300,000	(117,000)		

Groveland Community Services District  
Proposed 2018/2019 Annual Budget  
SEWER-EXPENSES

BUDGET ITEM	BUDGET		CHANGE		REASON FOR CHANGE
	17/18 Approved	18/19 Requested	\$	%	
<b>TOTAL CAPITAL OUTLAY</b>	417,000	300,000	(117,000)	-28%	
<b>Reserve Set-Aside</b>					
Annual Reserve Set-Aside	-	100,000	100,000		
<b>TOTAL RESERVE SET-ASIDE</b>	-	100,000	100,000		
<b>GRAND TOTAL WITH CAPITAL</b>	1,984,334	1,977,458	(6,874)	0%	

DRAFT

**Groveland Community Services District  
Proposed 2018/2019 Annual Budget  
SEWER-REVENUE**

BUDGET ITEM	BUDGET		CHANGE		REASON FOR CHANGE
	17/18 Approved	18/19 Requested	\$	%	
<b>Service Charges</b>					
Fixed Charges	1,061,634	1,208,475	146,841	14%	Using projected rate increase per rate study
Variable Charges	343,057	405,000	61,943	18%	Using projected rate increase per rate study
<b>TOTAL SERVICE CHARGES</b>	<b>1,404,691</b>	<b>1,613,475</b>	<b>270,727</b>	<b>15%</b>	
<b>Fees</b>					
Reclaimed Water Sales	2,500	-	(2,500)	-100%	Haven't been selling reclaimed water
Late Pay Penalty	16,391	12,000	(4,391)	-27%	Based on actuals
Cell Tower Rental	6,896	-	(6,896)		Reclassified to Water
<b>TOTAL FEES</b>	<b>25,787</b>	<b>12,000</b>	<b>(13,787)</b>	<b>-53%</b>	
<b>Other Non-Operating Revenue</b>					
Expense Refunds	2,758	-	(2,758)		Not budgeting for going forward
Septage	27	-	(27)		
Interest Earned (S/C UB)	1,194	800	(394)		
Interest Earned Rabobank/BNY	5,623	4,500	(1,123)	-20%	Based on actuals
<b>TOTAL NON-OPERATING REVENUE</b>	<b>9,602</b>	<b>5,300</b>	<b>(4,302)</b>	<b>-45%</b>	
<b>TOTAL SEWER REVENUE</b>	<b>1,440,080</b>	<b>1,630,775</b>	<b>252,638</b>	<b>13%</b>	

DRAFT

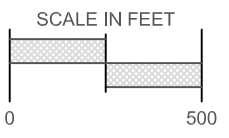
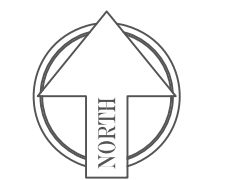
**APPENDIX B**  
**SEWER COLLECTION SYSTEM MAPS**

GROVELAND COMMUNITY SERVICES DISTRICT  
SEWER SYSTEM MANAGEMENT PLAN



LEGEND

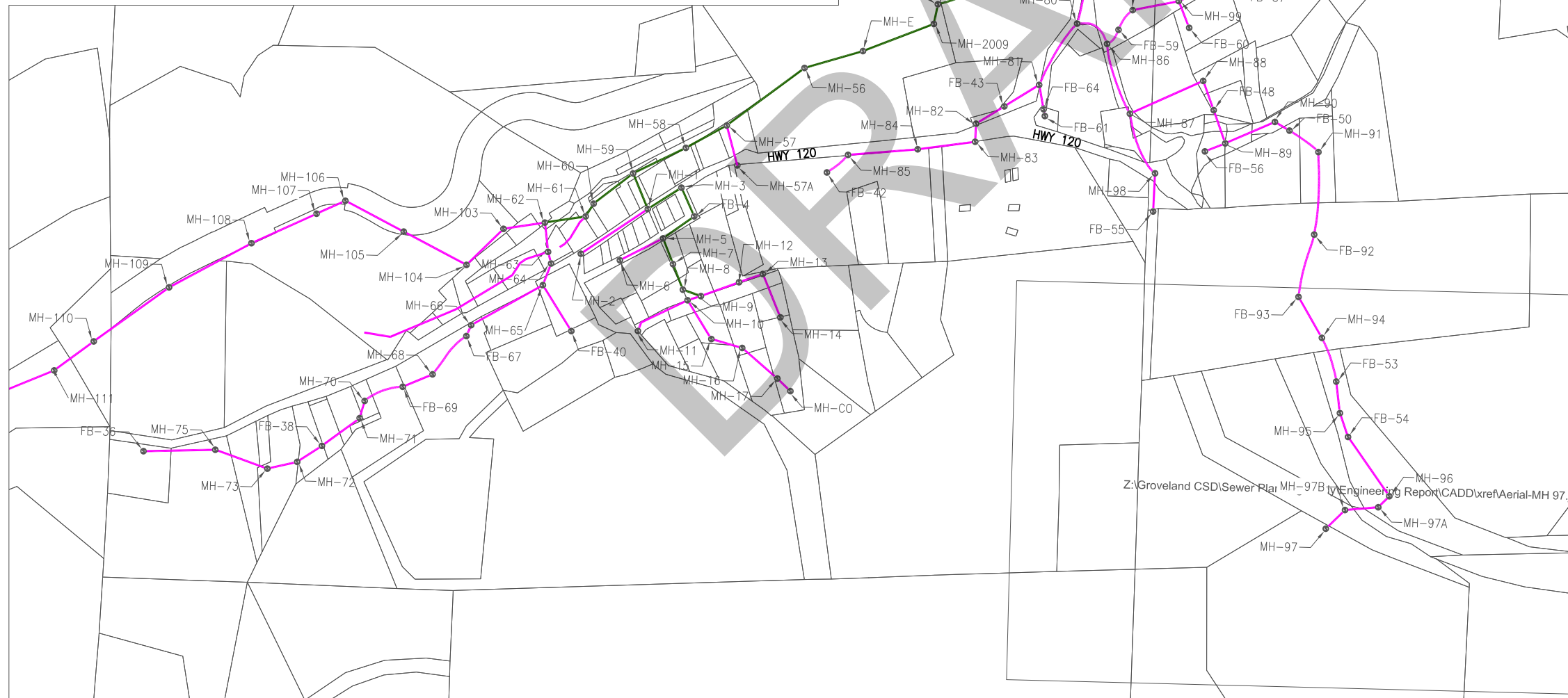
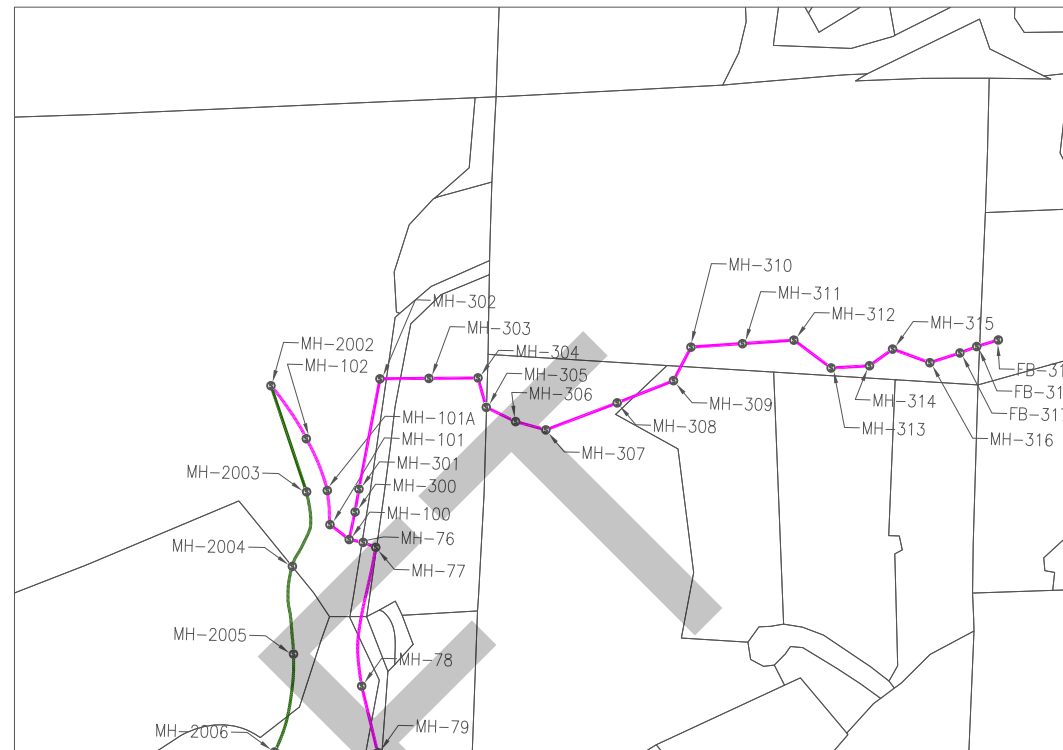
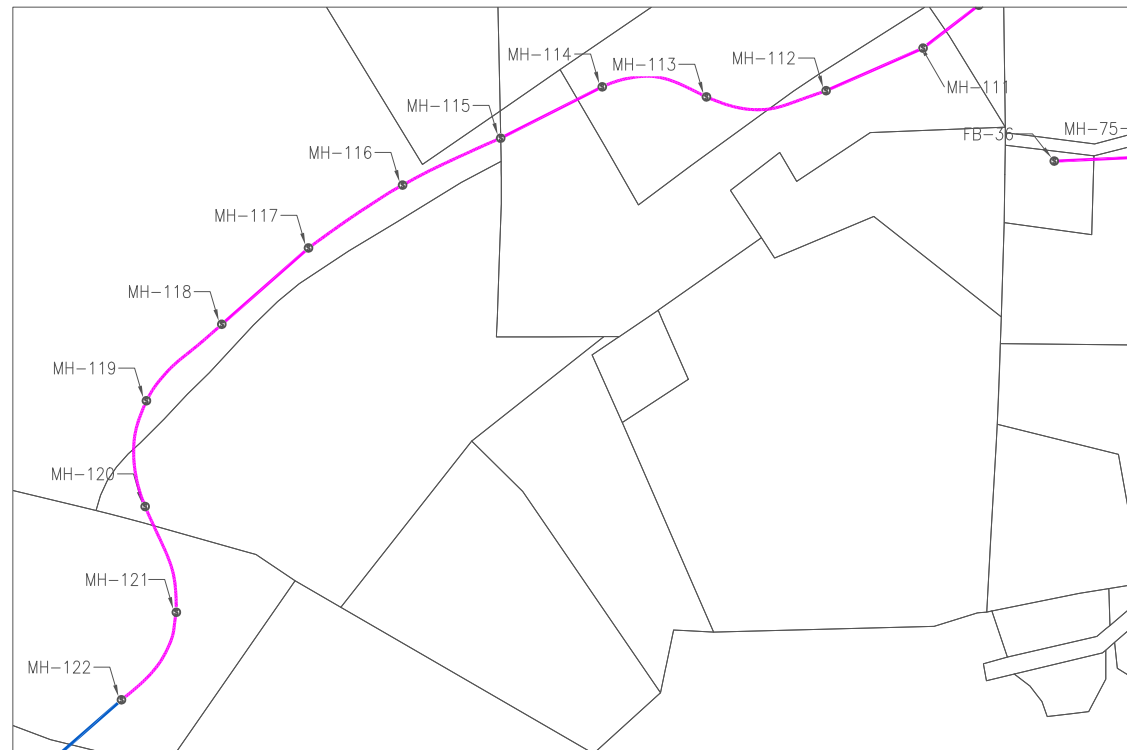
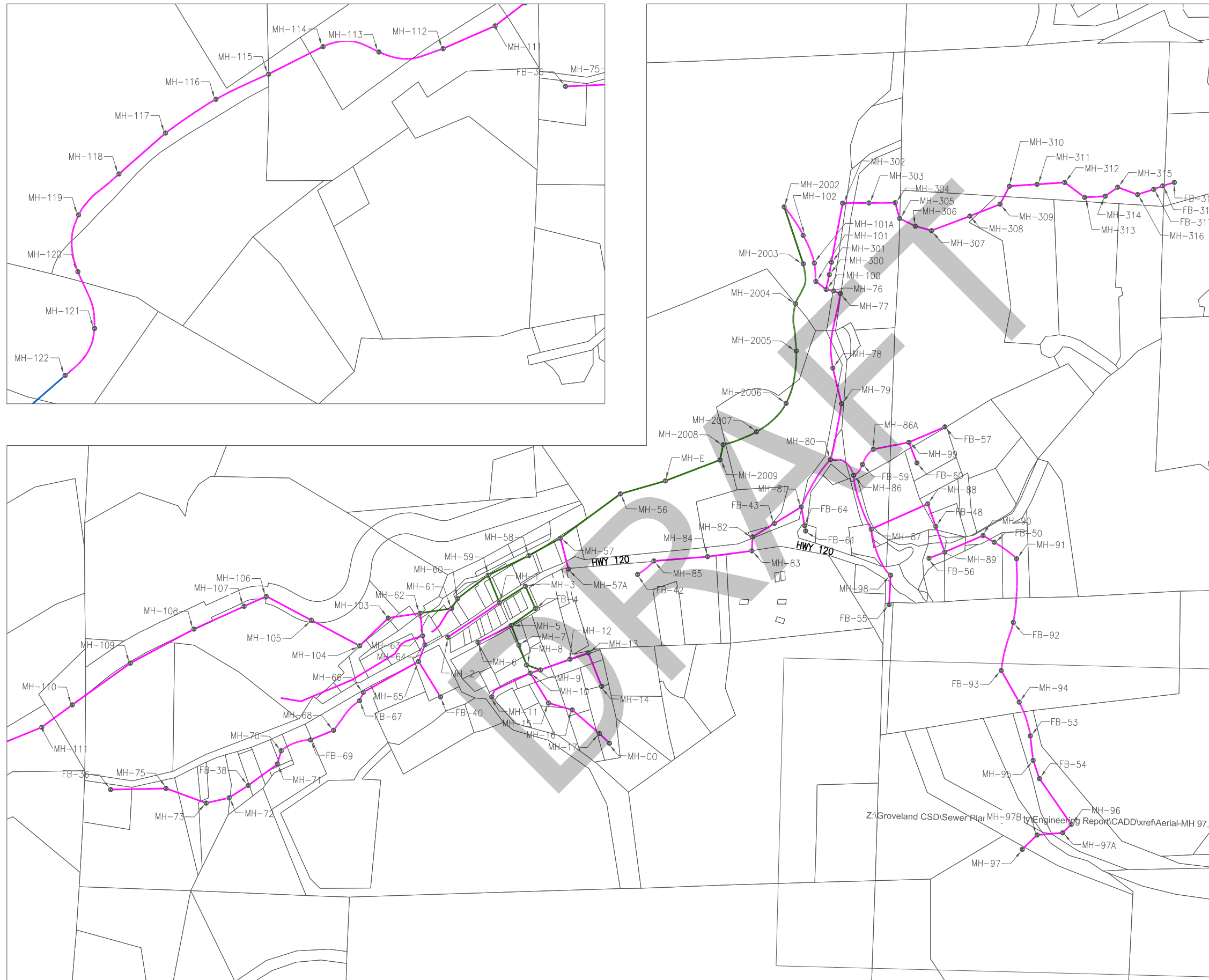
- 6" SEWER —
- 8" SEWER —
- 4" FORCE MAIN —



BIG OAK FLAT SEWER COLLECTION SYSTEM INFRASTRUCTURE

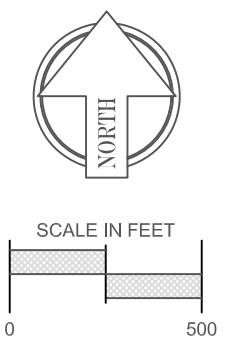
# GROVELAND COMMUNITY SERVICES DISTRICT

## SEWER SYSTEM MANAGEMENT PLAN



### LEGEND

- 6" SEWER —
- 8" SEWER —
- 4" FORCE MAIN —



## GROVELAND SEWER COLLECTION SYSTEM INFRASTRUCTURE

DRAFT

**APPENDIX C**  
**TRAINING**



Training Topic	T8 Section	Frequency of Training	Typical Job Classification	Cal/OSHA Publication
Accident Investigation	<a href="#">3203(a)(7)(F)</a>	Initial	Supervisors/Accident Investigators	Model Program(s) IIPP:  <a href="#">For High Hazard Employers</a>  <a href="#">For Non-High Hazard Employers</a>  For Employers with Intermittent Employees ( <a href="#">English &amp; Spanish</a> )  For Employers With Intermittent Workers in Agriculture ( <a href="#">English &amp; Spanish</a> )  <a href="#">Guide to Developing IIPP</a>
Accident Prevention Signs & Tags	<a href="#">3341(d)(5)</a>	Initial	Impacted Employees	<a href="#">Lockout/Blockout</a>
Acetylene Fuel & Gas Safety	<a href="#">1740(k)(1)</a>	Initial	Users	
Acrylonitrile (AN)	<a href="#">5213(o)</a> <a href="#">5213 (appendix B)</a>	Initial Annual	Exposed Employees <b>Qualified Person</b>	
Actinolite (Non-Asbestos)	<a href="#">5208.1</a>	Initial Annual	Exposed Employees	
Anthophyllite (Non-Asbestos)	<a href="#">5208.1(n)</a>	Initial Annual	Exposed Employees	
Agricultural & Equipment Tractors	<a href="#">3441(a)</a> <a href="#">3664(b)</a>	Initial Annual	Involved Employees Operators	<a href="#">Agricultural - Industrial Tractors</a>  <a href="#">Farm Labor Contractors Guide</a>
Asbestos Consultant Site Surveillance Technican	<a href="#">341.15</a>	Initial	Certified Persons	
Asbestos/Asbestos Awareness	<a href="#">1529(k)(9)(B)</a>  <a href="#">5208(i)(7)(B)</a> <a href="#">1529</a>	Initial Annual	Employees likely exposed =>PEL & those who perform Class I-IV operations  Assigned	
Building Inspector Project Designer	<a href="#">341.16</a>	Initial	Exposed Employees	
Cement Pipe	<a href="#">341.17</a>	Initial	<b>Competent Person</b>	
Class I-IV Operations	<a href="#">341.17</a>  <a href="#">1529(o)(4)</a>  <a href="#">341.9</a>	Initial Initial Annual	<b>Qualified Person</b>	
Battery Handling/ Changing/Charging	<a href="#">5185(a)</a>	Initial	Assigned Employees	
Benzene	<a href="#">5218(i) &amp; (j)(3)</a>	Initial Annual	Exposed Employees	
Bloodborne Pathogens	<a href="#">5193(g)(2)</a>	Initial Annual	Potentially Exposed Employees	<a href="#">A Best Practices Approach for Reducing Bloodborne Pathogens Exposure</a>  <a href="#">Exposure Control Plan for Bloodborne Pathogens</a>
Boatswains Chair	<a href="#">1662(a)</a>	Initial	Users	
1,3-Butadiene	<a href="#">5201(l)(2)</a>	Initial Annual	Exposed Employees	

Training Topic	T8 Section	Frequency of Training	Typical Job Classification	Cal/OSHA Publication
Cadmium	<a href="#">5207(m)(4)</a>  <a href="#">1532</a>	Initial  Annual	Exposed Employees <b>Competent Person</b>	
Carcinogens As Listed	<a href="#">5209(e)(5)</a>	Initial	Exposed Employees	
Chemical Hygiene for Laboratories	<a href="#">5191(f)(2)</a>	Initial New Hazards Refresher	Laboratory Employees	
Coke Oven Emissions	<a href="#">5211(t)</a>	Initial  Annual	Exposed Employees	
Compaction Equipment	<a href="#">4355(a)(2)</a>	Before Use	Users	
Confined Spaces	<a href="#">5157(g)</a> <a href="#">5158(c)(2)</a>	Initial Program Update Changes	Affected Employees	<a href="#">Confined Space: Is It Safe To Enter?</a>
Marine Terminal Ops.	<a href="#">3463(b)(5)(B)</a>		Exposed Employees	
Control of Hazardous Energy	<a href="#">3314(j)</a>	Initial	Authorized Employees	<a href="#">Lockout/Blockout</a>
Cotton Dust	<a href="#">5190(i)</a>	Initial Annual	Exposed Employees	
Cotton Gins/ Processing Mach.	<a href="#">4640</a>		<b>Qualified Person</b>	
Cranes & Other Hoisting Equipment Incl. Mobile/ Tower/ Derrick	<a href="#">5006.1(a)</a>  <a href="#">5006</a>  4966, 4994, 4999, 5000, 5004, 5031, 5043, 5044	Initial  Mobile & Tower Cert. @ 5 yrs	Mobile & Tower Crane Operators <b>Qualified Person</b>  Authorized Employees	
Cranes/Hoisting Equipment - Marine Terminals	<a href="#">3472(d)(3)</a>	Initial	Operators	
Demolition	<a href="#">1734</a> <a href="#">1735(u)</a> <a href="#">1736</a>		<b>Qualified Person</b>	
1,2 Dibromo-3-Chloropropane (DBCP)	<a href="#">5212(i)(3) &amp; (n)</a> <a href="#">5212 (Appendix B)</a>	Initial Annual	Exposed Employees <b>Qualified Person</b>	
Diving Operations	<a href="#">6052</a>	Initial	Assigned Employees	
Elevating Work Platforms & Aerial Devices	<a href="#">3648(l)(7)</a> <a href="#">3648(c)</a> <a href="#">3646(c)</a> <a href="#">3638(d)</a>	Before Use	Users Authorized Personnel	
Emergency Action Plan	<a href="#">3220(e)</a>	Initial Plan Update	Impacted Employees	
Emergency Procedures (Construction)	<a href="#">1512(d)</a>	Initial	Assigned Employees	
Equipment & Machinery (Construction)	<a href="#">1510(b)</a>	Initial	<b>Qualified Person</b>	
Erection & Construction – Bolting/ Riveting/ Plumbing Structural Wood/ Steel Frame Steel Erection	<a href="#">1716</a>  <a href="#">1716.1</a> <a href="#">1716.1(f)(1)</a> <a href="#">1716.2(j)</a> <a href="#">1710</a>	Initial	Assigned Employees  <b>Competent Person</b> <b>Qualified Person</b>	Pocket Guide for the Construction Industry (English / Spanish) + Update Sheet)
Ergonomics	<a href="#">5110(b)(3)</a>	Initial – When Standard is Triggered	Employees in affected job classifications (identical jobs) when standard is triggered	<a href="#">Back Injury Prevention Guide in the Health Care Industry for Health Care Providers</a>  <a href="#">Easy Ergonomics</a>  <a href="#">Ergonomics in Action</a>  <a href="#">Fitting The Task To The Person: Ergonomics for Very Small Businesses</a>

Training Topic	T8 Section	Frequency of Training	Typical Job Classification	Cal/OSHA Publication
				<a href="#">Easy Ergonomics for Desktop Computer Users</a>
Ethylene Dibromide (EDB)	<a href="#">5219(i)</a>	Initial Annual	Exposed Employees	
Ethylene Oxide	<a href="#">5220(i)(3)</a> <a href="#">5220 Appendix A</a>	Initial Annual	Exposed Employees	
Excavation/ Trenching/ Shoring	<a href="#">1541</a>		<b>Competent Person</b>	<a href="#">Trenching Safety (Tailgate Topic)</a>  <a href="#">Pocket Guide for the Construction Industry</a>
Explosives	<a href="#">5239</a> <a href="#">5322</a> <a href="#">5329</a> <a href="#">344.20, 344.21</a>	Initial	Assigned Employees Competent Person Licensed Blaster	
Explosives – Deteriorated	<a href="#">5240</a>		<b>Competent Person</b>	
Explosives Storage Magazines	<a href="#">5256</a>		Competent Person	
Fall Protection	<a href="#">1671.1</a>	Initial	Affected Employees <b>Competent Person</b> <b>Qualified Person</b>	
Fall Protection – Date Palm Ops.	<a href="#">3458</a>		<b>Competent Person</b>	
Fire Brigades (Private)	<a href="#">3411(c)</a>	Initial/ Quarterly/ Annual Refresher	Assigned Employees	
Fire Extinguisher & Fire Fighting Equipment	<a href="#">6151(g)(1)-(2)</a>	Initial  Annual	Assigned Employees	
Fire Prevention Plan	<a href="#">3221(d)(1)-(2)</a>	Initial New Hazards	Exposed Employees	
Fire Protection – Fixed Extinguishing Systems	<a href="#">6175(b)(10)</a> <a href="#">6181(b)(2)</a>	Initial Annual	Employees Assigned Maintenance/Operation Exposed Employees	
Fire Protection – Standpipe & Hose System Inspection	<a href="#">6165(f)(2)(F)</a>	Initial	Assigned Employees	
First Aid First Aid & CPR	<a href="#">3439(b)</a> <a href="#">6251(d)(2)</a> <a href="#">3400(b)</a>  <a href="#">5157, 5158, 5193 3421, 6052</a>	Initial Changes Every 2 years (or as specified by cert. organization)	Assigned Employees Supervisors	
First Aid (Construction)	<a href="#">1512(b) &amp; (d)</a>	Initial  Updated	Assigned Employees	
Flaggers (Traffic)	<a href="#">1599(f) &amp; (g)</a>	Initial	Assigned Employees	
Flammable Liquids/ Gasses/Vapors – Industrial Plants	<a href="#">5561</a>		<b>Qualified Person</b>	
Fumigation – General	<a href="#">5221(b)</a>	Initial	Exposed Employees	
Formaldehyde	<a href="#">5217(n)</a>	Initial  Annual	Exposed Employees	
Hazard Communication	<a href="#">5194(b)(1)</a>	Initial  New chemicals or processes	Exposed Employees	<a href="#">Guide to California Hazard Communication Regulation</a>
Hazardous Substance Containers Clean/ Repair/Alter	<a href="#">5166(a)</a>	Initial	Assigned Employees	
Hazardous Waste Operations & Emergency Resp.	<a href="#">5192 (e) &amp; (q)(6)</a>	Initial  Annual Refresher	Assigned Employees  <b>Qualified Person</b>	
Hearing (Noise) Protectors Conservation	<a href="#">5098(a)(4)</a>	Initial Retraining	Employees Provided Protectors	

Training Topic	T8 Section	Frequency of Training	Typical Job Classification	Cal/OSHA Publication
	<a href="#">5097(d)(5)(A)&amp;(B)</a> <a href="#">5099(a)</a>	Initial Annual	All Employees Exposed to =>85 dBA TWA	
Heat Stress	<a href="#">3395</a>	Initial	Exposed Employees	<a href="#">Protect Yourself from Heat Illness (English/Spanish)</a>
Helicopter Operations	<a href="#">1901(c)</a>	Daily Briefing	Involved Personnel	
Industrial/Lift Trucks (Forklifts) & Tractors	<a href="#">3657(i)</a> <a href="#">3664(b)</a> <a href="#">3668</a>	Initial, Annual Observed Unsafe Operation Post Accident Equipment Change Workplace Change (Operator eval. @ 3 years)	Operators	Operating Rules for Industrial Trucks Poster ( <a href="#">English / Spanish</a> )
Injury & Illness Prevention Program	<a href="#">3203(a)(7)</a> <a href="#">1509(e)</a>	Initial Updated	All Employees Supervisor Tailgates	Model Program(s) IIPP:  <a href="#">For High Hazard Employers</a>  <a href="#">For Non-High Hazard Employers</a>  For Employers with Intermittent Employees ( <a href="#">English &amp; Spanish</a> )  For Employers With Intermittent Workers in Agriculture ( <a href="#">English &amp; Spanish</a> )  <a href="#">Guide to Developing IIPP</a>
Inorganic Arsenic	<a href="#">5214(m)</a>	Initial Annual	Exposed Employees	
Job Hazard(s)	<a href="#">3203(a)(7)</a> <a href="#">1510(a)</a>	Before Job Assignment New Hazards	All Employees	<a href="#">Guide to Developing IIPP</a>
Laboratory Safety (See Chemical Hygiene)	<a href="#">5191(f)</a>	Initial New Hazards Refresher	Laboratory Employees	
Laser Equipment	<a href="#">1801(a)</a>	Initial	Operators Qualified Person	
Laundry/Dry Cleaning	<a href="#">4494(a)</a>	Initial Periodic	Assigned Employees	
Lead	<a href="#">5198(l)</a>	Initial Annual	Exposed Employees/ Supervisors Exposed Employees => Action Level	<a href="#">Lead in Construction (Fact Sheet)</a>
Lead in Construction	<a href="#">1531.1(1)(1)(C)-(D)</a> <a href="#">1532.1(l)</a>			
Lift Slab Construction	<a href="#">1722.1</a>		<b>Competent Person</b>	
Lockout/Blockout	<a href="#">3314</a> <a href="#">3314(j)</a>	Initial When Updated	Affected Employees <b>Qualified Person</b>	<a href="#">Lockout/Blockout</a>
Machinery & Equipment	<a href="#">1510(b)</a>	Before Use	<b>Qualified Person</b>	<a href="#">Lockout/Blockout</a>
Marine Terminals	<a href="#">3463(b)(5)(B)</a> <a href="#">3464(a)(1)</a> <a href="#">3462(b) &amp; (d)</a> 3463, 3472	Initial	Exposed Employees Supervisors <b>Qualified Person</b>	
Medical & Exposure Records - Access	<a href="#">3204(g)(1)</a>	Initial  Annual	Affected Employees	Access to Medical and Exposure Records (poster) ( <a href="#">English / Spanish</a> )
Metal Working (forging) Machines	<a href="#">4243(a)(6)</a>	Initial	Operators/Maintenance Personnel	<a href="#">Power Press Safety – Tool Box Topics</a>
4,4-Methylenebis (2-Chloroaniline) MBOCA	<a href="#">5215(j)</a>	Initial	Exposed Employees	

Training Topic	T8 Section	Frequency of Training	Typical Job Classification	Cal/OSHA Publication
		Annual		
Methylene Chloride	<a href="#">5202(l)</a> <a href="#">5202 (Appendix A)</a>	Initial & As Necessary	Exposed Employees <b>Qualified Person</b>	
Methylenedianiline	<a href="#">5200(k)(3)</a> <a href="#">1535</a>	Initial Annual	Exposed Employees	
Miter Saws	<a href="#">4307.1(c)</a>	Initial	Operators	
Noise Exposure	<a href="#">5099(a)</a>	Initial  Annual	Employees Exposed => 85dBA TWA	
Openings/Holes – Floors & Roofs	<a href="#">3212(b)</a>		Qualified Person	
Paper Converting/ Printing Machines – H&-Fed Engraving Presses	<a href="#">4445(3)</a>	Initial  Changes	Operators/ Maintenance  Personnel	
Personal Fall Arrest/Restraint Systems/	<a href="#">1670(b)(19)</a>		<b>Competent Person</b>	
Personal Protective Equipment	<a href="#">3380(c)</a>	Initial	PPE Users	
Pesticide Safety	<a href="#">5194(h)</a>		Handlers & Applicators	
Pile Driving	<a href="#">1600</a>		<b>Competent Person</b>	
Calif. Posting Requirements	<a href="#">340</a>	Initial	All Employees	
Powder-Actuated Tools	<a href="#">1685(a)(1)</a> <a href="#">1689(a)</a>	Initial	Users <b>Qualified Person</b>	
Power Presses	<a href="#">4203(a)</a> <a href="#">4203(b)</a> <a href="#">4208.1(m)(1)</a> <a href="#">4208</a>	Initial Annual	Inspectors/Maintenance Operators PSDI Operators Qualified Person	<a href="#">Power Press Safety (Tailgate Topic)</a>
Powered Platforms (Installed) for Building Maintenance	<a href="#">3298(a)</a>  <a href="#">3296</a>	Initial	Assigned Employees  <b>Qualified Person</b>	
Process Safety Management	<a href="#">5189(g)</a>	Initial Refresher & Supplemental Certification	Involved Employees	
Pulp, Paper & Paperboard Mills	<a href="#">4402</a>	Initial	Exposed Employees	
Railroad – Signs & Signals	<a href="#">3333(d)</a>	Initial	Assigned Employees	
Reinforcing Steel/ Similar Projections	<a href="#">1712(f)(A)</a>		<b>Qualified Person</b>	
Respiratory Protection	<a href="#">5144(c) &amp; (k)</a>  <a href="#">5144 Appendix A</a> <a href="#">5144 Appendix C</a>	Initial  Annual	Users	<a href="#">Respiratory Protection in the Workplace</a>  <a href="#">New Respirator Regulation (Fact Sheet)</a>
Roofing	<a href="#">1509(a)</a>  <a href="#">1730(b)(8)-(9)</a>	Initial	<b>Qualified Person</b>	<a href="#">Roofing Safety (Tailgate Topic)</a>
Rope Access Equipment	<a href="#">3270.1(c)</a> <a href="#">3270.1</a>	Initial Annual Refresher	Assigned Employees <b>Qualified Person</b>	
Rubber/ Composition Working Machines	<a href="#">4592</a>		<b>Competent Person</b>  Test/Maintenance	
Scaffolds	<a href="#">1637(k)(1)</a> <a href="#">1637</a> <a href="#">1658(g)</a>	Initial	Erectors & Dismantlers: <b>Qualified Person</b>	
Supervisory Safety Training	<a href="#">3203(a)(7)(F)</a>	Initial  Change	Supervisors	
Tanks – Open Surface	<a href="#">5154(j)(1)</a>	Initial	Assigned Employee	
Traffic Control – Flaggers	<a href="#">1599(f) &amp; (g)</a>	Initial	Flaggers	
Tree Work General	<a href="#">3420(b)</a> , <a href="#">3421(c)</a>	Initial	Assigned Employees	

Training Topic	T8 Section	Frequency of Training	Typical Job Classification	Cal/OSHA Publication
Date Palm Ops.	<a href="#">3423(a)</a> , <a href="#">3427</a> <a href="#">3428(a)</a> <a href="#">3458</a>		Qualified Person	
Tremolite (Non-Asbestos)	<a href="#">5208.1(n)</a>	Initial Annual	Exposed Employees	
Vinyl Chloride	<a href="#">5210(i)</a>	Initial Annual	Exposed Employees	
Welding & Cutting Safety – Hot Work	<a href="#">4799</a> <a href="#">4848(a)</a> <a href="#">1537(a)</a>	Initial	Welders Fire Watchers <b>Qualified Person</b>	
Wheels or Rims – Servicing	<a href="#">3326(c)</a>	Initial	Service Personnel	<a href="#">Servicing Single, Split Rim &amp; MultiPiece Rim Wheel (Tailgate Topic)</a>
Window Cleaning	<a href="#">3282(d) &amp; (f)</a> <a href="#">3286(a)(2)</a>	Initial	Assigned Employees	

DRAFT

DRAFT

**APPENDIX D**  
**CONSUMABLES INVENTORY AND VEHICLE LIST**



### GROVELAND C. S. D EQUIPMENT LIST

EQUIPMENT	HOURS / MILEAGE	SERIAL / VIN	LIC. PLATE #	MAKE / MODEL / YEAR
BOB CAT		A7MP12260		2008 T-320
CASE SUPER E	2772.1 HR	17041856		1980 Case580E
CASE 580 SUPER M	670.1 HR	N7C426301		2007 Case 580 Super M
BOB CAT Mini EXCAVATOR	210.2 HR	AACS11941		2009 331
KUBOTA TRACTOR	1727.4 HR			Kubota M1250
VACTRON		5HZBE121941	4FJ4969	2004 Vactron
SULLAIR AIR COMPRESSOR	222.1 HR	004-140293		SR4
STERLING FLUSH TRUCK	9923.5MI	2FZACFCS45AU19978	1222435	2005 Sterling
STERLING VAC TRUCK	5934.4MI	2FZHATDC45AU44891	1166980	2005 Sterling
DUMP TRUCK	486388.1MI	1HSZALWN3GHA17311	376471	1986 International
SV 15	65870 MI	1GBJK34G64E203348	1160673	2003 Chevy 3500
SV 13	93479.5MI	1GBKC34J7TJ112849	1302291	96 Cheyenne Versa Lift
SV6		1GCDT46168273925	1231864	2006 Chevy Colorado
SV 17	24725.6 MI	1FDWF37R28EA03328	1238694	2007 Ford F-350
SV 7	40628.1 MI	1FDWF31R48EE58061	1309491	2008 Ford F-350
SV 8	49707 MI	1FTYR11U77PA97800	1212648	2007 Ford Ranger
SV 3	106965 MI	1GCEK14TX4Z104975	1160668	2004 Chevy SILV 1500
SV 10	13662 MI	1FDWF37R78EE13087	1311160	2008 Ford F-350
SV18		1GBOKUEG1GZ341652	1494676	2016 Chevy 2500HD
SV19		1GCNKNEH4HZ215173	1496478	2017 Chevy 1500
SV20		1GCNKNEH3JZ110646	1524903	2018 Chevy 1500
Admin 21		3GNAXREV8JS511322	1524904	2018 Chevy Equinox
SV24		1GCNKNEHXJZ145720		2018 Chevy 1500
BOAT		KAY42168M82A	CF 575XC	1982 Harriskt
BAD BOY MOWER				Zt Kohler 747CC
BOAT TRAILER		4TM13DN25BB001079	1417214	2011 Trailer
CAR TRAILER / BIG TEX		16VEX182451H84205	4GR4708	2005 Big Tex
LAWNMOWER TRAILER		1T9SB101781042179	1269067	2008 TRUTR
TILT TRAILER / BACKHOE		13375	325323	1971 Miller SK
CONFINED SPACE TRAILER		4P2FB08186U07024	1231027	2006 Pace
TRAFFIC CONTROL TRAILER		4P2FB08166U07023	1231028	2006 Pace
LIGHT TOWER / GENERATOR	3117.5HR	333897ULM789		

CAT GENERATOR / TRAILER	8959.7 HR			
PIPE THREADER		62088		Rothenberger 2SE
MILLER WELDER		LE414150		Millermatic251
LINCOLN WELDER		M3071005511		SP-135T
HYPERTHERM		PMX600-037464		Powermax600
MILLER WELDER		JH152842		Thunder Bolt AC/DC
PRESSURE WASHER				HotsyGX 390
POWER SNAKE		VAK092020907		Ridgid K-7500
FD Utility 786U		1GCHK536X9F109439	1338464	2009 HD2500 Chevy Duramax
FD Engine 781		4P1CCO1A69A010087	1317028	2009 Pierce Fire Engine
FD Engine 787		1FV6TWEB4YHF29910	1058823	1999 Freightliner
FD Engine 788		1GDK701G3EV511988	462723	1984 GMC Wildcat

DRAFT

DRAFT

**APPENDIX E**  
**SANITARY SEWER OVERFLOW EMERGENCY RESPONSE PLAN**



## **SANITARY SEWER OVERFLOW EMERGENCY RESPONSE PLAN**

Updated: April 2, 2011

Updated: January 19, 2012

Updated: May 3, 2012

Updated: February 24, 2014

Updated: September 30, 2018

**Regardless of quantity, any sewage spill that enters or threatens to enter waters of the State that will have a negative impact on public health or will have a negative impact on environmentally sensitive areas must be reported as outlined in this Sanitary Sewer Overflow Emergency Response Plan (SSOERP). Failure to adequately report incidents may lead to significant regulatory action including fines and criminal prosecution.**

### **I. AUTHORITY**

#### **B. Legal Requirements**

The State Water Resources Control Board Order No. 2006-003-DWQ, Statewide General WDR for Wastewater Collection Agencies dated May 2, 2006 (the "SRWCB Order") requires:

Each enrollee shall develop and implement an overflow emergency response plan that identifies measures to protect public health and the environment. At a minimum, this plan must include the following:

- (a) Proper notification procedure so that the primary responders and regulatory agencies are informed of all SSO's in a timely manner;
- (b) A program to ensure an appropriate response to all overflows;
- (c) Procedures to ensure prompt notification to appropriate regulatory agencies and other potentially affected entities (e.g. health agencies, Regional Water Boards, water suppliers, etc.) of all SSO's that potentially affect public health or reach the waters of the State in accordance with the MRP. All SSO's shall be reported in accordance with this MRP, the California Water Code, other State Law, and other applicable Regional Water Board WDR's or NPDES permit requirements. The SSMP should identify the officials who will receive immediate notification;
- (d) Procedures to ensure that appropriate staff and contractor personnel are aware of and follow the Emergency Response Plan and are appropriately trained;
- (e) Procedures to address emergency operations, such as traffic and crowd control and other necessary response activities;
- (f) A program to ensure that all reasonable steps are taken to contain and prevent the discharge of untreated and partially treated wastewater to waters of the United States and not minimize or correct any adverse impact on the environment resulting from the SSO's, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the discharge.

## **II. GENERAL**

The District shall take all feasible steps to eliminate SSO's. In the event that an SSO does occur, the District shall take all feasible steps to contain and mitigate the impacts of an SSO. The District's General Manager or highest-level staff person on-site is responsible for using sound judgment in efforts to stop and contain the SSO as soon as possible, initiate proper notifications in accordance with an approved communication plan, and implement safe and effective measures to remediate the spill. All SSO's shall be reported in accordance with State Water Resources Control Board Order No. 2006-0003-DWQ, Monitoring and Reporting Program, Statewide General Waste Discharge Requirements for Sanitary Sewer Systems; State Water Resources Control Board Order No. WQ 2008-0002-EXEC, Amended Monitoring and Reporting Requirements for Statewide General Waste Discharge Requirements for Sanitary Sewer Systems; State Water Resources Control Board Order No. WQ 2013-0058-EXEC, Amending Monitoring, and Reporting Program for Statewide General Waste Discharge Requirements For Sanitary Sewer Systems; and amendments thereto.

This Sanitary Sewer Overflow Emergency Response Plan (SSOERP) is designed to ensure that every report of a confirmed sanitary sewer overflow (SSO) is immediately dispatched to the appropriate crews so that the effects of the overflow can be minimized with respect to impacts to public health and adverse effects on beneficial uses and water quality of surface waters and customer service. The SSOERP further includes provisions to ensure safety pursuant to the directions provided by the Tuolumne County Environmental Health Department and that

notification and reporting is made to the appropriate local, state and federal authorities. For purposes of this SSOERP, "sewage spill", "spill", or "overflow" will be referred to as a sanitary sewer overflow (SSO) as identified in Section III of this Plan.

The District shall ensure that up-to-date copies of the SSOERP are always readily available to sewer system operation and maintenance personnel. The District shall ensure that SSO response personnel are properly trained in the use of the SSOERP.

#### **A. Objectives**

The primary objective of the SSOERP is to protect public health and the environment, comply with State Water Resources Control Board Order No. 2006-0003-DWQ, satisfy regulatory agencies and waste discharge permit conditions that address procedures for managing SSO's, and to minimize the risk of enforcement actions against the Groveland Community Services District (GCSO or District).

Additional objectives of the SSOERP are as follows:

- Provide appropriate customer service
- Protect wastewater treatment plant and collection system personnel
- Protect the collection system, wastewater treatment facilities, and all appurtenances
- Protect private and public property beyond the collection and treatment facilities.

This Plan shall not supersede existing emergency plans or standard operating procedures (SOPs) unless directed by the District General Manager.

#### **B. Organization of the Plan**

The key elements of the SSOERP are addressed individually as follows:

Section III	Definitions
Section IV	Reporting Requirements
Section V	Water Quality Monitoring Requirement
Section VI	Overflow Emergency Response Procedures
Section VII	Public Advisory Procedures
Section VIII	Regulatory Agency Notification Procedures
Section IX	Media Notification Procedures
Section X	Distribution and Maintenance of SSOERP

### **III. DEFINITIONS**

- A. **Category 1 SSO:** All discharges of sewage of any volume resulting from a failure in the sanitary sewer system that reaches surface water.

- B. **Category 2 SSO:** All discharges of sewage resulting from a failure in the sanitary sewer system that are greater than or equal to 1,000 gallons and do not reach surface water.
- C. **Category 3 SSO:** All discharges of sewage resulting from a failure in the sanitary sewer system that are less than 1,000 gallons and do not reach surface water.
- D. **Online SSO Reporting System and/or CIWQS:** Online spill reporting system that is hosted, controlled, and maintained by the State Water Resources Control Board. This online database is maintained on a secure site and is controlled by unique usernames and passwords.
- E. **Order:** State Water Resources Control Board Order No. 2006-0003-DWQ, Statewide General Waste Discharge Requirements for Sanitary Sewer Systems.
- F. **Private Lateral Sewage Discharges:** Sewage discharges that are caused by blockages or other problems within a privately-owned lateral.
- G. **Receiving Water:** Surface waters receiving discharge from stormwater conveyance systems.
- H. **Sanitary Sewer Overflow (SSO):** Any overflow, spill, release, discharge or diversion of untreated or partially treated wastewater from a sanitary sewer system. SSO's include:
- Overflows or releases of untreated or partially treated wastewater that reach waters of the United States;
  - Overflows or releases of untreated or partially treated wastewater that do not reach waters of the United States; and
  - Wastewater backups into buildings and on private property that are caused by blockages or flow conditions within the publicly owned portion of a sanitary sewer system.
- I. **Sanitary Sewer System:** Any system of pipes, pump stations, sewer lines, or other conveyances, upstream of a wastewater treatment plant headworks used to collect and convey wastewater to the publicly owned treatment facility. Temporary storage and conveyance facilities (such as vaults, temporary piping, construction trenches, wet wells, impoundments, tanks, etc.) are considered to be part of the sanitary sewer system, and discharges into these temporary storage facilities are not considered to be SSO's.
- J. **Surface Waters:** Waters of the United States as defined in 40 CFR 122.2 such as navigable waters, rivers, streams (including ephemeral streams), lakes, natural ponds, lagoons, estuaries, man-made canals, ditches, wet meadows, wetlands, marshes, sloughs and water courses.



## **IV. REPORTING REQUIREMENTS**

### **A. Category 1 SSO**

All SSO's that meet the criteria for Category 1 SSO's shall be reported as specified in Section VIII – Regulatory Agency Notification Procedures as soon as:

- The District has knowledge of the discharge;
- Reporting is possible;
- Reporting can be provided without substantially impeding cleanup or other emergency measures.

The District shall report the SSO to the Regional Water Quality Control Board and appropriate governmental agencies, including the California Office of Emergency Services (CalOES) in accordance with California Water Code Section 13271, and Tuolumne County Environmental Health Department in accordance with California Health and Safety Code Section 5410 et seq.

For any SSO that results in a discharge to a drainage channel or a surface water, the District shall, as soon as possible, but not later than two (2) hours after becoming aware of the discharge, notify the Regional Water Quality Control Board, California Office of Emergency Services, and Tuolumne County Environmental Health Department. As soon as possible, but no later than twenty-four (24) hours after becoming aware of the discharge to drainage channel or surface water, the District shall submit to the Regional Water Quality Control Board a certification that the California Office of Emergency Services and Tuolumne County Environmental Health Department have been notified of the discharge

In addition, Category 1 SSO's shall be reported using the Online SSO Reporting System as soon as possible but no later than three (3) business days after the District is made aware of the SSO. Minimum information that shall be contained in the 3-day report shall include all information identified in the State Water Resources Control Board Order No. 2006-0003-DWQ, Monitoring and Reporting Program, Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, and amendments thereto. The 3-day report must be certified within 15 calendar days of the SSO end date. A final certified report shall be completed through the Online SSO Reporting System within thirty (30) calendar days of the conclusion of SSO response and remediation. Additional information may be added to the certified report, in the form of an attachment, at any time.

In cases where a Category 1 SSO of 50,000 gallons or greater is spilled to surface waters, an SSO Technical Report (as detailed below in part F of this section) must also be submitted to the CIWQS database within forty-five (45) calendar days of the SSO end date.

In the event that the SSO Online Reporting System is not available, the District shall fax all required information to the appropriate Regional Water Quality Control Board office in accordance with the time schedules identified above. In such event, the District shall also enter all required information into the Online SSO Database as soon as practical.

**B. Category 2 SSO**

All SSO's that meet the criteria for Category 2 SSO's shall be reported using the Online SSO Reporting System as soon as possible but no later than three (3) business days after the District is made aware of the SSO. Minimum information that shall be contained in the 3-day report shall include all information identified in the State Water Resources Control Board Order No. 2006-0003-DWQ, Monitoring and Reporting Program, Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, and amendments thereto. The 3-day report must be certified within 15 calendar days of the SSO end date. A final certified report shall be completed through the Online SSO Reporting System within thirty (30) calendar days of the conclusion of SSO response and remediation. Additional information may be added to the certified report, in the form of an attachment, at any time. It is District policy that any Category 2 SSO will also be reported to the Cal OES, CIWQS, the CRWQCB, and TCEH, as set forth in Section VIII (Regulatory Agency Notification Procedures).

**C. Category 3 SSO**

All SSO's that meet the criteria for Category 3 SSO's shall be reported using the Online SSO Reporting System within thirty (30) days after the end of the calendar month in which the SSO occurs.

**D. Private Laterals**

If an SSO is caused by a blockage or problem with a privately-owned lateral, the District shall use its discretion in determining whether the SSO will be reported in the Online SSO Database. If a Private Lateral Sewage Discharge is recorded in the Online SSO Database, the District shall identify the sewage discharge as occurring and caused by a private lateral, and a responsible party (other than the District) should be identified, if known.

**E. No SSO's**

If there are no SSO's during the calendar month, the District shall provide, within ten (10) days after the end of each calendar month, a statement through the Online SSO Reporting System certifying that there were no SSO's for the designated month.

**F. SSO Technical Report**

If a Category 1 SSO of 50,000 gallons or more is discharged to surface waters an SSO Technical Report must be submitted to the CIWQS Online SSO Database within 45 calendar days of the SSO end date. This report, which does not preclude the Water Boards from requiring more detailed analyses if requested, shall include at a minimum, the following:

**1. Causes and Circumstances of the SSO**

- a. Complete and detailed explanation of how and when the SSO was discovered.
- b. Diagram showing the SSO failure point, appearance points(s), and final destinations(s).
- c. Detailed description of the methodology employed, and available data used to calculate the volume of the SSO and, if applicable, the SSO volume recovered.
- d. Detailed description of the cause(s) of the SSO.
- e. Copies of the original field crew records used to document the SSO.
- f. Historical maintenance records for the failure location.

**2. District's Response to SSO:**

- a. Chronological narrative description of all actions taken by the District to terminate the spill.
- b. Explanation of how the SSMP Overflow Emergency Response Plan was implemented to respond to and mitigate the SSO.
- c. Final corrective action(s) completed and/or planned to be completed, including a schedule for actions not yet completed.

**3. Water Quality Monitoring:**

- a. Description of all water quality sampling activities conducted including analytical results and evaluation of the results.
- b. Detailed location map illustrating all water quality sampling points.

**V. WATER QUALITY MONITORING REQUIREMENTS**

**A. Category 1 SSOs Discharged to Drainage Channel or Surface Water**

If a Category 1 SSO in which 50,000 gallons or greater is discharged to a drainage channel or surface waters the district shall, within 48 hours, implement the SSO Water Quality Monitoring Program, which consists of the following:

- Trained staff will gather representative samples upstream, downstream, and at the location where SSO reached a receiving body of water. Sampling shall consider spill travel time in the surface water and shall account for scenarios in which monitoring may not be possible.
- Trained staff will collect samples using proper sampling procedures including documentation of proper maintenance and calibration of monitoring instruments and devices.

- An accredited laboratory will analyze samples for the selected constituents which may include:
  - Ammonia;
  - Bacterial Indicators (Total and Fecal Coliform, Enterococcus, and E-coli);
  - Biochemical Oxygen Demand (BOD);
  - Dissolved Oxygen (DO);

It should be noted that within 48 hours of becoming aware of a Category 1 SSO of 50,000 gallons or more has spilled to surface water, water quality sampling must, at a minimum, include ammonia and the appropriate bacterial indicators for the applicable Basin Plan water quality objective or Regional Board direction which may include total and fecal coliform, enterococcus, and e-coli.

- Conduct any additional sampling requirements imposed by the Tuolumne County Environmental Health (TCEH) and/or the Regional Board.

Water quality results are required to be uploaded into the CIWQS for Category 1 SSOs in which 50,000 gallons or more are spilled to surface waters. Sampling results may also be sent to TCEH and to Regional Board.

## **VI. OVERFLOW EMERGENCY RESPONSE PROCEDURE**

The Overflow Emergency Response Procedure sets forth the District’s strategy to mobilize labor, materials, tools and equipment to correct or repair any condition that may cause or contribute to an unpermitted discharge. The Procedure considers a wide range of potential system failures that could create an overflow to surface waters, land, or buildings.

### **A. Receipt of information regarding an SSO**

An overflow may be detected by District employees or by others. The District’s administrative office is primarily responsible for receiving phone calls during normal business hours from the public of possible SSO’s from the wastewater collection system, and for forwarding details to the General Manager, Operations and Maintenance Manager (“O&M Manager”), Collections and Distribution Supervisor, and the Chief Plant Operator (CPO). After hours emergency calls are directed to the on call Collections and Distribution operator through Mother Lode Answering Service via pager. This emergency phone line is staffed twenty-four (24) hours per day.

The individual receiving the call should obtain all relevant information available regarding the overflow including:

- Time and date the call was received;
- Specific location;
- Description of problem;

- Time possible overflow was noticed by the caller;
- Caller's name and phone number;
- Observations of the caller (e.g., odor, duration, back or front of property); and
- Other relevant information that will enable the responding investigator and crews, if required, to quickly locate, assess and stop the overflow.

The individual receiving the call records the overflow information and creates a service request for assignment to the Collections and Distribution Department.

Lift station problems/failures are monitored via SCADA, which sends emergency pages to the on-call Collections and Distribution operator(s). The operator on call shall immediately convey all information regarding alarms or pages to the Collections and Distribution System Supervisor to initiate the investigation.

SSO's detected by any personnel in the course of their normal duties shall be reported immediately to the Collections and Distribution System Supervisor. If an SSO is detected, the Collections and Distribution System Supervisor will notify the O&M Manager and General Manager immediately. Personnel will be dispatched to investigate and respond to the incident as needed.

The person investigating shall confirm the SSO. Until verified, the report of a possible spill will not be referred to as an SSO.

A Preliminary Wastewater Spillage Report Form, Appendix A, should be completed within twenty-four (24) hours. The General Manager, O&M Manager, and Collections and Distribution System Supervisor are generally responsible for reviewing and updating the final SSO Report.

The O&M Manager is responsible for ensuring the proper delivery of the report to the appropriate authorities.

**B. Dispatch of appropriate crews to site of a Sanitary Sewer Overflow**

Failure of any element within the wastewater collection system that threatens to cause or causes a SSO will trigger an immediate response to isolate and correct the problem. Crews and equipment shall be available to respond to any SSO location. Crews will be dispatched to any site of a reported SSO immediately. Also, additional personnel may be placed "on call" should extra crews be needed. Table VI-1 summarizes the SSO Action Plan.

Step	Event
1	Report of possible SSO received by District or on call C&D operator.
2	Dispatcher relays information and/or completes work order.
3	Contact is made with O&M Manager and/or on-call staff, to investigate.

4	The investigator reports the significance of the overflow to the O&M Manager and ensures that appropriate response crews are dispatched. The General Manager is notified.
5	The O&M Manager completes an overflow report. Cal OES (California Office of Emergency Services) shall be notified within two (2) hours of the event. A report is faxed to CRWQCB and Tuolumne County Environmental Health. The report is given to the General Manager/O&M Manager and the Board of Directors.
6	The incident is logged in the SSO History Data file.
7	Follow up letters are completed and mailed

*Table VI-1: SSO Action Plan*

### 1. Dispatching Crews

Generally, the General Manager should receive notification of sewer overflows as outlined in Section A, "Receipt of Information Regarding a Sanitary Sewer Overflow" and dispatch an individual to investigate, and/or the appropriate crews and resources as required.

### 2. Crew Instructions and Work Orders

- Responding crews should be dispatched by radio or phone and should receive instructions from the individual investigating or their supervisor regarding appropriate crews, materials, supplies, and equipment needed.
- All employees being dispatched to the site of a SSO shall proceed immediately to the site of the overflow. Any delays or conflicts in assignments must be immediately reported to the supervisor for resolution.
- Response crews should in all cases report their findings, including possible damage to private and public property, to the O&M Manager immediately upon completing their investigation. The investigation findings shall also be reported to the General Manager. If a supervisor has not received findings from the field crew within thirty (30) minutes, the supervisor shall contact the response crew to determine the status of the investigation.

### 3. Additional Resources

If necessary, the General Manager should receive requests for additional personnel, material, supplies, and equipment from crews working at the site of an SSO, and convey such requests to the appropriate parties.

#### 4. Coordination with Hazardous Material Response

- In the event a suspicious substance (e.g., oil sheen, foamy residue) is found on the ground surface when the response crew arrives on the scene of a SSO, or should a suspicious odor (e.g., gasoline) not common with the sewer system be detected, the SSO investigator or response crew should immediately contact the O&M Manager for guidance before taking further action.
- Should the O&M Manager determine the need to alert the hazardous material response team, the SSO investigator or crew shall await the arrival of the Fire Department who will then take over the site. **Remember that any vehicle engine, portable pump or open flame (e.g., cigarette lighter) can provide the ignition for an explosion or fire if flammable fluids or vapors are present. The response crew shall keep a safe distance and observe caution until assistance arrives.**
- Upon arrival of the Fire Department, the SSO investigator or crew will take direction from the person with the lead authority of that team. Only when that authority determines it is safe and appropriate for the SSO investigator and crew to proceed can they proceed under the SSOERP with the containment, clean-up activities and correction.

#### C. Overflow Correction, Containment, and Clean-Up

SSO's of various volumes occur from time to time in spite of concerted prevention efforts. Spills may result from blocked sewers, pipe failures, or mechanical malfunctions among other natural or man-made causes. The District is constantly on alert and should be ready to respond upon notification and confirmation of an overflow.

This section describes specific actions to be performed by the crews during a SSO. The objectives of these actions are:

- To protect public health, environment and property from SSO's and restore surrounding area back to normal as soon as possible;
- To establish perimeters and control zones with appropriate traffic cones and barricades, vehicles or use of natural topography (e.g., hills, berms);
- To promptly notify the regulatory agency's communication center of preliminary overflow information and potential impacts; and
- To contain the SSO to the maximum extent possible including preventing the discharge of sewage into surface waters, and



Under most circumstances, the District will handle all response actions with its own maintenance and operations forces. They have the skills and experience to respond rapidly and in the most appropriate manner. An important issue with respect to an emergency response is to ensure that the temporary actions necessary to divert flows and repair the problem do not produce a problem elsewhere in the system. For example, repair of a force main could require the temporary shutdown of the pump station and diversion of the flow at an upstream location. If the closure is not handled properly, sewage system back-ups may create other overflows.

Circumstances may arise when the District could benefit from the support of private sector or mutual aid assistance. This may be true in the case of multiple incidents or large-scale system failure.

#### 1. Responsibilities of response crew upon arrival

It is the responsibility of the first personnel who arrive at the site of a SSO to protect the health and safety of the public by mitigating the impact of the overflow to the extent possible. Should the overflow not be the responsibility of the District but there is imminent danger to public health, public or private property, or to the quality of waters of the U. S., then prudent emergency action should be taken until the responsible party assumes responsibility and provides actions. Upon arrival at a SSO, the response crew should do the following:

- Determine the cause of the overflow, e.g. sewer line blockage; pump station mechanical or electrical failure, sewer line break, etc.;
- Identify and request, if necessary, assistance or additional resources to correct the overflow or to assist in the determination of its cause;
- Determine if private property is impacted. If private property is impacted, customer service should be informed to notify the impacted individual.
- Take photos in order to visually document the incident.
- Take immediate steps to stop the overflow, e.g. relieve pipeline blockage, manually operate pump station controls, vacuum pump, repair pipe, etc. Extraordinary steps may be considered where overflows from private property threaten public health and safety (e.g., an overflow running off of private property into the public right-of-way); and
- Request additional personnel, materials, supplies, or equipment that will expedite and minimize the impact of the overflow.

2. Additional measures when potentially prolonged overflow conditions are encountered:

- In the event of a prolonged sewer line blockage or a sewer line collapse, a determination should be made to set up a portable by-pass pumping operation around the obstruction.
- Appropriate measures shall be taken to determine the proper size and number of pumps required to effectively handle the sewage flow.
- Continuous or periodic monitoring of the by-pass pumping operation shall be implemented as required.
- Regulatory agency issues shall be addressed in conjunction with emergency repairs.

3. Cleanup

- SSO sites are to be thoroughly cleaned after an overflow. No readily identified residue (e.g., sewage solids, papers, rags, plastics, rubber products) is to remain.
- Where practical, the area is to be thoroughly flushed and cleaned of any sewage or wash-down water. Solids and debris are to be flushed, swept, raked, picked-up, and transported for proper disposal.
- The overflow site is to be secured to prevent contact by members of the public until the site has been thoroughly cleaned. Posting if required should be undertaken pursuant to Section V of this Plan.
- Where appropriate, the overflow site is to be disinfected and deodorized.
- Where sewage has resulted in ponding, the pond should be pumped dry and the residue disposed of in accordance with applicable regulations and policies.
- If a ponded area contains sewage that cannot be pumped dry, it may be treated with bleach. If sewage has discharged into a body of water that may contain fish or other aquatic life, bleach or other appropriate disinfectant should not be applied and the State Department of Fish and Game should be contacted for specific instructions.
- Use of portable aerators may be required where complete recovery of sewage is not practical and where severe oxygen depletion in existing surface water is expected.

#### **D. Overflow Report**

An Overflow Report, see Attachment A, shall normally be completed by the O&M Manager. Information regarding the SSO should include the following:

- Indication that the SSO had reached surface waters for all overflows where sewage was observed running to surface waters, or there was obvious indication (e.g. sewage residue) that sewage flowed to surface waters; or
- Indication that the sewage overflow had not reached surface waters.

Guidance in characterizing these overflows to include:

- a) Sewage overflows to covered storm drains (with no public access) where personnel verify, by inspection, that the entire volume is contained in a sump or impoundment and where complete clean up occurs leaving no residue.
- b) Preplanned or emergency maintenance jobs involving bypass pumping if access by the public to a bypass channel is restricted and subsequent complete clean-up occurs leaving no residue (Any preplanned bypass under these circumstances will not be considered an overflow.); and
- c) An SSO where observation or on-site evidence clearly indicates all sewage was retained on land and did not reach surface water and where complete cleanup occurs leaving no residue.
- Determination of the start time of the SSO by one of the following methods:
  - a) Date and time information received and/or reported to have begun and later substantiated by a sewer investigator or response crew;
  - b) Visual observation; or
  - c) Pump station and lift station flow charts and other recorded data.
- Determination of the stop time of the sewer overflow by one of the following methods:
  - a) When the blockage is cleared or flow is controlled or contained; or
  - b) The arrival time of the sewer investigator or response crew, if the overflow stopped between the time it was reported and the time of arrival.
- Visual observations. An estimation of the rate of sewer overflow in gallons per minute (GPM) by one of the following criteria:
  - a) Direct observations of the overflow; or
  - b) Measurement of actual overflow from the sewer main.
- Determination of the volume of the sewer overflow:

- a) When the rate of overflow is known, multiply the duration of the overflow by the overflow rate; or
  - b) When the rate of overflow is not known, investigate the surrounding area for evidence of ponding or other indications of overflow volume.
- Photographs of the event, when possible.
  - Assessment of any damage to the exterior areas of public/private property.
  - A listing of all GSCD personnel who responded to the SSO and a chronology of their arrival times.

**E. Customer Satisfaction**

The supervisor, SSO investigator, or response crew confirming the overflow should follow-up in person or by telephone with the citizen(s) reporting the overflow. The cause of the overflow and its resolution will be disclosed.

**VII. PUBLIC ADVISORY PROCEDURE**

This section describes the actions the GSCD should take, in cooperation with the Tuolumne County Environmental Health Department, to limit public access to areas potentially impacted by un-permitted discharges of pollutants to surface water bodies from the wastewater collection system.

**A. Temporary Signage**

The District has primary responsibility for determining when to post notices of polluted surface water bodies or ground surfaces that result from uncontrolled wastewater discharges from its facilities. The objective of posting of signs is to provide warning of potential public health risks due to sewage contamination. Generally, signs are posted where sewage enters a water body, where an overflow cannot be cleaned, or when directed by regulatory agencies. The postings do not necessarily prohibit use of recreational areas, unless posted otherwise, but provide a warning of potential public health risks due to sewage contamination.

As directed by the Tuolumne County Environmental Health Department, the District shall post warning signs prohibiting the use of recreational areas. The postings shall remain until the results of lab tests indicate contamination levels have returned to safe limits, as determined by the Tuolumne County Environmental Health Department.

**B. Other Public Notification**

Should the posting of surface water bodies or ground surfaces subjected to a sewer overflow be deemed necessary, the General Manager/ shall also determine the need for further public notification through the use of pre-scripted notices made available to the printed or electronic news media for immediate publication or airing, or by other measures (e.g., front door hangers).

## VIII. REGULATORY AGENCY NOTIFICATION PLAN

The Regulatory Agency Notification Plan establishes procedures that the District shall follow to provide formal notice to the California Office of Emergency Services (Cal OES), California Integrated Water Quality System (CIWQS), California Regional Water Quality Control Board (CRWQCB), Tuolumne County Environmental Health Department, Pine Mountain Lake Association, and the Department of Fish and Game as necessary in the event of any SSO. The reporting criteria below explains to whom various forms of notification should be made, and lists agencies/individuals to be contacted.

Agency notifications will be performed in parallel with other internal notifications. The procedure for providing notification to the media of an SSO is presented in Section VIII - Media Notification Procedures. Internal notification and mobilization of personnel are detailed in Section V - Overflow Emergency Response Procedure.

Using data supplied during the verification process and updates from the response crew, the O&M Manager shall normally prepare initial and final SSO reports. This report shall be made available to those desiring additional information or written confirmation.

Written notification in a "hard copy" version should be made within five (5) working days. The O&M Manager shall be responsible for meeting the oral or fax notification requirement.

The O&M Manager will normally prepare written notification to the appropriate regulatory agencies and others of any confirmed overflows. The O&M Manager shall sign these notifications.

### A. Immediate Notification

The District shall notify Federal and State agency representatives (see below) immediately and keep them updated of response actions and final corrective actions.

#### 1. California Office of Emergency Services (Cal OES) - Immediate notification call (800) 852-7550 or (916) 845-8911

Cal OES is responsible for maintaining and implementing the State of California's Emergency Plan. The Cal OES must be notified immediately following any sewage spill regardless of quantity. The Cal OES operator will provide a Control Number and they will notify other state agencies of the spill.

During the phone call to Cal OES, the emergency operator will create a Hazardous Materials Spill Report in the Cal OES database and will notify the person reporting the SSO of the Cal OES control number. This number should be recorded by the District employee reporting the SSO. Information that the District employee should have available before calling Cal OES include the date and time of the SSO, location and quantity of the SSO (this can be a preliminary estimation – the report can be amended at a later time should the calculated volume change), and reason for SSO.

The Cal OES report can be accessed online at [www.calema.ca.gov](http://www.calema.ca.gov). Click on the pull-down menu for RIMS (Response Information Management System),

and click Login. Down near the bottom of the screen, click on “Hazardous Material Spill”. Click on “Search”, and then type in the control number, or any other description of the SSO such as “Groveland” or “Rattlesnake Creek”, etc. A list of Hazardous Material Spill reports will appear. Select the correct report and it will then be fully displayed on the computer screen. A printout of the Cal OES report will need to be included in the comprehensive report that will be sent to the CRWQCB.

## **2. California Integrated Water Quality System (CIWQS) Database**

Access to the CIWQS database is limited to the District’s Legally Responsible Official (LRO) and any person whom the LRO designates as a Data Submitter.

A Category 1 SSO must be reported in the CIWQS database as soon as possible but no later than three (3) business days after District becomes aware of the SSO. A Certified Final report must be submitted within fifteen (15) days of the conclusion of the SSO response and remediation.

A Category 2 SSO must be reported in the CIWQS database as soon as possible but no later than three (3) business days after the District becomes aware of the SSO. A Certified Final report must be submitted within fifteen (15) days of the conclusion of the SSO response and remediation.

A Category 3 SSO must be reported in the CIWQS database within ten (10) days after the end of the calendar month in which the SSO occurred.

At present it is the District’s policy to not report private lateral spills.

A printout of the CIWQS certified SSO report will need to be included in the comprehensive report that will be sent to the CRWQCB.

## **3. California Regional Water Quality Control Board (CRWQCB), Central Valley Region – call within 24 Hours: Mr. Warren Gross (559) 445-5128, Warren.Gross@waterboards.ca.gov**

The CRWQCB is charged with the protection of all state water resources and their beneficial uses. The CRWQCB has the authority to abate, through cease and desist orders, any situation that impacts or threatens to impact the waters of the state.

A full report of the SSO will be required by the CRWQCB, including printouts of the Cal OES and CIWQS reports. The report shall include time and date of initial notification of the SSO, location, names of responders, times and dates of state and local agency notifications, GPS coordinates of the SSO, time and date that the SSO was halted, best estimate of SSO volume based on factual information (there is no regulatory agency requirement to report maximum possible guesstimated volume), names of persons estimating SSO volume, cause of the SSO, and all clean up measures taken. This report must be

submitted to Mr. Warren Gross of the CRWQCB within 15 days of the SSO end date.

4. **Tuolumne County Environmental Health Department - Immediate Notification: Christy Mckinnon, (209) 533-5633, CMckinnon@co.tuolumne.ca.us**  
**Environmental Health Division of the Tuolumne County: call Community Development Department Receptionist (209) 533-5633. If after-hours call: Tuolumne County Sherriff Office (209) 533-5815 Ask Sheriff's Dispatch to page EHD on-call staff, (209) 533-5909 (Fax)**

The Tuolumne County Environmental Health Department is the local agency with the responsibility for determining the minimum level for sanitation of public recreation areas and is responsible for making decisions regarding public notification of health hazards, including, but not limited to the posting, closing, and reopening of public beaches. If a spill reaches any water course, it must be immediately posted by GCSO, and confirmation must be sent to TCEH within 24 hours or as soon as possible. TCEH requests that they be sent electronic pictures in order to verify that the spill site has been posted. Additionally, Environmental Health should receive a carbon copy of the full SSO report that is sent to the CRWQCB.

5. **Tuolumne County Health Officer – If Environmental Health cannot be contacted: Dr. Robert Bernstein (209) 533-7400**
6. **Pine Mountain Lake Association -Immediately notify when recreation areas are required to be closed: Security at PML Main Gate (209) 962-8615**
7. **California Department of Fish and Wildlife – Immediately notify if a body of water is affected: Julie Vance, Regional Manager (559) 243-4005 ext. 151, (559) 243-4022, or Dispatch (888) 334-2258**

**B. Secondary Notification**

After those parties identified in Section A have been contacted, other agencies, as necessary, as well as other interested and possibly impacted parties will be contacted.

**IX. MEDIA NOTIFICATION PROCEDURE**

The General Manager shall be the only person authorized on behalf of the District to provide information and/or respond to requests for information from the media and/or the public. Calls received by customer service from the media at any time are referred to the General Manager. The General Manager is the authorized person on behalf of the District to be interviewed by the media and is the designated spokesman.

Contact Name	Title	Office	Cell Phone
Peter Kampa	General Manager	(290) 962-7161 ext. 24	(209) 591-7100

Luis Melchor	O&M Manager	(209)-962-7161 ext. 18	(209)-206-8002
Robert Swan	Board President	(209) 962-6535	-

*Table IX-1: GCSD Public Information Contacts*

## **X. DISTRIBUTION AND MAINTENANCE OF SSOERP**

Annual updates to the SSOERP should be made to reflect all changes in policies and procedures as may be required to achieve its objectives.

### **A. Submittal and Availability of SSOERP**

- Copies of the SSOERP and any amendments shall be distributed to the maintenance and operations departments and functional positions. These personnel shall read the SSOERP and sign a confirmation that they have read and understand it:
- All other personnel who may become incidentally involved in responding to overflows should be familiar with the SSOERP.

### **B. Review and Update of SSOERP**

The SSOERP should be reviewed annually and amended as appropriate. The District should:

- Update the SSOERP with the issuance of a revised or new NPDES permit or state waste discharge permit;
- Conduct annual training sessions with appropriate personnel; and
- Review and update, as needed, the various contact person lists included in the SSOERP.

### **C. Training**

The District will ensure that all SSO response personnel are properly trained in the use of the SSOERP. The District will ensure that relevant training programs, reading materials and video cassette tapes or CD/DVD's are made available to all staff that could assist response crews in executing their duties and responsibilities in confirming overflows, identifying their causes, and resolving them. Periodic field drills of the overflow response procedures will be conducted. Such drills could be executed in conjunction with other periodic emergency preparedness drills associated with man-made (e.g., fires, explosions) and natural disasters (e.g., flooding, severe weather).

Appropriate supervisory personnel shall attend an annual SSO review training course in order to stay current with updated training procedures.



DRAFT

**Appendix F**  
**AUDIT CHECKLIST**

## Sewer System Management Plan Annual Audit Checklist

**Table 1 Audit Checklist Summary**

<b>Name of agency</b>	<b>Groveland Community Services District</b>
<b>Date of audit</b>	November 2018
<b>Name of auditor</b>	AM Consulting Engineers
<b>System Overview</b>	Sewer System
<b>Miles of gravity sewer mains</b>	35
<b>Miles of force mains</b>	11
<b>Total Miles of all District sewer lines</b>	46
<b>Number of lift stations</b>	16
<b>Population served</b>	3,414
<b>Current average monthly single family residential sewer rate</b>	\$43.28

### GOALS

1. Are the goals stated in the SSMP still appropriate and accurate? YES / NO
2. If you answered NO to question 1, describe content and schedule for updates, or provide additional comments for YES response.

### ORGANIZATION

#### Reference Material

- ❖ Organization Chart
- ❖ Phone list

3. Is the SSMP up-to-date with agency organization and staffing contact information? YES / NO
4. If you answered NO to question 3, describe content and schedule for updates, or provide additional comments for YES response.

### LEGAL AUTHORITY

#### Reference Material

- ❖ Sewer Ordinance No. 1-10
- ❖ Enforcement actions

5. Does the SSMP contain up-to-date information about the City's legal authority? YES / NO
6. Does the City have sufficient legal authority to control sewer use and maintenance? YES / NO
7. If you answered NO to questions 5 or 6, describe content and schedule for necessary changes, or provide additional comments for a YES response.

## OPERATIONS AND MAINTENANCE

### Reference Material

- ❖ Collection system map
  - ❖ Current operating budget
8. Does the SSMP contain up-to-date information about the City's maps? YES / NO
  9. Are the City's collection system maps complete, up-to-date, and sufficiently detailed? YES / NO
  10. If you answered NO to questions 8 or 9, describe content and schedule for necessary changes, or provide additional comments for YES response.
  11. Does the SSMP contain up-to-date information about the City's resources and budget? YES / NO
  12. Are the City's resources and budget sufficient to support effective sewer system management? YES / NO
  13. Do the City's planning efforts support long-term goals? YES / NO
  14. If you answered NO to questions 11, 12, and/or 13, describe content and schedule for necessary changes, or provide additional comments for YES response.

## PRIORITIZED PREVENTATIVE MAINTENANCE

### Reference Material

- ❖ Cleaning schedules
- ❖ List or map of potential problem area
- ❖ Work orders
- ❖ Incident reports
- ❖ Customer feedback

**Table 2 Annual Preventative Maintenance Activities**

Maintenance Activity Description	2013	2014	2015	2016	2017
Miles of Forced Mains & Other Pressure Systems	11	11	11	11	11
Miles of Gravity Sewers	35	35	35	35	35
Number of Service Connections Inspected	6	7	4	9	5
Miles of total Gravity Sewer System Cleaning	13.35	10.80	8.53	9.87	9.95
Miles of total Gravity Sewer System Inspection	3.35	3.80	3.53	5.87	6.95

15. Does the SSMP contain up-to-date information about the City's YES / NO

preventative maintenance activities?

16. If you answered NO to question 15, describe content and schedule for necessary improvements to preventative maintenance activities.

### **SCHEDULED INSPECTIONS AND CONDITION ASSESSEMNT**

#### Reference Material

- ❖ Inspection reports
- ❖ Infiltration and Inflow (I/I) monitoring studies and reports
- ❖ Pipe and manhole condition data

17. Does the SSMP contain up-to-date information about the City's inspection and condition assessment? **YES / NO**
18. Are the City's scheduled inspections and condition assessment system effective in locating, identifying, and addressing deficiencies? **YES / NO**
19. If you answered NO to questions 17 and/or 18, describe content and schedule for necessary changes or provide additional comments for YES.

### **CONTINGENCY EQUIPMENT AND REPLACEMENT INVENTORIES**

#### Reference Material

- ❖ Funds spent on equipment and materials
- ❖ Equipment and parts inventory

20. Does the SSMP contain up-to-date information about equipment and replacement inventories? **YES / NO**
21. Are contingency equipment and replacement parts sufficient to respond to emergencies and properly conduct regular maintenance? **YES / NO**
22. If you answered NO to questions 20 and/or 21, describe content and schedule for necessary arrangements, or provide additional comments for YES response.

### **TRAINING**

#### Reference Material

- ❖ Employee training records

23. Does the SSMP contain up-to-date information about the City's training expectations and programs? **YES / NO**
24. Do supervisors believe that their staff is sufficiently trained? **YES / NO**
25. Are staff satisfied with the training opportunities and support offered to them? **YES / NO**
26. If you answered NO to questions 23, 24, and/or 25, describe

contend and schedule for necessary improvements, or provide additional comments for YES response.

### OUTREACH TO BUILDING CONTRACTORS

#### Reference Material

- ❖ Fliers/mailings
- ❖ Mailing lists

27. Does the SSMP contain up-to-date information about the City's outreach to plumbers and building contractors? YES / NO
28. Has the City conducted or participated in any outreach activities to plumbers and building contractors? YES / NO
29. If you answered NO to questions 27 and/or 28, describe content and schedule for future activities, or provide additional comments for YES response.

### DESIGN AND CONSTRUCTION STANDARDS

#### Reference Material

- ❖ Design and construction standards
- ❖ Ordinance

30. Does the SSMP contain up-to-date information about the City's design and construction standards? YES / NO
31. Are design and construction standards, as well as standards for inspection and testing of new and rehabilitated facilities sufficiently comprehensive and up-to-date? YES / NO
32. If you answered NO to questions 30 and/or 31, describe content and schedule for necessary revisions, or provide additional comments.

### OVERFLOW EMERGENCY RESPONSE PLAN

#### Reference Material

- ❖ Data submitted to CIWQS
- ❖ Service call data

**Table 3 Annual SSO Statistics**

Indicator	2013	2014	2015	2016	2017
<b>Number of SSOs (total)</b>					
Wet season SSOs	2	1	1	1	0
Dry season SSOs	0	0	0	1	2
Private Lateral	0	0	0	0	0
Total Number of SSO's	2	1	1	2	2
<b>Number of SSOs by volume (gallons)</b>					

**Table 3 Annual SSO Statistics**

Indicator	2013	2014	2015	2016	2017
<10	0	1	0	0	0
10 – 99	1	0	1	1	0
100 – 999	0	0	0	0	1
1000-9999	0	0	0	1	1
>10,000	1	0	0	0	0
Total SSO Volume (gallons)	330,025	2	18	643	7,919
Volume reaching waters of the State (gallons)	330,000	0	0	0	7,233
Volume not contained but not reaching waters of the State (gallons)	0	0	2	377	0
Volume recovered (gallons)	25	2	16	266	4,686
Net volume (total minus recovered)	330,000	0	2	377	3,233
Number of SSOs per 100 miles of sewer per year					
Volume of SSOs per 100 miles of sewer per year					
<b>Number of SSOs (by Cause)</b>					
Blockages:	0	0	0	0	0
Roots	1	0	0	0	0
Grease	0	0	1	0	0
Debris	0	0	0	1	0
Debris from Laterals	0	0	0	0	0
Animal Carcass	0	0	0	0	0
Construction Debris	0	0	0	0	0
Pump Failure	1	0	0	0	0
Air Release Valve Failure	0	1	0	0	0
Multiple causes	0	0	0	0	0
Infrastructure failure	0	0	0	1	0
Inflow & Infiltration	0	0	0	0	0
Electrical Power Failure	0	0	0	0	0
Flow Capacity Deficiency	0	0	0	0	0
Natural Disaster	0	0	0	0	0
Bypass	0	0	0	0	0
Cause Unknown	0	0	0	0	0
Vandalism	0	0	0	0	2

33. Does the SSMP contain an up-to-date version of the City's Overflow Emergency Response Plan? **YES / NO**
34. Considering the information in Table 3, is the Overflow Emergency Response Plan effective in handling SSO's? **YES / NO**
35. If you answered No to questions 30 and/or 31, describe content and schedule for necessary revisions and implementation, or provide additional comments for YES response.

## FATS, OILS, AND GREASE (FOG) CONTROL PLAN

### Reference Material

- ❖ List or map of FOG sources in service area
- ❖ List or map of potential problem areas
- ❖ Cleaning schedules
- ❖ Restaurant inspection reports or summaries
- ❖ Data submitted to CIWQS
- ❖ Service call data

**Table 3 FOG Control Statistics**

	2013	2014	2015	2016	2017
Number of SSOs caused by FOG	0	0	1	0	0
Number of FOG inspections completed	9	9	5	9	11

36. Does the SSMP contain up-to-date information about the City's FOG program? **YES / NO**
37. Considering the information in Table 4, is the FOG program effective in documenting and controlling FOG sources? **YES / NO**
38. If you answered NO to questions 33 and/or 34, describe content and schedule for necessary changes, or provide additional comments for YES response.

## CAPACITY MANAGEMENT

### Reference Material

- ❖ Capacity assessment reports
- ❖ CIP
- ❖ SSO data

**Table 4 SSOs Caused by Hydraulic Limitations**

	2013	2014	2015	2016	2017
Number of SSOs caused by capacity limitations	0	0	0	0	0

39. Does the SSMP contain up-to-date information about the City's capacity assessment? **YES / NO**
40. Has the City completed a capacity assessment and identified and addressed any hydraulic deficiencies in the system? **YES / NO**
41. If you answered NO to questions 39 and/or 40, describe content and schedule for necessary activities, or provide additional comments for YES response.

## MONITORING, MEASUREMENT, AND PROGRAM MODIFICATIONS

42. Does the SSMP contain up-to-date information about the City's **YES / NO**

data collection and organization?

43. Is the City's data collection and organization sufficient to evaluate the effectiveness of the SSMP? **YES / NO**
44. If you answered NO to questions 42 and 43, describe content and schedule for necessary improvements, or provide additional comments for a YES response.

### **SSMP AUDITS**

45. Will this Audit be completed annually and filed with the SSMP report? **YES / NO**

### **COMMUNICATION PROGRAM**

#### Reference Material

- ❖ Mailings and mailing lists
- ❖ Website
- ❖ Other communication records such as newspaper ads, site postings, or other outreach
- ❖ Customer feedback

46. Does the SSMP contain up-to-date information about the City's public outreach activities? **YES / NO**
47. Does the SSMP contain up-to-date information about the City's communications with satellite and tributary agencies? **YES / NO**
48. Has the City effectively communicated with the public and other agencies about the SSMP, and addressed feedback? **YES / NO**
49. If you answered NO to questions 46, 47, or 48, describe content and schedule for necessary improvements, or provide additional comments for YES response.



DRAFT

**APPENDIX G**  
**GCSD CONTACT INFORMATION**

# GCSD Contact Information

(Last Updated September 2018)

- Perter Kampa  
General Manager  
(209) 591-7100 (Cell)  
(209) 962-7161, ext 24 (Office)
- Luis Melchor  
O&M Manager/Collections and Distribution Supervisor  
(209) 209-8002 (Cell)  
(209) 962-7161, ext 18 (Office)
- After-Hours Answering Service  
(209) 533-7992
- California Office of Emergency Services (Cal OES)  
(916) 845-8911  
(800) 852-7550 (Hazmat Spill Notification)
- Central Valley Regional Water Quality Control Board  
Warren Gross, Unit Chief  
(559) 445-5128
- Tuolumne County Environmental Health  
(209) 533-6440