



SEWER SYSTEM MANAGEMENT PLAN



Truckee Sanitary District
Updated May 2015

Prepared by



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TABLE OF CONTENTS

LIST OF ACRONYMS i

LIST OF TERMS iii

EXECUTIVE SUMMARY ES-1

ES-1 Background ES-1

ES-2 District Service Area ES-1

ES-3 SSMP Objectives..... ES-2

ELEMENT 1 - GOALS 1-1

1.1 Statewide WDR Requirement..... 1-1

1.2 Truckee Sanitary District Goals 1-1

ELEMENT 2 - ORGANIZATION 2-1

2.1 Statewide WDR Requirement..... 2-1

2.2 Organization Chart and SSMP Responsibilities..... 2-1

2.3 Responsibility for SSMP Management, Administration and Maintenance 2-3

2.4 Chain of Communication for Reporting and Responding to SSOs..... 2-5

2.5 Appendix A – Element 2 Documents 2-6

ELEMENT 3 - LEGAL AUTHORITY 3-1

3.1 Statewide WDR Requirement..... 3-1

3.2 Legal Authority to Enforce SSMP Requirements 3-1

3.3 Interagency Agreements and Satellite Systems 3-4

3.4 Appendix B – Element 3 Documents 3-4

ELEMENT 4 - OPERATION AND MAINTENANCE PROGRAM..... 4-1

4.1 Collection System Maps 4-1

4.2 Resources and Budget 4-2

4.3 Prioritized Preventative Maintenance 4-2

4.4 Inspections, Condition Assessment and Rehabilitation 4-3

4.5 SSMP Training 4-4

4.6 Contingency Equipment..... 4-4

4.7 Appendix C – Element 4 Documents..... 4-5

ELEMENT 5 - DESIGN AND PERFORMANCE PROVISIONS 5-1

5.1 Statewide WDR Requirement..... 5-1



5.2 Design and Construction Standards for Installation, Rehabilitation and Repair5-1

5.3 Procedures and Standards for Inspection, Testing, Rehabilitation and Repair 5-1

5.4 Appendix D – Element 5 Documents 5-1

ELEMENT 6 – SANITARY SEWER OVERFLOW EMERGENCY RESPONSE PLAN 6-1

6.1 Statewide WDR Requirement..... 6-1

6.2 SSO Categories..... 6-1

6.3 SSO Notification Procedures..... 6-2

6.4 Response Program..... 6-3

6.5 SSO Documentation and Reporting..... 6-166

6.6 SSO Reporting and Notification..... 6-19

6.7 Training..... **6-Error! Bookmark not defined.**4

6.8 Appendix E – Overflow Emergency Response Plan Documents 6-255

ELEMENT 7 - FOG CONTROL PROGRAM..... 7-1

7.1 Statewide SSMP Requirement 7-1

7.2 Public Education Outreach Plan 7-1

7.3 FOG Disposal Plan..... 7-2

7.4 Legal Authority to Prohibit SSOs and Blockages Caused by FOG Discharge 7-2

7.5 Requirements and Design Standards for Installation of Grease Removal Devices 7-2

7.6 Sewer Sections Subject to FOG Blockages..... 7-3

7.7 Appendix F – Element 7 Documents 7-3

ELEMENT 8 - SYSTEM EVALUATION AND CAPACITY ASSURANCE PLAN 8-1

8.1 Statewide WDR Requirement..... 8-1

8.2 System Evaluation and Capacity Assurance Plan 8-1

8.3 Appendix G – Element 8 Documents..... 8-2

ELEMENT 9 - MONITORING, MEASUREMENT AND PROGRAM MODIFICATIONS 9-1

9.1 Statewide WDR Requirement..... 9-1

9.2 Utility Metrics to Measure Progress and Prioritize Activities 9-1

9.3 SSO Trends – Frequency, Location and Volume 9-2

9.4 Appendix H – Element 9 Documents..... 9-3

ELEMENT 10 - SSMP PROGRAM AUDITS..... 10-1

10.1 Statewide WDR Requirement..... 10-1



10.2 Audit Procedures, Roles and Responsibilities 10-1

10.3 SSMP Program Modification/Update Process 10-1

10.4 Appendix I – SSMP Program Audit Documents..... 10-1

ELEMENT 11 - COMMUNICATION PLAN 11-1

11.1 Statewide WDR Requirement..... 11-1

11.2 Communication Plan 11-1

11.3 Appendix J – Communication Plan Documents..... 11-1

LIST OF FIGURES

Figure ES-1	TSD Service Area
Figure 2-1	Organization Chart
Figure 2-2	SSO Reporting Chain of Communications
Figure 4-1	Example Information Available Through GIS
Figure 6-1	Reporting Chain of Communications (same as Figure 2-2)
Figure 6-2	SSO Reporting Requirement Flow Chart

LIST OF TABLES

Table ES-1	SSMP Objectives
Table 2-1	List of District Staff Responsibilities for SSMP Elements
Table 6-1	Designated SSO Responders
Table 6-2	Traffic Control Agencies
Table 6-3	List of Outside Agencies in Concern
Table 6-4	SSO Reporting Requirements
Table 9-1	Success Factors and Metrics

LIST OF APPENDICES

Appendix A	Supporting Documents for Element 2
Appendix B	Supporting Documents for Element 3
Appendix C	Supporting Documents for Element 4
Appendix D	Supporting Documents for Element 5
Appendix E	Supporting Documents for Element 6
Appendix F	Supporting Documents for Element 7
Appendix G	Supporting Documents for Element 8
Appendix H	Supporting Documents for Element 9
Appendix I	Supporting Documents for Element 10

LIST OF ACRONYMS

BMP	Best Management Practice
CCTV	Closed-Circuit Television
CIP	Capital Improvement Project or Plan
CIWQS	California Integrated Water Quality System
CMMS	Computerized Maintenance Management System
CDFW	California Department of Fish and Wildlife
CWEA	California Water Environment Association
EHS	Environmental Health Services
FOG	Fats, Oils and Grease
FSE	Food Service Establishment
GIS	Geographical Information System. The District uses ESRI software to manage the District's GIS maps.
GPS	Global Positioning System
I/I or I&I	Inflow & Infiltration
LRO	Legally Responsible Official
MRP	Monitoring and Reporting Program
NASSCO	National Association of Sewer System Companies
NPDES	National Pollution Discharge Elimination System
OERP	Overflow Emergency Response Plan
OES	California Office of Emergency Services (formerly California Emergency Management Agency)
PACP	Pipeline Assessment and Certification Program
PM	Preventive Maintenance
RWQCB	Regional Water Quality Control Board
SOP	Standard Operating Procedure
SSMP	Sewer System Management Plan



SSO	Sanitary Sewer Overflow
SWRCB	State Water Resources Control Board
TSD	Truckee Sanitary District
T-TSA	Tahoe-Truckee Sanitation Agency
WDR	General Waste Discharge Requirements. Also referenced as the Statewide WDR.
WWTP	Wastewater Treatment Plant

LIST OF TERMS

Blockage – An object that partially or fully hinders flow through a sewer pipeline. The blockage can be caused by debris in the sewer, grease buildup, root intrusion, or a partial or full collapse of the pipeline. Also known as a stoppage.

Board – Truckee Sanitary District Board of Directors

California Department of Fish and Wildlife Service (CDFW) – A state agency responsible for protecting fish, wildlife, and plant resources, as well as native habitats.

California Integrated Water Quality System (CIWQS) – A computer system used by the State and Regional Water Quality Control Boards to track information about SSOs, among other information. CIWQS is the tool used for online submittal of SSO details, which are then made available to the public. Website: <http://www.swrcb.ca.gov/ciwqs/>

California Water Environment Association (CWEA) – The statewide association of wastewater professionals that trains and certifies wastewater professionals, disseminates technical information and promotes policies to protect and enhance the environment.

Website: <http://www.cwea.org>

Computerized Maintenance Management System (CMMS) – A computerized database program that collects and stores system data, including maintenance and inventory information, and generates routine work orders for the District’s sewer maintenance program.

District – The Truckee Sanitary District

Enrollee – The legal public entity that owns a sanitary sewer system, as defined by the Statewide WDR. Also known as a sewer system agency or wastewater collection system agency.

Environmental Health Services (EHS) – County agency or agencies that are responsibility for protecting the health and safety of the community. The District is located within the jurisdictions of the Nevada County EHS and Placer County EHS.

FOG Control Program – Program implemented at the discretion of the agency, based on the identified causes of sewer overflows, to reduce the discharge of fats, oils and grease into the sewer system.

Geographical Information System (GIS) – A database linked with mapping that records sewer system information. The GIS database could include sewer features such as pipe location, diameter, material, condition, or last date cleaned or repaired. GIS maps also typically contain base information such as streets and parcels.

Infiltration – The seepage of groundwater into a sewer system, including service connections. Seepage frequently occurs through defective or cracked pipes, pipe joints, connections or manhole walls and joints.

Inflow – Water discharged into a sewer system from such sources as roof leaders, cellars, yard and area drains, foundation drains, through holes in manhole covers, cross connections from the storm system or street wash waters. Inflow differs from infiltration in that it is a direct discharge into the sewer rather than a leak through defects in the sewer.

Lahontan Regional Water Quality Control Board – Also known as Region 6 or RWQCB. This regulatory agency preserves, enhances and restores the quality of California's water resources, and ensures their proper allocation and efficient use for the benefit of present and future generations. Website: <http://www.waterboards.ca.gov/lahontan>

Lateral or Private Lateral – The privately-owned sewer pipeline that conveys wastewater from the premises of a user to the District's sewer system. The upper lateral extends from the building to property line (or easement line). The lower lateral extends from the property or easement line to the connection to the pipe.

Legally Responsible Official (LRO) – The official authorized to enter and certify data in the online SSO database, through CIWQS, on behalf of the District.

Monitoring and Reporting Program (MRP) - The program used by the District to monitor, maintain records, report issues and complete needed public notifications.

NASSCO PACP Program – An industry-accepted standard for conducting, assessing, and recording pipeline condition, most often through the use of CCTV inspection equipment and off-the-shelf computerized software.

Overflow Emergency Response Plan (OERP) – This document identifies measures that are needed to respond to sanitary sewer overflows in a way that maximizes the protection of public health and the environment.

Preventive Maintenance (PM) – Regularly scheduled servicing of machinery, infrastructure or other equipment using appropriate tools, tests, and lubricants.

Regional Water Quality Control Board (RWQCB) – Lahontan Regional Water Quality Control Board, also known as the Regional Board or Region 6.

Rehabilitation and Replacement Plan (also referred to as a Capital Improvement Plan) – Identifies and prioritizes system deficiencies and implements short-term and long-term rehabilitation actions to address each deficiency.

Sanitary Sewer Overflow (SSO) – Any overflow, spill, release, discharge or diversion of untreated or partially treated wastewater from a sanitary sewer system, including overflows or releases that reach waters of the United States, overflows or releases that *do not* reach water of the United States, and backups into buildings and/or private property caused by conditions within the publicly owned portion of the sewer system.

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 wastewater treatment plant.

Satellite Collection System – The portion, if any, of a sanitary sewer system that is owned or operated by a different public agency or user.

Sewer System Management Plan (SSMP) – A series of written programs that address how a collection system owner/operator conducts daily business. Each SSMP is unique for an individual discharger. The plan includes provisions to provide proper and efficient management, operation, and maintenance of sanitary sewer systems, while taking into consideration risk management and cost benefit.

State Water Resources Control Board (SWRCB) – Also called the State Board. This agency developed and passed the Statewide Waste Discharge Requirements for collection systems and maintains the SSO reporting web site.

Statewide Waste Discharge Requirements (WDR) – The Statewide General Waste Discharge Requirements for Sanitary Sewer Systems was adopted by the SWCRB in 2006 to provide a structure and guidance for SSMP development. Also known as Order No. 2006-0003-DWQ, which as further amended by Order No. 2013-0058-EXEC.

System Evaluation and Capacity Assurance Plan – A required component of an agency's SSMP that provides hydraulic capacity of key sanitary sewer system elements for dry weather peak flow conditions, as well as the appropriate design storm or wet weather event.

Tahoe-Truckee Sanitation Agency – Comprised of Tahoe City Public Utility District, North Tahoe Public Utility District, Alpine Springs County Water District, Squaw Valley Public Service District, and TSD, this agency receives wastewater from TSD for treatment and reclamation.

Wastewater Collection System – See Sanitary Sewer System

EXECUTIVE SUMMARY

This Sewer System Management Plan (SSMP) has been prepared in compliance with requirements of the State Water Resources Control Board (SWRCB) Order No. 2006-0003-DWQ as amended by Order No. 2013-0058-EXEC (Amended Monitoring and Reporting Program or MRP).

ES-1 Background

On May 2, 2006, the SWRCB issued a directive through Order No. 2006-0003-DWQ to require all public wastewater collection system agencies in California with greater than one mile of sewers, including Truckee Sanitary District (TSD or District) to be regulated under General Waste Discharge Requirements (Statewide WDR). The SWRCB action also mandates the development of an SSMP and the reporting of sanitary sewer overflows (SSOs) using an electronic reporting system. The SWRCB issued new requirements to the Statewide WDR that became effective on September 9, 2013.

This SSMP was updated to meet the requirements of the Statewide WDR and Amended MRP. Some information describes work in progress that will be described further in future updates to this document.

ES-2 District Service Area

TSD boundaries currently encompass an area of approximately 39 square miles in Placer and Nevada Counties. TSD operates and maintains approximately 300 miles of gravity pipelines containing 3,927 manholes, 9 miles of pressure pipeline, 10 main lift stations, and 32 smaller lift stations. The entire collection system is closely monitored 24 hours a day through a computerized telemetry and flow metering system.

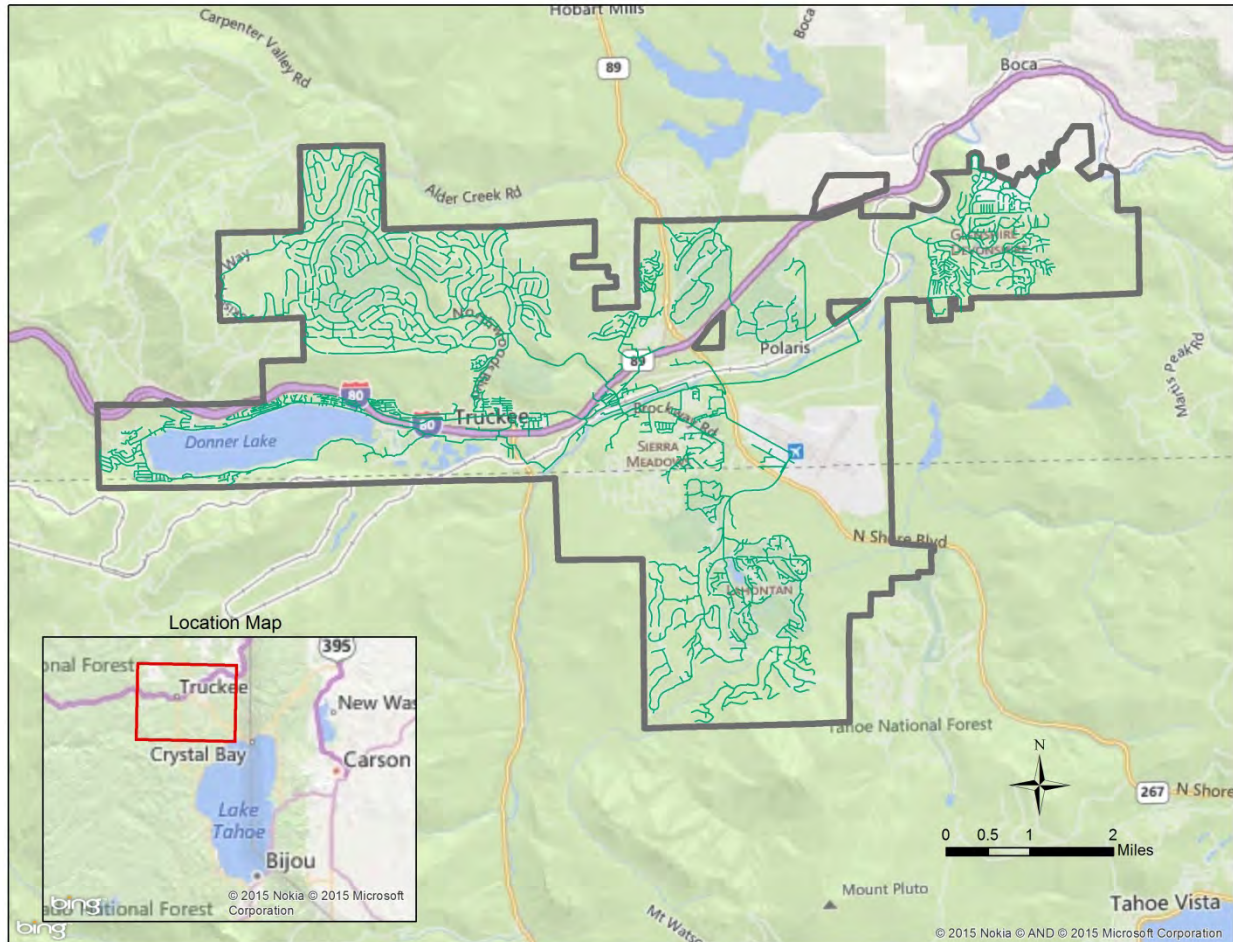
The collection system primarily services residential customers. Small businesses and restaurants contribute only a small percent of TSD's total wastewater flow. TSD does not service any heavy industrial customers.

At present, there are approximately 10,800 residential and 650 commercial accounts discharging into TSD's wastewater collection system.

Truckee Sanitary District also accepts wastewater from Northstar Community Services District via two paired interceptors. This wastewater is conveyed by TSD's collection system to the Tahoe-Truckee Sanitation Agency (T-TSA).

Figure ES-1 on the following page shows the District's service area.

Figure ES-1. TSD Service Area



ES-3 SSMP Objectives

The objectives of the SSMP are to accomplish the following:

- Establish goals that align the TSD sewer collection system operation, management and capacity assurance activities in a manner that achieves the goals stated in Element 1.
- Comply with the Statewide WDR and Amended MRP through provision of the following:
 - Elements I through XI summarizing the District’s sewer system management approach and methods as discussed in the Statewide WDR; and
 - Appendices that are amended over time to reflect changes in contact personnel, job descriptions, policies, procedures and programs.

Table ES-1 identifies the objectives that must be addressed to comply with each SSMP element.

Table ES-1. SSMP Objectives

Element	Objective
I. Goals	<ul style="list-style-type: none"> • Properly manage, operate, and maintain the collection system • Provide capacity to convey base and peak flows • Minimize the frequency and severity of SSOs • Mitigate the impact of SSOs
II. Organization	<ul style="list-style-type: none"> • Identify agency staff responsible for the SSMP • Identify chain of communication for responding to and reporting SSOs
III. Legal Authority	<ul style="list-style-type: none"> • Control I/I from the collection system and laterals • Require proper design and construction of sewers and connections • Require proper sewer installation, testing and inspection • Have the authority to impose source control requirements
IV. Operation and Maintenance Program	<ul style="list-style-type: none"> • Maintain up-to-date maps • Allocate adequate resources for system operation and maintenance • Prioritize preventative maintenance activities • Identify critical equipment and spare parts to minimize equipment and/or facility downtime • Provide staff training on a regular basis
V. Design & Performance Standards	<ul style="list-style-type: none"> • Identify minimum design and construction standards and specifications • Identify procedures and standards for inspecting and testing
VI. Overflow Emergency Response Plan (OERP)	<ul style="list-style-type: none"> • Provide SSO notification procedures • Develop and implement a plan to respond to SSOs • Develop procedures to report and notify SSOs • Develop procedures to prevent overflows from reaching surface waters, and to minimize or correct any adverse impact from SSOs
VII. FOG Control Program	<ul style="list-style-type: none"> • Develop a Fats, Oil and Grease (FOG) control plan, if needed
VIII. System Evaluation and Capacity Assurance	<ul style="list-style-type: none"> • Establish a process to assess current and future capacity requirements • Implement a capital improvement plan to provide hydraulic capacity
IX. Monitoring, Measurement and Program Modifications	<ul style="list-style-type: none"> • Measure the effectiveness of each SSMP element • Monitor each SSMP element and make updates as necessary
X. SSMP Audits	<ul style="list-style-type: none"> • Conduct a bi-annual audit that includes deficiencies and identify steps to correct them
XI. Communication Program	<ul style="list-style-type: none"> • Communicate with the public on SSMP development, implementation, and performance and create a plan for communication with tributary/satellite sewer systems if applicable

ELEMENT 1 - GOALS

The purpose of this section is to identify the goals that the Truckee Sanitary District (TSD) has established for sewer collection system maintenance and the SSMP. These goals are intended to define a program that promotes continuous improvement in TSD's existing collection system management and maintenance processes.

1.1 Statewide WDR Requirement

Requirements for the Goals element of the SSMP are as follows:

The TSD must develop goals to provide a plan and schedule to properly manage, operate, and maintain all parts of the sanitary sewer system. This will help reduce and prevent SSOs, as well as mitigate any SSOs that do occur.

1.2 Truckee Sanitary District Goals

The goals of the TSD are to accomplish the following:

- To manage, operate, and maintain all parts of the public wastewater collection system in an efficient, cost effective manner to provide reliable service now and into the future.
- To cost effectively minimize infiltration and inflow (I & I) and provide adequate sewer capacity to accommodate design peak flows.
- To minimize the number and mitigate the impact of SSOs that occur.
- To mitigate the impacts that are associated with any SSO that may occur.
- To meet all applicable regulatory notification and reporting requirements.

ELEMENT 2 - ORGANIZATION

The purpose of this section is to identify TSD staff responsible for implementing this SSMP, responding to SSO events and meeting the SSO reporting requirements. This section also includes the designation of the Legally Responsible Official (LRO) or Authorized Representative to meet Statewide WDR requirements for completing and certifying spill reports.

2.1 Statewide WDR Requirement

The requirements for the Organization element of the SSMP are as follows. The SSMP must identify:

- The name of the legally responsible or authorized representative as described in Section J of the SSO WDR.
- The names and telephone numbers for management, administrative, and maintenance positions responsible for implementing specific measures in the SSMP program. Include lines of authority as shown in an organization chart or similar document with a narrative explanation.
- The chain of communication for reporting SSOs, from receipt of a complaint or other information, including the person responsible for reporting SSOs 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 Office of Emergency Services (OES)).

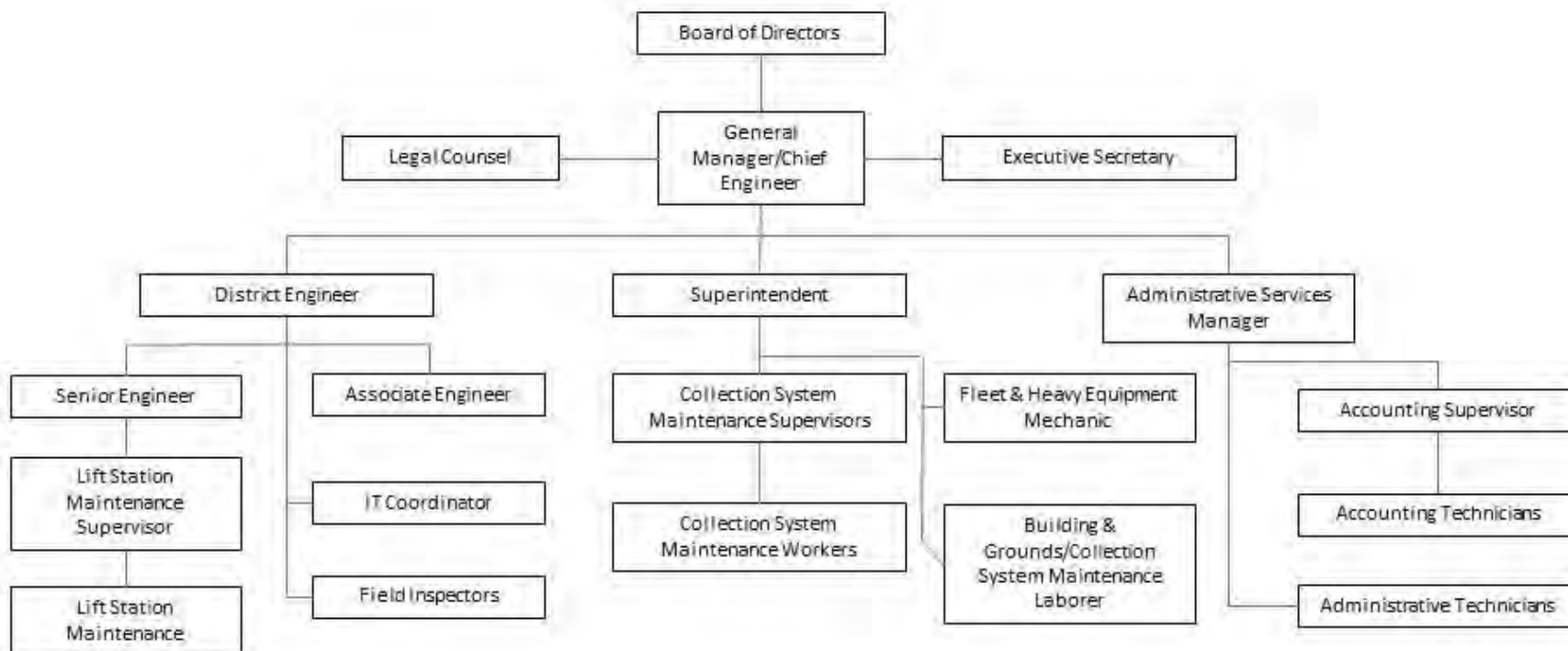
2.2 Organization Chart and SSMP Responsibilities

The TSD operates and maintains the District's sewer system, and responds to sewer emergencies including SSOs. The TSD organization chart is shown in Figure 2-1.

The Collection System Superintendent is the Legally Responsible Official (LRO), reports each SSO through California Integrated Water Quality System (CIWQS), and makes additional required reports to the SWRCB, RWQCB, Town of Truckee, Nevada County, Department of Environmental Health Services (EHS), California Department of Fish and Wildlife (CDFW), and OES as appropriate. The General Manager and District Engineer are both backup LROs, in case the Collection System Superintendent is unavailable.

Roles and responsibilities of key personnel involved in managing the wastewater collection system are listed after the organization chart.

Figure 2-1. Organization Chart



General Manager/Chief Engineer—Establishes policy, plans strategy, leads staff, allocates resources, delegates responsibility, authorizes outside contractors to perform services, and may serve as public information officer. The GM is responsible for implementing the District SSMP.

Superintendent—Manages field operations, cleaning and CCTV inspection activities, provides relevant information to agency management, prepares and implements contingency plans, leads emergency response, investigates and reports SSOs, and trains field crews. The Superintendent coordinates the development, implementation and modifications to the SSMP.

Administrative Services Manager—Provides information updates to Board. Arranges for emergency meetings if necessary. Works as needed on applicable permits, laws, and regulations; provides support to all parts of operation.

District Engineer—Prepares wastewater collection system planning documents; manages capital improvement delivery system; documents new and rehabilitated assets; manages the system flow modeling and capacity assurance plan; completes monthly grease interceptor inspections; manages the lift station and field inspection crews.

Field Inspector—Assures that new and rehabilitated assets meet agency standards, work with field crews to handle emergencies when contractors are involved; and provide verbal reports to District Engineer.

Field Crews—Staff preventive maintenance activities, mobilize and respond to notification of stoppages and SSOs (mobilize sewer cleaning equipment, by-pass pumping equipment, and portable generators).

Administrative Staff—Provides support for all activities as necessary.

Contact numbers for District staff involved in system management, maintenance, and SSO response are included in Appendix A.

2.3 Responsibility for SSMP Management, Administration and Maintenance

Table 2-1 on the following page presents individual responsibilities for each section of the SSMP.

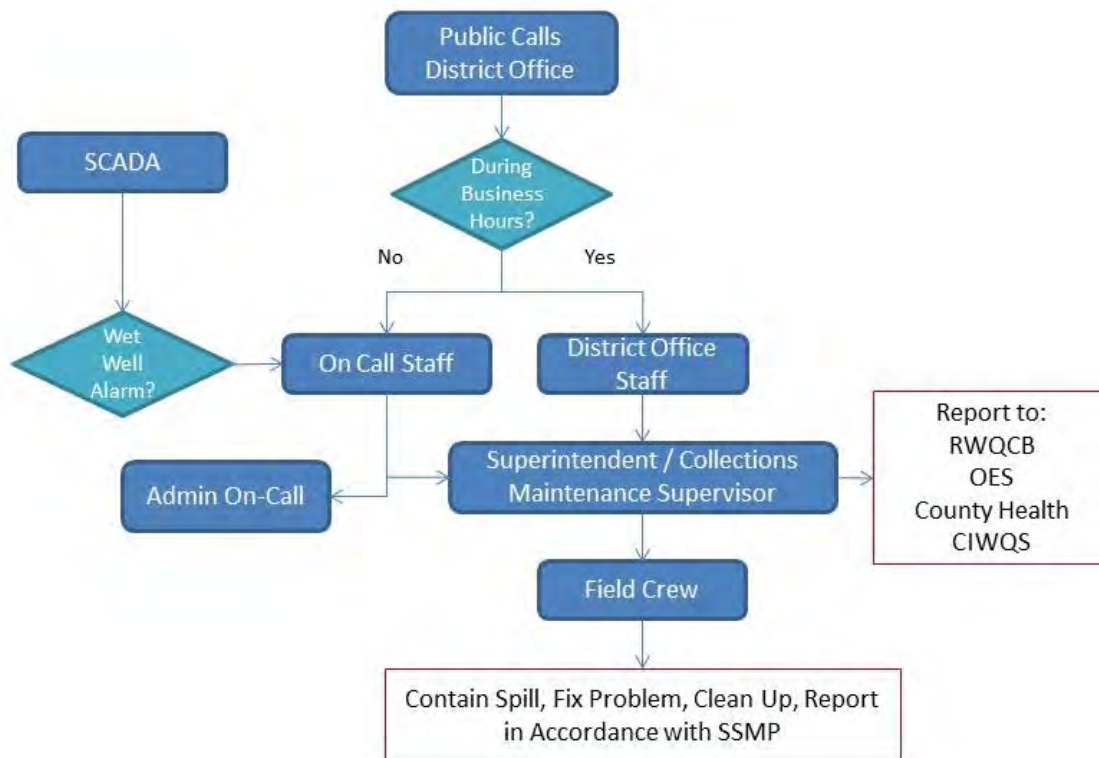
Table 2-1. List of District Staff Responsibilities for SSMP Elements

SSMP Element		Responsible Position
I.	Goals	<ul style="list-style-type: none"> The General Manager leads staff in the implementation of the District's goals.
II.	Organization	<ul style="list-style-type: none"> The General Manager updates the organization structure and amends SSO response and reporting chains of communication, as needed. The District Engineer supports the General Manager in managing SSMP implementation.
III.	Legal Authority	<ul style="list-style-type: none"> The General Manager upholds District Code and drafts new policies as needed.
IV.	Operations & Maintenance	<ul style="list-style-type: none"> The General Manager manages the District's related resources and budget. The District Engineer manages outreach to plumbers and building contractors and maintains a current collection system map. The Superintendent prioritizes preventive maintenance and schedules inspections and condition assessments. The Superintendent maintains contingency equipment and replacement inventories and schedules sewer-related training.
V.	Design and Performance Standards	<ul style="list-style-type: none"> The District Engineer reviews design and construction documents to ensure that all construction projects meet the District's standards, and also updates standards for installation, rehabilitation and repair, as needed. The District Engineer manages the inspection of all construction projects to ensure the District's construction standards have been followed.
VI.	Overflow Emergency Response Plan	<ul style="list-style-type: none"> The Superintendent maintains the Overflow Emergency Response Plan. The District Engineer and Superintendent work together to implement the plan, make revisions, and oversee regular training for maintenance crew members.
VII.	FOG Control Program	<ul style="list-style-type: none"> The Superintendent identifies grease hot spots and maintains an effective cleaning program for grease problem sewers. The District Engineer manages the inspection of grease interceptors and/or traps that have been installed at non-residential locations. The General Manager enforces discharge regulations, as needed.
VIII.	System Evaluation and Capacity Assurance	<ul style="list-style-type: none"> The District Engineer establishes and assesses capacity requirements and manages preparation and implementation of the System Evaluation and Capacity Assurance Plan. The District Engineer develops and implements the long-term Capital Improvement Plan including updating budgets and schedules.
IX.	Monitoring, Measurement and Program Modifications	<ul style="list-style-type: none"> The District Engineer monitors implementation and assesses success of the overall SSMP program elements with the assistance of staff. The District Engineer identifies trends in SSO occurrences and provides recommendations to the Superintendent.
X.	SSMP Audits	<ul style="list-style-type: none"> The District Engineer oversees annual SSMP audits.
XI.	Communication Plan	<ul style="list-style-type: none"> Depending on the situation, the General Manager, District Engineer, and Superintendent communicate with the public and nearby agencies of the City's SSMP.

2.4 Chain of Communication for Reporting and Responding to SSOs

The SSO Reporting Chain of Communications is described below and shown on Figure 2-2.

Figure 2-2. SSO Reporting Chain of Communications



2.4.1 During Normal Business Hours

- During normal business hours, telephone calls reporting SSOs are received at the District Office. Calls are dispatched to the Superintendent. If the Superintendent is not available, the call is redirected to a Collections Maintenance Supervisor.
- The Superintendent or Collections Maintenance Supervisor deploys the Field Crew, which responds to the SSO site within a target range of 60 minutes or less and evaluates the severity of the SSO. Response time may be impacted by heavy snow conditions.
- The Field Crew addresses the SSO and relays appropriate information to the Superintendent, who makes all required reports.

2.4.2 During Non-Business Hours

- After normal business hours, incoming calls are received by the District contracted answering service and automatically routed to the lift station person on-call, who are field staff on a rotational list. The lift station on-call person responds to the call and assesses

the response required. If other crews are required the on-call person calls the Administrative on-call person, who is the District Engineer, Superintendent, or Administrative Services Manager. These positions rotate through the admin on-call responsibility every week. The administrative on-call recipient dispatches the response crew, including contacting the Superintendent, or contacts the appropriate agency, if different than the District.

- Response and reporting are completed as described under 2.4.1. Additional information can be found in Element 6 and the Overflow Emergency Response Plan.

During and after business hours, the Superintendent is the LRO responsible for SSO reporting.

2.5 Appendix A – Element 2 Documents

Appendix A includes the following documents related to this section. The information in these documents will change from time to time, and the documents in Appendix A may have been superseded. Please contact the TSD General Manager for the most recent updates to the Appendix A documents.

- First Responder and Contract Responder Names and Contact Numbers

ELEMENT 3 - LEGAL AUTHORITY

This element of the SSMP discusses the TSD Legal Authority provided through the Truckee Sanitary District Code, Ordinance Nos. 1-2008 and 3-2008 and amendments, which are all available through the TSD website.

3.1 Statewide WDR Requirement

The District must demonstrate, through collection system use ordinances, service agreements, or other legally binding procedures, that it possesses the necessary legal authority to:

- Prevent illicit discharges into its wastewater collection system (examples may include I&I, storm water, chemical dumping, unauthorized debris and cut roots, etc.)
- Require that sewers and connections be properly designed and constructed
- Ensure access for maintenance, inspection, or repairs for portions of the lateral owned or maintained by the public agency
- Limit the discharge of fats, oils, grease, and other debris that may cause blockages
- Enforce any violation of its sewer ordinances

3.2 Legal Authority to Enforce SSMP Requirements

The TSD is regulated by several agencies of the United States Government and the State of California, pursuant to the provisions of Federal and State Law. Federal and State Laws including, but not limited to the following, grant to the District the authority to regulate and/or prohibit, by the adoption of an ordinance and by issuance of control mechanisms, the discharge of any waste, directly or indirectly, to the TSD sewerage facilities.

- 1) Federal Water Pollution Control Act, commonly known as the Clean Water Act (33 U.S.C. Section 1251 et seq.);
- 2) California Porter Cologne Water Quality Act (California Water Code Section 13000 et seq.);
- 3) California Health & Safety Code Sections 25100 to 25250;
- 4) Resource Conservation and Recovery Act of 1976 (42 U.S.C. Section 6901 et seq.); and
- 5) California Government Code, Sections 54739-54740.

Following the authorities provided by the documents described, the District maintains a District Code that provides the necessary legal authority. The District's Code provisions are summarized below and included in Appendix B.

3.2.1 Prevention of Illicit Discharges

The TSD Code controls illicit discharges to the sanitary sewer system through the following Chapters:

- TSD Code Chapter 8, Grease Reduction Program requires specific establishments to install a grease interceptor or trap, and establishes guidelines for sizing equipment.
- TSD Code Chapter 11, Prohibited Uses of Sewer is the primary Code section prohibiting discharges to the sewer system. Specifically:
 - Chapter 11.01 states, “No person shall discharge, or cause to be discharged, any industrial waste into the District sanitary sewer system without having obtained an Industrial Waste Permit from T-TSA. Such permit is required in addition to any other permits that may be required by the District Code, Town Code, County Code, State Statute or other Ordinance, rule or regulation applicable to the industrial discharge.”
 - Chapter 11.02(a) describes that it is unlawful for any person to deposit various solid matters into the sewer
 - Chapter 11.02(b) prohibits the discharge liquid waste of any kind
 - Chapter 11.02(c) prohibits stormwater runoff from any source
 - Chapter 11.02(d) prohibits the disposal of explosive liquid wastes to the sewer system
 - Chapter 11.02(e) prohibits the discharge of any toxic or other pollutants in amounts that cause specific risk to public safety, treatment operations, or water quality, or add cost to downstream treatment processes
 - Chapter 11.02(f) prohibits connections from septic tanks or cesspools to the public sewer system
 - Chapter 11.02(g) requires written permission from the District to discharge uncontaminated water to the sanitary sewer system
 - Chapter 11.02(h) prohibits any person from allowing plumbing fixtures to run water to inhibit freezing of water pipes
 - Chapter 11.03 addresses garbage disposal
 - Chapters 11.04 and 11.05 control temperature and pH of discharges
 - Chapter 11.06 requires compliance with an industrial waste discharge permit from the T-TSA for any and all toxic chemical substances

3.2.2 Proper Design and Construction of Sewers and Connections

The following sections of the District’s governing code establish the requirement that sewers and connections must be properly designed and constructed.

TSD Code Chapter 7, Installation of Sanitary Sewer Facilities, includes the following subsections governing proper construction of sewers and their connections:

- Chapter 7.01, Connection Policy, provides the conditions upon which connection of any residential or commercial structure to the District sewer collection system will be authorized
- Chapter 7.02, Preliminary Sewer Lateral Inspection Program, defines when the private sewer lateral must be inspected prior to issuance of a building permit
- Chapter 7.05, Size and Type of Building Laterals, provides performance and testing requirements for residential and commercial building laterals
- Chapters 7.06 and 7.09 defines standards for pipeline trench excavation and backfill
- Chapters 7.07 and 7.08 establish minimum cover and slope requirements
- Chapters 7.10 through 7.12 address requirements for cleanouts and backflow prevention devices, and for sewer lateral tracer wire
- Chapters 7.13 through 7.15 describe pipeline inspection using pressure testing and CCTV inspection, and testing of manholes, grease interceptors, and sand/oil interceptors
- Chapter 7.16 provides requirements for residential/small commercial pump systems. This Chapter was further amended by Ordinance Nos. 1-2012 and 1-2013.

Appendix A-5 (including amendments established by Ordinance 1-2012) and A-6 to the TSD Code provides the District's standard specifications for sewer construction. Standard Drawings (including amendments established by Ordinance 1-2013) are included following Appendix A-6.

3.2.3 Responsibility for Private Laterals

TSD Code Chapter 7.04 establishes that the owner or its agent shall establish the building sewer lateral at their own expense. The following sections of the District's governing code establish the property owner's responsibility for the sewer building lateral, which is privately-owned up to and including the connection to the District's sewer system at the property line or easement boundary.

TSD Code Chapter 10, Maintenance of Existing Facilities, establishes private lateral ownership as follows:

- Chapter 10.01 states that the owner or their agent of a property served by the District is responsible for the operation and maintenance of the private sanitary sewer facilities from the building to the connection at the sanitary sewer easement or property line.

3.2.4 Access for Maintenance, Inspection & Repairs

TSD Code Chapter 10.02 states that it shall be unlawful for any owner of a property or structure connected to the District's system to maintain private sanitary sewer facilities in a condition such that testing and inspection cannot be performed.

3.2.5 Limit Discharge of Fats, Oils & Grease and Debris

TSD Code Chapter 8 comprises the District's Grease Reduction Program. This Chapter includes the following sections:

- Chapter 8.01 defines commercial food establishments
- Chapter 8.02 establishes requirements for grease interceptors
- Chapter 8.03 establishes requirements for grease traps
- Chapter 8.04 establishes requirements for sand/oil interceptors
- Chapter 8.05 defines various triggers for compliance

3.2.6 Enforcement Measures

TSD Code Chapter 12 describes enforcement, as follows:

- Chapter 12.01 assigns District costs for enforcements to the permittee
- Chapter 12.02 establishes the authority of the District
- Chapters 12.03 and 12.04 define public nuisance and abatement
- Chapter 12.05 through 12.08 establish the conditions by which service will be discontinued
- Chapter 12.12, 12.16, and 12.17 provides authority to enforce provisions of the TSD Code, and establishes criteria for reconnection to the District's system

3.3 Interagency Agreements and Satellite Systems

Truckee Sanitary District accepts wastewater from Northstar Community Services District via two paired interceptors. This wastewater is conveyed by TSD's collection system to the Tahoe-Truckee Sanitation Agency Water Reclamation Plant in Martis Valley.

3.4 Appendix B – Element 3 Documents

Appendix B includes the following documents related to this section. The information in these documents will change from time to time, and the documents in Appendix B may have been superseded. Please contact the General Manager for the most recent updates to the Appendix B documents.

- District Code, Chapters 7, 8, 10, 11, and 12, and Code Appendices A-5 and A-6
- Ordinance 1-2012
- Ordinance 1-2013

ELEMENT 4 - OPERATION AND MAINTENANCE PROGRAM

This section of the SSMP discusses the TSD mapping, operations, preventive maintenance, inspection, training and outreach activities.

The requirements and TSD's plan for the Operations and Maintenance element of the SSMP are summarized in each category below. Since requirements for this SSMP element contain multiple categories, this summary is organized by category, with SWRCB requirements described for each category as applicable.

The categories that are addressed in Element 4 include:

- Collection System Mapping
- Resources and Budget
- Prioritized Preventive Maintenance
- Scheduled Inspections, Condition Assessments and Replacement Planning
- Critical Equipment and Spare Parts
- Training

4.1 Collection System Maps

4.1.1 Statewide WDR Requirement

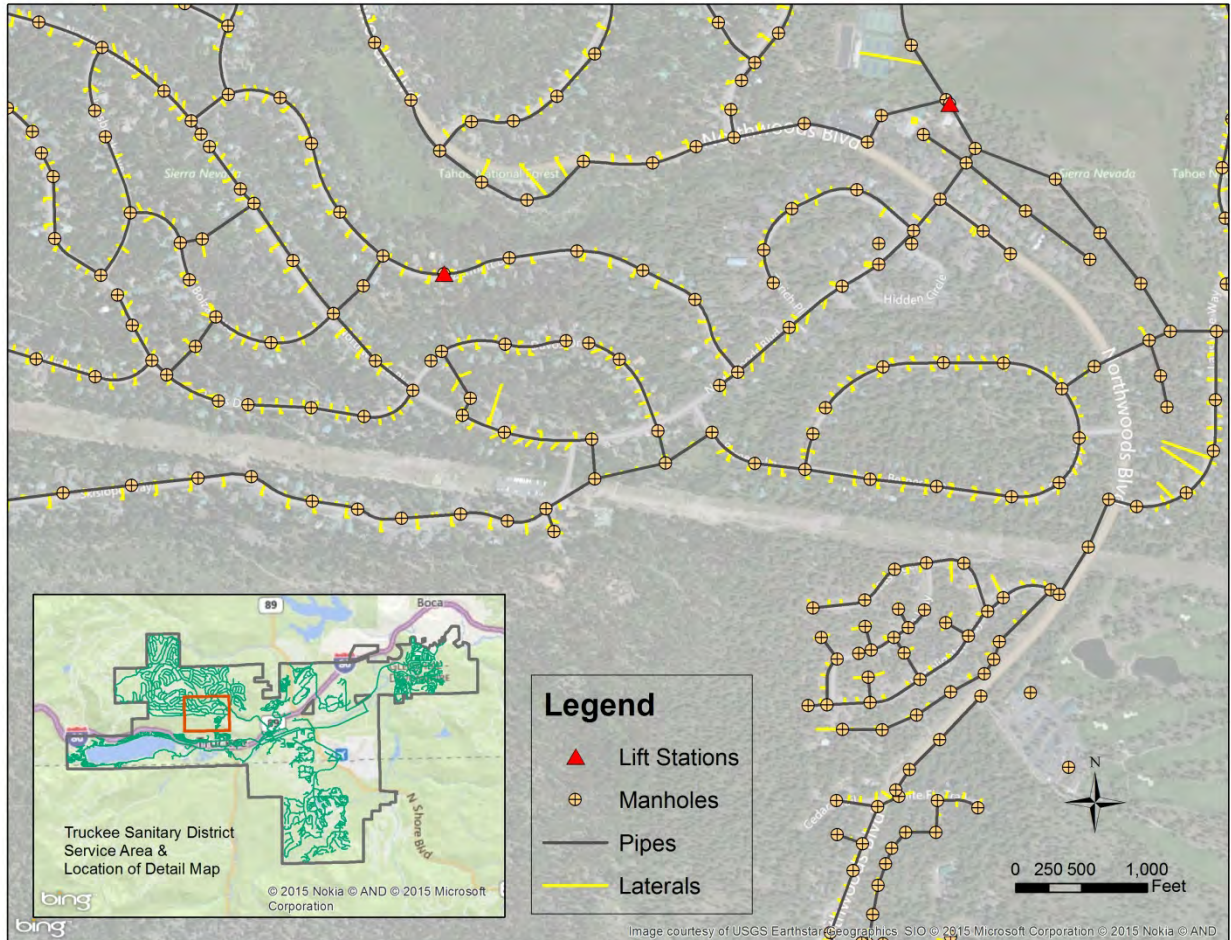
The TSD must maintain an up-to-date map of the sanitary sewer system, e.g., all gravity line segments and manholes, pumping facilities, pressure pipes and valves, and applicable stormwater conveyance facilities.

4.1.2 TSD Collection System Mapping

TSD currently uses ESRI GIS to create and maintain maps of the sewer collection system facilities. The maps are integral with the District's computerized maintenance management system, which uses Lucity software. Maps include all gravity line segments and manholes, pumping facilities, pressure pipes, and bypass ports. Maps are printed in hardcopy as a map book which is carried in all District field vehicles.

Maps are updated by engineering staff on a regular basis when differences are found in the system. System map updates are managed by the District Engineer. Figure 4-1 on the following page provides a snapshot of the information available through GIS for the TSD sewer collection system.

Figure 4-1. Information Available Through GIS for the TSD Sewer Collection System



4.2 Resources and Budget

The Statewide WDR includes no requirement for resources and budget. However, some Regional Boards include this requirement. Therefore, TSD has included the most recent District and capital budgets in Appendix C.

4.3 Prioritized Preventative Maintenance

4.3.1 Statewide WDR Requirement

The SSMP must describe routine preventive operation and 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 Preventive Maintenance (PM) program should have a system to document scheduled and conducted activities, such as work orders.

4.3.2 Prioritized Preventive Maintenance Activities

Truckee Sanitary District cleans its gravity sewer mains on roughly a 3-year cleaning cycle. Pipes are cleaned by hydrojet via one of two larger combination vactor/jetter vehicles, or a smaller jetter truck where access by the larger vactor is not feasible. Pipes with recurring maintenance issues are defined as potential “hot spots.” Hot spot pipes are first cleaned on a 12-month cleaning schedule, and moved to a 6-month or 3-month cleaning schedule if issues persist. The SSO hot spot list is developed based on one or more of the following criteria: cleaning history, CCTV inspection results, and/or the occurrence of SSOs. If the pipeline in question is rehabilitated, the pipe segment is moved off of the hot spot list. The entire hot spot cleaning list is re-evaluated periodically.

4.4 Inspections, Condition Assessment and Rehabilitation

4.4.1 Statewide WDR Requirement

The TSD must develop a rehabilitation and replacement plan to identify and prioritize system deficiencies and implement short-term and long-term rehabilitation actions to address each deficiency. The program should include regular visual and TV inspections of manholes and sewer pipes, and a system for ranking the condition 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 (CIP) 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.

4.4.2 CCTV Inspection Program

TSD conducts CCTV inspections of its sewer lines on roughly a 4 year cycle. Pipeline condition is assessed using the National Association of Sewer Service Companies (NASSCO) Pipeline Assessment Certification Program (PACP). Lines are assigned structural and maintenance grades by the inspector. On a monthly basis, the District Engineer and Superintendent review a report containing CCTV inspection data from the prior period.

During this monthly review, videos for critical pipelines are individually reviewed, and decisions are made regarding needed maintenance or repairs. Although the PACP rating indicates potential issues, decisions are made based on actual observed defects. In addition, the District Engineer and Superintendent identify any required changes to cleaning frequencies. After this review, the CCTV inspection data is uploaded into the District’s CMMS program.

4.4.3 Rehabilitation and Replacement Strategy

The District uses historical knowledge provided by the District Engineer and Superintendent as the foundation for its pipeline rehabilitation program. Additional factors that are used to prioritize rehabilitation needs include the following:

- Pipeline condition
- Flow and capacity needs
- Proximity to water bodies
- Proximity to commercial areas
- Projects are coordinated to the greatest extent possible with other utility and paving work within roadway

Overall, District infrastructure is currently in good condition, and requires approximately \$150,000 annually in rehabilitation budget to address ongoing pipeline issues.

4.5 SSMP Training

4.5.1 Statewide WDR Requirement

The TSD must provide training on a regular basis for staff in sanitary sewer system operations, maintenance, and require contractors to be appropriately trained.

4.5.2 Training of District Personnel and Contractors

All District staff and contractor employees that have a role in responding to, reporting and/or mitigating a sewer system overflow receive training on sewer maintenance, equipment operation, and emergency response, in addition to required safety training. A list of safety training topics is included in Appendix C.

New employees receive this training before they are placed in a position where they may have to respond to SSOs. Beginning in January 2015, SSO response has been included on the agenda for District preconstruction meetings.

Records are kept of all staff training that is provided in support of the SSMP. The records include the date, time, place, content, name of trainer(s) and names of attendees.

4.6 Contingency Equipment

4.6.1 Statewide WDR Requirement

The TSD must provide equipment and replacement part inventories, including identification of critical replacement parts.

4.6.2 Contingency Equipment and Replacement Inventories

The current collection systems inventory is represented in Appendix C. Inventory lists are maintained for the following:

- District fleet

- Parts inventory for sewer pipelines, service laterals, and manhole repairs and maintenance
- Parts and equipment used in lift stations, for force main repair and maintenance, and for emergency vehicles and equipment.

The lists are stored and maintained in the District's CMMS database, which uses Lucity software. These lists are dynamic because they represent current, changing inventory. Emergency response equipment and parts are stored at the District office and warehouse.

4.7 Appendix C – Element 4 Documents

Appendix C includes the following documents related to this section. The information in these documents will change from time to time, and the documents in Appendix C may have been superseded. Please contact the General Manager for the most recent updates to the Appendix C documents.

- TSD Operating and Capital Improvement Budget
- Safety Training list
- Fleet and parts equipment lists

ELEMENT 5 - DESIGN AND PERFORMANCE PROVISIONS

This section of the SSMP discusses the District's design and construction standards.

5.1 Statewide WDR Requirement

TSD must have procedures and standards for inspecting and testing the installation of new sewers, pumps, and other appurtenances and for rehabilitation and repair projects.

5.2 Design and Construction Standards for Installation, Rehabilitation and Repair

As discussed in Element 3, the TSD design and construction standards are provided as part of the District Code, Chapter 7 and Appendices A-5 and A-6. Design criteria include the following:

- Flow criteria
- Minimum velocity
- Peaking factor
- Alignment in public rights of way
- Proximity to other utilities
- Depth of cover
- Manhole spacing
- End of line terminations
- Service connections
- Lift station and force main requirements

The design and construction standards are included in Appendix D.

5.3 Procedures and Standards for Inspection, Testing, Rehabilitation and Repair

Standards for inspection, testing, rehabilitation, and repair are provided in the TSD Code and described further in Element 3.

5.4 Appendix D – Element 5 Documents

Appendix D includes the TSD Code Chapter 7 and Appendices A-5 and A-6, which comprise the District's design and construction standards. The information in this document will change from time to time, and the document in Appendix D may have been superseded. Please contact the General Manager for the most recent updates to the District's Design Standards.

ELEMENT 6 – SANITARY SEWER OVERFLOW EMERGENCY RESPONSE PLAN

This section of the SSMP provides a summary of the District’s Overflow Emergency Response Plan. The OERP is also referred to as the Emergency Overflow Response Guide.

6.1 Statewide WDR Requirement

TSD 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:

- Proper notification procedures so that the primary responders and regulatory agencies are informed of all SSOs in a timely manner
- A program to ensure 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 SSOs that potentially affect public health or reach the waters of the State in accordance with the Statewide MRP. All SSOs shall be reported in accordance with this MRP, the California Water Code, other State Law, and other applicable Regional Water Board WDR or National Pollution Discharge Elimination System (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 untreated wastewater and prevent discharge of untreated wastewater to waters of the United States and minimize or correct any adverse impact on the environment resulting from the SSOs, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the discharge.

6.2 SSO Categories

The responsibilities of the SSO response team depend on the volume and location of an incident. Three categories of SSOs are defined by the SWRCB:

- Category 1 SSO: 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 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 municipal separate storm sewer system is considered to have reached surface water unless the storm drain system discharges to a dedicated storm water or ground water infiltration basin (e.g., infiltration pit, percolation pond).

- Category 2 SSO: 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 municipal separate storm sewer system unless the entire SSO discharged to the storm drain system is fully recovered and disposed of properly.
- Category 3 SSO: All other discharges of untreated or partially treated wastewater resulting from an enrollee's sanitary sewer system failure or flow condition.

6.3 SSO Notification Procedures

Telephone calls reporting SSOs are received at the District Office 24-hour Sewer Emergency Number: **530-587-3804**. This number is posted clearly on the District's webpage, and is also included in the telephone directory.

6.3.1 Normal Working Hours

During normal business hours (Monday to Thursday from 07:00 to 16:30 and Friday from 07:00 to 16:00), incoming telephone calls reporting a potential SSO are dispatched to the Superintendent. If the Superintendent is not available, the call is redirected to a Collections Systems Maintenance Supervisor. The Superintendent or, in his/her absence, the Collections Systems Maintenance Supervisor initiates completion of SSO documentation, using one of the SSO Field Report Forms that is located in the OERP, or an alternative form of documentation.

In addition to completing the documentation, the Superintendent or Collections Systems Maintenance Supervisor deploys the Field Crew. The Field Crew responds to the SSO site within a target range of 60 minutes or less and evaluates the severity of the SSO. Response time may be impacted by snow conditions.

The Field Crew addresses the SSO and relays appropriate information to the Superintendent and/or Collection Systems Maintenance Supervisor. During and after business hours, the Superintendent is the LRO responsible for SSO reporting.

6.3.2 After Normal Working Hours

After normal business hours, incoming calls are automatically routed to the Lift Station On-Call staff, who are field staff on a rotational list. The Lift station On-call person responds to the call and assesses the response required. If other crews are required the on-call person calls the Administrative on-call person, The Administrative on-call list includes the District Engineer, Superintendent, and Administrative Services Manager. Each of these staff are on a weekly rotation with primary responsibility for on-call response. The On-Call staff contact the Superintendent (if not already On-Call), and in his or her absence, the Collections Maintenance Supervisor to provide the necessary response. The Superintendent or Collections Maintenance Supervisor notifies other staff members as required to assist in spill response. Response and reporting are completed following the same procedure that is used during business hours.

6.3.3 Notification from Pump Station SCADA Alarms

All District pump stations are polled continuously via a telemetry system for a variety of parameters. When a pump station alarm occurs at the TSD office during working hours, office staff are notified by an audible alarm and immediately contact lift station maintenance staff. The On Call staff and the Lift Station Maintenance Supervisor are notified by telephone during non-business hours. Field crews are dispatched to resolve the issue and ensure public and environmental safety, following the process used for pipeline SSO response.

6.4 Response Program

The following positions are designated to respond to reported SSOs:

Table 6-1. Designated Responders

TSD Position	Name	Contact Info
General Manager	Blake R. Tresan	(530) 587-3804
District Engineer	Ray Brown	(530) 550-3135
Superintendent	Lee Wright	(530) 550-3111
Collection System Maintenance Supervisor	Lisa Snider	(530) 550-3116

Note: Name of individuals designated with each specific TSD position is current as of April 2015.

Names and numbers for outside agencies and contractors to contact during an SSO are also included in Appendix E (OERP-A).

These entities include:

- In Case of Emergency: 911
- Truckee Police Dispatch
- Nevada County Environmental Health
- Placer County Environmental Health

- Lahontan Regional Water Quality Control Board
- Glendale Treatment Plant / Truckee Meadows Water (if SSO is anticipated to reach the Truckee River)
- California Department of Fish and Wildlife Services
- California Office of Emergency Services
- For Sewage Cleanup: BELFOR Property Restoration or CALNEVA Hydro Steam
- For Industrial Hygiene: Environmental Testing & Consulting Inc., Reno, NV
- Outside Assistance:
 - North Tahoe Public Utility District
 - Tahoe City Public Utility District
 - Alpine Septic
 - Waters Septic Service
 - Tahoe-Truckee Sanitation Agency
 - Truckee Donner P.U.D.

The TSD crew will respond to the site of the complaint with the proper Spill Response Equipment. A variety of equipment are available in the following:

Sewer Maintenance Fleet

- Trucks
- Small construction equipment
- Two Vactor trucks
- Hydrojet truck
- CCTV equipment

Dedicated Emergency Response Equipment

- One large bypass trailer
- One small bypass trailer
- Five portable generators
- Four portable pumps
- Inventory of spare hoses and parts.

Outside Agency/ Contractors

- North Tahoe PUD – Vactors, Bypass Equipment, Staff
- Tahoe City PUD – Vactors, Bypass Equipment, Staff

- Alpine Septic – Tank Trucks
- Water Septic Services – Tank Trucks

Equipment lists are included in Appendix E (OERP-B).

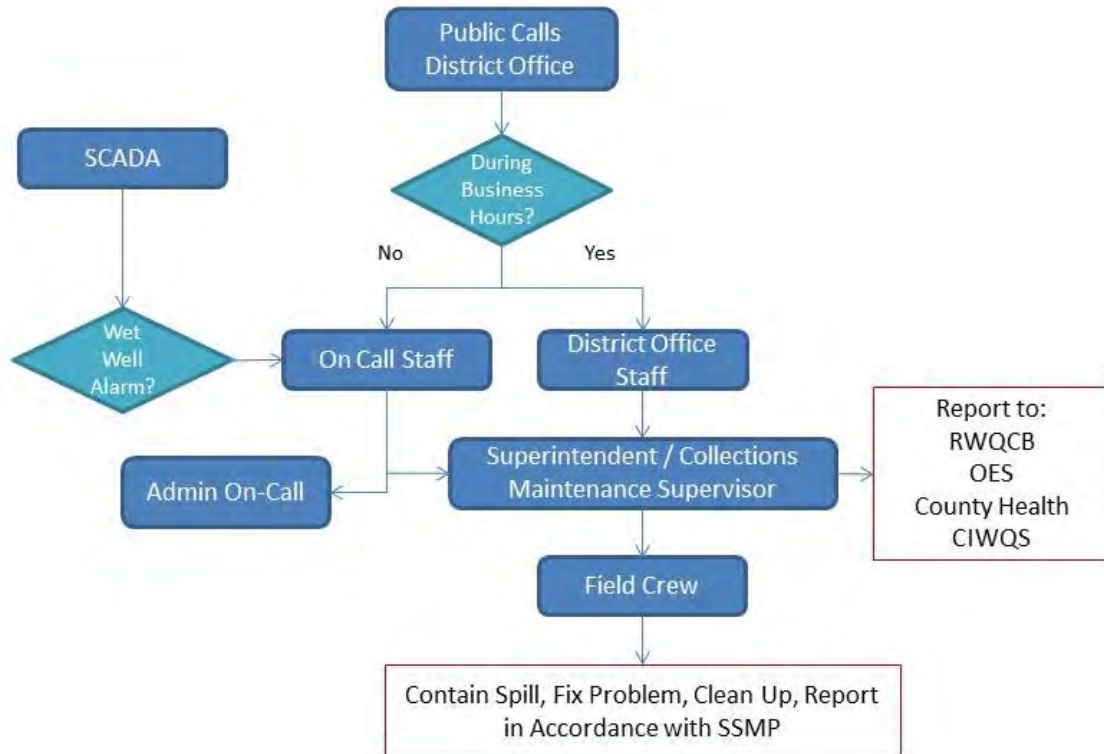
6.4.1 Initial Response

The initial spill response of the District requires clear communication. When the District is notified of a potential sanitary sewer overflow during working hours, the Operations & Maintenance Superintendent or the Collection Systems Maintenance Supervisor will immediately be notified and a crew dispatched. After hours, the On Call Employee will initially notify the Operations & Maintenance Superintendent or the Collection Systems Maintenance Supervisor of a potential sanitary sewer overflow. The On Call Employee will provide the first response. The Operations & Maintenance Superintendent or the Collection Systems Maintenance Supervisor shall notify other staff members from the District to assist in the spill response as required. If the Superintendent cannot be contacted, the On Call Employee shall contact other employees while not delaying the response.

The TSD SSO Reporting Chain of Communications Chart shown on Figure 6-1 on the following page is used for notification procedures so that the primary responders and regulatory agencies are informed of all SSO's in a timely manner.

The crew will respond to the site of the complaint with the proper Spill Response equipment. If the problem is identified as an actual spill, it may be necessary to send for additional equipment or personnel. The crew will assess the problem and take the necessary steps to contain the spill, eliminate the overflow, and begin necessary cleanup. Additionally, crew will be responsible for signage, photos, water quality sampling and notifications. If the problem has escalated to an emergency situation, further staff assistance, such as List Station operators may be contacted

Figure 6-1. SSO Reporting Chain of Communication



6.4.2 External SSO Response

Upon arrival at the site, the First Responder completes the following:

- Notes arrival time at spill site, and include the time in the SSO record. The First Responder records basic incident information on site, and should complete the form after finishing the response.
 - TSD keeps standardized SSO reporting forms on hand to internally document the contact and response for each SSO that occurs. The most current forms are named, “SSO Field Report Form” and Category 1 SSO Field Report Form.” Both forms are included in the OERP. However, use of these specific forms is currently left to the judgment of the First Responder
- Verifies the existence of the SSO
- Field verifies the address and nearest cross street, and confirms that the SSO is part of the TSD sewer/conveyance system. If needed, the First Responder sends for additional equipment or personnel, and notifies the Administrative On-Call person
- Conducts visual monitoring to determine immediate actions, starting with documentation of SSO volume using the methods included in the OERP

- Identify and clearly assess the affected area and extent of spill, including possible impacts on surface water. Where it is safe and practical, visually inspect surface water in the vicinity of the SSO and record observations. Record signs of receiving water impacts include clear signs of sewage (solids, grease, and paper), abnormal color, fish kills, etc.
- Estimate spill volume using one or more SSO flow estimation guidelines in Appendix E (OERP-B) These guidelines follow the information that is published by DKF Solutions, as supported by the California Water Environment Association (CWEA).
- Contain, mitigate, and minimize impacts from the SSO. **Containment is top priority**, and the crew should make every reasonable attempt to keep the SSO in as small an area as possible, and out of storm drains.
- If the SSO is the result of a blockage, follow the **Mainline Stoppage Procedure** in Appendix E (OERP-B).
- If the blockage is not relieved within the first few attempts or 20 minutes, whichever is sooner, the General Manager and Superintendent must be immediately informed. The Administrative On-Call person or the Superintendent will call up other employees and local contractors to initiate emergency repair to restore flow and also provide assistance to initiate spill containment or bypass pumping as described in Appendix E (OERP-B).
- Where safe and feasible, take necessary water quality samples at the point of discharge and at upstream and downstream locations. Use best judgment and consult with the District Engineer if uncertain. It is a Regional and State Board requirement to use the **Water Quality Monitoring Plan**, see Appendix E (OERP-C) for SSOs greater than 50,000 gallons. Water quality monitoring is not given precedence over stopping the SSO or protecting public health. However, if sufficient personnel are available, monitoring is conducted in parallel with these activities or with the cleanup effort.
- Comply with all safety precautions (traffic, confined space, etc.). For SSOs in high traffic areas, additional staff should be contacted to provide traffic control. If traffic control is required on a State highway, both Highway Patrol and CalTrans shall be contacted.
- Contact caller, if time permits. Identify SSO cause, including conducting CCTV inspection as appropriate.
- Document all activities through photos and written documentation.

6.4.3 Internal SSO Response (Residential Sewage Backup)

Upon arrival at the location of a spill into a house or a building, the First Responder should evaluate and determine if the spill was caused by a blockage in the private lateral or in the District-owned sewer main or lower lateral. If a blockage is found in a property owner's lateral, it should be clearly communicated that response and repair of private laterals is not the District's responsibility. The homeowner is responsible for clearing any blockage in the home's plumbing system or private lateral and for any resulting flood damage to the structure. The homeowner is also responsible for damage that happens because a lateral was not properly installed.

- Sewer intrusion into a private residence or commercial building caused by a blockage or SSO related to a District owned and operated facility will be handled by the Superintendent. Property damage shall be immediately documented and photographed by the field crew during first response. A professional and certified sewage cleanup contractor shall be dispatched to begin cleanup procedures.
- The District's Administrative Services Manager shall be notified of the occurrence and will contact the District's Insurance carrier to begin the loss process. Property damage caused by a blockage or SSO in the private lateral or customer owned facilities shall be reviewed and the customer shall be given contact information for certified sewage clean up specialists.

Sewage Cleanup Contractors

CALNEVA HYDRO STEAM (for sewage cleanup)
24 hour emergency service/Howard or Anna Rankell
(530) 587-0505 or 583-3645
or 546-3756 or (775) 831-3645

BELFOR PROPERTY RESTORATION (for sewage cleanup)
24 hour emergency response
1-800-856-3333

In addition, the following guidelines should be followed for an internal SSO:

- Keep all family members and pets away from the affected area
- Place towels, rags, blankets, etc between areas that have been affected and areas that have not been affected, and move any uncontaminated property away from the overflow area
- Move any uncontaminated property away from the overflow area. Do not remove any contaminated items.
- Turn off the heating and ventilation systems.
- The First Responder should follow the following steps to assist the homeowner:
 - Gather information
 - Call a restoration company (contact numbers are included in the OERP and Appendix E [OERP-A]), and wait for the restoration firm to arrive
 - Forward incident reports and related documents to the Superintendent

6.4.4 Pump Station SSO Response

The First Responder to a potential pump station or force main failure should determine whether flow can be restored within a reasonable time. If it appears that flow cannot be restored within a reasonable time or if the conveyance system facility requires construction and/or repairs, then the First Responder should employ the actions that are described in the **Standard Operating**

Procedure Manual. This document provides instructions for addressing anticipated bypass and emergency response needs, including a power outage at a small or large lift station, lift station pumped bypass, force main bypass, and gravity main bypass. The Standard Operating Procedure Manual is included in Appendix E (OERP-B).

In addition, other SSO response activities discussed above should be implemented where applicable.

6.4.5 Emergency Traffic Control

In the event that the spill is located in a high traffic area, additional staff shall be contacted to provide traffic control. Traffic control may be needed immediately to protect the public and TSD crew while containing the overflow and removing blockage. Traffic control may also be needed to prevent wastewater from being further dispersed. If the traffic control will be on a State Highway, both Highway Patrol and Cal Trans shall be contacted as outlined in table 6-2.

General steps in implementing traffic and crowd control include the following:

- Contact impacted agencies, local law enforcement and fire/sheriff as needed
- Set up barriers and delineation directing human and vehicular traffic around spill area, including closing any entrances or exits from adjacent facilities
- Establish signage including signs protecting public health and safety
- Use staff personnel to control traffic and pedestrians

Table 6-2. Traffic Control Agencies

Traffic Control Agency	Contact Number
TOT Police Dispatch	(530) 550-2320
California Highway Patrol / Truckee Dispatch	(530) 582-7500
Cal Trans	(530) 583-3201

6.4.6 Containment

Containment of already spilled material is top priority. The crew will make every effort to keep the SSO in as small an area as possible. It is preferred that the crew keeps the SSO in the street and out of storm drains. To make sure the SSO is contained, the crew may use the following methods:

- Determine the immediate destination of the overflowing sewage.
- Use drain covers, 3 inch high rubber dams, sand bags or soil to keep the overflow from reaching a storm drain

- Should the overflow take place in an area not normally accessible to the public, such as; (fields, tributaries, etc.), the crew will use any reasonable means to contain the flow in that area for recovery
- The crew will make every reasonable attempt to dam up the spill in the storm drain or catch basin and recover it from that point
- Take photos of all containment efforts

If an SSO reaches a water body, follow the requirements below for posting and SSO notification signage. Also conduct water quality sampling as discussed above.

6.4.7 Bypass and Clearing Blockage

Once on site, and after the blockage is assessed, District staff will make every attempt to clear the blockage as quickly as possible. If the blockage is not relieved within the first few attempts (20 minutes), it is crucial that bypass or storage procedures are followed immediately. The standard procedure in addressing a blockage is summarized below:

- Containment of the overflow while the vector or bypass equipment is being setup
- Determine if a pump station can be isolated and used for temporary storage. Consult with the Lift Station Supervisor or Lift Station Operator.
- In small residential areas, the storage capacity of the Vector(s) may be sufficient to bypass flows and stop the spill until the blockage is cleared or a larger bypass is set up
- Locate the nearest downstream manhole that can accept the additional flow
- Set up necessary bypass equipment
- Take photos of containment areas and/or bypass setups

6.4.8 Sewage Estimation

Use the methods outlined in Appendix E (OERP-B) to estimate the volume of the spilled sewage. These guidelines follow the information that is published by DKF Solutions, as supported by the California Water Environment Association (CWEA).

Some spills may occur in locations where the wastewater can seep into the ground or flow away from the spill location. In such conditions, consider when the spill was first detected and observations from bystanders in order to determine the total spill volume.

6.4.9 Water Quality Sampling

Water quality sampling and testing are required within 48 hours after initial SSO notification whenever the spilled sewage enters any active creek, stream, or river or has reached Donner Lake. Further, with an SSO greater than 50,000 gallons, the District must follow the Water Quality Monitoring Plan in Appendix E (OERP-C). The purpose of testing is to determine the extent and impact of the SSO.

A spill sample kit is located in the Safety/PPE storage room in the Field Operations Building.

Extreme care shall be taken to ensure samples are taken properly and stored properly. The samples shall be analyzed for ammonia and fecal coliform, which the Tahoe-Truckee Sanitation Agency (T-TSA) will perform. Additional analysis may be required by the Regional Water Quality Control Board. The following steps shall be followed to make sure samples are collected properly. Two samples from each collection site shall be taken. One sample will be tested for ammonia and one for fecal coliform (bacteria indicator).

- The First Responder should arrange for collection of samples
- Contact T-TSA as soon as possible after it is determined the spill requires water quality sampling, but no later than 48 hours after the discovery of the SSO event
- If the SSO occurs on the weekend, contact the on-duty operator at **T-TSA at 530-587-2525**. T-TSA's office is located at **13720 Butterfield Drive Truckee, CA 96161**. Let them know you need the lab to accept and set up these samples within 6-24 hours of being collected.
- Always wear sterile blue nitrile gloves while handling the sample containers. Change gloves after each sample bottle is filled.
- Always sample in a clean to dirty order. Sample lakes, creeks, streams and rivers upstream **first**, downstream **second** and at the **location of the spill last**.
 - Donner Lake: Collect one sample along the shoreline approximately 100' away from the point of entry of the SSO (i.e., upstream). Collect another sample 100' in the opposite direction of the SSO point of entry from the first sample (i.e., downstream). Collect one sample at or near the point of entry of the SSO to the Lake.
 - Creeks, Rivers and Streams: Collect one sample 100' upstream of the point of entry of the SSO. Collect one sample 100' downstream of the point of entry of the SSO. Collect one sample at or near the point of entry of the SSO.
- Label each sample bottle with a specific sample ID prior to filling.
- Water quality sampling procedures are provided in detail in the OERP, and should include the following procedures:
 - **For ammonia samples:**
 - The sample bottle is 500 mLs
 - Keep the sterile bottle closed until it is to be filled
 - Remove cap and hold the bottle near its base and plunge it, neck downward, below the surface
 - Collect water sample just below the surface in knee deep water, approximately 3 feet deep (full arm's length). If needed, extend the sampling pole to the fullest length to reach deeper water depth.

- When the sample is grabbed, the bottle should be rinsed twice at the site and then the **third dip shall be the grab sample**
- Take great care to assure no debris, dirt or sediment enters the sample bottle. Do not touch the inside of the sample bottle or lid with your fingers or any foreign objects
- Turn bottle until neck points slightly upward and mouth is directed toward the current
- Fill the sample container to the 500mL line, and quickly replace lid and tighten securely
- Dry the bottle. Label container with distinctive sample site name, date, and time collected.
- Note any field observations that may have occurred during the sampling.
- **For the fecal coliform samples:**
 - The sample bottle size is 120 mL
 - Keep the sterile bottle closed until it is to be filled
 - Remove cap and hold the bottle near its base and plunge it, neck downward, below the surface
 - Collect water sample just below the surface in knee deep water, approximately 3 feet deep (full arm's length). If needed, extend the sampling pole to the fullest length to reach deeper water depth.
 - The bottle contains a preservative so the first dip is the grab sample. **Do not rinse this sample bottle.** This sample has a 6 hour incubation from collection to laboratory set up.
 - Do not touch the inside of the sample bottle or lid with your fingers or any foreign objects
 - Turn bottle until neck points slightly upward and mouth is directed toward the current
 - Fill the sample container to the 120mL line, and quickly replace lid and tighten securely
 - Dry the bottle. Label container with distinctive sample site name, date, and time collected.
 - Note any field observations that may have occurred during the sampling
- Record date, time and location that each sample is taken on the chain of custody forms in the kit. There should be one chain of custody form per sample bottle. There is a different chain of custody form for ammonia and fecal coliform samples. All paperwork will be in the sampling kit.

- Place each sample bottle into a separate and unused zip lock bag and place into a cooler with a frozen blue ice pack or cubed ice placed in a sealed zip lock bag. Place chain of custody forms (one per bottle) in a zip lock bag and place in the cooler with the samples.
- Samples shall be transported and analyzed at the T-TSA within 6 hours for Total Coliform, and 6 to 24 hours of being collected for ammonia.
- Take photos at the sample sites

Records of monitoring information shall include the date, exact place, and time of sampling or measurements, the individual(s) who performed the sampling or measurements, the date(s) analyses were performed, the individual(s) who performed the analyses, the analytical technique or method used, and the results of such analyses.

6.4.10 Water Quality Monitoring Program

A Water Quality Monitoring Plan must be implemented immediately upon discovery of any Category 1 SSO of 50,000 gallons or more in order to assess impacts from SSOs to surface waters. Water quality testing must be completed within 48 hours of the District becoming aware of the SSO.

TSD's SSO Water Quality Monitoring Program is included in Appendix E (OERP-C), and includes the items listed below. All staff should be familiar with the Water Quality Monitoring Program, which provides administrative requirements beyond the sample collection requirements described above.

- Protocols for water quality monitoring, which are also described above
- Requirement to account for spill travel time in the surface water and scenarios where monitoring may not be possible (e.g. safety, access restrictions, etc.)
- Requirement for water quality analyses for ammonia and bacterial indicators to be performed by an accredited or certified laboratory, following the District's standard practice
- Requirement for monitoring instruments and devices used to implement the SSO Water Quality Monitoring Program to be properly maintained and calibrated, including any records to document maintenance and calibration, as necessary, to ensure their continued accuracy

6.4.11 Site Restoration and Cleanup

The recovery and clean-up phase must begin when the flow has been restored and the spilled sewage has been contained to the extent possible. Spilled sewage shall be vacuumed or pumped and discharged to the extent possible back into the sanitary sewer system. The surrounding environment shall be restored as closely as possible to the condition that existing before the SSO occurred.

Cleanup and Disinfection

Clean up and disinfection procedures must be implemented to reduce the potential for human health issues and adverse environmental impacts that are associated with an SSO event. The procedures described are for dry weather conditions and should be modified as required for wet weather conditions. Clean up should proceed quickly in order to minimize negative impact.

Where cleanup is beyond the capabilities of District staff, contact a cleanup contractor to complete the work.

Phone numbers are provided in the emergency response list in Appendix E (OERP-A) and this OERP. Spills inside houses or buildings should be cleaned by a professional cleaning company as discussed above. Contact information for professional cleaning companies can be found in the “Water Damage Restoration” section of the Yellow Pages and is also provided in Section 4.3.2 and the emergency response list. Claims by homeowners should be forwarded to the District.

In the event of an SSO event during night time hours, the incident must be re-inspected as soon as possible the following day. The site shall be inspected for any signs of sewer related debris/material that may warrant additional cleanup activities.

Cleanup Procedure

Every effort to restore the environment to the condition that existed before the SSO occurred will be made by using the following procedures:

- If the SSO occurred in the street, staff should apply a light mist of diluted household bleach to the affected area. If the SSO occurred in an unpaved/dirt area, staff should vacuum up all affected areas and loose material and apply a light application of diluted household bleach to the saturated areas.
- Document the volume and application of disinfectant that is employed.
- Collect and dispose of any standing or pooled sewage that is accessible to the public.
- Attempt to recover all signs of sewage solids and sewage-related material in gutters, storm drains, culverts, swales, ditches, dry creeks, etc.
- If the spill area is not accessible to vacuum up, rake up all loose material and debris and place into garbage bags, scarify the soil with a rake and apply a diluted household bleach solution.
- Allow area to dry then repeat the process if additional cleaning is required
- Quantify the volume of all sewage recovered at the time it is disposed of out of the truck
- Clear surrounding area of paper, solids, and any other signs of a SSO
- Take photos of site restoration and cleanup

If the SSO has reached the **storm drain system**, the combination sewer cleaning truck should be used to vacuum/pump out the catch basin and any other portion of the storm drain that may contain sewage. In the event that an overflow occurs at night, the location should be re-inspected

as soon as possible the following day. The operator should look for any signs of sewage solids and sewage-related material that may warrant additional cleanup activities.

6.4.12 SSO Notification and Signage

Notification signage and barriers should be installed where required to prevent the public from having contact with the sewage. Signs should be posted with yellow “caution” tape to keep vehicles and pedestrians away from contact with spilled sewage. “Closed” signs should be posted at the outfall of streams and a minimum of 100 feet upstream and 100 feet downstream of the discharge. If there is a large volume of sewage, more signs must be posted downstream.

Signs must remain in place until Department of Health Services determines that the risk of contamination has subsided to acceptable levels. Warning signs should be checked every day in order to ensure that they are still in place.

A sample warning sign is found in Appendix E OERP-C.

6.4.13 Blockage Investigation

Following elimination of the blockage and after cleanup activities have been completed, the cause of the spill shall be investigated. If the spill occurred in a gravity sewer main or lower lateral, the affected segment of line shall be televised using the District CCTV equipment.

For each substantive SSO event as determined by the General Manager, all response participants– from the person who received the call to the last person to leave the site – should meet, as soon as feasible, after the event to review and evaluate the incident and the TSD response procedures. The objective of the Post-SSO debrief is to determine actions necessary, if any, to reduce the recurrence and better mitigate the effects of SSOs.

General procedures for investigating an SSO are as follows, and may be adjusted depending on the specific details of the SSO:

- Review and complete SSO documentation
- Review the incident timeline and other documentation regarding the incident
- Review actions by all persons involved in the response, including the initial recipient of the complaint
- Review communications with the all reporting parties, and witnesses
- Review volume estimate, volume recovered estimate, volume estimation assumptions and associated drawings
- Review available photographs
- Interview staff that responded to the spill

- Review past maintenance and inspection records of all affected manholes and pipe segments
- Review FOG information or results
- Identify any changes or additions needed to the OERP and SSMP following the event

The product of the blockage investigation should be the determination of the root cause and identification of the corrective actions.

6.5 SSO Documentation and Reporting

6.5.1 Documentation

In accordance with the WDR, the District maintains records for each sanitary sewer overflow. Records include:

- Documentation of response steps and/or remedial actions
- Photographic evidence to document the extent of the SSO, field crew response operations
- Site conditions after field crew SSO response operations have been completed
- The date, time, location, and direction of photographs taken will be documented
- Documentation of how any estimations of the volume of discharged and/or recovered overflow were calculated

The records are maintained at the District office and are also entered into the District's CMMS system. The District also maintains records of complaints received, even if the complaint does not relate to a TSD SSO.

6.5.2 Sewer Service Request

The District's Sewer Service Request Procedures are used as a tool to ensure appropriate response to all overflows. The following procedures are followed as appropriate by TSD staff when receiving notice of a potential overflow from the public. A sewer-related call, especially a possible sewage spill, is of critical importance. Nothing is more important than SSO response, other than the safety of individuals. The main objective of District personnel at the spill site is to relieve the problem, stop the flow, and clean up the site as quickly as possible, no matter where the site is, whether it is on public or private property.

The following are procedures for processing a Sewer Service Request (SSR) received over the telephone. When a SSR is received alerting TSD of a sewer problem, never place the caller on hold without first identifying the nature of the call.

- Ask the caller if there is any sewage flowing; if so, get the site address, the name of the nearest cross street, their name and phone number. Get as much information as possible. Then ask the caller to please hold.
- If the call is sewer spill/blockage related, immediately contact the TSD Operations &

Maintenance Superintendent or a Collection Systems Maintenance Supervisor. Confirm who is responding to the SSR.

- Thank the caller for calling. Advise the caller that a Supervisor will be contacting them to meet at the site to assess the situation. (Pull the APN file and make a copy of the Inspector's as-built drawing for the Supervisor.)
- Get started with **Lucity** software:
 - Double click on the Lucity Web icon, which should be on your desktop.
 - Click on **Go to Menu** and then one click on **SEWER SERVICE REQUEST**.
 - Below, on second line, appears **Sewer Service Request**, one click on this opens the program ready for you to input the information.
 - Complete the form. The items with an asterisk are required fields.
 - Click on **Submit**, then a summary of the information provided will be displayed.
 - One more step left, scroll down, you must click on “**Send e-mail copy**”. This will distribute the summary information to all Outlook Users.
 - Click on **close** button and exit the program.
- If the sewer spill relates to Lift Stations or Force Mains, contact the Senior Engineer or the Lift Station Maintenance Supervisor. Supervisors will dispatch the appropriate personnel and equipment immediately to the site, if necessary. TSD field personnel hearing the radio traffic and already in the area shall acknowledge their location via radio and respond to the site as needed.
- If a sewer complaint call is received out in the field, contact the office personnel and inform them of the situation. Ask them to start the SSR procedures.
- Once everything is entered on the SSR in the computer, print and give the original SSR to the person who responded to the call for completion
- It is the responsibility of the person who took the SSR to **make sure that a TSD employee has responded to the call**
- Stand by for further radio and telephone communications from the field staff. Listen for updates that will be given via the radio as additional information and details are obtained.
- Ask other office staff to assist with unrelated incoming phone calls if needed
- Keep all personnel up to date on the status of the request as needed the e-mail
- The General Manager, Operations & Maintenance Superintendent, District Engineer or Administrative Services Manager will initiate telephone calls to the agencies listed in Table 6-3 on the following page, if appropriate.

Table 6-3. List of Outside Agencies in Concern

Agency	Normal Hours	24 Hours
Nevada County Environmental Health	(530) 582-7884	Haz Mat Emergency Hotline: (530) 265-1778 OR call 911
Placer County Environmental Health	(530) 581-6240	Sheriff Dispatch: (530) 581-6305 Haz Mat call 911
Lahontan Regional Water Quality Control Board	(530) 542-5400	California State Warning Center w/OES (800) 852-7550
Glendale Treatment Plant/Truckee Meadows Water (if spill is anticipated to reach the Truckee River)	(775) 834-8140	Previous number also 24hrs: (775) 834-8140
California Department of Fish and Game	Northern Central Regional Office (Rancho Cordova) (916) 358-2900	(916) 445-0411 (916) 653-7664
For Sewage Clean Up: BELFOR Property Restoration	(800) 856-3333	(800) 856-3333
For Sewage Clean Up: CALNEVA Hydro Steam	(530) 587-0505, 583- 3645, 546-3756, (775) 831-3645 Direct Line: (775) 831- 9790	All numbers 24 Hour Emergency Service (Anna/Howard Rankell)
Industrial Hygiene Co: Environmental Testing & Consulting, Inc., Reno, NV	Office: (775) 847-7878	Cell: (775) 691-5506

- The SSR must be filled out completely by the Superintendent or the Collection Systems Maintenance Supervisor who responded or was in charge of the action taken at the site. The action taken should be documented, what happened, date and time of who you spoke with on the conversation, possibly a work order was created, additional reports, photographs, follow up, etc.
- Turn the completed SSR and all other documentation pertaining to the request to the Administrative Maintenance Support (Evy Henkel as of April 2015) for final processing and follow up.

6.5.3 SSO Technical Report

If 50,000 gallons or greater from an SSO reaches surface waters, an SSO Technical Report must be prepared and submitted to the CIWQS online SSO database within 45 calendar days of the SSO end date. The SSO Technical Report template is attached, and includes the following required elements:

1. Causes and Circumstances of the SSOs
2. Complete and detailed explanation of how and when the SSO was discovered
3. Diagram showing the SSO failure point, appearance point(s), and final destination(s)
4. Detailed description of the cause(s) of the SSO
5. Copies of the original field crew records used to document the SSO
6. Historical maintenance records for the failure location
7. Response to SSOs
 - a) Chronological narrative description of all actions taken to terminate the SSO
 - b) Explanation of how the OERP was implemented to respond to and mitigate the SSO
 - c) Final corrective action(s) completed and/or planned to be completed, including a schedule or actions not yet completed
8. 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 point

The District Engineer is responsible for the development and certification of the SSO Technical Report.

6.6 SSO Reporting and Notification

6.6.1 SSO Notification Requirements

The District's SSO Reporting Requirements document, located on the following page, should be used to ensure prompt notification to appropriate regulatory agencies of all SSOs that potentially affect public health or reach the waters of the State. All SSOs shall be reported in accordance with this SSMP, which follows SWRCB Order No. WQ 2013-0058-EXEC.



TRUCKEE SANITARY DISTRICT SSO REPORTING REQUIREMENTS

NOTIFICATIONS – COMPLETE ALL REQUIRED NOTIFICATIONS	
If Spill is greater than 1,000 gal OR spill reached surface water or storm drain, Contact:	
OFFICE OF EMERGENCY SERVICES (800-852-7550):	DATE & TIME:
PERSON CONTACTING:	SPOKE TO:
CONTROL NUMBER:	
If Spill Impacted Public Areas, Warning Signs were Posted, and/or Human Contact Occurred, Contact:	
NEVADA COUNTY ENVIRONMENTAL HEALTH (530) 582-7884 Haz Mat Emergency Hot Line (530) 265-1778	DATE & TIME:
PERSON CONTACTING:	SPOKE TO:
PLACER COUNTY ENVIRONMENTAL HEALTH (530) 581-6240 Sheriff Dispatch (530) 581-6305	DATE & TIME:
PERSON CONTACTING:	SPOKE TO:
LAHONTAN REGIONAL WATER QUALITY CONTROL BOARD during normal hours (530) 542-5400 24-Hours (800) 852-7550 Calif. State Warning Center w/OES	DATE & TIME:
PERSON CONTACTING:	SPOKE TO:



If Spill Backups into a Property, Contact:	
<p><u>CALNEVA HYDRO STEAM</u> (for sewage cleanup)</p> <p>24 hour emergency service/Howard or Anna Rankell</p> <p>(530) 587-0505 or 583-3645 or</p> <p>546-3756 or (775) 831-3645</p> <p>PO Box 580, Carnelian Bay, CA 96140</p>	<p>DATE & TIME:</p>
<p>PERSON CONTACTING:</p>	<p>SPOKE TO:</p>

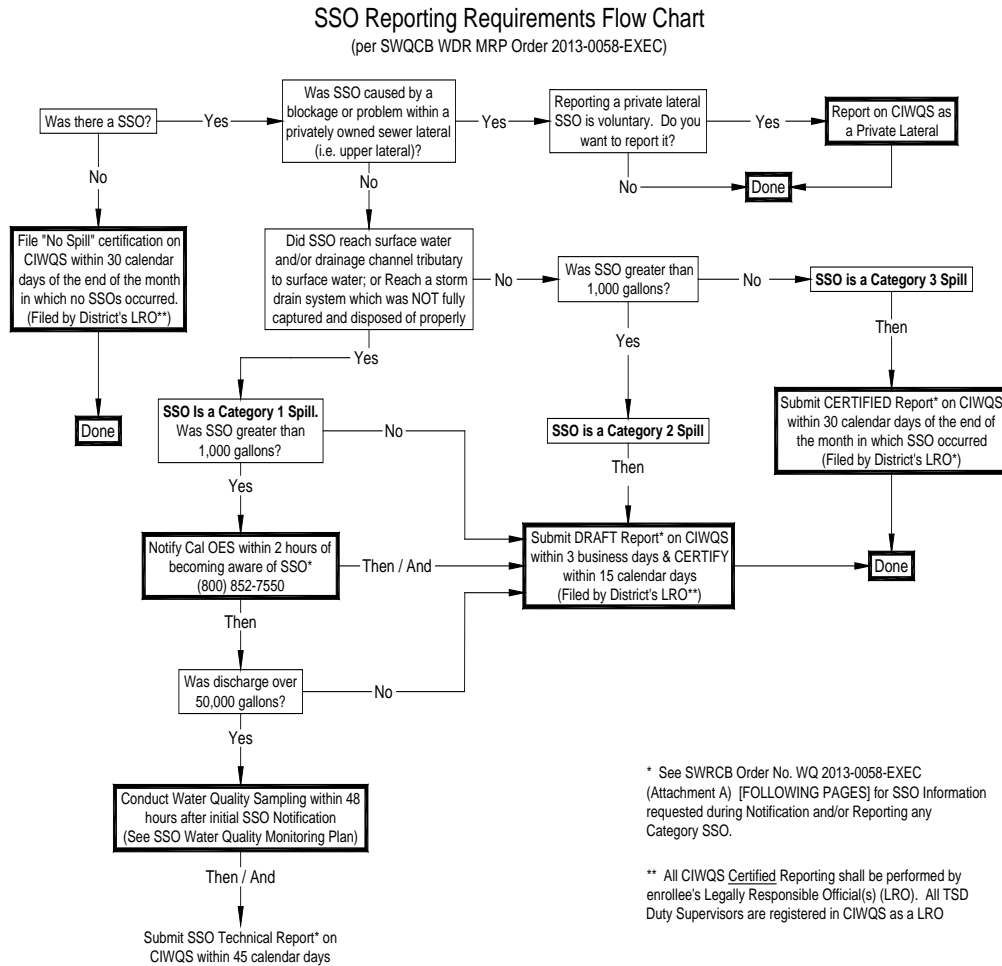
Note: *Category 2 Spill requires notification in CIWQS in 3 business days.*

6.6.2 Regulatory Requirements

SSOs that occur in as a result of a failure within the District’s sanitary sewer system must be reported by the District using the State Water Resources Control Board (SWRCB) Sanitary Sewer Overflow eReporting Program @ <http://ciwqs.waterboards.ca.gov/>.

Notification and reporting requirements are based on SWRCB Order No. WQ 2013-0058-EXEC, Adopted Amended Monitoring and Reporting Requirements for Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (as of September 9, 2013). Figure 6-2 is a reporting flowchart to be used to determine reporting type, schedule and completion timelines.

Figure 6-2. SSO Reporting Requirement Flow Chart



Multiple Appearance Points – Single SSO

For reporting purposes, if one SSO event of whatever category results in multiple appearance points in a sewer system, a single SSO report is required in CIWQS which includes the global positioning system (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 descriptions of the locations of all other discharge points associated with the single SSO event.

2-Hour Notification to Regulatory Agencies of SSOs

Cal OES is only to be notified of a Category 1 SSO greater than or equal to 1,000 gallons discharged to surface water or spilled in a location where it probably will be discharged to surface water. The Administrative On-Call person or the Superintendent is responsible for reviewing field data for reporting to regulatory agencies. If it is determined that the criteria for

OES notification was met, than the Administrative On-Call person or the Superintendent must notify OES of the event no later than two (2) hours after:

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

The OES phone number is (800) 852-7550. The First Responder is responsible for obtaining an OES Control number. Following the initial notification to OES and until the SSO report is certified in the SWRCB online SSO Database, the LRO will provide updates (or provide direction for updates to be provided) to OES regarding substantial changes to estimated volume of untreated or partially treated sewage discharged and any substantial changes to known impact(s).

Detailed Reporting Requirements

Table 6-4 provides detail on the District's regulatory reporting process, which is also described below.

SSO Reporting for Category 1 SSOs

Cal OES shall receive notification of Category 1 SSOs greater than or equal to 1,000 gallons, as stated earlier in this Section.

The Data Submitter must then submit the initial draft report to the SWRCB's CIWQS Online SSO database @ <http://ciwqs.waterboards.ca.gov/ciwqs> within 3 business days of becoming aware of the SSO.

Within 15 calendar days of the SSO end date, the LRO must review and certify the report in the CWIQS Online SSO database @ <http://ciwqs.waterboards.ca.gov/ciwqs>

SSO Reporting for Category 2 SSOs

Within 3 business days of becoming aware if the SSO, the Superintendent or Manager must submit the initial report to the SWRCB's CWIQS Online SSO database @ <http://ciwqs.waterboards.ca.gov/ciwqs>.

Within 15 calendar days of the SSO end date, the LRO must review and certify the report in the CWIQS Online SSO database @ <http://ciwqs.waterboards.ca.gov/ciwqs>.

SSO Reporting for Category 3 SSOs

Within 30 calendar days of the end of the calendar month in which the SSO occurred, the LRO must submit and certify a report to the SWRCB's CWIQS Online SSO database @ <http://ciwqs.waterboards.ca.gov/ciwqs>.

No Spill Certification (Monthly)

Within 30 calendar days of the end of a calendar month that there are no SSO's, the LRO must submit and certify a "No Spill" certification to the CIWQS online SSO database.

CIWQS Not Available

In the event that the CIWQS online SSO database is not available, the LRO should fax or e-mail all required information to the Lahontan Regional Water Quality Control Board South Lake Tahoe office at (530) 544-2271 in accordance with the time schedules identified above. In such an event, the District will submit the appropriate reports using the CIWQS online SSO database when the database becomes available. A copy of all documents that certify the submittal in fulfillment of this section shall be retained in the SSO document file.

Amending SSO Reports

The LRO is responsible for amending SSO reports. Certified SSO reports may be updated by amending the report or adding an attachment to the SSO report within 120 calendar days after the SSO end date. After 120 days, the District must contact the State SSO Program Manager to request to amend an SSO report along with a justification for why the additional information was not available prior to the end of the 120 days. The SWRCB SSO Program Manager contact information is as follows:

Russell Norman, P.E.
State Water Resources Control Board
Division of Water Quality
1001 I Street 15th Floor
Sacramento, CA 95814
E-mail: Russell.norman@waterboards.ca.gov
Phone: (916) 323-5598

6.7 Training

This section provides information on the training that is required to support this Overflow Emergency Response Plan.

Initial and Annual Refresher Training

All of the TSD Field Maintenance Crews are aware of and trained in District Emergency Response Procedures. The District's collection system staff is trained in OERP as new employees. The following training procedures must be completed within the first 180 days of employment:

- Injury and illness prevention
- Hazard communication
- Safety inspections

- Fall protection
- Confined space entry
- Motorized equipment operations
- Traffic control

District employees responsible for responding to and reporting a SSO event must complete the following SSO-related training procedures within 180 days of employment and annually thereafter:

- TSD Overflow Emergency Response Plan
- SSO Volume Estimation Techniques
- First aid/Cardio Pulmonary Resuscitation (every two years)

Employees are also trained in the following procedures specific to sanitary sewer stoppages:

- Mainline Stoppage Procedure (included in Appendix E [OERP-B])
- Mainline Troubleshooting (included in Appendix E [OERP-B])

SSO Training Record Keeping

Records should be kept of all training that is provided in support of this plan. The records for all scheduled training courses and for each overflow emergency response training event and will include date, time, place, content, name of trainer(s), and names of attendees.

Contractors Working On District Sewer Facilities

Beginning in 2014, all contractors working on District sewer facilities will be trained in the District's OERP and will be required to follow the OERP in the event that they cause or observe an SSO.

6.8 Appendix E – Overflow Emergency Response Plan Documents

Appendix E includes a full copy of the TSD Overflow Emergency Response Plan. The information in this document will change from time to time, and the OERP may have been superseded. Please contact the General Manager for the most recent updates to the OERP.

- TSD Overflow Emergency Response Plan
- Hard Copies of Referenced Forms and Standard Operating Procedures
- TSD Emergency Contact List
- TSD Equipment List
- SSO Volume Estimation Techniques
- Mainline Stoppage and Trouble Shooting Procedure Manual



- SSO Water Quality Monitoring Plan

Table 6-4. SSO Reporting Requirements

Element	Requirement	Method
<ul style="list-style-type: none"> NOTIFICATION 	<ul style="list-style-type: none"> Within two hours of becoming aware of any Category 1 SSO greater than or equal to 1,000 gallons discharged to surface water or spilled in a location where it probably will be discharged to surface water, the District will notify the California Office of Emergency Services (OES) and obtain a notification control number. 	<ul style="list-style-type: none"> Call Cal OES at: (800) 852-7550
<ul style="list-style-type: none"> REPORTING 	<ul style="list-style-type: none"> Category 1 SSO: The District will submit a draft report within three business days of becoming aware of the SSO and certify within 15 calendar days of SSO end date. Category 2 SSO: The District will submit a draft report within 3 business days of becoming aware of the SSO and certify within 15 calendar days of the SSO end date. Category 3 SSO: The District will submit a certified report within 30 calendar days of the end of month in which SSO the occurred. SSO Technical Report: The District will submit within 45 calendar days after the end date of any Category 1 SSO in which 50,000 gallons or greater are spilled to surface waters. "No Spill" Certification: The District will certify that no SSOs occurred within 30 calendar days of the end of the month or, if reporting quarterly, the quarter in which 	<ul style="list-style-type: none"> Enter data into the CIWQS Online SSO Database (http://ciwqs.waterboards.ca.gov/), certified by the Legally Responsible Official(s). All information required by CIWQS will be captured in the SSO report. Certified SSO reports may be updated by amending the report or adding an attachment to the SSO report within 120 calendar days after the SSO end date. After 120 days, the State SSO Program Manager must be contacted to request to amend an SSO report along with a justification for why the additional information was not available prior to the end of the 120 days.
<ul style="list-style-type: none"> WATER QUALITY MONITORING 	<ul style="list-style-type: none"> The District will conduct water quality sampling within 48 hours after initial SSO notification for Category 1 SSOs in which 50,000 gallons or greater are spilled to surface waters. 	<ul style="list-style-type: none"> Water quality results will be uploaded into CIWQS for Category 1 SSOs in which 50,000 gallons or greater are spilled to surface waters.
<ul style="list-style-type: none"> RECORD-KEEPING 	<ul style="list-style-type: none"> The District will maintain the following records: <ul style="list-style-type: none"> SSO event records. Records documenting Sanitary Sewer Management Plan (SSMP) implementation and changes/updates to the SSMP. Records to document Water Quality Monitoring for SSOs of 50,000 gallons or greater spilled to surface waters. 	<ul style="list-style-type: none"> Self-maintained records shall be available during inspections or upon request.

ELEMENT 7 - FOG CONTROL PROGRAM

The purpose of this section is to evaluate the extent and nature of SSOs related to Fats, Oils and Grease (FOG), to determine the need for a FOG Control Program, and to outline the elements of the TSD FOG Control Program. The TSD FOG Control Program is captured in Chapter 8 of the District Code.

7.1 Statewide SSMP Requirement

TSD shall evaluate its service area to determine whether a FOG control program is needed. If the TSD determines that a FOG program is not needed, justification must be provided for why it is not needed. If FOG is found to be a problem, the TSD must prepare and implement a FOG source control program to reduce the amount of these substances discharged to the sanitary sewer system. The FOG source control program shall include the following as appropriate:

- An implementation plan and schedule for a public education outreach program that promotes proper disposal of FOG
- A plan and schedule 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 Practice (BMP) requirements, record keeping and reporting requirements.
- Authority to inspect grease producing facilities, enforce requirements, and determine whether the TSD has sufficient staff to inspect and enforce the FOG ordinance.
- An identification of sewer system sections subject to FOG blockages and the establishment of a cleaning maintenance schedule for each section.
- Development and implementation of source control measures, for all sources of FOG discharged to the sewer system, for each sewer system section identified as subject to blockages.

7.2 Public Education Outreach Plan

The District has approximately 92 food service establishments (FSE) with grease traps and interceptors. FOG in the sewer system has been managed through routine maintenance and is not a major contributor to SSOs. However, in order to reduce maintenance needs for FOG-related hot spots, TSD implements a routine inspection program for the FSEs under its service area.

The inspection program consists of the following items:

- Inspection of grease trap
- Check grease trap maintenance log (see Appendix F)
- Provide educational materials on proper grease trap maintenance and grease waste disposal (see Appendix F).

The maintenance log shall be maintained and posted in the restaurant available for review by District personnel. If during periodic inspections, the District determines that the FSE is in non-compliance with the District Code, enforcement action may be required.

The program is developed to educate FSE owners and employees about minimizing FOG disposal into the sewer system and also information about best management practices for minimizing FOG.

7.3 FOG Disposal Plan

Currently, grease haulers dispose of grease pumped from interceptors at area rendering companies. At this time, there does not appear to be a need for additional grease disposal facilities to collect grease from the TSD service area. However, TSD may choose to evaluate this need further, should the need for additional grease disposal facilities become an issue in the future.

7.4 Legal Authority to Prohibit SSOs and Blockages Caused by FOG Discharge

Legal authority to prohibit FOG is provided through TSD Code Chapter 8, which is included in Appendix B. Enforcement is addressed through TSD Code Chapter 12. Code sections are discussed further in Element 3.

TSD Code Chapter 8 subsections include the following:

- Chapter 8.01 defines commercial food establishments
- Chapter 8.02 establishes requirements for grease interceptors
- Chapter 8.03 establishes requirements for grease traps
- Chapter 8.04 establishes requirements for sand/oil interceptors
- Chapter 8.05 defines various triggers for compliance

7.5 Requirements and Design Standards for Installation of Grease Removal Devices

Requirements for the installation of grease removal devices are included in Chapters 8.02 through 8.04 of the TSD Code. Testing requirements are provided in Appendix A-6 of the TSD Code.

7.6 Sewer Sections Subject to FOG Blockages

There have been zero FOG-related SSOs in the last 5 years.

7.7 Appendix F – Element 7 Documents

Appendix F includes the following documents related to this section. The information in these documents will change from time to time, and the documents in Appendix F may have been superseded. Please contact the General Manager for the most recent updates to the Appendix F documents.

- FOG Control Handouts and Public Outreach Materials

ELEMENT 8 - SYSTEM EVALUATION AND CAPACITY ASSURANCE PLAN

This section of the SSMP discusses the TSD's activities related to capacity management.

8.1 Statewide WDR Requirement

The TSD must prepare and implement a capital improvement plan (CIP) that will provide hydraulic capacity of key sanitary sewer system elements from dry weather peak flow conditions, as well as the appropriate design storm or wet weather event. At a minimum, the plan must include:

- **Evaluation:** Actions needed to evaluate those portions of the sanitary sewer system that are experiencing or contributing to an SSO discharge caused by hydraulic deficiency. The evaluation must provide estimates of peak flows (including flows from SSOs that escape from the system) associated with conditions similar to those causing overflow events, estimates of the capacity of key system components, hydraulic deficiencies (including components of the system with limiting capacity) and the major sources that contribute to the peak flows associated with overflow events;
- **Design Criteria:** Where design criteria do not exist or are deficient, undertake the evaluation identified in **Evaluation** process above to establish appropriate design criteria; and
- **Capacity Enhancement Measures:** The steps needed to establish a short- and long-term CIP to address identified hydraulic deficiencies, including prioritization, alternatives analysis, and schedules. The CIP may include increases in pipe size, I/I reduction programs, increases and redundancy in pumping capacity, and storage facilities. The CIP shall include an implementation schedule and shall identify sources of funding.
- **Schedule:** The Enrollee shall develop a schedule of completion dates for all portions of the capital improvement program developed in the **Evaluation, Design Criteria, and Capacity Enhancement Measures** above. This schedule shall be reviewed and updated consistent with the Sewer System Management Plan (SSMP) review and update requirements as described in the SWRCB Order No. 2006-0003-DWQ Section D.14.

8.2 System Evaluation and Capacity Assurance Plan

The District does not have any known capacity issues within the system. Therefore, the District has focused hydraulic modeling efforts to date on the Martis Valley Drainage Basin, which is where the greatest near-term development is anticipated. The District is beginning a similar analysis for the Donner Lake Drainage Basin. Within five years, the remaining two basins are expected to be added to the sewer model.

The District's hydraulic model uses Innovyze® InfoSewer® computerized hydraulic modeling software.

8.2.1 Design Criteria

The District's sewer system is designed to convey peak tourist flows, which are substantially larger than resident flows and occur in December and July. Typically, peak flows related to wet weather do not exceed peak tourist flows. In order for this to occur, peak rainfall would need to coincide with peak snowmelt, combined with a tourist period.

The District experienced these concurring events on New Year's Eve 2005, when occupancy was at its annual maximum and the area experienced rainfall in lieu of snowfall. This rainfall event is considered the design storm event for the purpose of capacity assessment.

The Martis Valley hydraulic model was developed and calibrated using the District's Martis Valley meter. The following design criteria were used to develop the model:

- New Year's Eve 2005, which generated peak wet weather flows due to the occurrence of rainfall in lieu of snowfall, concurrently with the high use holiday season, and
- New Year's Eve 2010, when very high occupancy was experienced along with snowfall in lieu of rainfall, yielding reliable full occupancy, "dry weather" flow data.

8.2.2 Capacity Enhancement Measures

Based on the completed analyses, the District found that no SSOs are predicted in the current or buildout condition. However, three pipe segments surcharge under the existing peak wet weather condition, and 26 pipe segments surcharge under the buildout peak wet weather scenario.

After further review, it was determined that many of the pipe segments had either minor surcharge or were very deep, resulting in a large freeboard measurement (measured from water surface to the manhole rim). Manholes with five feet or less of freeboard were reviewed further and assigned future capacity improvements.

In total, six manholes are predicted to have a freeboard of five feet or less. As buildout occurs, the District will require that sewer system bottlenecks that cause the predicted surcharge are addressed by the District or Developer through pipeline capacity improvements. In total, the anticipated cost in current dollars for the needed improvements is less than \$200,000.

8.3 Appendix G – Element 8 Documents

Appendix G includes the following documents related to this section. The information in these documents will change from time to time, and the documents in Appendix G may have been superseded. Please contact the General Manager for the most recent updates to the Appendix G documents.



- Draft Martis Valley Hydraulic Model and Capacity Assurance Report

ELEMENT 9 - MONITORING, MEASUREMENT AND PROGRAM MODIFICATIONS

This section of the SSMP discusses the TSD Monitoring, Measurement, and Program Modifications.

9.1 Statewide WDR Requirement

The requirements for the Monitoring, Measurement, and Program Modifications element of the SSMP are as follows. The TSD shall:

- 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 SSO frequency, location, and volume

9.2 Utility Metrics to Measure Progress and Prioritize Activities

The District has established the preventive maintenance sewer metrics that are shown in Table 9-1 for use in monitoring, measuring and adjusting sewer maintenance activities. These metrics will be monitored on a regular basis.

Table 9-1. Success Factors and Metrics

Sewer Maintenance Success Factor	Metric
• System Pipes	• Miles
• Sewer Maintenance Field Staff	• Full Time Equivalentents (FTE)
• Pipes Cleaned	• Miles/Year
• Pipe Inspected (CCTV)	• Miles/Year
• Manholes Inspected	• Miles/Year
• Hot Spots Cleaned	• Number by Underlying Cause (Roots, Debris, FOG, Structural)
• SSOs	• Number by Underlying Cause per 100 Miles
• Repeat SSOs	• Number by Address
• Response Time	• Minutes per SSO after Notification
• Pump Station Overflows	• Number by Cause
• Odor Complaints	• Number
• FSE Inspections	• #/Year
• Pipe Replaced	• Miles/Year
• Resolved Claims	• #/Year and \$/Year/Incident

9.3 SSO Trends – Frequency, Location and Volume

The District has had 13 SSOs over the past five years as follows:

- In 2010, TSD had one SSO that was caused by contractor error on a pipe lining project.
- In 2011, TSD had two SSOs. One SSO was related to debris, and the second SSO occurred during contractor bypass operations during a pipe lining project.
- In 2012, TSD had three SSOs due to roots/pine cones and debris.
- In 2013, TSD had three SSOs due to roots and debris.
- In 2014, TSD had 4 SSOs. Three of these SSOs were due to roots and debris, and the fourth SSO was caused by others.

Overall, this SSO history do not indicate any issues in the sewer system that require immediate action. SSO rates and causes have remained generally constant and relatively low throughout the prior 5-year period.



9.4 Appendix H – Element 9 Documents

There are no Appendix documents to accompany Section 9. However, this Appendix H is included as a placeholder for future documents

ELEMENT 10 - SSMP PROGRAM AUDITS

This section of the SSMP discusses plans for required self-audits of the SSMP.

10.1 Statewide WDR Requirement

The requirements for the SSMP Audits element of the SSMP are as follows:

The TSD shall conduct periodic internal audits, appropriate to the size of the system and the number of SSOs. At a minimum, these audits must occur every two years and a report must be prepared and kept on file. This audit shall focus on evaluating the effectiveness of the SSMP and the TSD's compliance with the SSMP requirements, including identification of any deficiencies in the SSMP and steps to correct them.

10.2 Audit Procedures, Roles and Responsibilities

The TSD prepares a biannual SSMP audit and keeps this document on file in accordance with the Statewide WDR requirements. The most recent audit was completed in March 2014. The audit format is included in Appendix I.

10.3 SSMP Program Modification/Update Process

If the biannual audit identifies significant changes to be made to the SSMP, then the SSMP will be updated by June 30 of the same year in which the audit was submitted. However, it is anticipated that the main SSMP document will remain generally unchanged, and that any changes will be reflected in the SSMP appendices.

The SSMP was updated in February 2015 to reflect recommendations from the prior audit. This updated SSMP will be presented to the Board for adoption in early 2015. A new audit will be completed following adoption, and will remain on file. Future changes to the SSMP will be documented in the Change Log located in Appendix I. SSMP Audit results will also be included in Appendix I, beginning in 2015.

10.4 Appendix I – SSMP Program Audit Documents

Appendix I includes the following documents related to this section. The information in these documents will change from time to time, and the documents in Appendix I may have been superseded. Please contact the General Manager for the most recent updates to the Appendix I documents.

- Audit Form
- Change Log
- Future Audits

ELEMENT 11 - COMMUNICATION PLAN

This section of the SSMP discusses the District's Communication plan.

11.1 Statewide WDR Requirement

The requirements for the Communication Plan element of the SSMP are as follows:

The District shall communicate on a regular basis with the public on the development, implementation, and performance of its 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 shall also create a plan of communication with systems that are tributary and/or satellite to the sanitary sewer system.

11.2 Communication Plan

The District does not currently have a formal communication plan in place for the communication of SSMP elements, performance, or updates. However all SSMP updates that are adopted by the Board are available to the public for review.

The SSMP will be added to the District website to provide access to the document. Along with the link to the SSMP document, the reference on the website page will be configured to facilitate access to the individual SSMP attachments related to communication, such as SSO warning signage and FOG control literature.

11.3 Appendix J – Communication Plan Documents

There are no Appendix documents to accompany Section IX. However, this Appendix J is included as a placeholder for future documents.