Sanitary Sewer Management Plan
June 2021

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District WDID #6SSO11120

Prepared In Conjunction With:
Causey Consulting
Walnut Creek, CA 94598

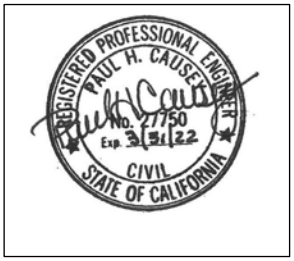


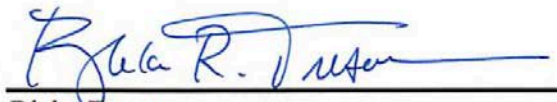
Table of Contents

Table of Tables

Table of Figures

CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.



Blake Tresan
General Manager/Chief Engineer
Truckee Sanitary District

Introduction

1.1. Sewer System Management Plan

This Sewer System Management Plan (SSMP) has been prepared by the Truckee Sanitary District (TSD or District) with the assistance of Causey Consulting, Walnut Creek, CA. It is a compendium of the policies, procedures, and activities used in the planning, management, operation, and maintenance of TSD's sanitary sewer system. TSD Board adopted the original SSMP on July 29, 2009 as required by the Sanitary Sewer Waste Discharge Requirements (GWDR).

The State Water Resources Control Board (SWRCB) has issued statewide waste discharge requirements for sanitary sewer systems, which include requirements for development of an SSMP. The State Water Board requirements are outlined in Order No. 2006-0003-DWQ, Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, dated May 2, 2006 (GWDR), and Order No. WQ-2008-0002-EXEC, dated February 20, 2008, which was amended by Order No. 2013-0058-EXEC, effective September 9, 2013, which changed the Monitoring and Reporting Program (MRP) requirements. This SSMP is intended to comply with the GWDR and MRP revised requirements.

The structure (section numbering and nomenclature) of this SSMP follows the above referenced GWDR Section D13. This SSMP is organized by the SWRCB outline of elements; and contains language taken from the GWDR at the beginning of each element. The GWDR uses the term "Enrollee" to mean each individual municipal wastewater collection system that has completed and submitted the required application for coverage under the WDR (in this case, the Enrollee is the District). The District's waste discharger identification number (WDID) in the California Integrated Water Quality System (CIWQS) is 6SSO11120.

1.2. Sanitary Sewer System Facilities

The District operates a sanitary sewer system that serves a full-time population of approximately 17,000 and encompasses approximately 39 square miles in Placer and Nevada County. The sewer system serves approximately 13,400 residential and 2,000 commercial service connections as of January 2020. The sewer system consists of 215 miles of gravity sewer pipeline segments, 3927 manholes, 15.5 miles of force mains, forty-four (44) lift stations, and 17 sewer flow metering sites. The lift stations include twenty (20) large lift stations and twenty-four (24) small lift stations. The sewer pipelines range in size from four (4) inches to twenty-four (24) inches in diameter. The District is responsible for seventy-four (74) miles of lower laterals, and private property owners have the responsibility for the upper lateral (i.e., portion of the lateral located on the property owner's parcel). Finally, the District system also includes three (3) sewer siphons.

The District also receives sewage from one satellite system operated and maintained by the Northstar Community Services District (NCSD). All wastewater is conveyed to the Tahoe-Truckee Sanitation District (T-TSA) for ultimate treatment and disposal.

Intro Figure 1 contains an overview map of TSD and Northstar sanitary sewer service areas.

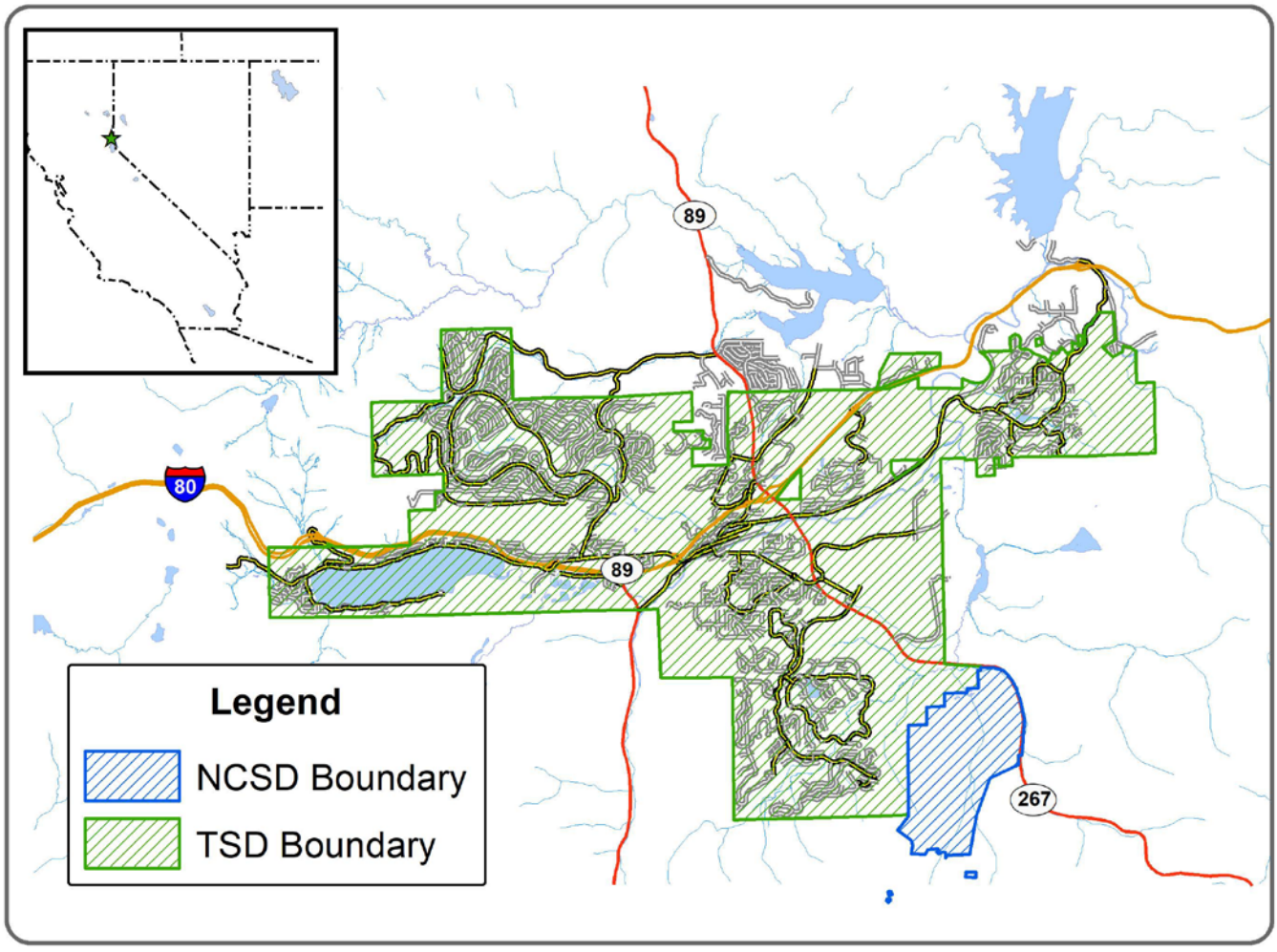
Intro Table provides the pipe diameter distribution of the gravity sewer pipes in the District collection system.

Intro Table 2 provides the composition of the gravity sewer pipes by material of construction.

Intro Table 3 provides the installation age distribution of TSD's collection system.

Intro Table 4: Sewer System Siphon Information

Intro Figure 1: TSD Sewer System Area Map



Intro Table 1: Gravity Sewer System Size Distribution

Diameter, Inches	Number of Line Segments	Pipe Length, Linear Feet	Portion of Sewer System, %
4	39	4,616	0.41
6	3516	903,072	79.65
8	523	127,036	11.20
10	132	38,679	3.41
12	97	27,647	2.44
14	38	11,835	1.04
15	45	10,396	0.92
16	5	1,097	0.10
18	14	3,191	0.28
20	2	766	0.07
21	13	4,517	0.40
24	6	987	0.09
Total	4,430	1,133,839	100.00
Total, miles		215	

Source: District supplied infrastructure file 3/22/2021

Intro Table 2: Gravity Sewer System Materials of Construction

Material	Number of Line Segments	Pipe Length, LF	Percent of Sewer System
VCP	421	97,237	8.57
PVC	2456	599,760	52.90
DIP	77	19,299	1.70
AP	1445	407,777	35.96
Techite	31	9,784	0.86
Total	4,430	1,133,857	100.00
Total, Miles		215	

Source: District supplied infrastructure file 3/24/21

Intro Table 3: Gravity Sewer System Inventory of Sewer Lines by Pipe Age

Age in Years	Construction Period	Linear Feet of Gravity Sewers	Miles of Gravity Sewer	Percent of System
0-15	2000 - current	366,550	64.5	30
16 – 35	1980 – 1999	231,922	49.4	23

Age in Years	Construction Period	Linear Feet of Gravity Sewers	Miles of Gravity Sewer	Percent of System
36 – 55	1960 – 1979	520,821	98.9	46
56 – 75	1940 – 1959	9,082	2.2	1
76 – 95	1920 – 1939	0	0	0%
95 – 115	1900 – 1919	0	0	0%
>115	Before 1900	0	0	0%
Total		1,128,705	215	100%

Source: District supplied infrastructure file 11/5/20

Intro Table 4: Sewer System Siphon Information

Siphon Name US Structure	Construction Date	Length Linear feet	Size Inches	Pipe Material
RC1	2/25/1987	335	14	DIP
RC2	8/25/1987	918	14	DIP
CT06-A02	1/1/2004	278	10	DIP
CT06-A03	5/1/1985	234	10	DIP
GD04-A01	2/25/1987	332	10	PVC
GD08-A01	2/25/1987	1015	10	PVC
GD17-A01 V1	8/25/1987	20	14	DIP
GD17-A01 V2	2/25/1987	365	14	PVC
GD17-A02 V1	8/25/1987	335	14	DIP
GD17-A03 V1	8/25/1987	318	14	DIP
GD17-A03 V2	8/25/1987	318	14	DIP
GD17-A04	2/25/1987	695	14	DIP
GD17-A04 V1	2/25/1987	20	8	DIP
GD17-A05	2/25/1987	632	14	PVC
GD17-A06	2/25/1987	426	14	PVC
GD17-A07	2/25/1987	964	14	PVC
GD17-A09	2/25/1987	771	12	PVC
GD17-A10	2/25/1987	370	12	PVC

Siphon Name US Structure	Construction Date	Length Linear feet	Size Inches	Pipe Material
GD17-A11	2/25/1987	870	12	PVC
GD17-A12	2/25/1987	822	12	PVC
GD17-A13	2/25/1987	978	12	PVC
GD17-A13	2/25/1987	10	12	PVC
GD17-A14	2/25/1987	10	12	PVC
GD17-A14	2/25/1987	250	12	PVC
GD17-A16	2/24/1987	10	12	PVC
GD17-A16	2/25/1987	7	10	DIP
GD17-A17	2/25/1987	850	12	PVC
GD17-A18	2/25/1987	897	10	PVC
GD17-A19	2/25/1987	814	10	PVC
GD17-A20	2/25/1987	515	10	DIP
GD17-A21	2/25/1987	730	10	DIP
GD17-B01	2/25/1987	902	10	PVC
GD18-A00	4/1/2000	158	8	PVC
GD18-A01	4/1/2000	67	8	PVC
GD18-A02	4/1/2000	419	8	PVC
GD18-A03	4/1/2000	800	8	PVC
GD18-A04	4/1/2000	801	8	PVC
GD18-A05	4/1/2000	825	8	PVC
GD18-A06	4/1/2000	324	8	PVC
Total, Linear Feet		19,405		
Total, Miles		3.68		

Source: District supplied infrastructure file dated 2/11/21

1.3. Definitions, Acronyms, and Abbreviations

Asbestos Cement Pipe (ACP)

Best Management Practices (BMP)

Refers to the procedures employed in commercial kitchens to minimize the quantity of grease that is discharged to the sanitary sewer system. Examples include scraping food scraps into a garbage can and dry wiping dishes and utensils prior to washing.

Calendar Year (CY)

California Department of Fish and Wildlife (CDFW)

Capital Improvement Plan (CIP)

Refers to the document that identifies future capital improvements to TSD's sanitary sewer system.

California Integrated Water Quality System (CIWQS)

Refers to the State Water Resources Control Board online electronic reporting system that is used to report SSOs, certify completion of the SSMP, and provide information on the sanitary sewer system.

Clean Water Act (CWA)

California Water Environment Association (CWEA)

Closed Circuit Television (CCTV)

Refers to the process and equipment that is used to internally inspect the condition of gravity sewers.

Computerized Maintenance Management System (CMMS)

Refers to the computerized maintenance management system that is used by the District to plan, dispatch, and record the work on its sanitary sewer system. Lucity is the propriety software the District uses for workflow management.

Data Submitter (DS)

District

Refers to the Truckee Sanitary District.

District Code (DC)

Ductile Iron Pipe (DIP)

Division of Water Quality (DWQ)

Refers to the State of California Division of Water Quality of the State Water Resources Control Board.

Environmental Protection Agency (EPA)

Fats, Oils, and Grease (FOG)

Refers to fats, oils, and grease typically associated with food preparation and cooking activities that can cause blockages in the sanitary sewer system.

First Responder

Refers to the field crew or the on call personnel that are TSD's initial response to an SSO event or another sewer system emergency.

Fiscal Year (FY)

Means a 12-month period beginning July 1st and ending June 30th.

Food Service Establishment (FSE)

Refers to commercial or industrial facilities where food is handled/prepared/served that discharge to the sanitary sewer system.

General Waste Discharge Requirements (GWDR)

Refers to the State Water Resources Control Board Order No. 2006-0003, Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, dated 5/2/2006.

Geographical Information System (GIS)

Refers to TSD's system that it uses to capture, store, analyze, and manage geospatial data associated with TSD's sanitary sewer system assets.

Global Positioning System (GPS)

Refers to a field device that is recommended to determine the longitude and latitude of sanitary sewer overflows for use in meeting CIWQS reporting requirements.

Grease Removal Device (GRD)

Refers to grease traps and grease interceptors that are installed to remove FOG from the wastewater flow at food service establishments.

High Maintenance Area (HMA)

Injury and Illness Prevention Program (IIPP)

Infiltration/Inflow (I/I)

Refers to water that enters the sanitary sewer system from storm water and groundwater.

- Infiltration enters through defects in the sanitary sewer system after flowing through the soil.
- Inflow enters the sanitary sewer without flowing through the soil. Typical points of inflow are holes in manhole lids and direct connections to the sanitary sewer (e.g. storm drains, area drains, and roof leaders).

Joint Powers Agreement (JPA)

Lahontan Regional Water Quality Control Board (LRWQCB)

Lateral

See Private Sewer Lateral

Legally Responsible Official (LRO)

Person(s) formally designated by TSD to be responsible for formal reporting and certifying of all reports submitted to the CIWQS.

Lift Station (LS)

A facility that lifts sewage into the TSD gravity sanitary sewer collection system.

Lower Lateral

The portion of the lateral from the District main to the private property clean-out or private property line.

Manhole (MH)

Refers to an engineered structure that is intended to provide access to a sanitary sewer for maintenance and inspection.

Mainline Sewer

Refers to TSD publicly owned wastewater collection system piping that is not a private lateral connection to a user.

Monitoring, Measurement, and Plan Modifications (MMPM), SSMP Element 9

Monitoring and Reporting Program (MRP)

State Water Resources Control Board WQ 2013-0058-EXEC effective September 9, 2013.

Municipal Separate Storm Sewer System (MS4)

National Association of Sewer Service Companies (NASSCO)

Notification of an SSO

Refers to the time at which TSD becomes aware of an SSO event through observation or notification by the public or other source.

National Pollution Discharge Elimination System (NPDES)

Northstar Community Services District (NCSD)

Nuisance

California Water Code section 13050, subdivision (m), defines nuisance as anything that meets all the following requirements:

a. Is injurious to health, or is indecent or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property.

b. Affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal.

c. Occurs during, or as a result of, the treatment or disposal of wastes.

Office of Emergency Services (OES or Cal OES)

Refers to the California State Office of Emergency Services.

Operations and Maintenance (O&M)

Overflow Emergency Response Plan (OERP)

Pipeline Assessment and Certification Program (PACP)

Refers to the NASSCO certification program that is used for the evaluation and condition assessment of sewer lines and appurtenances from closed circuit televising of the lines and appurtenances.

Polyvinylchloride Pipe (PVC)

Preventive Maintenance (PM)

Refers to maintenance activities intended to prevent failures of the sanitary sewer system facilities (e.g., cleaning, CCTV, repair, etc.).

Private Sewer Lateral (PSL)

The sewer pipeline from the plumbing of a building to a TSD collection line, including portions that extend across public rights-of-way and the saddle, wye, or other physical connection to the collection line. Private sewer laterals are privately owned and maintained.

Private Lateral Sewage Discharges (PLSD)

Sewage discharges that are caused by blockages or other problems within a privately-owned sewer service lateral.

Property Damage Overflow

Refers to a sewer overflow or backup that damages a private property owner's premises.

Public Owned Treatment Works (POTW)

Regional Water Quality Control Board (LRWQCB)

Refers to the Lahontan Regional Water Quality Control Board.

Sanitary Sewer Backup (Backup)

A wastewater backup into a building and/or on private property caused by blockages or flow conditions within the publicly owned portion of a sanitary sewer system.

Sanitary Sewer Overflows (SSO)

Any overflow, spill, release, discharge, or diversion of untreated or partially treated wastewater from a sanitary sewer system. SSOs include:

a. Overflows or releases of untreated or partially treated wastewater that reach waters of the United States;

b. Overflows or releases of untreated or partially treated wastewater that do not reach waters of the United States; and

c. Wastewater backups into buildings and on private property that are caused by blockages or flow conditions within the publicly owned portion of a sanitary sewer system.

SSOs that include multiple appearance points resulting from a single cause will be considered one SSO for documentation and reporting purposes in CIWQS.

NOTE: Wastewater backups into buildings caused by a blockage or other malfunction of a private sewer lateral are not SSOs.

SSO Categories:

Category 1: Discharge of untreated or partially treated wastewater of any volume resulting from a sanitary sewer system failure or flow condition that either:

- Reaches surface water and/or drainage channel tributary to a surface water; or
- Reached a Municipal Separate Storm Sewer System (MS4) and was not fully captured and returned to the sanitary sewer system or otherwise captured and disposed of properly.

Category 2: Discharge of untreated or partially treated wastewater greater than or equal to 1,000 gallons resulting from a sanitary sewer system failure or flow condition that either:

- Does not reach surface water, a drainage channel, or an MS4, or
- The entire SSO discharged to the storm drain system was fully recovered and disposed of properly.

Category 3: All other discharges of untreated or partially treated wastewater resulting from a sanitary sewer system failure or flow condition.

Sanitary Sewer System (SSS)

Refers to the sanitary sewer facilities that are owned and operated by the TSD

Sanitary Sewer Overflow Emergency Response Plan (SSOERP)

Sensitive Areas

Refers to areas where an SSO could result in a fish kill or pose an imminent or substantial danger to human health.

Sewer Service Lateral

Refers to the piping that conveys sewage from the building to the sanitary sewer system

Sewer System Management Plan (SSMP)

Standard Operating Procedures (SOP)

Refers to written procedures that pertain to specific activities employed in the operation and maintenance of the Sanitary Sewer System.

Standard Specifications

Refers to the latest edition of the TSD Design Standards and Standard Details for Construction.

State Water Resources Control Board (SWRCB)

Refers to the California Environmental Protection Agency, State Water Resources Control Board.

Note: The State Board is a separate entity from the Lahontan Regional Water Quality Control Board, although the agencies are closely connected.

Supervisory Control and Data Acquisition (SCADA)

Refers to the system that is employed by TSD to monitor the performance of its lift stations and to notify the operating staff when there is an alarm condition that requires attention.

System Evaluation and Capacity Assurance Plan (SECAP) SSMP Element 8

Tahoe-Truckee Sanitation District (T-TSA)

The treatment facility for all District collected sewage from the service area.

Untreated or Partially Treated Wastewater

Any volume of waste discharged from the sanitary sewer system upstream of a wastewater treatment plant headworks.

Vitrified Clay Pipe (VCP)

Waste Discharge Identification Number (WDID)

A unique identification number for the certification and reporting of collection system related actions and overflows in the CIWQS System. The District's WDID is 6SSO11120

Water Body

Any stream, creek, river, pond, impoundment, lagoon, wetland, or bay.

Water of the State

Refers to "any surface water, including saline waters, within the boundaries of the state." (California Water Code § 13050(e)).

Water Quality Monitoring Plan (WQMP)

1.4. References

- State Water Resources Control Board Order No. 2006-0003, Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, California State Water Resources Control Board, May 2, 2006.
- State of California Water Resources Control Board Order No. WQ-2008-0002-EXEC, Adopting Amended Monitoring and Reporting Requirements for Statewide General Waste Discharge Requirements for Sanitary Sewer Systems dated February 20, 2008
- State Water Resources Control Board Order No. Order No. 2013-0058-EXEC, Amending Monitoring and Reporting Program for Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, September 9, 2013.
- California Integrated Water Quality System database for WDID 6SSO11120.

Element 1: Goals

Goal: The goal of the SSMP is 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.

1-1: SSMP Goals

The goal of TSD is to provide safe, effective, and efficient operation of TSD's sanitary sewer collection system by:

- Managing, operating, and maintaining all parts of the public wastewater collection system in an efficient, cost effective manner to provide reliable service now and into the future.
- Cost effectively minimize infiltration and inflow (I & I) and providing adequate sewer capacity to accommodate design peak flows.
- Minimizing the number of SSOs that occur.
- Mitigating the impacts that are associated with any SSO that may occur.
- Meeting all applicable regulatory notification and reporting requirements.

1-2: References

None.

Element 2: Organization

Organization: The SSMP must identify:

(a) The name of the responsible or authorized representative as described in Section J of this Order.

(b) The names and telephone numbers for management, administrative, and maintenance positions responsible for implementing specific measures in the SSMP program. The SSMP must identify lines of authority through an organization chart or similar document with a narrative explanation; and

(c) 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 State Office of Emergency Services (OES)).

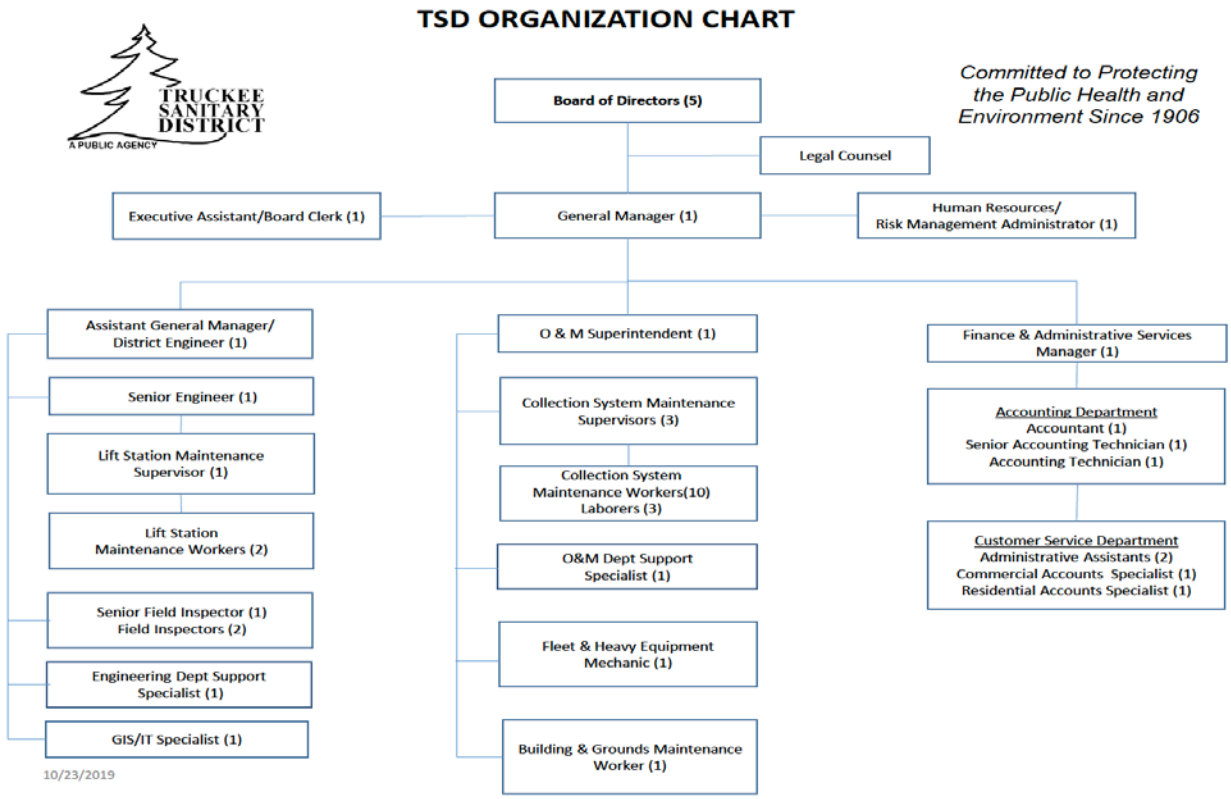
2-1: Organizational Structure

The purpose of this section is to identify District 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.

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

The O&M Superintendent is the Legally Responsible Official (LRO) and reports each SSO through the 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), Placer County Department of Environmental Health Services (EHS), California Department of Fish and Wildlife (CDFW), and OES as appropriate. The General Manager and Assistant General Manager/District Engineer are both backup LROs, in case the O&M Superintendent is unavailable

Figure 2 – 1: District Sewer Program Organization Chart



2-2: Authorized Representatives

General Manager/Chief Engineer (LRO) – Under policy direction, plans, organizes, and provides administrative direction and oversight for all District functions and activities; serves as the District Treasurer, District Secretary and Chief Engineer; provides policy guidance and program evaluation to the Board and management staff; ensures that all regulatory and contractual requirements are met; facilitates provision of services to District residents and businesses; fosters cooperative working relationships with other governmental and regulatory agencies and various public and private groups; and performs other duties as assigned.

Executive Assistant/Board Clerk – Under direction, provides administrative support to the General Manager and Board of Directors; performs all statutory duties of Board Clerk, coordinates and attends Board meetings, taking minutes to record the meeting actions; maintains and manages the records, contracts, and documents of the District; and performs related work as required.

HR/Risk Management Administrator – Under direction performs a variety of increasingly responsible duties in the administration of the District's human resources and risk management programs; areas of responsibility include, but are not limited to, recruitment, selection, classification and compensation, insurance and benefits programs, workplace safety, employee training and new employee orientation; provides specialized assistance to the General Manager

and District management on human resources and risk management matters; ensures all programs are compliant with mandated requirements; and performs related work as required.

Legal Counsel – Provides a wide range of professional legal services to the District Board, District Departments, and other boards and commissions and to represent the District in litigation and other proceedings.

Assistant General Manager/District Engineer (LRO) – Under administrative direction, plans, organizes, directs, and reviews the activities and operations of the Engineering Department including long- and short-range project planning, environmental planning, design, construction and permitting programs, and servicing and mechanical repair of stationary pump and lift stations; coordinates departmental activities with other departments and outside agencies; provides highly responsible and complex technical support to the General Manager; performs duties of the General Manager in his/her absence; has high-level involvement with preparation of annual budget, employee handbook, District Code Book; and performs other duties as assigned.

Finance & Administrative Services Manager - Under administrative direction, plans, manages, and directs the District's finance and customer services operations; coordinates activities with those of other departments for operational efficiencies and optimal service delivery; assumes responsibility for a variety of programs, projects, and special assignments; provides assistance to District management staff in areas of expertise; and performs other duties as assigned.

Operations and Maintenance Superintendent (LRO) – Under administrative direction, plans, organizes, and provides direction and oversight for all District operations and maintenance functions and activities; plans, manages, and coordinates the installation, operations, maintenance, and repair of wastewater collection systems including underground sewer lines; ensures the reliable operation of all vehicles and equipment, whether stationary or mobile; manages the building and ground maintenance function; ensures that District maintenance functions meet all applicable laws, regulations and District policies; provides expert professional assistance to District management staff in areas of expertise; fosters cooperative working relationships with intergovernmental and regulatory agencies and various public and private groups; acts as the District's Safety Director and Emergency Response Coordinator; and performs other duties as assigned.

Senior Engineer – Under general direction, performs, oversees and supervises professional engineering work related to the planning, design, construction, and maintenance of District capital projects; manages complex engineering projects; provides professional assistance and technical advice to District officials; coordinates projects with contractors, other departments and other agencies; administers professional services and construction contracts; evaluates requests for changes or additional work; and performs other duties as assigned.

GIS/IT Specialist – Under general direction, performs a variety of specialized, technical work in the administration, operation and maintenance of the District's Information Technology (IT) systems including, the Geographic Information System (GIS), desktop systems, local area and wide area networks (LAN & WAN), telecommunication, and web site; evaluates and participates

in the functions necessary to implement, sustain and expand GIS and IT systems to improve efficiency throughout the District; performs related work as required.

Collection System Maintenance Supervisor – Under general supervision, plans, organizes, directs, oversees, and personally performs full-range skilled-level work in support of District wastewater collection system installation, inspection, preventive and corrective maintenance and repair activities; ensures that all federal, state, and local regulatory requirements are met; and performs other duties as assigned.

Collection System Maintenance Worker I/II – Under direct and general supervision, learns and performs a variety of semi-skilled and skilled work in support of District wastewater collection system installation, inspection, preventive, and corrective maintenance and repair activities; assists in performing underground televised wastewater line inspection and hydrocleaning of sewer lines; and performs other duties as assigned.

Laborer – Under direct supervision, learns and performs a variety of semi-skilled work in support of District wastewater collection system inspection, preventive and corrective maintenance, and cleaning activities; assists in performing underground televised wastewater line inspection and hydrocleaning of sewer lines; and performs other duties as assigned.

Lift Station Maintenance Supervisor – Under general supervision, plans, organizes, directs, oversees, and personally performs full-range skilled-level work in support of District buildings and wastewater collection system pumping facilities, including installation, inspection, preventive and corrective maintenance and repair activities; ensures that all Federal, State, and local regulatory requirements are met; and performs other duties as assigned.

Lift Station Maintenance Worker I/II – Under direct or general supervision, performs a variety of skilled-level installation, troubleshooting, maintenance and repair of electrical equipment, electronic instrumentation and controls, pneumatic, hydraulic, and electro-mechanical systems as found in wastewater collection lift stations and related facilities, which may include controlling, data logging and display equipment, and telemetry systems; and performs other duties as assigned.

Senior Field Inspector – Under direction, plans, organizes, and performs the most complex field inspection work for a variety of construction projects, including wastewater collection construction and repair work performed by private contractors, home owners, and the District to ensure conformance to established plans, specifications, State laws and District codes and regulations; performs quality assurance/quality control (QA/QC) on work of District inspection team to ensure work performed meets District standards; assumes responsibility for planning, coordinating and managing the District's Fats, Oils and Grease (FOG) and Underground Service Alert (USA) programs; and performs other duties as assigned.

Field Inspector I/II – Under direct or general supervision, performs field inspections of varied construction projects, including wastewater collection construction and repair work performed by private contractors, home owners and District projects to ensure conformance to established plans, specifications, State laws and District codes and regulations; reviews construction plans and as-

built maps for compliance with rules, regulations and laws; oversees, administers, and implements the District's fats, oils, and grease prevention/reduction program; and performs other duties as assigned.

Administrative Assistant I/II – Under immediate (Administrative Assistant I) or general (Administrative Assistant II) supervision, provides varied office administrative and general clerical assistance for the District's central and departmental operations and programs; provides information externally and internally regarding District policies and/or procedures; performs varied support work for the District such as telephone and counter reception, customer service, word processing, data entry, records management, and work order processing; and performs other duties as assigned.

Administrative Specialist – Under direction, provides technical support in the administration, implementation and monitoring of the District's operating departments' programs including, but are not limited to, engineering, inspection, operations and maintenance services and activities; prepares, executes and monitors a diverse range of technical documents such as contracts, agreements, and operational policies and procedures; performs research and assists in the preparation of, or updates to, statistical and regulatory reports, manuals and publications; ensures that the administrative functions of the department are effectively executed; and performs other duties as assigned.

District Contracted Service Providers:

- Lift station electrical support – Sierra Controls
- Environmental spill clean-up services – Clean Harbors
- Property restoration services – Belfor Property Restoration

2-3: Responsibility for SSMP Implementation and Maintenance

The General Manager shall have the overall responsibility for implementing, periodically auditing, and maintaining the District's SSMP. He/she may delegate these responsibilities to his/her staff.

Other District staff responsible for developing, implementing, and maintaining specific elements of the District's SSMP, along with their job titles and contact information, are shown in **Table 2 – 1** below.

Table 2 – 1: Responsible Officials for SSMP Elements

Element	Element Name	Responsible District Official	Phone	Email
0	Introduction	Blake Tresan	530-550-3122	btresan@truckeesan.org
1	Goals	Blake Tresan	530-550-3122	btresan@truckeesan.org
2	Organization	Blake Tresan	530-550-3122	btresan@truckeesan.org
3	Legal Authority	Blake Tresan	530-550-3122	btresan@truckeesan.org

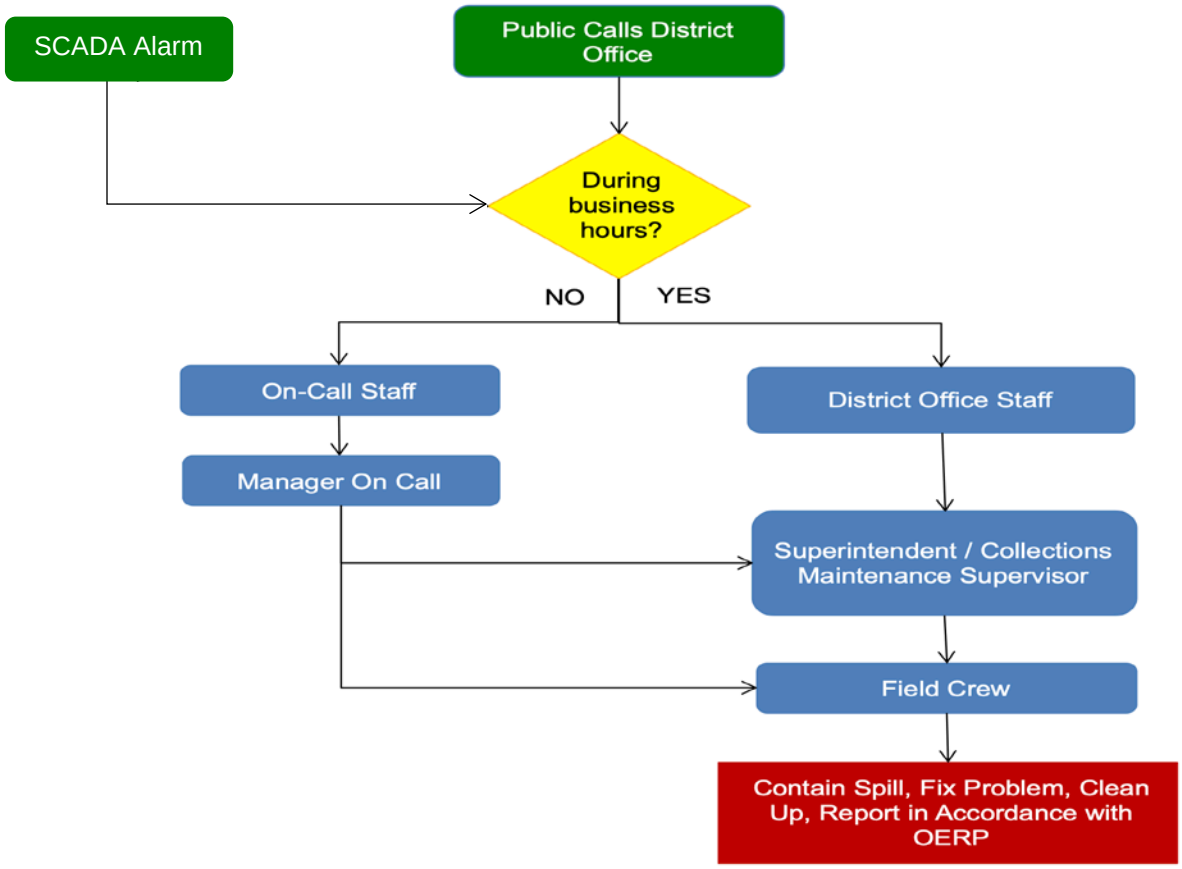
Element	Element Name	Responsible District Official	Phone	Email
4	O & M Program	Eric Sundale	530-550-3111	esundale@truckeesan.org
5	Design & Performance Provisions	Raymond Brown	530-550-3135	rbrown@truckeesan.org
6	OERP	Eric Sundale	530-550-3111	esundale@truckeesan.org
7	Fats, Oils and Grease (FOG) Control Program	Raymond Brown	530-550-3135	rbrown@truckeesan.org
8	System Evaluation and Capacity Assurance Plan	Raymond Brown	530-550-3135	rbrown@truckeesan.org
9	Monitoring, Measurement and Program Modifications	Eric Sundale	530-550-3111	esundale@truckeesan.org
10	Program Audits	Eric Sundale	530-550-3111	esundale@truckeesan.org
11	Communications Program	Blake Tresan	530-550-3122	btresan@truckeesan.org
App A	SSMP Board Adoption Documents	Blake Tresan	530-550-3122	btresan@truckeesan.org
App B	SSMP Audit Reports	Eric Sundale	530-550-3111	esundale@truckeesan.org
App C	SSMP Audit Checklist	Eric Sundale	530-550-3111	esundale@truckeesan.org
App D	SSMP Change Log	Eric Sundale	530-550-3111	esundale@truckeesan.org
App E	OERP	Eric Sundale	530-550-3111	esundale@truckeesan.org
App F	Water Quality Monitoring Plan	Eric Sundale	530-550-3111	esundale@truckeesan.org

Source: District supplied information dated 12/5/20

2-4: SSO Reporting Chain of Communication

The SSO reporting process and responsibilities are described in the Overflow Emergency Response Plan in Appendix E, Table B-1. The attached flow chart in Figure 2-2 below outlines the procedures for the reporting chain of communications used by the District for all overflow emergencies and complaints by customers of the District.

Figure 2 – 2: Reporting Chain of Communications



2-5: References

None.

Element 3: Legal Authority

Legal Authority: Each Enrollee must demonstrate, through sanitary sewer system use ordinances, service agreements, or other legally binding procedures, that it possesses the necessary legal authority to:

(a) Prevent illicit discharges into its sanitary sewer system (examples may include I/I, stormwater, chemical dumping, unauthorized debris and cut roots, etc.);

(b) Require that sewers and connections be properly designed and constructed;

(c) Ensure access for maintenance, inspection, or repairs for portions of the lateral owned or maintained by the Public Agency;

(d) Limit the discharge of fats, oils, and grease and other debris that may cause blockages, and

(e) Enforce any violation of its sewer ordinances.

3-1: District Summary and Evaluation of Legal Authority

The District 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 in **Table 3 – 1: Summary of Legal Authorities** and are included in District Ordinance 1-2017 as amended by Resolution No. 2020-102.

Table 3 – 1: Summary of Legal Authorities

Requirement	District Ordinance 1-2017 References
Prevent illicit discharges into the wastewater collection system	Chapter 8 and 11.01 to 11.06
Limit the discharge of fats, oils, and grease and other debris that may cause blockages	8.01 – 8.05
Require that sewers and connections be properly designed and constructed	7.01-7.16; 9.01-9.06
Require proper installation, testing, and inspection of new and rehabilitated sewers	10.02 Appendices A-5 and A-6
Clearly define District responsibility and policies	7.01-7.16
Control infiltration and inflow (I/I) from private service laterals	3.03; 10.01
Requirements to install grease removal devices (such as traps or interceptors), design standards for the grease removal devices, maintenance requirements, BMP requirements, record keeping and reporting requirements	8.03 – 8.04
Authority to inspect grease producing facilities	8.03 – 8.04
Enforce any violation of its sewer ordinances	Chapter 12

3-2: Agreements with Satellite Agencies

The TSD is a satellite system to T-TSA, discharging all sewage collected in the District's sewer service area directly into the T-TSA interceptors. The District wastewater is transported to the T-TSA treatment facilities where it is treated, processed, and disposed of by land disposal through subsurface percolation systems.

The District also transports the sewage collected from the NCSD through District collection lines to the T-TSA plant for treatment and disposal. The two agencies have agreements for this service.

3-3: References

- District Ordinance 1-2017
- Truckee Sanitary District and Northstar Community Services District (NCSD) Agreement for Service dated 3-23-92 and as amended in September 2005

Element 4: Operations and Maintenance Program

Operation and Maintenance Program. The SSMP must include those elements listed below that are appropriate and applicable to the Enrollee's system:

(a) Maintain an up-to-date map of the sanitary sewer system, showing all gravity line segments and manholes, pumping facilities, pressure pipes and valves, and applicable stormwater conveyance facilities;

(b) 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 Preventative Maintenance (PM) program should have a system to document scheduled and conducted activities, such as work orders;

(c) 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 that addresses proper management and protection of the infrastructure assets. The plan shall include a time schedule for implementing the short-term and long-term plans plus a schedule for developing the funds needed for the capital improvement plan;

(d) Provide training on a regular basis for staff in sanitary sewer system operations and maintenance, and require contractors to be appropriately trained; and

(e) Provide equipment and replacement part inventories, including identification of critical replacement parts.

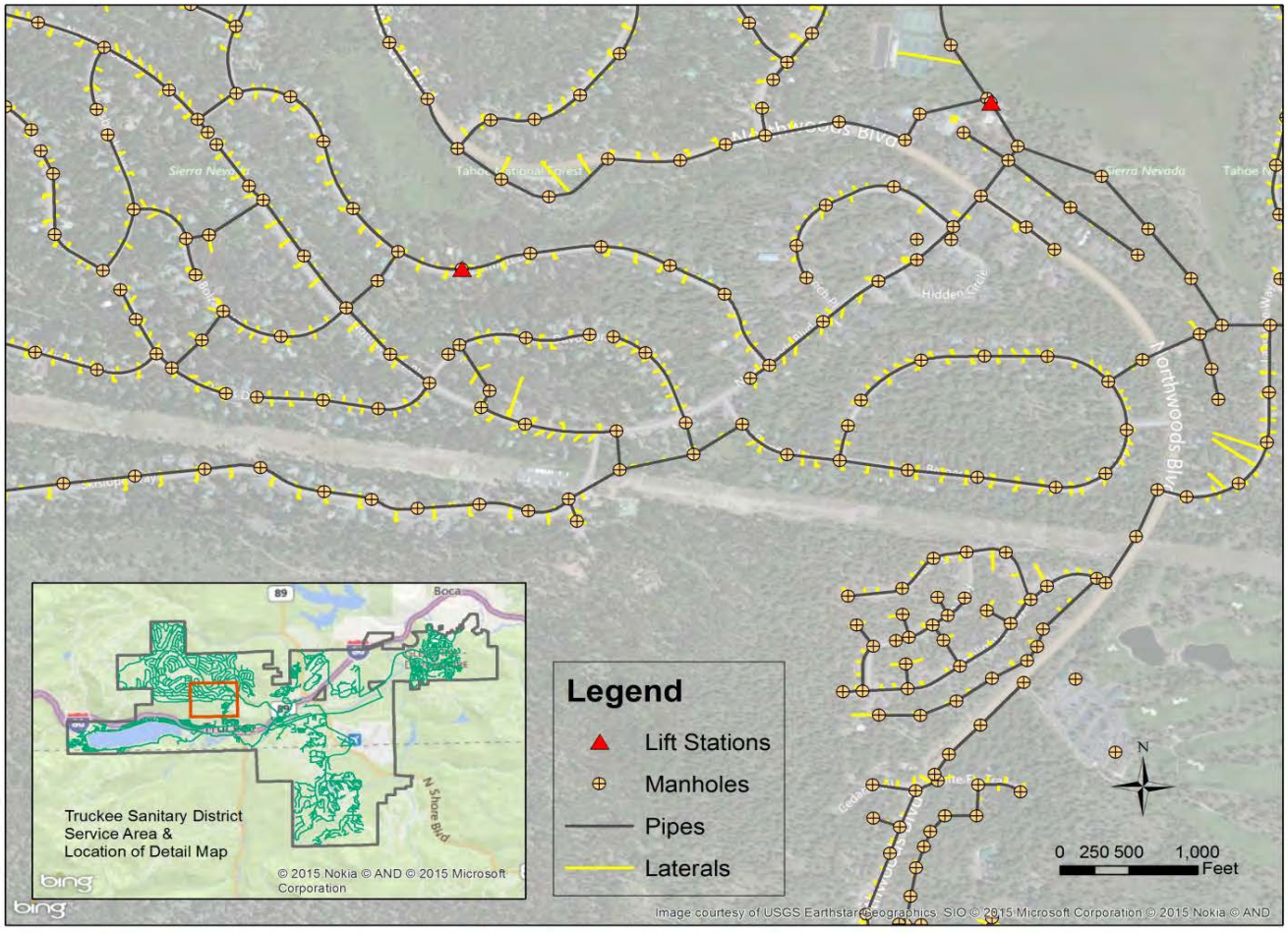
4-1: Collection System Mapping

The District 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 pipeline segments and manholes, pumping facilities, pressure pipes, sewer metering sites, and bypass ports. Maps are printed in hardcopy as a map book which is carried in all District field vehicles. The maps also include parcel information.

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** provides a snapshot of the information available through GIS for the District sewer collection system.

The District has reached out to the Town of Truckee and developed a process that allows the District to see Town storm drainage system facilities during an overflow event. The District has a link on the Lucity dashboard that allows the District to view, in the event of a SSO, storm drainage catch basins and storm drainage pipes to be able to properly evaluate where sewage may enter and flow in the Town storm drain system. This will allow the District to both contain and follow sewage discharged to the storm system. The District will be working with Caltrans to obtain storm drainage facility locations within their service area to have the same capabilities for impacts to those storm facilities.

Figure 4 – 1: GIS System Map Snapshot



4-2: Preventive Operation and Maintenance

The elements of the District's sewer system O&M program include:

- Proactive, preventive, and corrective maintenance of gravity sewers;
- Ongoing CCTV inspection program to determine the condition of the gravity sewers;
- Periodic inspection and preventive maintenance for the lift stations and force mains;
- Rehabilitation and replacement of sewers that are in poor condition; and,

- Proper training for District employees and service contractors to assure proper operations and maintenance of the collection system facilities.

The District staff identified in **Figure 2 – 1 Organization Chart** are responsible for the maintenance and operations of the sanitary sewer collection system and proper planning and emergency response throughout the entire service area. The Engineering Department in conjunction with the O&M Department is responsible for capital and renewal and replacement planning and construction activities. Engineering coordinates and manages the fats, oils, and grease (FOG) program for all food service establishments (FSE) in the service area.

4-2.1: Gravity Sewer Maintenance

The District cleans its gravity sewer mains on approximately a 3-year cleaning cycle. Pipes are cleaned by hydrojetting with one of two large combination vacuum-hydrojetter vehicles, or a smaller hydrojetter truck where access by the larger units is not feasible. Pipes with recurring maintenance issues are defined as potential "hot spots" or high frequency maintenance areas (HMAs). These pipes are cleaned on a 12-month, 6-month, 3-month, 1-month, or bi-weekly cleaning schedule as appropriate. The HMA 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 repaired or rehabilitated to remove the maintenance issue, the pipe segment is moved off the HMA list. The HMA cleaning list is re-evaluated periodically.

High Frequency Maintenance Area Cleaning Production Results are stated in **Figure 4 – 1** Column 2 below. The District has identified three hundred and seventy-four (374) HMA pipe segments (8.5% of the gravity pipe system) throughout the system which are cleaned at varying intervals. Cleaning intervals depend on observed conditions documented during routine cleaning activities at each location. HMAs are generally the result of pipe sags, or Fats, Oils and Grease (FOG). The HMA list is updated as necessary when staff observes sewer line conditions that require an increased cleaning frequency. Summary statistics for HMA lines are displayed in Column 2 of Table 4-1.

Table 4 – 1: Historical Cleaning Production Results

Calendar Year	High Frequency, Linear Feet	Gravity Cleaning, Linear Feet	Total Annual, Linear Feet	Total Annual, Miles	Percent of System
2009	348,619	443,733	792,352	150.07	70.45%
2010	320,918	302,601	623,519	118.09	55.44%
2011	358,061	434,601	792,662	150.13	70.48%
2012	351,286	302,601	653,887	123.84	58.14%
2013	359,754	371,241	730,995	138.45	65.00%
2014	321,597	307,881	629,478	119.22	55.97%

Calendar Year	High Frequency, Linear Feet	Gravity Cleaning, Linear Feet	Total Annual, Linear Feet	Total Annual, Miles	Percent of System
2015	440,940	344,841	785,781	148.82	69.87%
2016	440,609	487,401	928,010	175.76	82.52%
2017	391,685	418,761	810,446	153.49	72.06%
2018	434,513	450,441	884,954	167.60	78.69%
2019	450,525	593,001	1,043,526	197.64	92.79%
2020	473,365	537,319	1,010,684	191.42	89.87%
Total	4,691,872	4,994,422	9,686,294	1834.53	
Averages	390,989	416,202	807,191	152.88	71.77%

Source: District supplied infrastructure file dated 4/3/21

The historical pipeline cleaning production results for the non-HMA portion of the gravity system cleaning are shown in Column 3 of Table 4 – 1.

The pipeline-cleaning crews evaluate cleaning results based upon the Standard Sewer Cleaning Results derived from **TSD's Standard Measures of Observed Results Collection System Line Cleaning** shown in **Table 4 – 2**. The use of these Standard Methods allows TSD to develop needs-based cleaning schedules. Staff places pipeline segments on a higher or lower frequency schedule based upon past cleaning results, history of SSO events, video inspections and professional judgment.

Table 4 – 2: Standard Measures of Observed Results for Collection System Line Cleaning

Category	None	Low	Medium	High
Debris / Grit	Code: CL No observable debris or grit	Code: DL Minor amount of debris 15 minutes or less to clean 1 Pass	Code: DM Less than 5 gallons of debris 15-30 minutes to clean 2-3 passes required Requires cleaning twice or less per year Only fine grit	Code: DH More than 5 gallons of debris More than 30 minutes to clean More than 4 passes required Requires cleaning four times per year Operator concern for future stoppage
Grease	Code: CL No observable grease	Code: GL Minor amounts of grease 15 minutes or less to clean 1 pass	Code: GM Small chunks / no "logs" 15-30 minutes to clean 2-3 passes required Requires cleaning twice or less per year	Code: GH Big chunks / "Logs" More than 30 minutes to clean More than 4 passes required Operator concern for future stoppage
Roots	Code: CL No observable roots	Code: RL Minor amounts of roots 15 minutes or less to clean 1 pass	Code: RM Thin / Stringy roots present No large "clumps" 15-30 minutes to clean 2-3 passes required	Code: RH Thick roots present Large "clumps" More than 30 minutes to clean More than 4 passes required Operator concern for future stoppage

Category	None	Low	Medium	High
Other	Code: CL No observable materials	Code: OL Specify material Minor amounts of material	Code: OM Specify material Less than 5 gallons of material	Code: OH Specify material More than 5 gallons of material Operator concern for future stoppage

Footnote: (a) Times shown are typical manhole-to-manhole distance of 250 feet. Longer runs will require longer cleaning times. Judgement will need to be applied by the field crews for varying lengths and pipe diameters.

4-2.1.1: Pipe Condition Assessment

The District conducts CCTV inspections of its main sewer lines on approximately a 4-year frequency. The District conducts CCTV inspections of its lower lateral sewer lines on approximately a 15-year frequency. Pipeline condition is assessed using the National Association of Sewer Service Companies (NASSCO) Pipeline Assessment Certification Program (PACP) and (NASSCO) Lateral Assessment Certification Program (LACP). Pipelines are assigned structural and maintenance grades by the inspector. On a monthly basis, the Senior Engineer, CCTV Supervisor 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/LACP rating indicates potential issues, decisions are made based on actual observed defects. In addition, the Superintendent identifies any required changes to cleaning frequencies. After this review, the CCTV inspection data is uploaded into the District's CMMS program.

Table 4 – 3: Historical Closed-Circuit Television Production by Fiscal Year*

Fiscal Year	CCTV, Linear Feet	CCTV, miles	Percent of the System (based on 208 miles)
2009	587,202	111	53.4
2010	485,760	92	44.2
2011	665,280	126	60.6
2012	501,600	95	45.7
2013	438,240	83	39.9
2014	396,000	75	36.1
2015	348,480	66	31.7
2016	205,920	39	18.8
2017	179,520	34	16.4
2018	300,960	57	27.4
2019	311,520	59	28.4

Fiscal Year	CCTV, Linear Feet	CCTV, miles	Percent of the System (based on 208 miles)
2020	392,663	74	34.5
Annual Average	352,176	66.7	32.1

**Source District supplied Annual Year in Review Graphs 12-30-20 and 4/12/21 Email*

4-2.1.2: Manhole Inspection and Maintenance Program

The District has an active manhole inspection program conducted mostly during the winter. These inspections are tracked in the CMMS program and the resulting comments and notes made by District staff are used to determine repair and replacement needs for inclusion in the capital program. Funds have been designated in the current capital program for manhole adjustments associated with roadway paving programs. The District has not established a formal manhole inspection program frequency for formal inspections; however, both the cleaning and condition assessment crews are trained to identify and note any issues with manholes as part of their standard operating procedure.

4-2.1.3: Lift Station Maintenance

There are forty-four (44) lift stations owned, operated, and maintained by the District in the TSD service area. The lift stations are classified as either large or small based upon the rated flow capacity of each station. In general, all large lift stations are equipped with a dedicated standby generator and/or an emergency overflow tank. Each lift station is provided with either a simplex or duplex pumping system for redundancy and reliability. These redundant systems allow for continued operation of a lift station in the event of pump failure. Stations are monitored remotely through a Supervisory Control and Data Acquisition (SCADA) system.

The lift stations asset information is identified below in **Table 4 – 4**.

Table 4 – 4: Lift Station Locations and Asset Information

Pump Station Name	Type Large/Small	Construct Date	No. Pumps	Pump GPM	Pump Manu-facturer	Pump HP	Standby Generator-KW
Alder Creek	Large	1/1/1975	4	400	S&L	25	100
Coachland	Small	1/1/2005	2	100	Flygt	5	None
DSP 1	Small	1/1/1977	2	30	Reliance	3	None
DSP 2	Small	1/1/1977	2	60	Reliance	3	None
DSP 3	Small	1/1/1977	2	90	Flygt	4	None
Fox Mead	Small	1/1/1990	1	50	Flygt	2	None
Fox Mead 3	Small	1/1/1990	1	50	Flygt	2	None
Gray's Crossing	Large	1/1/2007	2	380	Flygt	35	100
Lahontan 1	Large	1/1/1998	2	340	Flygt	10	30

Pump Station Name	Type Large/Small	Construct Date	No. Pumps	Pump GPM	Pump Manu-facturer	Pump HP	Standby Generator-KW
Lahontan 2	Large	1/1/1998	2	175	Flygt	15	30
Lahontan 3	Large	1/1/1999	2	181	Flygt	30	80
Lahontan 4	Large	1/1/1999	2	166	Flygt	10	60
Lahontan 5	Large	1/1/2000	2	175	Flygt	15	46.5
Lahontan 6	Large	1/1/2000	2	176	Flygt	15	None
Lakeside Landing	Small	1/1/1989	2	60	Flygt	2.4	None
Lift Station 1	Large	1/1/1968	2	960	S&L	15	154
Lift Station 1B	Large	1/1/1968	2	1020	S&L	25	154
Lift Station 2	Large	1/1/1968	2	820	S&L	15	154
Lift Station 3	Large	1/1/1968	2	790	S&L	15	154
Lift Station 4	Large	1/1/1968	2	710	S&L	25	154
Lift Station 5	Large	1/1/1968	2	620	S&L	15	154
Lift Station 6	Large	1/1/1968	2	170	S&L	5	20
Martis Camp 1	Large	12/8/2008	2	87	Flygt	11	60
Martis Camp 2	Large	11/1/2012	2	87	Flygt	11	30
Old Greenwood	Large	1/1/2002	2	310	Flygt	30	80
Pine Forest	Large	1/1/2004	2	354	Flygt	18	60
River Park	Small	1/1/1989	2	50	Flygt	2.4	None
Schaffers Mill	Large	2/18/2016	2	75	Flygt	6	32
Schussing	Large	1/1/1975	2	250	Cornell	40	105
SUB A	Small	1/1/1968	2	50	Wemco	2	None
SUB B	Small	1/1/1968	2	50	Wemco	1	None
SUB C	Small	1/1/1968	2	50	Wemco	1	None
SUB D	Small	1/1/1968	2	50	Wemco	1	None
SUB F	Small	1/1/1968	2	50	Wemco	1	None
SUB Glen	Small	1/1/1988	2	55	Wemco	7.5	40
SUB H	Small	1/1/1968	2	50	Wemco	1	None
SUB Hunt	Small	1/1/1987	2	50	Wemco	5	None
SUB I	Small	1/1/1968	2	50	Wemco	1	None
SUB J	Small	1/1/1968	2	50	Wemco	1	None
SUB K	Small	1/1/1968	2	50	Wemco	1.5	None
SUB M	Small	1/1/1968	2	50	Wemco	2	None
SUB O	Small	1/1/1975	2	50	Flygt	2	None

Pump Station Name	Type Large/Small	Construct Date	No. Pumps	Pump GPM	Pump Manu-facturer	Pump HP	Standby Generator-KW
Trout Creek	Small	1/1/1985	2	35	Reliance	0.5	None
Trout Creek 2	Small	1/22/2015	2	40	HOMA	0.85	None

** District supplied infrastructure file dated 11/5/2020*

A complex set of Preventative Maintenance work orders allows field personal to access lift stations and perform general inspections of major critical components of the station, such as pump operation, station controls, alarms, check valves, and emergency power supplies. These stations are equipped to operate under emergency conditions utilizing emergency backup generators. Emergency conditions such as power failure and high water alarms are monitored via SCADA systems. Stations will be inspected utilizing the Lift Station and Force Main Checklist, Supplement 4 – 1.

4-2.1.4: Force Main Maintenance

There are a total of 66,161 linear feet of force mains immediately downstream of the lift stations. The District owns, maintains, of these force mains. Each of the lift stations described in Section 4 – 2.2 above discharge through pressure force mains as described in **Table 4 – 5** below to the District's gravity collection system

A preventative maintenance work order is set to CCTV the discharge portion of the force main as a condition assessment every 3 years.

The discharge manholes into the collection system are inspected for concrete corrosion regularly. The District does not currently have a formal force main condition assessment and/or replacement program.

Table 4 – 5: Force Main Locations and Descriptions

Name of Lift Station Associated with Force Main	Year Constructed	Force Main Asset Information		
		Length (linear feet)	Pipe Diameter (inches)	Material Type*
Alder Creek	1/1/1975	6415	8	DIP
Coachland	1/1/2005	330	6	HDPE
DSP 1	1/1/1977	2825	3	ACP
DSP 2	1/1/1977	380	3	ACP
DSP 3	1/1/1977	277	3	ACP
Fox Mead	1/1/1990	240	2	PVC
Fox Mead 3	1/1/1990	111	2	PVC
Gray's Crossing	1/1/2007	7902	6	PVC
Lahontan 1	1/1/1998	1300	6	PVC
Lahontan 2	1/1/1998	2165	4	PVC

Name of Lift Station Associated with Force Main	Year Constructed	Force Main Asset Information		
		Length (linear feet)	Pipe Diameter (inches)	Material Type*
Lahontan 3	1/1/1999	4376	4	PVC
Lahontan 4	1/1/1999	1194	4	PVC
Lahontan 5	1/1/2000	1388	4	PVC
Lahontan 6	1/1/2000	1834	4	PVC
Lakeside Landing	1/1/1989	79	3	PVC
Lift Station 1	1/1/1968	1175	8	ACP
Lift Station 1B	1/1/1968	3539	10	ACP
Lift Station 2	1/1/1968	1354	8	ACP
Lift Station 3	1/1/1968	1766	8	ACP
Lift Station 4	1/1/1968	2412	8	ACP
Lift Station 5	1/1/1968	1932	8	ACP
Lift Station 6	1/1/1968	2369	6	ACP
Martis Camp 1	12/8/2008	2400	3	HDPE
Martis Camp 2	11/1/2012	1729	3	HDPE
Old Greenwood	1/1/2002	2324	6	PVC
Pine Forest	1/1/2004	3737	6	PVC
River Park	1/1/1989	327	3	PVC
Schaffers Mill	2/18/2016	1536	2	HDPE
Schussing	1/1/1975	3350	6	Steel
SUB A	1/1/1968	183	3	PVC
SUB B	1/1/1968	223	3	PVC
SUB C	1/1/1968	151	3	PVC
SUB D	1/1/1968	300	3	PVC
SUB F	1/1/1968	85	3	PVC
SUB Glen	1/1/1988	2180	4	PVC
SUB H	1/1/1968	133	3	PVC
SUB Hunt	1/1/1987	1141	3	PVC
SUB I	1/1/1968	161	3	PVC
SUB J	1/1/1968	116	3	PVC
SUB K	1/1/1968	104	3	PVC
SUB M	1/1/1968	118	3	PVC
SUB O	1/1/1975	15	3	PVC
Trout Creek	1/1/1985	350	3	PVC

Name of Lift Station Associated with Force Main	Year Constructed	Force Main Asset Information		
		Length (linear feet)	Pipe Diameter (inches)	Material Type*
Trout Creek 2	1/22/2015	135	2	HDPE
Total, Linear feet		66,161		
Total Miles		12.53		

Source: District supplied infrastructure file dated 2/11/21

4-2.2: Sewer Inverted Siphons

The District sewer system includes three inverted siphons consisting of thirty-nine (39) pipeline segments totaling 19,405 linear feet of pipe or 3.68 miles. The list of pipelines included in the inverted siphons are detailed in Intro Table 5: Sewer System Siphon Information. These inverted siphons range in diameter from 8 inches to 14 inches and are made of both PVC and Ductile Iron. The District's Inverted Siphon Maintenance Schedule are shown in the Table 4-6. The large siphons are inspected and the CCTV condition assessment program evaluates the pipes leading into and out of each siphon up to the siphon break. Preventative Maintenance (PM's) work orders are automatically generated when siphon maintenance is due, and detailed procedures are on file with the District.

Table 4 – 6: Inverted Siphon Maintenance Schedule

Name of Inverted Siphon (as Listed)		Maintenance Schedule			
		Flush	Clean	Drain, Flush, TV & Clean	Switch Lines and Clean
Glenshire Bridge Siphon (sections):					
Ick-1 (Icknield Canyon)		Annual	N/A	Triennial	N/A
Ick -2 (Flycaster's)		Annual	N/A	Triennial	N/A
GD-1 (Glenshire Dr.)		Annual	N/A	Triennial	N/A
GD-2 (Glenshire Bridge)		Annual	N/A	N/A	N/A
T-TSA River Crossing Siphon (sections):					
Old Greenwood		N/A	N/A	Triennial	N/A
Gray's Crossing		Triennial	N/A	N/A	N/A
River Crossing		N/A	N/A	N/A	Biennial
Central Truckee River Crossing Siphon (section):		N/A	Biannual	N/A	N/A

4-2.3: Smoke Testing

The District utilizes smoke testing to try and identify infiltration and inflow (I/I) issues. Historical smoke testing activity is summarized in Table 4 – 7. In addition to identifying I/I, smoke testing can also help locate direct connections to other utility systems and large cracks and pipe dislocations in District sewer pipes and private laterals. This work is typically conducted in

the fall and requires significant outreach and education for the public in the areas where smoke testing is conducted.

Table 4 – 7: Historical Smoke Testing Results*

Calendar Year	Linear Feet	Miles	Percent of System
2011	10,861	2.05	0.96
2012	0	0	0
2013	0	0	0
2014	0	0	0
2015	0	0	0
2016	0	0	0
2017	0	0	0
2018	1,237	0.23	0.11
2019	61,184	11.59	5.57
Total	73,282	13.88	6.67
Annual Average	8,143	1.54	0.72

Source: District supplied infrastructure file dated 11/5/20

4-3: Private Sewer Laterals

The District has no responsibility for the upper portion of sewer laterals from the building to the private property line cleanout. This portion of the lateral is the responsibility of the private property owner. The District is responsible for the lower portion of the lateral from the property line to the connection with the District mainline. Private sewer laterals are visually inspected, pressure tested and televised when originally installed. Additionally, the District can require private sewer laterals to be pressure tested for a number of reasons defined in the TSD Code Book. The most common reason for requiring the pressure testing of a private sewer lateral is when ownership of a property is transferred.

4-4: Rehabilitation and Replacement Program

The District uses data from its condition assessment (CCTV) program as the foundation for scheduling pipeline rehabilitation. Additional factors that are used to prioritize rehabilitation needs include:

- Flow and capacity of pipelines
- Proximity to water bodies of pipelines
- Proximity to commercial or high traffic areas of pipelines

- Historical operations and maintenance results
- Projects are coordinated to the greatest extent possible with other utility and paving work within roadways

Overall, District infrastructure is currently in good condition, and requires only $150,000 annually to address pipeline rehabilitation and replacement needs. The District has developed a 100-year asset replacement model that projects future costs of District rehabilitation and replacements needs.

A complete list of capital projects identified between fiscal year 19/20 and 24/25 are listed in **Supplement 4 – 2**.

4-5: Training of District Personnel and Contractors

All District staff and service 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. Annually employees involved in the District sanitary sewer program receive training on the SSMP, the OERP and the WQMP. In addition, staff also conducts at least annually, field exercises on proper procedures for the handling of sewage overflows and sampling requirements pursuant to the District WQMP.

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. Additionally, all staff receive safety training as outlined in the District's Injury and Illness Prevention Program (IIPP)

Training and Instruction records are retained for all staff training that is provided in support of the SSMP and the IIPP. These records include the date, time, place, content, name of trainer(s) and names of attendees and are conducted pursuant to the District's IIPP Training Program Matrix.

4-6: Critical Equipment and Replacement Parts

Critical parts and equipment, such as tools, pipe, hydrojetter parts, and portable pumps, are tracked on a Critical Parts and Equipment List in the CMMS. Parts and equipment are currently replaced as they are used. A list of these critical equipment and replacement parts can be found in Supplements 4 – 3 and 4 – 4 below. In the event of an emergency, local retailers are available to supply additional needed equipment and parts on short notice. The District also is part of a mutual aid agreement with other local agencies.

4-6: References

The data used in this section were taken from the following references:

- District Computerized Maintenance Management System (CMMS) and GIS Systems

Supplement 4 – 1: Lift Station and Force Main Assessment Checklist

Inspection Information	
Inspection date	
Inspection participants	
Facility name	
Facility address	
Comments	

Background Information (Prior 12 Months)	
SSOs	
Equipment failures	
Alarm history (attach copy)	
Major maintenance activities (attach list if applicable)	
Pending work orders (attach copies)	
Operating problems (attach copy of operating log)	
Comments	

Security Features	
Fence and gate	
External lighting	
Visibility from street	
Doors and locks	
Intrusion alarm(s)	
Signs with emergency contact information	
Other security features	
Comments	

Safety Features and Equipment	
Signage (confined space, automatic equipment, hearing protection, etc.)	
Fall protection	
Emergency communication	
Equipment hand guards	
Handrails and kickboards	
Platforms and grating	
Tag out and lock out equipment	
Hearing protection	
Eye wash	
Chemical storage	
Comments	

External Appearance	
Fence	
Landscaping	
Building	
Control panels	
Other external features	
Comments	

Building/Structure	
Lift Station building	
Control room	
Dry well	
Wet well	
Other structures	
Comments	

Instrumentation and Controls (including SCADA Facilities)	
Control panel	
Run time meters	
Flow meter	
Wet well level	
Alarms	
SCADA HMI/PLC	
Other instrumentation & controls	
Comments	

Electrical and Switch Gear	
Power drop	
Transformers	
Transfer switches	
Emergency generator and generator connection	
Starters	
Variable frequency drives	
Electrical cabinets	
Conduit and wireways	
Other electrical	
Comments	

Motors	
Lubrication	
Insulation	
Operating current	
Vibration and alignment	
Other	
Comments	

Pumps	
Lubrication	
Vibration and alignment	
Seals	
Indicated flow and discharge pressure	
Shutoff head	
Corrosion and leakage evidence	
Drive shaft	
Other	
Comments	

Valves and Piping	
Valve operation	
Valve condition	
Pipe condition	
Pipe support	
Other	
Comments	

Other	
Lighting	
Ventilation	
Support systems (air, water, etc.)	
Signage	
Employee facilities	
Sump pump	
Overhead crane	
Portable pump connections	
Portable pumps	
Comments	

Supplement 4 – 2: Capital Improvement Program (in $ thousands)

Project Title	2020/21	2021/22	2022/23	2023/24	24/25
Vehicle Storage Expansion	925				
Paving – Manhole Adjustments	120				120
Long Lateral Replacement	100				100
Easement Acquisitions	75			75	
Lift Station Electrical Upgrade	50	50		50	50
Alder Creek Electrical Retrofit	50				
TSD Manhole Rehabilitation	50				
Drywall Cathodic Protection Coating – L5	35				
Pipeline Rehabilitation		150			150
LS 1B Upgrade Capacity		150			
Alder Creek Force Main Check Valve Upgrade		100			
Alder Creek LS Emergency Overflow Tank Expansion		60			
Lateral Extensions Donner Lake		50		50	50
Donner Lake Substation Plumbing Replacement		10			10
Foxmead/River Park LS Upgrade			250		
Lahontan LS Upgrade for Capacity			100	100	100
Conversion Phone lines to Radio			60		
Flowmeter Upgrades (Schaffers Mill Road)			25		
Donner Creek Bypass System				250	250
Drywell Cathodic Protection Upgrade				10	0
Total Collection System Projects	1,405	570	755	535	830
Annual Vehicle and Equipment Purchases	368	330	465	410	1,000

**Source: TSD Fiscal Year 2021, Annual Budget, Table 7, Capital Budget – FY21 5-year Plan*

Supplement 4 – 3: Critical System Equipment Inventory

Equipment Number	Equipment Description	Year Purchased	Location
Unit 19	Vactor Combination Cleaner/Vacuum Truck - 2017 Freightliner AWD	2017	VSF
Unit 41	Vactor Combination Cleaner/Vacuum Truck- 2013 Freightliner AWD	2012	VSF
Unit 33	Hydro-Cleaning Truck - 2020 Dodge Pipe Hunter AWD	2020	VSF
Unit 40	TV Van - 2012 Chevrolet C3500 4x4	2012	VSF
Unit 43	TV Truck w/ Lamp II - 2014 Ford F550 4x4	2014	VSF
T-02	Bypass Trailer & Hose Reel System w/ 1800' of 6" Lay Flat Hose	2005	VSF
T-08	Bypass Trailer & Hose Reel System w/ 1600' of 4" Lay Flat Hose (Martis Camp)	2007	VSF
2324	Bypass Traffic Ramps 8'X6"	1995	VSF
P-08	Pump - Trailer 6" Godwin 1999	1998	VSF
P-09	Pump - Trailer 3" Godwin 1998	1998	VSF
G-06	Generator - Trailer Caterpillar 150KW	1983	VSF
G-10	Generator - Trailer Caterpillar 75KW	1999	VSF
G-11	Generator - Trailer Onan 20KW	1999	Glenshire Shed
G-13	Generator - Trailer Caterpillar 60KW	2002	VSF
G-15	Generator - Trailer Caterpillar 100KW	2005	VSF
G-02	Generator - Portable Green Power Chief 7.5KW		VSF
G-03	Generator - Portable Honda 2.5KW		VSF
G-04	Generator - Portable Blue Power Chief 2.5KW		VSF
2466	Generator - Portable Briggs & Stratton 8000W	2005	VSF
2374	Generator - Portable Honda 1000W w/ Light Attachment	2014	VMF
Unit 21	Utility Off Road Side-by-Side Vehicle - 2016 Kawasaki Mule	2017	VSF
Unit 10	Loader w/ Bucket/Blade - 2005 Caterpillar 938G	2005	VSF
Unit 20	Backhoe Loader - 2006 Caterpillar 430-D	2006	VSF
Unit 35	Mini Excavator - 2009 Caterpillar	2008	VSF
SE-36	Loader Compact Wheel w/ Bucket/Blade - 2019 Caterpillar 907M	2019	VSF

Equipment Number	Equipment Description	Year Purchased	Location
T-01	Trailer Flatbed/Large - 2001 Trailmax	2001	VSF
T-12	Trailer Flatbed/Small - 2012 Trailmax	2011	VSF
Unit 16	Flatbed Dump Truck & Crane - 1997 Ford F450 4x4	1997	VSF
Unit 25	Dump Truck 10yd - 2019 Freightliner 4x4	2018	VSF
Unit 37	Dump Truck 5yd - 2009 GMC C5500 4x4	2009	VSF
Unit 26	Flatbed Dump Truck - 2006 Chevrolet 4x4	2006	VSF
Unit 02	Utility Truck w/ Crane & Generator 4x4 - Lift Stations	2018	VSF
Unit 39	Utility Truck w/ Crane & Generator 4x4 - Lift Stations	2021	VSF
Unit 17	Utility Truck 4X4 - Confined Space Entry/Flagging	2019	VSF
Unit 06	Utility Truck 1 Ton 4x4 w/ Snowplow Attachment	2020	VSF
Unit 04	Utility Truck 1 Ton 4x4	2008	VSF
Unit 03	Utility Truck 4x4	2019	VSF
Unit 05	Utility Truck 4x4	2006	VSF
Unit 29	Utility Truck 4x4	2019	VSF
Unit 34	Utility Truck 4x4	2008	VSF
Unit 31	Holder Tractor w/ Zaugg Snowblower	2006	VSF
C-01	Air Compressor Portable Ingersol/Rand w/ Jackhammer - 160CFM	2007	VSF
3122-3124	Emergency Lighting on Tripod (1 of 3)	2013	VSF

Supplement 4 – 4: Critical System Replacement Parts Inventory*

Part Description	Number in Stock	Location
PUMPS:		
Schussing Backup GE 40HP Pump	1	VSF
LS4/LS1B Backup S&L 25HP Pump	1	VSF
AC Backup S&L 25HP Pump	1	VSF
LS 1, 2,3 & 5 Backup S&L 15HP Pump	1	VSF
LS 1, 2,3 & 5 Backup S&L 15HP Pump	1	VSF
S&L 15HP Pump	1	VSF
LS 6 Backup S&L 5HP Pump	1	VSF
DSP 1 & 2 Backup Reliance 3HP Pump	1	VSF
Subs Backup Reliance 1.5HP Pump	1	VSF
Reliance 1.5HP Pump	1	VSF
Reliance 1HP Pump	1	VSF
DSP 3 Backup Flygt 4HP Pump	1	VSF
Flygt 10HP Pump	1	VSF
Flygt 3.9HP Pump	1	VSF
Sub Glen Backup Flygt 7.5HP Pump	1	VSF
Sub Hunt Backup Flygt 5HP Pump	1	VSF
Lakeside Backup Flygt 2.4HP Pump	1	VSF
S&L 10HP Pump	1	VSF
OTHER:		
Grade Rings - Various sizes	45	VMF
Manhole Barrel Section 48" x 48"	9	VMF
Manhole Cone - Concentric, inside lip 24"	6	VMF
Manhole Frame and Covers	25	VMF
Pipe - C-900 - 6" - 24"	17	VMF
Repair Couplings - Various sizes	36	VMF
Pipe - PVC 4" - 24"	20	VMF
Electrical Breakers - Various ranges	38	FOB
Scada Packs - Lift station controls	5	FOB
Telemetry Backup Batteries	10	FOB

**Source: District supplied infrastructure file dated 2/5/21*

Element 5: Design and Performance Provisions

Design and Performance Provisions:

(a) Design and construction standards and specifications for the installation of new sanitary sewer systems, pump stations and other appurtenances; and for the rehabilitation and repair of existing sanitary sewer systems; and

(b) Procedures and standards for inspecting and testing the installation of new sewers, pumps, and other appurtenances and for rehabilitation and repair projects.

5-1: Design Criteria for Installation, Rehabilitation and Repair

As discussed in Element 3, the District 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

5-2: Inspection and Testing Criteria

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

5-2.1: New and Rehabilitated Lift Stations

Construction standards and acceptance provisions for new and rehabilitated lift stations are established through the design process and are part of the approval of the plans and specifications for the new or rehabilitated lift station.

5-3: References

The data used in this section were taken from the following references:

- Truckee Sanitary District Ordinance 1-2017, Appendices A5 and A6
- Truckee Sanitary District Standard Drawing, Effective 7/1/12020

Element 6: Overflow Emergency Response Plan

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

(a) Proper notification procedures so that the primary responders and regulatory agencies are informed of all SSOs in a timely manner;

(b) A program to ensure an appropriate response to all overflows;

(c) Procedures to ensure prompt notification to appropriate regulatory agencies and other potentially affected entities (e.g. health agencies, Regional Water Boards, water suppliers, etc.) of all SSOs that potentially affect public health or reach the waters of the State in accordance with the MRP. All SSOs shall be reported in accordance with this MRP, the California Water Code, other State Law, and other applicable Regional Water Board WDRs or NPDES permit requirements. The SSMP should identify the officials who will receive immediate notification;

(d) Procedures to ensure that appropriate staff and contractor personnel are aware of and follow the Emergency Response Plan and are appropriately trained;

(e) Procedures to address emergency operations, such as traffic and crowd control and other necessary response activities; and

(f) A program to ensure that all reasonable steps are taken to contain and prevent the discharge of untreated and partially treated wastewater to waters of the United States and to 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.

Sanitary Sewer Overflow Emergency Response Plan

6-1: Purpose

The purpose of the District's Overflow Emergency Response Plan (OERP) is to support an orderly and effective response to Sanitary Sewer Overflows (SSOs). The OERP provides guidelines for District personnel to follow in responding to, cleaning up, and reporting SSOs that may occur within the District's service area. The OERP (Appendix E) satisfies the SWRCB Statewide General Waste Discharge Requirements (GWDR), which require wastewater collection agencies to have an Overflow Emergency Response Plan.

6-2: Policy

The District employees are required to report all wastewater overflows from public sewer infrastructure and to take the appropriate action to secure the wastewater overflow area, properly

report to the appropriate regulatory agencies, relieve the cause of the overflow, and ensure that the affected area is cleaned as soon as possible to minimize health hazards to the public and protect the environment. The District goal is to respond to sewer system overflows as soon as possible following notification. The District will follow reporting procedures in regard to sewer spills as set forth by the Lahontan Regional Water Quality Control Board (*LRWQCB)* and the California State Water Resources Control Board (*SWRCB).*

6-3: Goals

The District's goals with respect to responding to SSOs are:

- Work safely;
- Respond quickly to minimize the volume of the SSO;
- Eliminate the cause of the SSO;
- Prevent sewage system overflows or leaks from entering the storm drain system or receiving waters to the maximum extent practicable;
- Contain the spilled wastewater to the extent feasible;
- Minimize public contact with the spilled wastewater;
- Mitigate the impact of the SSO;
- Meet the regulatory reporting requirements;
- Evaluate the causes of failure related to certain SSOs; and
- Revise response procedures resulting from the debrief and failure analysis of certain SSOs.

6-4: Full Overflow Emergency Response Plan

The full copy of the District Overflow Emergency Response Plan effective June 2021 can be found in Appendix E along with copies of all instructions and forms in the Backup Response Workbook. All SSO sampling and testing shall be conducted per the District Water Quality Monitoring Plan (WQMP) which is included in Appendix F.

6-5: Authority and References

- Health & Safety Code Sections 5410-5416
- CA Water Code Section 13271
- Fish & Wildlife Code Sections 5650-5656
- State Water Resources Control Board Order No. 2006-0003-DWQ
- State Water Resources Control Board Order 2013-009-DWQ effective September 9, 2013
- Truckee Sanitary District Overflow Emergency Response Plan June 2021

Element 7: Fats, Oils, and Grease (FOG) Control Program

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

(a) An implementation plan and schedule for a public education outreach program that promotes proper disposal of FOG;

(b) 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;

(c) The legal authority to prohibit discharges to the system and identify measures to prevent SSOs and blockages caused by FOG;

(d) Requirements to install grease removal devices (such as traps or interceptors), design standards for the removal devices, maintenance requirements, BMP requirements, record keeping and reporting requirements;

(e) Authority to inspect grease producing facilities, enforcement authorities, and whether the Enrollee has sufficient staff to inspect and enforce the FOG ordinance;

(f) An identification of sanitary sewer system sections subject to FOG blockages and establishment of a cleaning maintenance schedule for each section; and

(g) Development and implementation of source control measures for all sources of FOG discharged to the sanitary sewer system for each section identified in (f) above.

7-1: Nature and Extent of FOG Problem

The District has ninety-nine (99) food service establishments (FSEs) with grease traps or grease interceptors within its jurisdiction to minimize the risk of SSOs. All newly proposed FSEs are evaluated by the District and required to install an appropriately sized grease removal device. The District implements a routine inspection program for the FSEs under its service area. The inspection program consists of the following items:

FSEs with Grease Traps

- Periodic inspection of grease trap maintenance log
- Provide educational materials on proper grease trap maintenance and grease waste disposal. The maintenance log shall be maintained and posted in the restaurant available for review by District personnel. If during periodic inspections, the District determines

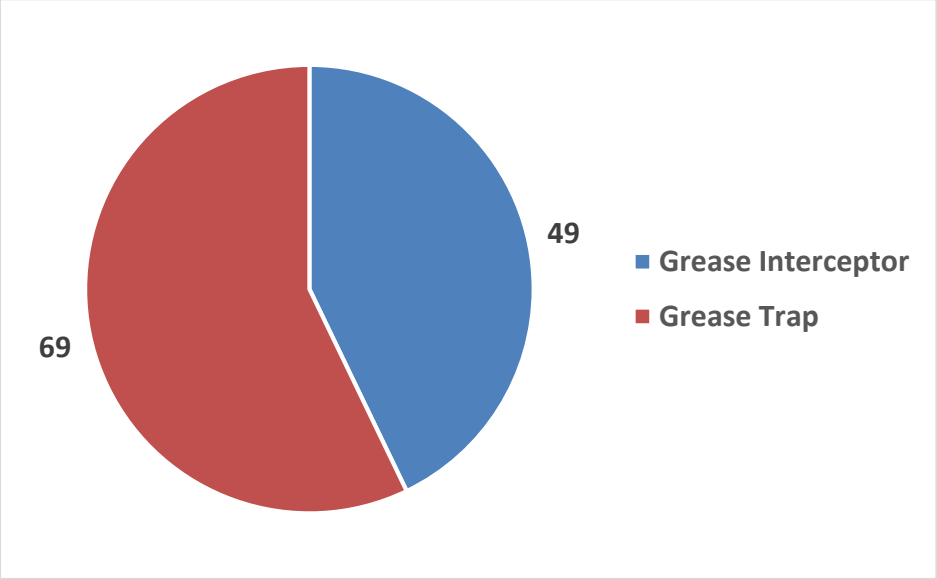
that the FSE is in non- compliance with the District Code, enforcement action may be required.

FSEs with Grease Interceptors

- Physical inspection of grease interceptor on a 1-month, 3-month, or 6-month cycle depending upon the history of FOG generation
- Physical inspection includes dipping grease interceptor to measure thickness of FOG in the first and second chambers
- If FOG thickness exceeds 12 inches, a note is left for FSE that they must pump out their interceptor

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

Figure 7 – 1: Food Service Establishments by Type of Device



7-2: Response to GWDR Requirements

Requirement (a):

An implementation plan and schedule for a public education outreach program should promote proper disposal of FOG.

Response:

The District has provided information on FOG Control on the District website. Public outreach materials have been developed to address common sources and prevention of FOG discharged into the sewer system. District Inspectors provide these materials to property owner and operators. The District also provides educational materials regarding FOG at community events.

Requirement (b):

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.

Response:

Inspections of grease interceptors are completed on a routine basis. Owners are notified to have their interceptors pumped down by local grease haulers to area rendering companies.

Requirement (c):

The legal authority to prohibit discharges to the system and identify measures to prevent SSOs and blockages caused by FOG.

Response:

Legal authority to prohibit FOG is provided through District Code Chapter 8. Enforcement is addressed through District Code Chapter 12. District 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

Requirement (d):

Requirements to install grease removal devices (such as traps or interceptors), design standards for the grease removal devices, maintenance requirements, BMP requirements, record keeping and reporting requirements.

Response:

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

Requirement (e):

Authority to inspect grease producing facilities, enforcement authorities, and determination of whether the collection system has sufficient staff to inspect and enforce the FOG ordinance.

Response:

District Code Section (3 and 4) provides the requirements for inspections and Section provides the authority for enforcement.

Requirement (f) and (g):

Requirement (f) is an identification of sewer system sections subject to FOG blockages and the establishment of a cleaning maintenance schedule for each section, and

Requirement (g) is the development and implementation of source control measures, for all sources of FOG discharged to the sewer system.

Response:

Requirement (f) sewer pipe sections identified through CCTV inspections with high grease collection are placed on a high frequency cleaning list to prevent blockages.

Requirement (g) public outreach materials have been developed to address common sources and prevention of FOG discharged into the sewer system. District Inspectors provide these materials to property owner and operators.

7-3: References

The data used in this section were taken from the following references:

Truckee Sanitary District Ordinance No. 1-2017, Chapter 8 and Appendices A-5 and A-6

Element 8: System Evaluation and Capacity Assurance Plan

System Evaluation and Capacity Assurance Plan: The Enrollee shall prepare and implement a capital improvement plan (CIP) that will provide 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. At a minimum, the plan must include:

(a) **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;

(b) **Design Criteria:** Where design criteria do not exist or are deficient, undertake the evaluation identified in (a) above to establish appropriate design criteria; and

(c) **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.

(d) **Schedule:** The Enrollee shall develop a schedule of completion dates for all portions of the capital improvement program developed in (a)-(c) above. This schedule shall be reviewed and updated consistent with the SSMP review and update requirements as described in Section D. 14.

8-1: System Evaluation – Collection System Master Plan

The Truckee Sanitary District (District) is responsible for the collection and conveyance of wastewater within the greater Truckee area. The District's collection system consists of four major sewer drainage basins, each of which discharge into the T-TSA Truckee River Interceptor. The four major sewer basins include: 1) Martis Valley, 2) Donner Lake, 3) Tahoe Donner, and 4) Glenshire. Each of the drainage basins have been modeled using Innovyze® InfoSewer® computerized hydraulic modeling software. Carollo Engineering was contracted to calibrate and analyze the Districts hydraulic model and published their findings in TSD Sewer System Hydraulic Model Update Report in 2019.

8-2: Design Criteria

The hydraulic model of the TSD sewer collection system was performed to determine if any TSD assets (e.g., pipes, manholes, lift stations) have capacity limitations under existing and buildout flow conditions and under dry weather and peak wet weather flow conditions.

The flow inputs for the model included an assumption of 230 gallons per day per equivalent dwelling unit. Data from the District's existing 17 real-time flow meters was used to calibrate the model to determine diurnal flow patterns and the peaking factors associated with storm events.

For the model, a 25-year 24-hour storm event was used. For the buildout scenario, it was assumed that every property in the District's existing service area as well as the properties located in the District's Sphere of Influence would be developed, occupied, and connected to the sewer. This is a conservative assumption given that many of the properties may remain undeveloped, unconnected (many are currently served by septic systems), or unoccupied (many are second vacation homes).

To determine if a pipe segment was capacity limited, the following criteria were used:

- Hydraulic grade line comes within 3-feet of a manhole cover elevation under dry weather conditions
- Pipeline is surcharged under wet weather conditions
- Flow into pump station exceeds the pump station's firm capacity.

Reference the Carollo Model 2019

8-3: District Capacity Enhancement Measures – Capital Improvement Program

A capacity analysis of the Donner Lake, Tahoe Donner, Martis Valley, and Glenshire basins was performed as part of this study. As part of the existing system analysis, some areas of the District's collection system do not have sufficient capacity to convey a 25-year design storm under existing high occupancy conditions. The existing system analysis showed one pump capacity deficiency in the Donner Lake Basin (Lift Station 1B), approximately 890 LF of capacity deficient sewers in the Tahoe Donner Basin, and 180 LF of capacity deficient sewers/five pump station deficiencies in the Martis Valley basin. At build-out, a total of approximately 22,700 LF of capacity deficient sewers and seven additional pump station capacity deficiencies were identified.

Reference Carollo Model 2019

8-4: Schedule

The current schedule of District capital projects is included in Supplement IV-2 earlier in this SSMP.

8-5: References

The data used in this section were taken from the following references:

- Draft Martis Valley Hydraulic Model and Capacity Assurance Report
- Truckee Sanitary District Sewer System Hydraulic Model Update, Carollo. August 2019

Element 9: Monitoring, Measurement, and Program Modifications

Monitoring, Measurement, and Program Modifications:

The Enrollee shall:

(a) Maintain relevant information that can be used to establish and prioritize appropriate SSMP activities;

(b) Monitor the implementation and, where appropriate, measure the effectiveness of each element of the SSMP;

(c) Assess the success of the preventative maintenance program;

(d) Update program elements, as appropriate, based on monitoring or performance evaluations; and

(e) Identify and illustrate SSO trends, including frequency, location, and volume.

9-1: Performance Measures

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

Table 9 – 1: District Preventative Maintenance Performance Metrics

Maintenance Success Factors	Metric
System Pipes	Miles
Sewer Maintenance Staff	Full Time Equivalents (FTE)
Gravity Pipes Cleaned	Miles/Year
Pipes Inspected (CCTV)	Miles/Year
Manholes Inspected	Number/Year
HMA (Hot Spots) Cleaned	Number by Underlying Cause (Debris, FOG, Structural)
Sanitary Sewer Overflows (SSO)	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	Individual Inspections/Year
Pipe Replaced	Miles/Year
Resolved Claims	Number/Year; $/Year/Event

9-2: Baseline Performance

The District has performance measures in place and evaluates its performance monthly and annually. The historical performance is shown below starting in calendar year 2007 through 2020. These performance results will be used to assist the District to evaluate the effectiveness of the sewer collection system program as part of the biennial internal audit.

Figure 9 – 1: SSOs per Fiscal Year

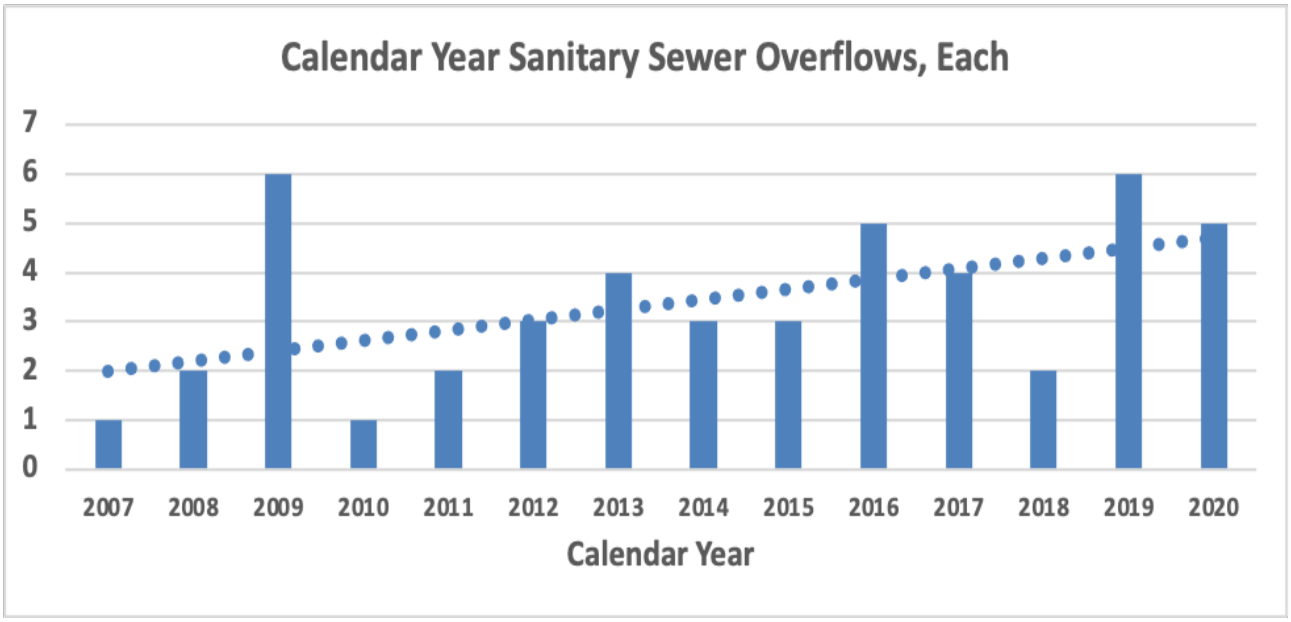


Figure 9 – 2: Trend in SSOs by Cause

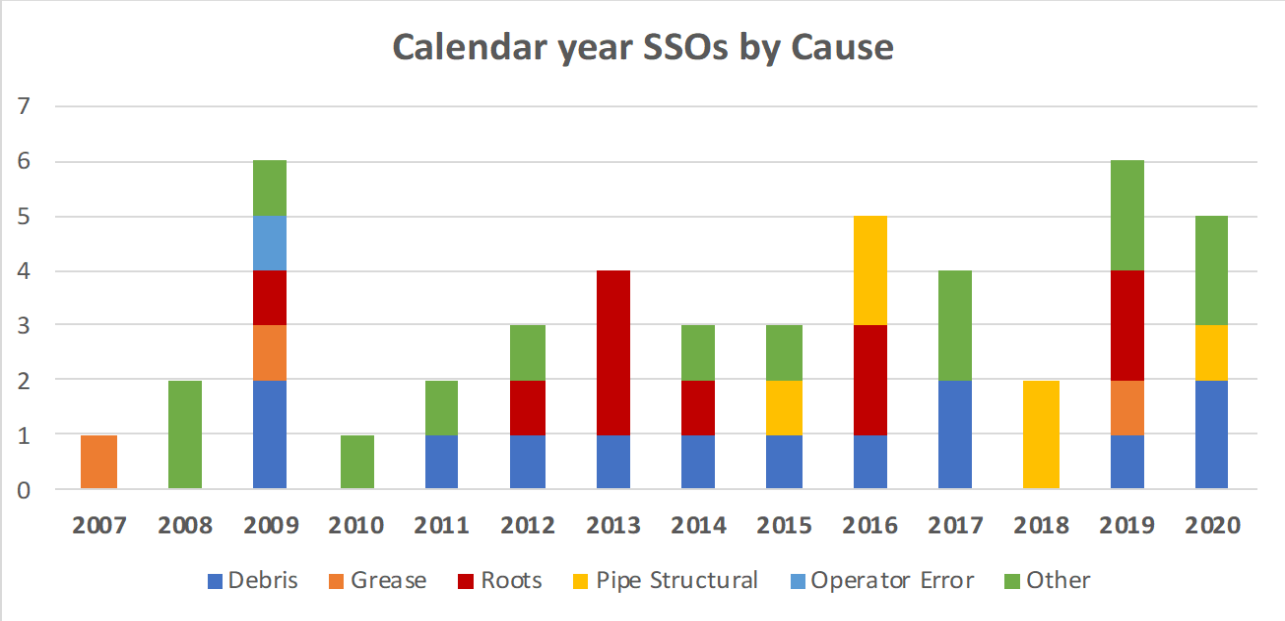


Figure 9 – 3: Historical Spill and Recovered Volumes by Fiscal Year

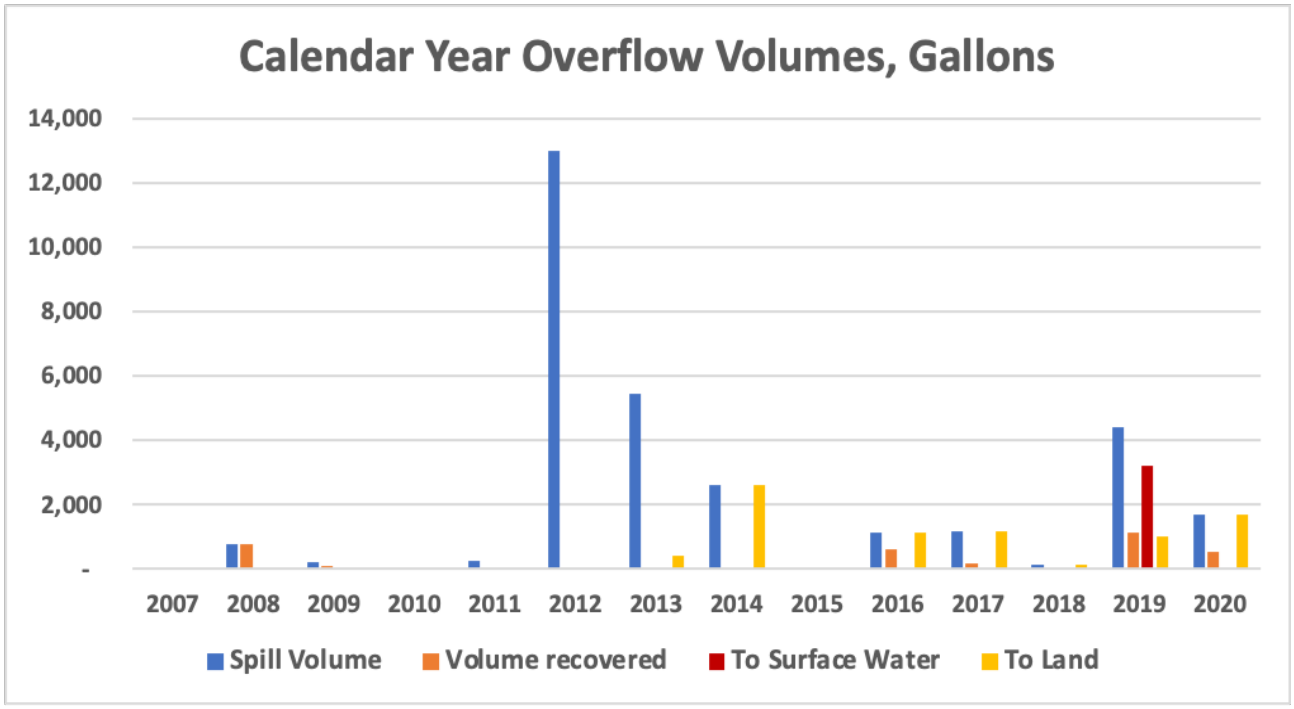


Figure 9 – 4: Overflows by SWRCB Categories per Fiscal Year

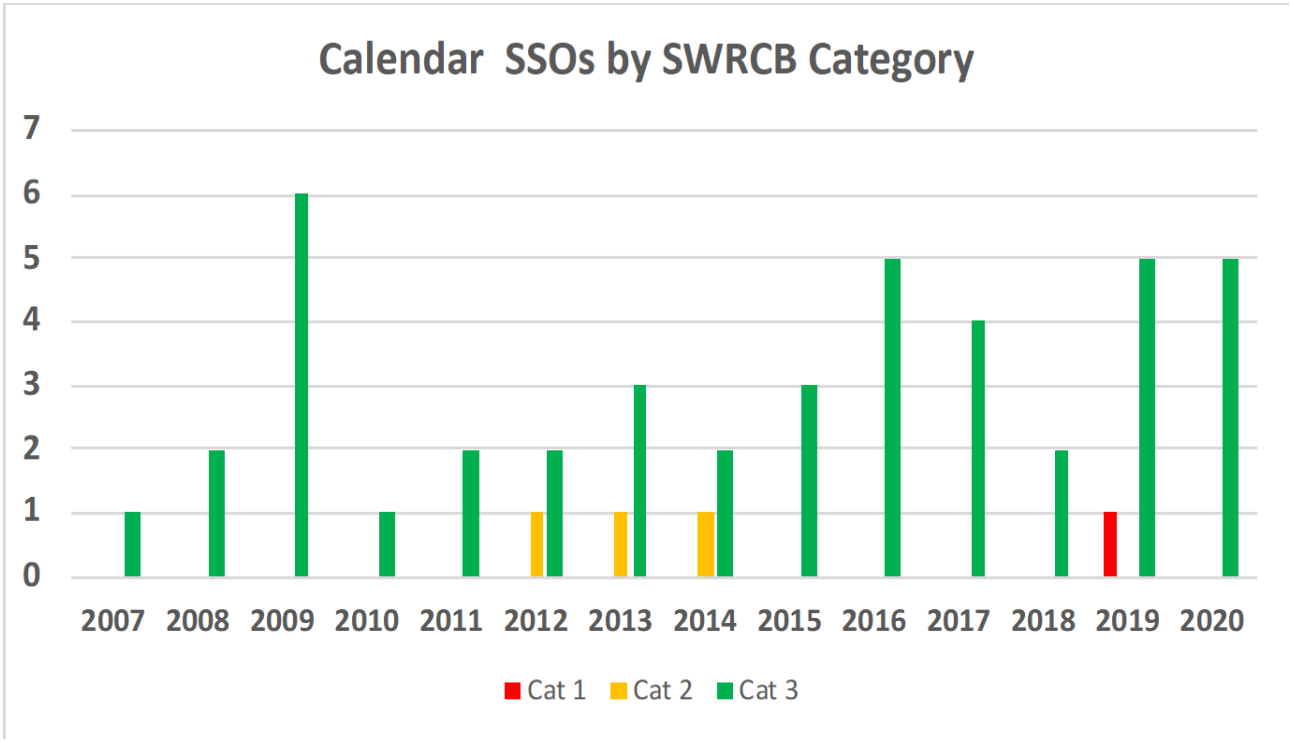


Figure 9 – 5: Comparison of SSO Rate per 100 Miles of Sewers

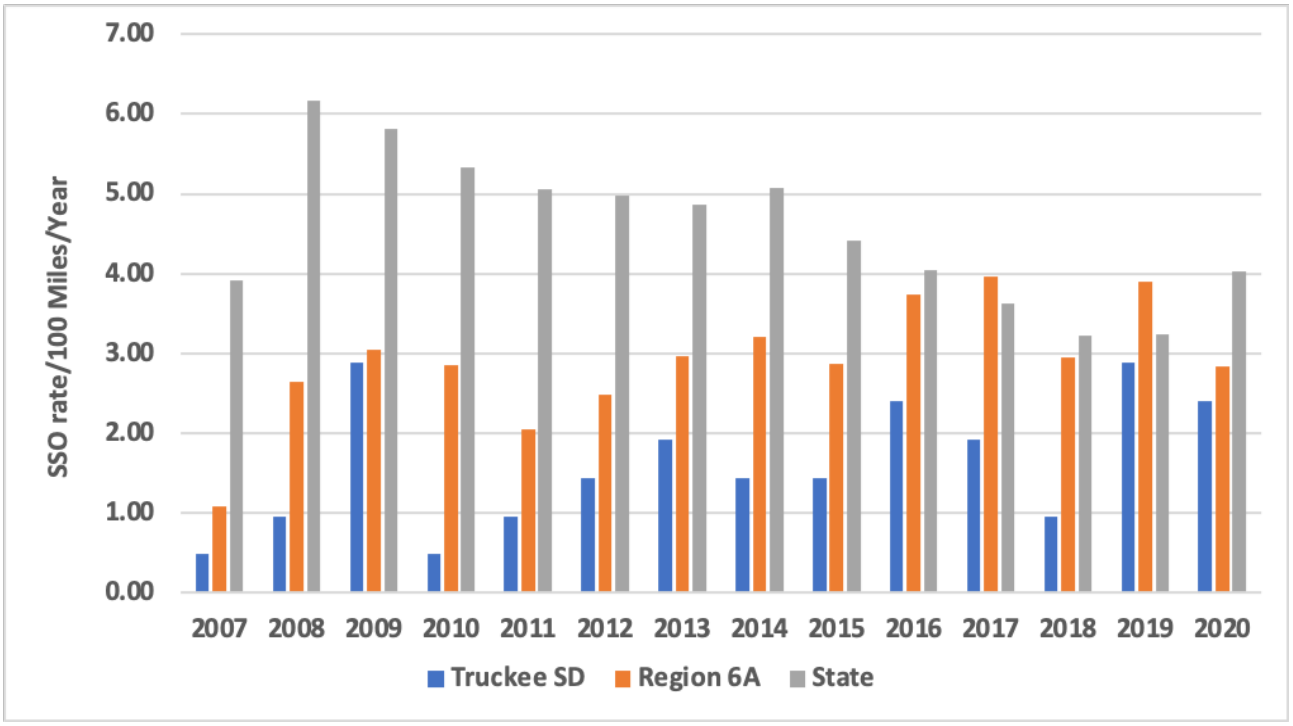


Figure 9 – 6: Historical Line Cleaning Summary

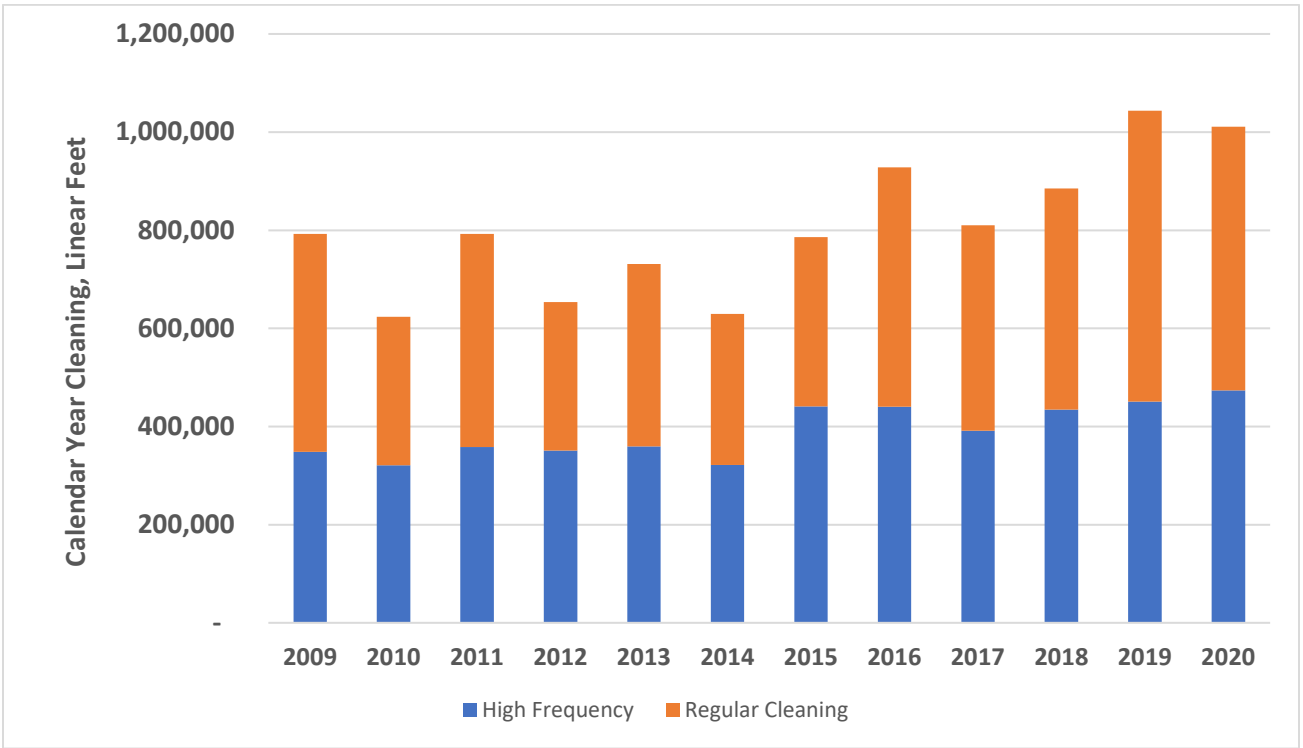
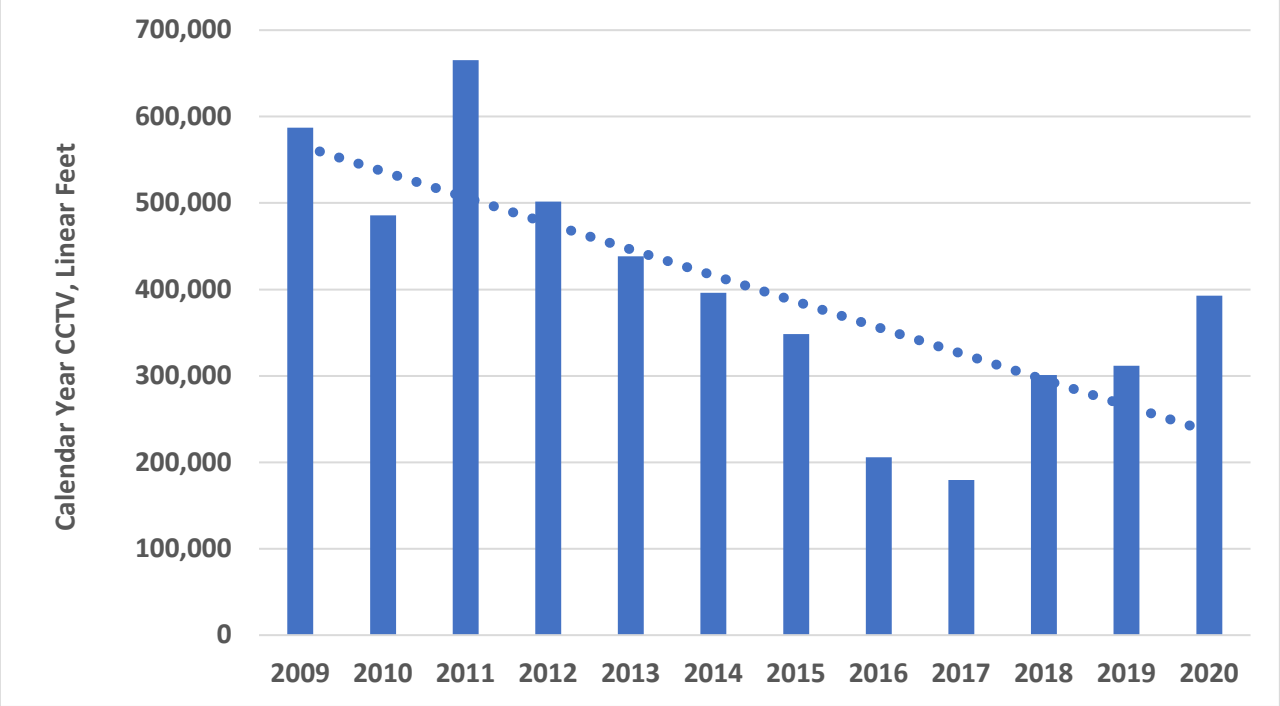


Figure 9 – 7: Historical Annual CCTV Performance



9-3: Performance Monitoring and Program Changes

The District will evaluate its performance at least annually using the performance measures identified in this Element. The District will update the data and analysis at the time of the annual evaluation and will place an Annual Performance Report on a Board agenda, and after approval, on the SSMP webpage.

The District may use other performance measures in its evaluations. The District will prioritize its actions and initiate changes to this SSMP, its operations and maintenance practices and procedures, and any related programs based on the results of these evaluations. This will be done as part of the biennial internal audit (see Element 10).

9-4: References

The data used in this section were taken from the following references:

- CIWQS SSO data as of December 31, 2020 for WDID 6SSO11120

Element 10: SSMP Program Audits

SSMP Program Audits - As part of the SSMP, the Enrollee 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 Enrollee's compliance with the SSMP requirements identified in this subsection (D.13), including identification of any deficiencies in the SSMP and steps to correct them.

10-1: Audits

The District will audit the implementation and compliance with the provisions of the WDR and this SSMP every two years from the original adoption date as required by the WDR. The next audit will be conducted and completed no later than July 2023. The audit will be conducted by a team consisting of District staff selected from the Engineering and O&M Department. The audit team may also include members from other service area agencies like T-TSA or professional consultants. During the SSMP audit, the District will conduct a record keeping audit of its SSO files supporting the CIWQS certified reports during the audit period to assure that that the files are complete, contain all required records and documentation as stated in the MRP and OERP and that the files contain no extraneous or conflicting records or information.

The SSMP Audit Checklist (Appendix C) is used to inform the audit interview process and includes the GWDR requirements for each SSMP element and the appendices. The results of the audit, including the identification of any deficiencies and the steps taken or planned to correct them will be included in a separate certified Internal Audit Report Action Plan. Upon completion of the audit report and certification by the LRO, the District will place a copy of the final Audit Report including the SSMP Audit Checklist in Appendix C, Sewer System Annual Audit Reports of the SSMP. Modifications and changes to the SSMP identified during the audit will be identified in Appendix D, SSMP Change Log when completed.

The audit should contain information about successes in implementing the most recent version of the SSMP and identify revisions that may be needed for a continuously improving and effective program. Information collected will be used in preparing the Audit Report. Tables and figures or charts will be used to summarize information about performance results. An explanation of the SSMP development, and accomplishments in improving the sewer system, should be included in the audit report, including:

- How the District implemented the sewer system SSMP elements in the past year;
- The effectiveness of implementing each SSMP element;
- A description of the additions and improvements made to the sanitary sewer collection system in the audit period; and

- A description of the additions and improvements planned for the upcoming reporting year with an estimated schedule for implementation.
- Status of any deficiencies or corrective actions identified to improve program performance.

10-1: SSMP Updates

If the biennial audit identifies significant changes to be made to the SSMP, 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 and the SSMP Change Log.

The SSMP was updated in June 2021 to reflect recommendations from the prior audit. This updated SSMP will be presented to the Board for adoption in Spring 2021. Future changes to the SSMP will be documented in the Change Log located in Appendix D. SSMP Audit results will also be included in Appendix B.

10-2: References

None.

Element 11: Communication Program

Communication Program – The Enrollee 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 Enrollee as the program is developed and implemented.

The Enrollee shall also create a plan of communication with systems that are tributary and/or satellite to the Enrollee's sanitary sewer system.

11-1: Communication during SSMP Development and Implementation

The District, at least annually, communicates with the Board at public meetings that allow for input from the public regarding the implementation and results of the collection system operations. The District's O&M Superintendent and Executive Assistant/Board Clerk are responsible to coordinate all communication activities and for all materials on the District's SSMP webpage including the posting of the Board adopted SSMP and all critical supporting documents.

Information provided upon request to interested parties includes: a copy of completed sections of the SSMP, brochures and materials regarding collection system operations and maintenance and contact information and/or opportunities for input into the development and implementation of the collection system operations.

The O&M Superintendent will annually provide the Board, at a regularly scheduled meeting, an Annual Collection System Performance Report that will be included in the minutes of that public meeting and placed on the District website. The performance information will include the performance measures listed in Element 9: Monitoring, Measurement, and Program Modifications, operations performance results and will be compiled following the end of the calendar year in an Annual Collection System Performance Report.

11-2: Communication with Regional and Joint Wastewater Collection Systems

Operations Managers for all T-TSA member entities meet several times per year to discuss items of mutual interest. Minutes from these meeting are documented and filed with the District.

11-3: References

None.

Appendices

Appendix A: Sewer System Management Plan Adoption Documents

TRUCKEE SANITARY DISTRICT
BOARD OF DIRECTORS
REGULAR MEETING MINUTES

JULY 16, 2009

5:30 p.m. Finance Committee reviewed the administrative and general payables for the month of July.

Vice President Smart called the regular meeting of the Board of Directors of the Truckee Sanitary District (District) to order at 6:00 p.m.

DIRECTORS PRESENT:	Gilmore, Smart, Sullivan, Sweet
DIRECTORS ABSENT:	Affeldt
STAFF PRESENT:	Selfridge (General Manager), Wright (Operations & Maintenance), Ruby (Administration), Tresan (District Engineer)
OTHERS PRESENT:	Mr. Ron Rinehart (Environmental Business Solutions)
CONSULTANTS PRESENT:	Ruthann G. Ziegler, Meyers-Nave, Mr. O.R. Butterfield, Mr. Peter M. Krasnoff and Ms. Sharon Squire, WEST Environmental Services

PLEDGE OF ALLEGIANCE:

PAYMENT OF BILLS:
A **MOTION** was made by Director Sweet and **SECONDED** by Director Sullivan to approve the bills and payroll for the month of July in the amount of $1,518,582.43. **MOTION CARRIED UNANIMOUSLY.**

APPROVAL OF MINUTES:
A **MOTION** was made by Director Gilmore and **SECONDED** by Director Sullivan to approve the minutes of July 7, 2009 and June 18, 2009. **MOTION CARRIED UNANIMOUSLY.**

PUBLIC COMMENTS:
This is the time set aside for the public to address the Board on any matter not on the agenda. There were no public comments.

T-TSA REPORT:
Mr. Butterfield reviewed Exhibit A with the Board.

1

PUBLIC HEARING - RESOLUTION NO. 2009-111:
Vice President Smart called the Public Hearing to order at 6:07 p.m. for Resolution No. 2009-111. A resolution of the Board of Directors of Truckee Sanitary District certifying and adopting the Donner Creek Bridge Sewer Pipeline Upgrade 2009 Negative Declaration and approval to proceed with the Project. **Vice President Smart** asked if there were any public comments from anyone in attendance for the Public Hearing. There were no comments; therefore, **Vice President Smart** closed the Public Hearing at 6:08 p.m.

A **MOTION** was made by Director Gilmore and **SECONDED** by Director Sullivan to adopt Resolution No. 2009-111. A resolution of the Board of Directors of Truckee Sanitary District certifying and adopting the Donner Creek Bridge Sewer Pipeline Upgrade 2009 Negative Declaration and approval to proceed with the Project. **AYES:** Gilmore, Smart, Sullivan, Sweet. **NOES:** None. **ABSTAIN:** None. **ABSENT:** Affeldt. **RESOLUTION PASSED.**

TRUCKEE LANDFILL REMEDIATION PROJECT:
Mr. Selfridge, Mr. Krasnoff, and Mr. Rinehart gave a status report on the Landfill Remediation Project. A field trip to the site was not conducted. After discussion, a **MOTION** was made by Director Sullivan and **SECONDED** by Director Gilmore to complete site work as scheduled within the contract, authorize the installation of 12" aggregate base (at the District's cost), and authorize the General Manager to negotiate with the Truckee Donner Recreation and Park District concerning their request to pave the landfill cap area on the subjects of cost, engineered plan design, long term maintenance, and a revised lease agreement. **MOTION CARRIED UNANIMOUSLY.**

TRUCKEE LANDFILL CONSULTING AGREEMENT:
A **MOTION** was made by Director Sullivan and **SECONDED** by Director Gilmore to approve Work Order No.: TSD.TRP-09.03 for West Engineering. **MOTION CARRIED UNANIMOUSLY.**

CLOSED SESSION:
The Board adjourned to closed session for discussion of Agenda Item number 10 - Pursuant to Government Code Section 54956.9, threat of litigation, at 7:00 p.m.

OPEN SESSION:
The Board reconvened to open session at 7:55 p.m. No reportable action was taken as a result of the closed session; direction was given to legal counsel and staff.

DELEGATION OF AUTHORITY:
A MOTION was made by Director Gilmore and SECONDED by Director Sullivan to approve the delegation of authority to the General Manager regarding claims against the District under Government Code Section 900 et. seq. – authority to reject or accept claims as appropriate and settle claims up to $5,000 with a signed release. **MOTION CARRIED UNANIMOUSLY.**

SEWER SYSTEM MANAGEMENT PLAN (SSMP):
After review, a **MOTION** was made by Director Gilmore and **SECONDED** by Director Sullivan to approve the Sewer System Management Plan (SSMP) as presented and direct staff to implement. **MOTION CARRIED UNANIMOUSLY.**

NEVADA COUNTY LOCAL AGENCY FORMATION COMMISSION (LAFCo):
A **MOTION** was made by Director Sullivan and **SECONDED** by Director Sweet to vote for Ronald (Ron) E. Perea on the LAFCo Election Ballot 2009 – Alternate Special District Member. **MOTION CARRIED UNANIMOUSLY.**

DISTRICT LAND HOLDINGS:
It was a consensus of the Board to direct staff to obtain appraisals for certain District land holdings and begin a dialog with the Truckee Donner Recreation and Park District.

STAFF REPORTS:
Mr. Tresan provided a brief update to the Board on the status of the following issues:

- Solar Power Project
- Northwoods Rehabilitation Project
- Inspection Department Workload
- Town of Truckee Legacy Trail Ribbon Cutting Ceremony

Mr. Wright provided a brief update to the Board on the status of the following issues:

- Maintenance Department Workload
- Receipt of New Dump Truck

Ms. Ruby provided a brief update to the Board on the status of the following issues:

- Audit Preparation
- Springbrook Business Process Study (BPS)

TRAVEL REQUIREMENTS:
There were no requests for special travel for the upcoming 2009 Annual California Association of Sanitation Agencies Conference.

MANAGER'S REPORT:
Mr. Selfridge reported to the Board on the following items:

- June 2009 Monthly Report

DIRECTOR'S COMMENTS:
No Comments.

ADJOURNMENT:
The meeting adjourned at 8:41 p.m.

Thomas S. Selfridge
Board Secretary

DATE OF APPROVAL: August 20, 2009

TRUCKEE SANITARY DISTRICT
BOARD OF DIRECTORS
POSTPONED REGULAR MEETING MINUTES

SEPTEMBER 24, 2015

5:30 p.m. Finance Committee reviewed the administrative and general payables for the month of September.

President Van Gundy called the regular meeting of the Board of Directors of the Truckee Sanitary District (District) to order at 6:00 p.m. and opened the meeting with a moment of silence in memory of Robert W. Affeldt, DDS.

President Van Gundy requested that the Board Members set their iPads to Airplane Mode.

DIRECTORS PRESENT: Gilmore, Smart, Sweet, Van Gundy

STAFF PRESENT: Tresan (General Manager), Wright (Operations & Maintenance), Ruby (Administration), Brown (District Engineer)

OTHERS PRESENT: Mr. Denny Anderson and Mr. Brad Benamati

CONSULTANTS PRESENT: Mr. O.R. Butterfield

PLEDGE OF ALLEGIANCE:

FINANCIAL REPORT:

a. Fund & Cash Report:
   Mr. Tresan reviewed the Fund & Cash Reports with the Board.
b. Payment of Bills:
   A **MOTION** was made by Director Sweet and **SECONDED** by Director Smart to approve the bills and payroll for the month of September in the amount of $991,501.75. **MOTION CARRIED UNANIMOUSLY.**

APPROVAL OF MINUTES:
A **MOTION** was made by Director Gilmore and **SECONDED** by Director Smart to approve the minutes of August 27, 2015. **MOTION CARRIED UNANIMOUSLY.**

PUBLIC COMMENTS:
This is the time set aside for the public to address the Board on any matter not on the agenda. There were no public comments.

T-TSA REPORT:
Mr. Butterfield reviewed the T-TSA September 9, 2015 meeting with the Board.

RESOLUTION NO. 2015-110:
A **MOTION** was made by Director Sweet and **SECONDED** by Director Gilmore to adopt Resolution No. 2015-110, a resolution of appreciation in honor of Robert W. Affeldt, DDS. **AYES:** Gilmore, Smart, Sweet, Van Gundy. **NOES:** None. **ABSTAIN:** None. **ABSENT:** None. **RESOLUTION PASSED**.

BOARD VACANCY:
It was a consensus of the Board to direct staff to move forward with the process for filing the Board vacancy.

PROJECT CONTRACT:
Mr. Brown reviewed the quotes received for TSD Repaving Project 2015:

- $21,167.00 - Schaffer Paving
- $24,700.00 - Lakeside Paving
- $16,496.00 - Blacktop Paving
- $22,545.23 - Advanced Asphalt

A **MOTION** was made by Director Gilmore and **SECONDED** by Director Sweet to award the TSD Repaving Project 2015 to Blacktop Paving with a not to exceed amount of $18,000, to authorize the General Manager to execute the Contractor Agreement, and to take all other steps as may be reasonably necessary to complement the terms of the agreement. **MOTION CARRIED UNANIMOUSLY.**

SEWER SYSTEM MANAGEMENT PLAN (SSMP):
A **MOTION** was made by Director Gilmore and **SECONDED** by Director Smart to approve the recertification of updated SSMP as presented. **MOTION CARRIED UNANIMOUSLY.**

PROPERTY DAMAGE CLAIM:
No action was taken on the property damage claim from Mr. Robert Culin as a formal claim has not yet been submitted to the District.

SEWER RATE STUDY:
Mr. Tresan stated that staff is preparing to present the HDR Engineering Sewer Rate Study to the Board at the October Board Meeting.

STAFF REPORTS:
Mr. Brown provided a brief update to the Board on the status of the following issues:

- Mr. Steve Murphy attended the Lucity Annual Conference in Kansas City
- Lift Station Maintenance Worker Recruitment
- Manhole Rehabilitation Project 2015
- Pipelining Rehabilitation Project 2015
- SCADA System/Server Room Upgrade Project
- Trails and Bikeways Master Plan Draft 8-2015
- Beaver Dam at Donner Creek
- Removal of earthen berm by Mr. Dave Rummel (property owner of APN 19-570-14)
- Town of Truckee Mousehole Project
- TSD Property Surveying – Lot Line Adjustment

- Public Agency Coordination
- Engineering and Inspections Department Workload
- Wastewater Flow Data
- District Solar Production

Mr. Wright provided a brief update to the Board on the status of the following issues:

- Maintenance Department Workload
- Sanitary Sewer Overflow Report for August 2015 – None
- TSD Training Center Use
- Mr. Jeremy Bourque passed the CWEA Grade I exam
- Temporary Summer Laborers
- Injury and Illness Prevention Program (IIPP) Update

Ms. Ruby provided a brief update to the Board on the status of the following issues:

- Christmas Party
- Holiday Schedule
- Audit Follow Up

MANAGER'S REPORT:

Mr. Tresan reported to the Board on the following items:

- August 2015 Monthly Report
- Sewer Rate Study and Public Notice Process
- Martis Valley West Parcel Project Contract
- Mr. Tresan commended staff for their work and support
- Truckee Area Managers Meeting

TRAVEL REQUIREMENTS:

There were no requests for special travel for the California Special Districts Association 2015 Annual Conference.

DIRECTOR'S COMMENTS:

Director Gilmore gave his conference report and reviewed items presented at the California Special Districts Association 2015 Annual Conference.

President Van Gundy closes the meeting in honor of Robert W. Affeldt, DDS.

ADJOURNMENT:

The meeting adjourned at 7:42 p.m.

Blake R. Tresan,
Board Secretary

DATE OF APPROVAL: October 15, 2015

TRUCKEE SANITARY DISTRICT
BOARD OF DIRECTORS
REGULAR MEETING MINUTES

June 17, 2021

Per Executive Order N-29-20, proclaiming a State of Emergency in the State of California due to the COVID-19 pandemic, the Truckee Sanitary District's June 17, 2021 Board of Director's meeting room was not accessible to the public and the meeting was conducted electronically. All attendees below participated via teleconference.

President call the regular meeting to order:
President Van Gundy called the regular meeting of the Board of Directors of the Truckee Sanitary District (District) to order at 6:00 p.m.

PLEDGE OF ALLEGIANCE:

ROLL CALL:

DIRECTORS PRESENT:	Anderson, Gilmore, Smart, Sweet, Van Gundy
DIRECTORS ABSENT:	None
STAFF PRESENT:	Tresan (General Manager), Sundale (Operations & Maintenance), Brown (Engineering), Wasley (Finance & Administration), Jordan (Administration), Rea (Finance), Piccioli (Administration),
CONSULTANTS PRESENT:	Ruthann G. Ziegler Attorney at Law - District Legal Counsel, Paul Causey - Paul Causey Consulting, Randy House - LP Insurance
OTHERS PRESENT:	Cole McGeorge - Member of the public, Kathleen Eagan and Louise Zabriskie - Friends of the Truckee Library

PUBLIC COMMENTS:
This is the time set aside for the public to address the Board on any matter not on the agenda. One written comment was received and forwarded to the Directors for review. The comment is attached to the minutes.

APPROVAL OF MINUTES:
A **MOTION** was made by Director Anderson and **SECONDED** by Director Sweet to approve the minutes of May 20, 2021. **AYES:** Anderson, Gilmore, Smart, Sweet, Van Gundy. **NOES:** None. **ABSENT:** None. **ABSTAIN:** None. **MOTION PASSED.**

TSD ENVIRONMENTAL LEADERSHIP SCHOLARSHIP:
President Van Gundy presented Mr. Cole McGeorge, a Truckee High School senior, to the Board and stated that it was his pleasure to announce that he is the recipient of the TSD Environmental Leadership Scholarship. Mr. McGeorge addressed the Board and thanked them for the scholarship. The Board congratulated Mr. McGeorge and wished him well going forward.

TRUCKEE LIBRARY PROJECT UPDATE:
Kathleen Eagan and Louise Zabriskie of Friends of the Truckee Library, provided the Board with an update on the status of the proposed Truckee Library Project located at the Truckee Regional Park. Their presentation included a fly-through architectural video of the proposed Truckee Library.

There was no action taken by the Board at this time.

GENERAL LIABILITY PACKAGE & EARTHQUAKE INSURANCE RENEWAL:
A **MOTION** was made by Director Smart and **SECONDED** by Director Gilmore to approve the expenditure of $167,915.81 to renew the General Liability Package & Earthquake Insurance. **AYES:** Anderson, Gilmore, Smart, Sweet, Van Gundy. **NOES:** None. **ABSENT:** None. **ABSTAIN:** None. **MOTION PASSED.**

PUBLIC HEARING - RESOLUTION NO. 2021-106:
President Van Gundy called the Public Hearing to order at 6:25 p.m. for Resolution 2021-106. A resolution of the Board of Directors of the Truckee Sanitary District requesting the collection of user fee charges for FY22 (7/1/21-6/30/22) on the Nevada and Placer County tax rolls and adopting a report of charges. President Van Gundy asked if there were any public comments from anyone in attendance for the Public Hearing.

There were no comments; therefore, President Van Gundy closed the Public Hearing at 6:27 p.m.

A **MOTION** was made by Director Gilmore and **SECONDED** by Director Anderson to adopt Resolution No. 2021-106. **AYES:** Anderson, Gilmore, Smart, Sweet, Van Gundy. **NOES:** None. **ABSENT:** None. **ABSTAIN:** None. **RESOLUTION PASSED.**

FINANCIAL REPORT:

a. Fund & Cash Report:
   Mr. Wasley reviewed the Fund & Cash Reports with the Board.
b. Payment of Bills:
   A **MOTION** was made by Director Gilmore and **SECONDED** by Director Sweet to approve the bills and payroll for the month of May in the amount of $584,792.33. **AYES:** Anderson, Gilmore, Smart, Sweet, Van Gundy. **NOES:** None. **ABSENT:** None. **ABSTAIN:** None. **MOTION PASSED.**

APPROPRIATION LIMITS FOR FISCAL YEAR 2021-2022 – RESOLUTION 2021-107:
A **MOTION** was made by Director Anderson and **SECONDED** by Director Gilmore to adopt Resolution No. 2021-107, a resolution establishing Appropriation Limits for fiscal year 2021-2022. **AYES:** Anderson, Gilmore, Smart, Sweet, Van Gundy. **NOES:** None. **ABSENT:** None. **ABSTAIN:** None. **RESOLUTION PASSED.**

FISCAL YEAR 2021-22 ANNUAL BUDGET - RESOLUTION NO. 2021-108:
A **MOTION** was made by Director Sweet and **SECONDED** by Director Gilmore to adopt Resolution No. 2021-108, a resolution adopting the Operating and Capital Budget for fiscal year 2021-2022. **AYES:** Anderson, Gilmore, Smart, Sweet, Van Gundy. **NOES:** None. **ABSENT:** None. **ABSTAIN:** None. **RESOLUTION PASSED.**

CalPERS PENSION FY22 UNFUNDED ACCRUED LIABILITY (UAL) PAYMENT SCHEDULE:
A **MOTION** was made by Director Sweet and **SECONDED** by Director Gilmore to approve the required FY22 UAL payments to CalPERS of $295,237 (Classic) and $7,327 (PEPRA) to be made in lump sum payments prior to July 31, 2021. **AYES:** Anderson, Gilmore, Smart, Sweet, Van Gundy. **NOES:** None. **ABSENT:** None. **ABSTAIN:** None. **MOTION PASSED.**

CONTRIBUTION TO CALIFORNIA EMPLOYERS PENSION PREFUNDING TRUST (CEPPT):
A **MOTION** was made by Director Anderson and **SECONDED** by Director Gilmore to approve ten (10) monthly contribution payments of $50,000 (totaling $500,000) to be made to the District's CEPPT account beginning July 2021. **AYES:** Anderson, Gilmore, Smart, Sweet, Van Gundy. **NOES:** None. **ABSENT:** None. **ABSTAIN:** None. **MOTION PASSED.**

DISTRIBUTION FROM CALIFORNIA EMPLOYERS' RETIREE BENEFIT TRUST (CERBT):
A **MOTION** was made by Director Gilmore and **SECONDED** by Director Smart to approve a California Employers' Retiree Benefit Trust (CERBT) distribution of $55,000 to be requested prior to June 30, 2021. **AYES:** Anderson, Gilmore, Smart, Sweet, Van Gundy. **NOES:** None. **ABSENT:** None. **ABSTAIN:** None. **MOTION PASSED.**

DELEGATION OF AUTHORITY - CALIFORNIA EMPLOYERS' RETIREEE BENEFIT TRUST (CERBT) - RESOLUTION NO. 2021-109
A **MOTION** was made by Director Sweet and **SECONDED** by Director Anderson to adopt Resolution No. 2021-109, a resolution of the Delegation of Authority to allow the General Manager, Finance & Administrative Manager, and Accountant positions to request disbursements/distributions from the District's California Employers' Retiree Benefit Trust account (CERBT). **AYES:** Anderson, Gilmore, Smart, Sweet, Van Gundy. **NOES:** None. **ABSENT:** None. **ABSTAIN:** None. **RESOLUTION PASSED.**

SEWER SYSTEM MANAGEMENT PLAN (SSMP) UPDATE:
A **MOTION** was made by Director Gilmore and **SECONDED** by Director Anderson to approve and recertify the Sewer System Management Plan (SSMP) as presented. **AYES:** Anderson, Gilmore, Smart, Sweet, Van Gundy. **NOES:** None. **ABSENT:** None. **ABSTAIN:** None. **MOTION PASSED.**

EQUIPMENT PURCHASE:
A **MOTION** was made by Director Gilmore and **SECONDED** by Director Anderson to authorize the General Manager to purchase three (3) Cornell Pump Sets from Gierlich Mitchell for the Schussing Lift Station for a not-to-exceed price of $35,000. **AYES:** Anderson, Gilmore, Smart, Sweet, Van Gundy. **NOES:** None. **ABSENT:** None. **ABSTAIN:** None. **MOTION PASSED.**

CONTRACTOR'S AGREEMENT:
A **MOTION** was made by Director Smart and **SECONDED** by Director Gilmore to authorize the General Manager to enter into a Contractor's Agreement with Easterbrook Painting to paint the 7 Donner Lake Lift Stations for a Not-to-Exceed price of $20,270.52. **AYES:** Anderson, Gilmore, Smart, Sweet, Van Gundy. **NOES:** None. **ABSENT:** None. **ABSTAIN:** None. **MOTION PASSED.**

CALIFORNIA SPECIAL DISTRICTS ASSOCIATION (CSDA):
A **MOTION** was made by Director Smart and **SECONDED** by Director Anderson to vote for Noelle Mattock on the CSDA Sierra Network Board of Directors 2021 Election Ballot.
AYES: Anderson, Gilmore, Smart, Sweet, Van Gundy. **NOES:** None. **ABSENT:** None.
ABSTAIN: None. **MOTION PASSED.**

CALIFORNIA ASSOCIATION OF SANITATION AGENCIES (CASA) CONFERENCE:
A **MOTION** was made by Director Anderson and **SECONDED** by Director Sweet to approve conference attendance and special travel requirements by Board Members.
AYES: Anderson, Gilmore, Smart, Sweet, Van Gundy. **NOES:** None. **ABSENT:** None.
ABSTAIN: None. **MOTION PASSED.**

T-TSA REPORT:
Mr. Tresan, TSD's representative on the T-TSA Board, reviewed the T-TSA June 16, 2021 Board of Directors meeting with the Board.

STAFF REPORTS:
Mr. Brown, Engineering, provided a brief update to the Board on the status of the following items:

- Solar Energy Production
- Wastewater Flow Data
- Letter to customers with pump systems informing them of what to do during power outages
- Cross Road Car Wash open drain investigation
- Pipeline and Manhole Rehabilitation projects update
- Local private and public projects of interest

Mr. Sundale, Operations and Maintenance, provided a brief update to the Board on the status of the following items:

- Sanitary Sewer Overflow Report for May 2021 – One (1) Category 3 SSO
- Maintenance Department Workload
- Updates:
  - Long lateral inspections in Tahoe Donner
  - May staff safety and training

Mr. Wasley, Finance and Administration, provided a brief update to the Board on the status of the following items:

- 63 Ordinance Tests performed
- 17 Residential Sewer Permits opened
- Administration and Finance staff workload

Ms. Piccioli, Board Clerk, provided a brief update to the Board on the status of the following items:

- Public Outreach and Education Update:
  - Truckee Day June 5, 2021
  - Tahoe Silicon Mountain Presentation on June 14, 2021

MANAGER'S REPORT:
Mr. Tresan reported to the Board on the following items:

- May 2021 Monthly Report
- Letter from Contractor's Association of Truckee Tahoe (CATT) concerning the connection fees
- Joint Community Facility Agreement (JCFA) executed for the Coldstream Project
- COVID-19 and CalOSHA's revised Temporary Emergency Standard

DIRECTORS' COMMENTS:
No comments

CLOSED SESSION:
Agenda Item 25, Existing/Initiated Litigation – Government Code Section 54956.9(d)(1)
No Closed Session Held

President Van Gundy adjourned for a recess at 8:07 p.m.

Mark Wasley (Finance & Administration) and Eric Sundale (Operations & Maintenance) excused themselves from the Board Meeting at 8:07 p.m.

President Van Gundy reconvened the meeting at 8:12 p.m.

CLOSED SESSION:
The Board adjourned to closed session at 8:12 p.m. for discussion with legal counsel of Agenda item 26.
Conference with Real Property Negotiators - Pursuant to Government Code Section 54956.8, Property APN 019-450-055, 10570 Brockway Road, Agency Negotiator: Blake Tresan, Under Negotiation: Price and Terms of Payment

Open Session: The Board reconvened to open session at 8:26 p.m. No reportable action was taken as a result of the closed session.

ADJOURNMENT:
The meeting adjourned at 8:27 p.m.

Diane Piccioli
Diane Piccioli,
Board Clerk

DATE OF APPROVAL: July 15, 2021

CERTIFICATION

I hereby certify that the foregoing is full, true and correct copy of minutes of the June 17, 2021 Regular Board Meeting, duly and regularly adopted by the Board of Directors of Truckee Sanitary District, County of Nevada, on July 15, 2021.

Diane Piccioli
Diane Piccioli
Board Clerk

5

Appendix B: Sewer System Management Audit Reports

Truckee Sanitary District
SSMP Audit Report Form

Audit Period Covered: January 1, 2012 through December 31, 2013
Completed by: V. W. Housen & Associates, May 21, 2014

The Truckee Sanitary District (District) is in the process of completing an update to the existing SSMP to address many of the comments discussed below. The District plans to complete the SSMP update by October 2014.

Introduction	Yes	No
Is the current system description complete and up to date? Are all infrastructure statistics current and complete?	X	
Discussion:		

	Element 1 – Goals	Yes	No
A	Are the goals stated in the SSMP still appropriate and accurate?	X	
Discussion:			

	Element 2 -- Organization	Yes	No
A	Is the Contact Information current?		X Note 1
B	Is the Sanitary Sewer Overflow Responder List current?		X Note 1
C	Is the Organization Chart in Figure 2-1 of the SSMP current?		X Note 1
D	Are the position descriptions an accurate portrayal of staff responsibilities?	X	
E	Is the chain of communication for reporting and responding to SSOs accurate and up-to-date?		X Note 2

Element 2 -- Organization	Yes	No
Discussion: Note 1. The District Manager retired in late 2013, and the organization has changed from that shown in the SSMP. The District is in the process of updating the organization chart and contact numbers. This information will be added to the current SSMP by June 30, 2014 Note 2. The chain of communication for reporting does not include the new definitions for Category 1, 2, and 3 SSOs that are required by 2013-0058-EXEC, Updated Monitoring and Reporting Requirements. An updated chain of communication will be added at the same time as the new contact list.		

Element 3 – Legal Authority		Yes	No
Does the SSMP contain current references to the District's Code documenting the District's legal authority to:			
A	Prevent illicit discharges?	X	
B	Require proper design and construction of sewers and connections?	X	
C	Ensure access for maintenance, inspection, or repairs for portions of the lateral owned or maintained by the City?	X	
D	Limit discharges of fats, oil, and grease?	X	
E	Enforce any violation of its sewer ordinances?	X	
F	Were any changes or modifications made in the past year or since the last SSMP audit to District Ordinances, Regulations, or standards?		X
Discussion: The SSMP references specific Ordinance sections in the body of the document and includes the District Code in an appendix. It is recommended that the District provide additional description within the body of the document to describe the contents of each referenced Ordinance.			

Element 4 – Operations and Maintenance		Yes	No
Collection System Maps			
A	Does the SSMP reference the current process and procedures for maintaining the District's sanitary sewer system maps?		X Note 1
B	Are the District's wastewater collection system maps complete, current, and sufficiently detailed?	X	
Prioritized Preventive Maintenance			
C	Does the SSMP describe current preventive maintenance activities and the system for prioritizing the cleaning of sewer lines?	X	
D	Based upon the SSO information in CIWQS and the Annual SSO Report, are the District's preventive maintenance activities sufficient and effective in minimizing SSOs and blockages?	X	
Rehabilitation and Replacement Program			
E	Is there an ongoing condition assessment program sufficient to rank the condition of sewer pipes and schedule rehabilitation? Are the current components of this program documented in the SSMP?		X Note 2
F	Does the rehabilitation and replacement plan include a capital improvement plan that addresses proper management and protection of the infrastructure assets? Does the plan 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?		X Note 2
Contingency Equipment and Replacement Inventory			
G	Does the SSMP list the major equipment currently used in the operation and maintenance of the collection system?		X Note 3
H	Are contingency equipment and replacement parts sufficient to respond to emergencies and properly conduct regular maintenance?	X Note 3	
Training			
I	Are the training records current?	X Note 4	
J	Does the SSMP document current training expectations and programs?	X	

Element 4 – Operations and Maintenance	Yes	No

Discussion:

Note 1. The District maintains professionally developed, complete, updated system maps. However, the SSMP does not describe how the maps are developed (i.e., GIS, etc.), or how they are updated and maintained. This description should be added to the next SSMP update.

Note 2. The SSMP does not describe the District's CCTV inspection approach and does not include an associated CIP. Also, budget documents were not easily obtained through the District's website. Therefore, this audit could not confirm the required information related to condition assessment. It is recommended that the updated SSMP provide additional description on the CCTV program and resulting CIP.

Note 3. The District owns and maintains a full fleet of equipment, including emergency response equipment. However, this equipment is not listed in the SSMP. The updated SSMP should list current equipment inventory.

Note 4. Training records are available at the District office.

	Element 5 – Design and Performance Standards	Yes	No
A	Does the SSMP reference current design and construction standards for the installation of new sanitary sewer systems, pump stations and other appurtenances and for the rehabilitation and repair of existing sanitary sewer systems?	X	
B	Does the SSMP document current procedures and standards for inspecting and testing the installation of new sewers, pumps, and other appurtenances and the rehabilitation and repair of existing sewer lines?		X Note 1

Discussion:

1. The District's design standards include requirements for testing and inspection. However, the SSMP does not reference or describe these requirements. It is recommended that the updated SSMP include additional information related to inspection and testing of new sewers and associated facilities.

	Element 6 – Overflow and Emergency Response Plan	Yes	No
A	Does the District's Overflow Emergency Response Plan (OERP) contain proper notification procedures so that the primary responders and regulatory agencies are informed of all sanitary sewer overflows (SSOs) as required by the WDR and MRP?		X Note 1
B	Does the OERP have a program to ensure an appropriate response to all overflows?	X	

Element 6 – Overflow and Emergency Response Plan		Yes	No
C	Does the OERP contain procedures to ensure prompt notification to appropriate regulatory agencies and other potentially affected entities of all SSOs that potentially affect public health or reach waters of the State in accordance with the MRP? Does the SSMP identify the officials who will receive immediate notification of such SSOs?	X	
D	Are staff and contractor personnel aware of and appropriately trained on the procedures of the OERP?	X	
E	Does the OERP contain procedures to address emergency operations such as traffic and crowd control and other necessary response activities?		X Note 2
F	Does the OERP ensure that all reasonable steps are taken to contain and prevent the discharge of untreated and partially treated wastewater to waters of the United States and to minimize or correct any adverse impact on the environment resulting from SSOs, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the discharge?	X	
G	Considering SSO performance data, is the OERP effective in handling SSOs in order to safeguard public health and the environment?	X	
H	Is the Water Quality Monitoring Plan current and has it been trained on and practiced by staff that would be involved in a SSO of large volume?		X Note 3
I	Was sampling conducted within 48 hours for all SSOs greater than 50,000 gallons and were results entered for these SSOs through the CIWQS website?	n/a Note 4	
J	Has the District prepared a Technical Report for all SSOs larger than 50,000 gallons? Have all Technical Reports been filed on the CIWQS website as required?	n/a No2.te 4	

Element 6 – Overflow and Emergency Response Plan	Yes	No
Discussion: Note 1. The notification procedures in the SSMP do not include WDR reporting timelines, including updated monitoring, and reporting timelines described in Order No. 2013-0058-EXEC. This information will be provided by June 30, 2014. Note 2. The OERP describes staff's expertise in addressing traffic control and other activities to support SSO response. However, the SSMP does not establish the need for, or describe traffic control procedures. This information should be included in the next update. Note 3. The OERP does not include a Water Quality Monitoring Plan. This plan will be added by June 30, 2014. Note 4. Based on the information in CIWQS, the District has not had a spill greater than 50,000 since the time online reporting was initiated.		

	Element 7 – Fats, Oils, and Grease (FOG) Control Program	Yes	No
A	Does the Fats, Oils, and Grease (FOG) Control Program include a description of public education outreach efforts that promote proper handling and disposal of FOG?	n/a Note 1	
B	Does the FOG program include a plan for the disposal of FOG generated within the sewer system service area?	n/a Note 1	
C	Does the District have sufficient legal authority to prohibit discharges to the system and identify measures to prevent SSOs and blockages caused by FOG?	X Note 2	
D	Are there requirements to install grease removal devices (such as traps or interceptors), best management practices (BMP) requirements, record keeping, maintenance requirements and reporting requirements established in the City's FOG Control Program?	X Note 2	
E	Does the District have authority to inspect grease producing facilities and have sufficient staff to inspect and enforce the FOG ordinance?	X Note 2	
F	Does the FOG control program identify sections of the collection system subject to FOG blockages, establish a cleaning schedule and address source control measures to minimize these blockages?	n/a Note 1	
G	Does the FOG control program implement source control measures for all sources of FOG discharged to the collection system?	X Note 2	
H	Is the current FOG program effective in minimizing blockages of sewer lines resulting from discharges of FOG to the system?	X	

Element 7 – Fats, Oils, and Grease (FOG) Control Program	Yes	No
Discussion: Note 1. The District had one SSO related to fats, oils, and grease in 2007, a second FOG-related SSO in 2009, and no subsequent FOG-related SSOs. Therefore, the District does not require a FOG control program. Note 2. District Code, Ordinance 1-2008 establishes the requirements and legal authority needed to control the discharge of FOG into the sewer system.		

Element 8 – System Evaluation and Capacity Assurance Plan		Yes	No
A	Does the System Evaluation and Capacity Assurance Plan evaluate hydraulic deficiencies in the system and provide estimates of peak flows associated with conditions similar to those causing overflow events, if applicable?		X Note 1
B	Does the District's capital improvement program (CIP) establish a schedule of approximate completion dates for both short-term and long-term improvements and is the schedule reviewed and updated to reflect current budgetary capabilities and activity accomplishment?	n/a Note 2	
C	Does the District take steps needed to establish a short and long-term CIP to address hydraulic deficiencies, including prioritization, alternatives analysis, and schedules? Are repair and replacement projects developed based upon condition assessment and/or field maintenance results?	n/a Note 2	
Discussion: Note 1. The District has not had any capacity-related issues within the system. However, as development continues in some areas, the need to evaluate capacity constraints will increase. The District is in the process of completing a computerized hydraulic model that will enable the described assessments. This hydraulic model and evaluation is expected to be completed in 2014. Note 2. The District currently does not have a capacity-related CIP, since the system has sufficient capacity to convey peak flows, as shown through the absence of capacity-related SSOs.			

Element 9 – Monitoring, Measurement, and Program Modifications		Yes	No
A	Does the District maintain relevant information that can be used to establish and prioritize appropriate SSMP activities?	**X** **Note 1**	

Element 9 – Monitoring, Measurement, and Program Modifications		Yes	No
B	Does the District monitor the implementation and, where appropriate, measure the effectiveness of each element of the SSMP?		**X** **Note 1**
C	Does the District assess the success of the preventive maintenance program?	**X**	
D	Does the District update program elements, as appropriate, based upon monitoring or performance evaluations?		**X** **Note 1**
E	Does the SSMP identify and illustrate SSO trends, including frequency, location, and volume of SSOs?		**X** **Note 1**

Discussion:

Note 1. The District maintains the information needed to prioritize SSMP activities. However, these parameters are not included in the SSMP. The updated SSMP should include a list of parameters that the District will use to monitor and measure performance in future years. The updated SSMP should also include information on SSOs trends.

Element 10 – SSMP Audits		Yes	No
A	Does the audit focus on the effectiveness of the SSMP? If not, what needs to be changed to increase the effectiveness of the overall collection system program?	X Note 1	
B	Were the audit results shared with the District Board? And the public, via the District website?		X Note 2
C	Will the SSMP Audit be completed, reviewed, and filed as an Appendix to the SSMP on a biennial basis?	X	
D	Do any proposed changes to the SSMP require Board approval as they have a substantial change in the policies and procedures for collection system operations and maintenance?	X Note 2	

Discussion:

Note 1. Recommended changes to the SSMP are described in the Discussion sections within this audit.

Note 2. The District is in the process of updating the SSMP. Therefore, discussion of these audit results is premature. District staff will present the updated document to the Board and public for future discussion and eventual adoption by the District Board.

Element 11 – Communication Program		Yes	No
A	Does the District communicate on a regular basis with the public and other agencies about the development and implementation of the SSMP? Does the communication system provide the public the opportunity to provide input as the program is developed and implemented? Were annual progress reports and metrics of implementation of the SSMP provided to the District Board?		X Note 1

Discussion:

Note 1. . The District is in the process of updating the SSMP. When the updated SSMP is substantially complete, District staff will present the updated document to the Board and public for future discussion and eventual adoption by the District Board. The District will also post the updated SSMP on the District website.

Change Log		Yes	No
A	Is the SSMP Change Log current and up to date?		X Note 1

Discussion:

Note 1. The updated SSMP will include an SSMP Change Log, as required by Order No. 2013-0058-EXEC.

Appendix C: Sewer System Management Audit Checklist

Truckee Sanitary District
SSMP Audit Checklist
Report Form

The purpose of the SSMP Audit is to evaluate the effectiveness of the District SSMP and sanitary sewer program and to identify any needed improvement. The information identified here will be used to inform the possible findings and necessary information to be evaluated during the biennial Internal Audit of the District SSMP.

Directions: Please rank each item below utilizing the following sufficiency ranking system and add any comments to explain the ranking to the Comment Section of each SSMP Element:

- *Complies (C) – complies with all WDR objectives*
- *Substantially Complies (SC) – complies mostly with all WDR objectives*
- *Partially Complies (PC) – complies with basic WDR objectives*
- *Marginal Compliance (MC) – complies minimally with basic objectives of the WDR*
- *Does Not Comply (DNC) – does not comply with WDR objectives*

Element 0 – Introduction/Executive Summary	
1.1 Sewer System Management Plan	
1.2 Sanitary Sewer System Facilities	
1.3 Definitions, Acronyms and Abbreviations	
1.4 References	
Element 1 – Goals	**Rating**
A. Are the goals stated in the SSMP Element I still appropriate and accurate?	
Discussion:	
Element 2 – Organization	**Rating**
A. Is the List of Staff Responsible for SSMP Elements current?	
B. Is the Sanitary Sewer Overflow Responder List current?	
C. Is the Organization Chart current?	

D. Are the staff position descriptions an accurate portrayal of staff responsibilities? Are the LRO and DSs properly identified in the position descriptions?	
E. Is the Chain of Communication for Reporting and Responding to SSOs section/flow chart accurate and up to date?	
Discussion:	

Element 3 – Legal Authority	**Rating**
Does the SSMP contain current references to the District Code documenting the District's legal authority to:	
A. Prevent illicit discharges?	
B. Require proper design and construction of sewers and connections?	
C. Ensure access for maintenance, inspection, or repairs for portions of the lateral owned or maintained by the District?	
D. Limit discharges of fats, oils and grease?	
E. Enforce any violation of its sewer ordinances?	
F. Were any changes or modifications made in the past year to Sewer Ordinances, Regulations or standards?	
Discussion:	

Element 4 – Operations & Maintenance	
Collection System Maps	**Rating**
A. Does the SSMP reference the current process and procedures for maintaining District's wastewater collection system maps?	
B. Are the wastewater collection system maps complete, current and sufficiently detailed?	
C. Are storm drainage facilities of the Town of Truckee identified in the District service area on the collection system maps? If not, are SSO responders able to determine locations of storm drainage inlets and pipes for possible discharge to waters of the state?	
Prioritized Preventive Maintenance	**Rating**
D. Does the SSMP describe current preventive maintenance activities and the system for prioritizing the cleaning of sewers?	

E. Based upon information in the Annual SSO Report, are the District's preventive maintenance activities sufficient and effective in minimizing SSOs and blockages?	
Scheduled Inspections and Condition Assessments	**Rating**
F. Is there an ongoing condition assessment program sufficient to develop a capital improvement plan addressing the proper management and protection of infrastructure assets? Are the current components of this program documented in the SSMP?	
Critical Equipment and System Replacement Parts	**Rating**
G. Does the SSMP list the critical equipment currently used in the operation and maintenance of the collection system and documents the procedures of inventory management?	
H. Are replacement parts sufficient to respond to emergencies and properly conduct regular maintenance?	
Training	**Rating**
I. Does the SSMP document current training expectations and programs for staff and contractors?	
Outreach to Plumbers and Building Contractors	**Rating**
J. Does the SSMP document current outreach efforts to plumbers and building contractors?	
Discussion:	
Element 5 – Design and Performance Standards	**Rating**
A. Does the SSMP reference current design and construction standards for the installation for new sanitary sewer systems, pump stations and other appurtenances and for the rehabilitation and repair of existing sanitary sewer systems?	
B. Does the SSMP document current procedures and standards for inspecting and testing the installation of new sewers, pumps, and other appurtenances and the rehabilitation and repair of existing sewer lines?	
Discussion:	
Element 6 – Overflow and Emergency Response Plan	**Rating**

A. Does the District Sanitary Sewer Overflow Emergency Response Plan establish procedures for the emergency response, notification, and reporting of SSOs?	
B. Are staff and contractor personnel appropriately trained on the procedures of the Sanitary Sewer Overflow Emergency Response Plan?	
C. Considering SSO performance data, is the Sanitary Sewer Overflow Emergency Response Plan effective in handling SSOs in order to safeguard public health and the environment?	
D. Are all SSO and claims reporting forms current or do they require revisions or additions?	
E. Does all SSO event recordkeeping meet the SSS GWDR and MRP requirements? Are all SSO event files complete and certified in the CIWQS system?	
F. Is all information in the CIWQS system current and correct? Have periodic reviews of the data been made during the year to assure compliance with SSS GWDR? Have all Technical Report and Water Quality Sampling requirements been met and uploaded to the CIWQS data management system?	
Discussion:	

Element 7 – Fats, Oils and Grease (FOG) Control Program	**Rating**
A. Does the FOG Control Program include efforts to educate the public on proper handling and disposal of FOG?	
B. Does the FOG Control Program identify sections of the collection system subject to FOG blockages, establish a cleaning schedule and address source control measures to minimize these blockages?	
C. Are requirements for grease removal devices, best management practices (BMP), record keeping, and reporting established in the FOG Control Program?	
D. Does TSD have sufficient legal authority to implement and enforce the FOG Control Program?	
E. Is the current FOG program effective in minimizing blockages of sewer lines resulting from discharges of FOG to the system	
F. Was required training on SSMP and OERP completed and documented? Were field exercises with field staff on SSO volume estimation conducted and documented?	

G. Did all public improvement plans and specifications that could impact collection system operations include requirements for OERP training or were contractor OERP programs at least as stringent as the District OERP? Were regular items included in project meeting agendas to discuss emergency response procedures and communications?	
Discussion:	
Element 8 – System Evaluation and Capacity Assurance Plan	**Rating**
A. Does the District Sewer System Master Plan evaluate hydraulic deficiencies in the system, establish sufficient design criteria and recommend both short and long-term capacity enhancement and improvement projects?	
B. Does the District Capital Improvement Plan (CIP) establish a schedule of approximate completion dates for both short and long-term capacity improvements and is the schedule reviewed and updated to reflect current budgetary capabilities and activity completed?	
Discussion:	
Element 9 – Monitoring, Measurement and Program Modifications	**Rating**
A. Does the SSMP accurately portray the methods of tracking and reporting selected performance indicators?	
B. Is the District able to sufficiently evaluate the effectiveness of the SSMP elements based on relevant information?	
C. Do the performance metrics properly support the Goals in Element 1?	
Discussion:	
Element 10 – SSMP Audits	**Rating**
A. Will the SSMP Audit be completed, reviewed and filed in Appendix B based upon the required time intervals since the original SSMP adoption date?	
B. Was the last Audit Report certified by the District LRO as required?	

C. Was the final Audit Report presented to the governing body at a publicly noticed meeting?	
D. Was the last Audit Report placed in the SSMP Appendix and added to the SCWD SSMP web page.	
Discussion:	

Element 11 – Community Program	**Rating**
A. Does District effectively communicate with the public and other agencies about the implementation of the SSMP and continue to address any feedback?	
B. Did the District Board receive and review the Annual Sewer System Report?	
C. Was the annual report uploaded to the District Sewer Section website and added to Appendix C?	
D. Did staff conduct and document meetings with the Northstar Community Services District's satellite collection systems?	
E. Are all agreements with satellite systems current or are changes necessary to these agreements?	
Discussion:	

Change Log	**Rating**
A. Is the SSMP Change Log current and up to date?	
Discussion:	

Audit Team: _____ **Date:** _____

Prepared By: _____ **Date:** _____

Reviewed By: _____ **Date:** _____

Certified By:		**Date:**	
	Approved for Filing On	**Date:**	

Appendix D: Sewer System Management Plan Change Log

LOG OF SSMP CHANGES			
Date	SSMP Element #	Description of Change / Revision Made	Person Authorizing Change

Truckee Sanitary District
Sewer System Management Plan



Appendix E
OVERFLOW EMERGENCY RESPONSE PLAN

UPDATED June 2021

Revised by

Causey Consulting
Walnut Creek, CA 94598

TABLE OF CONTENTS

CHAPTER 1: INTRODUCTION

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 State Water Resources Control Board (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.

Under this Order, each public wastewater collection system agency shall develop and implement an Overflow Emergency Response Plan (OERP) that identifies measures to protect public health and the environment.

1.1 OERP GOAL

The purpose of the sanitary sewer Overflow Emergency Response Plan (OERP) is to minimize the impact of sanitary sewer overflows (SSOs) to the public and the environment. All sanitary sewer overflows will be responded to in a timely manner and all necessary steps will be taken expeditiously to stop the overflow. Relieving the sewage blockage and containing the spill will be the District's highest priority, taking into consideration public health concerns.

This OERP will be the guideline for the standard operating procedures in the event of a sanitary sewer overflow. The response plan will be reviewed periodically to ensure that all corrective measures are being taken.

1.2 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 are aware of and follow the emergency response plan and are appropriately trained. In addition, receive assurances that

contractor personnel are training and understand reporting and participation responsibilities for District overflows in and around their construction sites that could impact District sewer facitilities.

- 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

CHAPTER 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.
- Private Lateral Sewage Discharge: Discharges of untreated or partially treated wastewater resulting from blockages or other problems within a privately owned sewer lateral connected to the enrollee's sanitary sewer system or from other private sewer assets. PLSDs that the enrollee becomes aware of may be voluntarily reported to the California Integrated Water Quality System (CIWQS) Online SSO Database.

CHAPTER 3: NOTIFICATION PROCEDURES

3.1 NOTIFICATION TO TSD

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.

TABLE 3-1: TSD HOURS OF OPERATION

Days	Hours
Monday - Thursday	7:00 a.m. – 4:30 p.m.
Friday	7:00 a.m. – 3:30 p.m.
Saturday, Sunday and Holidays	Closed

The TSD Administrative Office is located at **12304 Joerger Drive** Truckee. The office can be reached at 530-587-3804 or at customerinfo@truckeesan.org:

The District's reporting chain of communication is included in Element IV of the SSMP.

3.1.1 DURING NORMAL BUSINESS HOURS

During normal business hours, reports of a potential SSO from the public, contractors, plumbers, and District staff are immediately dispatched to the Superintendent, or in his/her absence, a Supervisor. The Superintendent or Supervisor immediately initiates response to the SSO and completion of the **Sanitary Sewer Overflow and Backup Response Workbook (Backup Response Workbook), Appendix B**. The field crew immediately responds to the SSO; if additional resources are required, the field crew contacts the Superintendent or Supervisor to coordinate additional resources.

During and after business hours, the Superintendent is the LRO responsible for SSO reporting to the CIWQS Online SSO Database. The General Manager/Chief Engineer and Assistant General Manager/District Engineer are backup LROs, in case the Superintendent is unavailable.

3.1.2 AFTER NORMAL BUSINESS HOURS

After normal business hours, all sewer related calls are automatically routed to a contracted answering service. The answering service immediately contacts the On Call Staff (field crew). The field crew immediately responds to the SSO. If additional resources are required, the field crew contacts the Manager On Call to coordinate additional resources. The field crew addresses the SSO and initiates completion of the **Backup Response Workbook, Appendix B**

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During and after business hours, the Superintendent is the LRO responsible for SSO reporting to the CIWQS Online SSO Database. The General Manager/Chief Engineer and Assistant General Manager/District Engineer are both backup LROs, in case the Superintendent is unavailable.

3.1.3 NOTIFICATION FROM LIFT STATION SCADA ALARMS

All District lift stations are polled continuously via a telemetry system for a variety of parameters. The Lift Station Supervisor and crew receive notification on their District issued cell phones. Field crews are dispatched as required to resolve the issue and ensure public and environmental safety.

CHAPTER 4: RESPONSE PROGRAM

4.1 DESIGNATED PRIMARY RESPONDERS

Primary staff designated to manage and report SSOs are shown in **Table 4-1 Designated Primary Responders**.

TABLE 4-1: DESIGNATED PRIMARY RESPONDERS

TSD POSITION	NAME	CONTACT INFO
General Manager/Chief Engineer	Blake R. Tresan	(530) 587-3804 (530) 913-0013
Assistant General Manager/District Engineer	Raymond Brown	(530) 550-3135 (530) 913-0006
O&M Superintendent	Eric Sundale	(530) 550-3111 (530) 913-0001
Finance & Administrative Services Manager	Mark Wasley	(530) 550-3117 (530) 913-0007

Note: Name of individuals designated with each specific TSD position is current as of March 2021.

The designated primary responders are authorized to contact outside agencies and contractors as needed. If assistance is needed, the agencies and outside contractors listed in **Table 4-2 Resources for Outside Assistance** may be contacted. Additional resources can be found on page ***Page B-2, Regulatory Reporting Contacts and Authorization,* in the Backup Response Workbook, Appendix B.**

TABLE 4-2: RESOURCES FOR OUTSIDE ASSISTANCE

AGENCY/VENDOR	EQUIPMENT	BUSINESS HOUR PHONE	AFTER HOURS PHONE
North Tahoe PUD	Vacuum Trucks, Bypass Equipment , Staff	530-546-4212	530-546-4212
Tahoe City PUD	Vacuum Trucks, Bypass Equipment, Staff	530-583-3717	530-583-3717
Alpine Septic	Tank Trucks	530 577-7867	775-291-8711
Water's Trucks	Tank Trucks	775 825-1595	775-825-1595
Pombo Inc	Excavating Equipment, Tank Truck	530 587-4112	530-392-5534
Heavy Equipment Inc	Excavating Equipment, Tank Truck	530-587-3260	530 210-0362

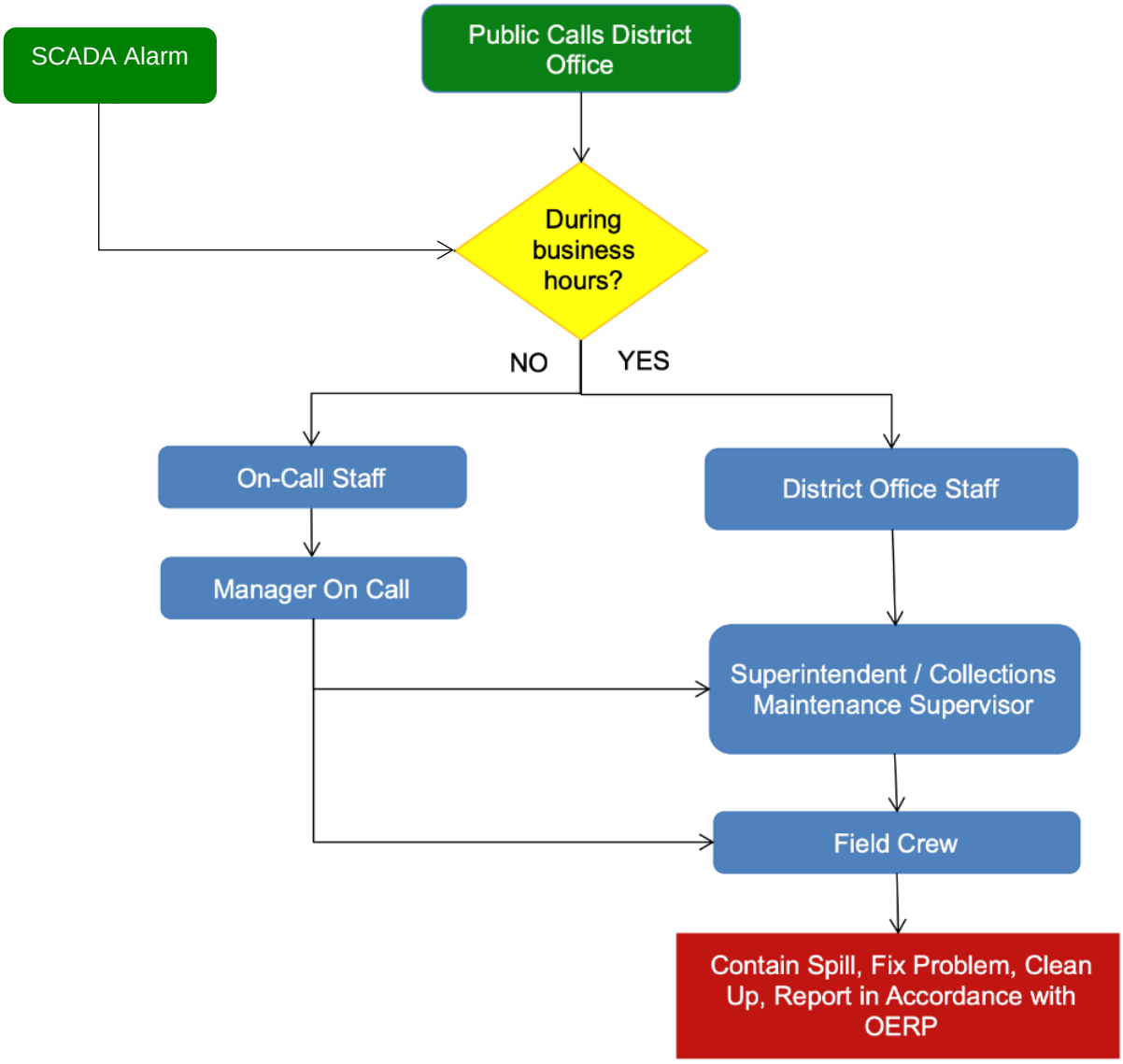
4.2 INITIAL SPILL RESPONSE

When the District is notified of a potential sanitary sewer overflow during working hours, the Superintendent or a Supervisor will immediately be notified and a crew dispatched.

The District SSO Reporting Chain of Communications Chart shown on Figure 4-1 is used for notification procedures.

The field 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 field crew will assess the problem and take the necessary steps to document and contain the spill, eliminate the overflow, and begin necessary cleanup. Additionally, the field crew will be responsible for signage, photos, videos, water quality sampling and notifications.

FIGURE 4-1: TSD SSO REPORTING CHAIN OF COMMUNICATION



4.2.1 EXTERNAL SSO RESPONSE

TSD uses the **Backup Response Workbook, Appendix B** to internally document the contact and response for each SSO that occurs.

Upon arrival at the site, the field crew completes the following:

- The first responder notes the arrival time at the spill site, and includes the time in the ***SSO Field Report D-1: Page 2*** **of the Backup Response Workbook, Appendix B**. The first responder also records basic incident information on site and should complete the ***SSO Field Report*** form as indicated, after finishing the response.
- Initiate the event chronology.
- Verifies the existence of the SSO; takes photos and/or videos.
- 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 notifies the Superintendent or Supervisor, and sends for additional equipment or personnel.
- Conducts visual monitoring to determine immediate actions, starting with documentation of SSO spill volume using the methods included in the ***Volume Estimation Computation & Examples, Section E,*** **of the Backup Response Workbook, Appendix B**.
- 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.
- 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 a result of a blockage, follow the District **Mainline Stoppage Procedure** SOP**.**
- If the blockage is not relieved within the first few attempts or 20 minutes, whichever is sooner, the Superintendent or Supervisor or General Manager must be immediately informed. The Superintendent or Supervisor or General Manager 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.
- Where safe and feasible, take necessary water quality samples at the point of discharge and at upstream and downstream locations. The number of downstream locations will depend on the flow travel time in the stream or creek. Use best judgment and consult with the District Engineer or Superintendent or Supervisor if uncertain. It is a Regional and State Board requirement to use the **Water Quality Monitoring Plan, *(see Appendix F of the SSMP)*** 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.

- Complies with all safety precautions (traffic, confined space, etc.). For SSOs in high traffic areas, the Superintendent or Supervisor should be immediately informed. The Superintendent or Supervisor will coordinate additional employees to provide traffic control. If traffic control is required on a State Highway, both Highway Patrol and CalTrans should be contacted.
- Contact caller, if time permits. Identify SSO cause, including conducting CCTV inspection as appropriate. Properly document all event interviews.
- Conduct necessary research and interviews to address and document SSO event start times.
- Obtain all telemetry records that support the calculations of spill and recovered volumes.
- Document all activities through photos, videos and written documentation.

4.2.2 INTERNAL SSO RESPONSE (RESIDENTIAL SEWAGE BACKUP)

TSD uses the Backup Response Workbook, Appendix B to internally document the contact and response for each SSO that occurs. A separate Backup Response Workbook shall be completed for each overflow event. The Backup Response Workbook is submitted to the Superintendent upon completion.

- 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 property owner 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 property owner is also responsible for damage that happens because a lateral was not properly installed.
- Sewage backup 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 or a Designated Primary Responder. Property damage shall be immediately documented and photographed by the first responder during first response.
- 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.
- Move any uncontaminated property away from the overflow area. Do not remove any contaminated items.
- Turn off the heating and ventilation systems.
- Turn off any appliances that use water.
- The first responder should follow the below steps to assist the property owner:
  - Gather information

  - Take photos of the impacted spill area inside the building if allowed. Document if not allowed.
  - Call a cleaning contractor company and wait for the cleaning contractor to arrive. The property owner has the right to select their own cleaning contractor, but the District does not guarantee payment of fees/expenses incurred and reserves the right to dispute fees/expenses deemed not usual and customary. Phone numbers are provided on page ***Page B-2, Regulatory Reporting Contacts and Authorization,*** **in the Backup Response Workbook, Appendix B.**

- The HR/Risk Management Administrator, or in his/her absence, a Designated Primary Responder shall be notified of the occurrence. and will contact the District's Insurance carrier to begin the loss process.

4.2.3 PUMP STATION SSO RESPONSE

The first responders 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 repairs are required, then the first responders should contact the Superintendent, Supervisor, or a Designated Primary Responder; and employ the actions that are described in the separate **District Standard Operating Procedure Manual** (SOPs). The SOPs provide instructions for addressing anticipated bypass and emergency response needs, including a power outage at a small or large lift station, lift station bypass, force main bypass, and gravity main bypass.

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

4.3 EMERGENCY TRAFFIC CONTROL

In the event that the spill is located in a high traffic area, the Superintendent or a Supervisor must be immediately informed. The Superintendent or Supervisor will coordinate additional employees to provide traffic control. If traffic control is required on a State Highway, both Highway Patrol and CalTrans shall be contacted.

4.4 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.
- The crew will take photos of all containment efforts.

If an SSO reaches a water body, follow the requirements in **Section 4.9 SSO Notification Signage** (see below) for posting and SSO notification signage. Also conduct water quality sampling using the **Water Quality Monitoring Plan in Appendix F of the SSMP.**

4.5 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:

- Contain the overflow while the vacuum truck or bypass equipment is being setup.
- Determine if a lift station can be isolated and used for temporary storage. Consult with the Lift Station Maintenance Supervisor or a Lift Station Maintenance Worker.
- In small residential areas, the storage capacity of the vacuum truck(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 and document the discharge location of the recovered volumes.
- Set up necessary bypass equipment.
- Take photos or videos of containment areas and/or bypass setups.

4.6 SEWAGE ESTIMATION

Use the methods outlined in the ***Volume Estimation Computation & Examples, Section E,* of the Backup Response Workbook, Appendix B** to estimate the volume of the spilled and recovered sewage. Using the proper forms in ***Volume Estimation Computation & Examples, Section E,* of the Backup Response Workbook, Appendix B**, prepare a separate map of the impacted spill area and prepare written documentation including all assumptions and calculations of the volumes along with the name of the preparer and the date of preparation.

Some spills may occur in locations where the sewage 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.

4.7 SITE RESTORATION AND CLEANUP

The recovery and cleanup 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 and the location used documented. The surrounding environment shall be restored as closely as possible to the condition that existed before the SSO occurred.

4.7.1 CLEANUP AND DISINFECTION

Cleanup 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. Cleanup 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 on page ***Page B-2, Regulatory Reporting Contacts and Authorization,* in the Backup Response Workbook, Appendix B.**

Spills inside houses or buildings should be cleaned by a professional cleaning company. The property owner has the right to select their own cleaning contractor, but the District does not guarantee payment of fees/expenses incurred and reserves the right to dispute fees/expenses deemed not usual and customary. Phone numbers are provided on page ***Page B-2, Regulatory Reporting Contacts and Authorization,* in the Backup Response Workbook, Appendix B.** Claims by property owners should be forwarded to the HR/Risk Management Administrator or the District's General Manager.

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, and must be documented in the SSO Incident File.

4.7.2 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 and document 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 a storm drain system, the vacuum truck should be used to vacuum 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, and document findings.

4.8 SSO NOTIFICATION SIGNAGE

Notification signage and barriers should be installed where required to prevent the public from having contact with the sewage. Signs are stored in the Field Operations Building in the upstairs mezzanine. 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 District sampling or the Superintendent determines that the risk of contamination has subsided to acceptable levels. Warning signage should be checked every day in order to ensure that they are still in place.

A sample warning sign is attached as **Appendix A**.

4.9 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 SSO event as determined by the General Manager or Superintendent, 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 District 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 chronology and other documentation regarding the incident.
- Review actions by all persons involved in the response, including the initial recipient of the complaint.
- Review communications documentation with all reporting parties and witnesses.
- Review volume estimate, volume recovered estimate, volume estimation assumptions, calculation, spill map and associated design drawings.
- Review available photographs and videos.
- 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, WQMP and SSMP following the event.

The purpose of the blockage investigation is to determine the cause, identify corrective actions, and document on ***Form G-1, Collection System Failure Analysis*****, in the Backup Response Workbook, Appendix B.**

CHAPTER 5: DOCUMENTATION

5.1 SEWER SERVICE REQUEST

The District's Sewer Service Request Procedures are used as a tool to ensure appropriate response to all sewer related complaints received and all overflows.

When a Sewer Service Request is received the script below is followed to establish whether or not the request is a general customer complaint or potential spill, and if so whether or not sewage is flowing or other sewer related issues needs to be addressed. If sewage is flowing, information is gathered using the scripted questions. The caller is then placed on hold while the information is relayed to the Superintendent, or Supervisor. The caller is then transferred to the Superintendent or Supervisor, for additional information gathering if needed. All Sewer Service Requests are logged into Lucity, the District's CMMS system. A numbered and dated request form is generated and emailed to all staff and the final disposition is entered upon completion of the complaint.

Script of Questions to be asked of a complainant:

- Call Date _____ Time _____ AM/PM Call received by: _____
- Caller Name: _____ Address: _____ Phone Number: _____
- Nature of the call: Odor__ Sewage overflow__ Sewage spill__ Other__
- Is water flowing on the ground? Yes__ No__
- When did you first notice the overflow? Date: _____ Time:_____ AM/PM
- Please describe what you are seeing: _____

  _____
- Is the overflow continuing? If so, size: small (1-3 ft)__ medium(3-10 ft)__ large (>10 ft)__
- Is the overflow entering a catch basin, creek, waterway or lake? Yes__ No__ Unknown___
- Have you notified anyone else? If so who? _____ Time: _____
- May we contact you at the above number with any follow-up questions? Yes__ No__
- 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 <u>as needed</u> via e-mail.
  - The General Manager, Superintendent, Senior Engineer or Assistant General

Manager/District Engineer will initiate telephone calls to the other agencies, if appropriate.

5.2 SSO DOCUMENTATION AND TECHNICAL REPORT

All SSOs are documented using the **Backup Response Workbook, Appendix B**, and reported to CIWQS as required to meet all applicable regulatory notification and reporting requirements.

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 causes(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

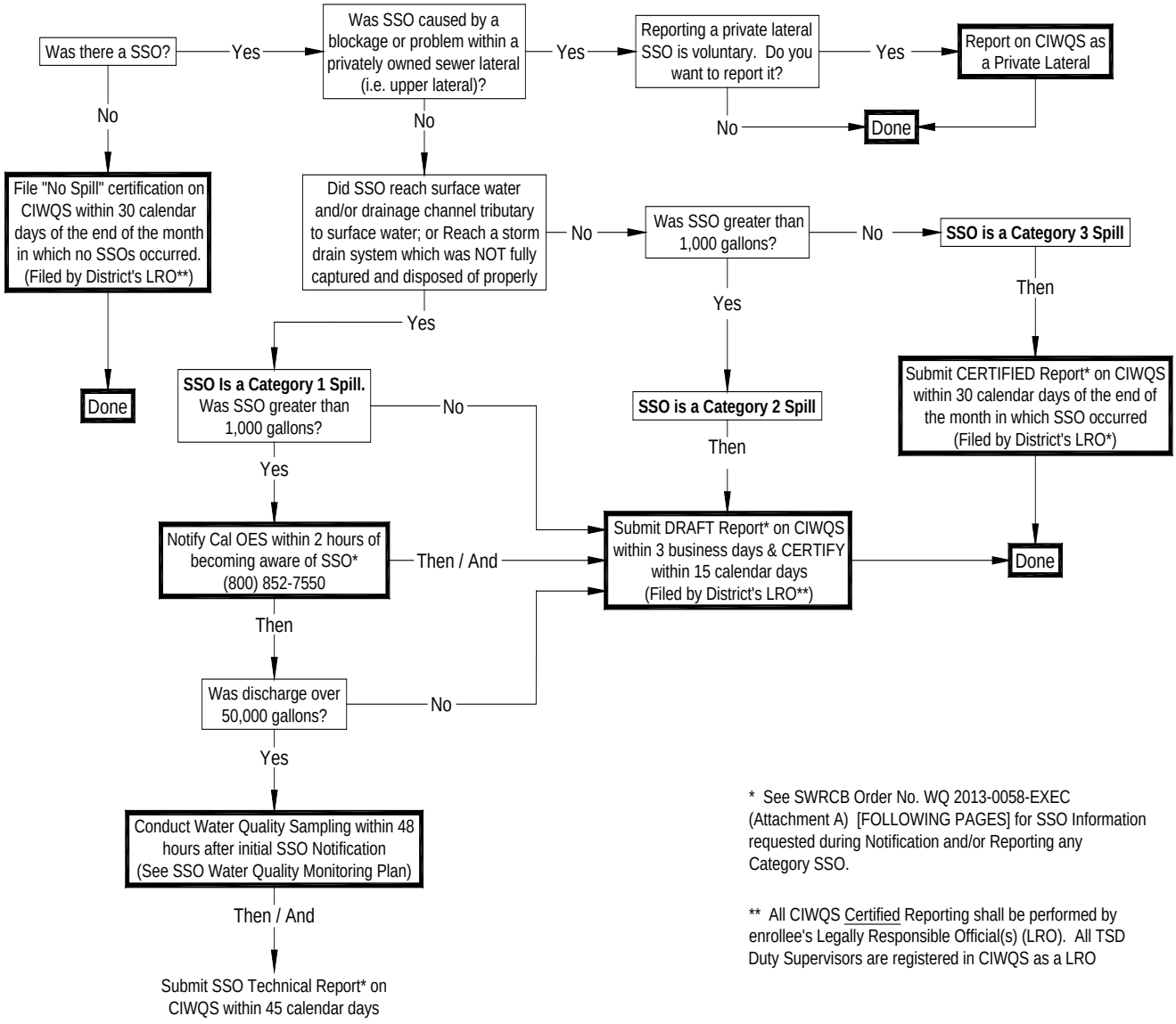
The Superintendent is responsible for the development and certification of the SSO Technical Report.

CHAPTER 6: REPORTING AND NOTIFICATION

6.1 SSO NOTIFICATION REQUIREMENTS

Refer to ***Regulatory Reporting Contacts and Authorization, Page B-2,*** **in the Backup Response Workbook, Appendix B,** 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 OERP, which follows SWRCB Order No. WQ 2013-0058-EXEC.

SSO Reporting Requirements Flow Chart
(per SWQCB WDR MRP Order 2013-0058-EXEC)



* See SWRCB Order No. WQ 2013-0058-EXEC (Attachment A) [FOLLOWING PAGES] for SSO Information requested during Notification and/or Reporting any Category SSO.

** All CIWQS Certified Reporting shall be performed by enrollee's Legally Responsible Official(s) (LRO). All TSD Duty Supervisors are registered in CIWQS as a LRO

6.1.1 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. The CIWQS report generated 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.

6.1.2 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 Superintendent or a Designated Primary Responder 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 Superintendent or a Designated Primary Responder 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 Superintendent or a Designated Primary 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 or Designated Primary Responder 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).

6.1.3 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) 542-4000 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.

6.1.4 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:

State Water Resources Control Board
Division of Water Quality
1001 I Street 15th Floor
Sacramento, CA 95814
E-mail: Walter.Mobley@waterboards.ca.gov
Phone: (916) 323-0878

CHAPTER 7: TRAINING AND FIELD EXERCISE PROGRAM

7.1 TRAINING AND FIELD EXERCISE PROGRAM GUIDELINES

Appropriate staff will participate in regularly scheduled training sessions to assist response crews in awareness of their responsibilities and executing their duties. The training sessions will be organized based on the latest OERP as well as other reference materials. Training will also incorporate hands-on field demonstrations to insure the preparedness of all response personnel to all anticipated situations.

Training and event participation will be documented and maintained. Currently, Engineering and Operations & Maintenance staff are encouraged to receive training through various vendors and to participate in Collection System Maintenance classes, and obtain Wastewater Treatment Certification through the CWEA. Additional certification requirements may be imposed in the future if deemed necessary by the District.

As a general guideline, the following training and field exercises will be provided to staff on a regularly occurring basis. Periodic training drills ensure that employees are up to date on OERP procedures, OERP equipment is in working order, and the required OERP materials are readily available. Training drills will cover scenarios typically observed during sewer related emergencies (e.g. mainline blockage, mainline failure, force main failure, pump station failure, and public lateral blockage). The results and the observations during the drills will be recorded and action items tracked to ensure completion.

7.1.1 SSO TRAINING AND FIELD EXERCISE PROGRAM

Training Topic	Type/Description	Trainees	Frequency
Regulatory Compliance/ OERP	Classroom/ Review of OERP, WDR, and MRP requirements.	Management, Field Supervisors, Field Personnel	Annually
SSO Volume Estimation	Classroom with hands- on/field exercise component/ Review of different methods to make and document volume estimations.	Field Supervisors, Field Personnel	Annually
SSO Drill	Field exercise/ Comprehensive review and practice of SSO response activities.	Field Supervisors, Field Personnel	Annually
Bypass Setup/Operation	Field exercise/ Review of equipment and practice setup and operation.	Field Supervisors, Field Personnel	Annually
Sampling/WQMP	Classroom with hands- on/field exercise component/ Review of appropriate methods for composite and/or grab sampling, test-strip analysis.	Field Supervisors, Field Personnel	Annually

Training Topic	Type/Description	Trainees	Frequency
SSO Reporting	Classroom with hands-on application/Overview of SSO Backup Response Workbook, Appendix B	Field Supervisors, Field Personnel	Annually

California Water Environmental Association (CWEA) Collection System Training

CWEA's Collection System Maintenance Certification program offers multi-level technical certification training for sewer system maintenance personnel. Tests are written by specialists in the field and administered throughout the year. To become certified, all applicants must complete the Application for Technical Certification, pay an application fee, have suitable experience and education, and pass the computer based test. The Collection System Maintenance Certification program is divided into four separate grades, based on the experience of the applicant.

National Association of Sewer Service Companies (NASSCO) Training

The Pipeline Assessment Certification Program (PACP) was developed by NASSCO to provide a reliable and standardized approach to characterize pipeline conditions. PACP assigns defect severity grades from one to five (both structural and O&M) for observed conditions in a pipe segment. The entire pipeline segment is then assigned a structural, O&M, and overall rating based on the number and severity of the observed defects.

NASSCO offers training courses for the PACP program throughout the country that familiarize the student with the PACP coding procedures, provide opportunities for students to ask questions and clarify various aspects of the program, and ensure the contents of the PACP have been adequately conveyed to the student through the successful completion of the certification examination. NASSCO's Lateral Assessment and Certification Program (LACP) is a program for defect coding in laterals. The training addresses many fittings and access points that are unique to laterals, the defect coding in LACP is very similar to PACP coding.

District staff members completed NASSCO PACP and LACP training in In April 2019, and were recertified as required by NASSCO. The NASSCO PACP & LACP Training has been added to the District's Compliance Calendar to ensure that staff is recertified every three (3) years as required to maintain NASSCO PACP and LACP certification.

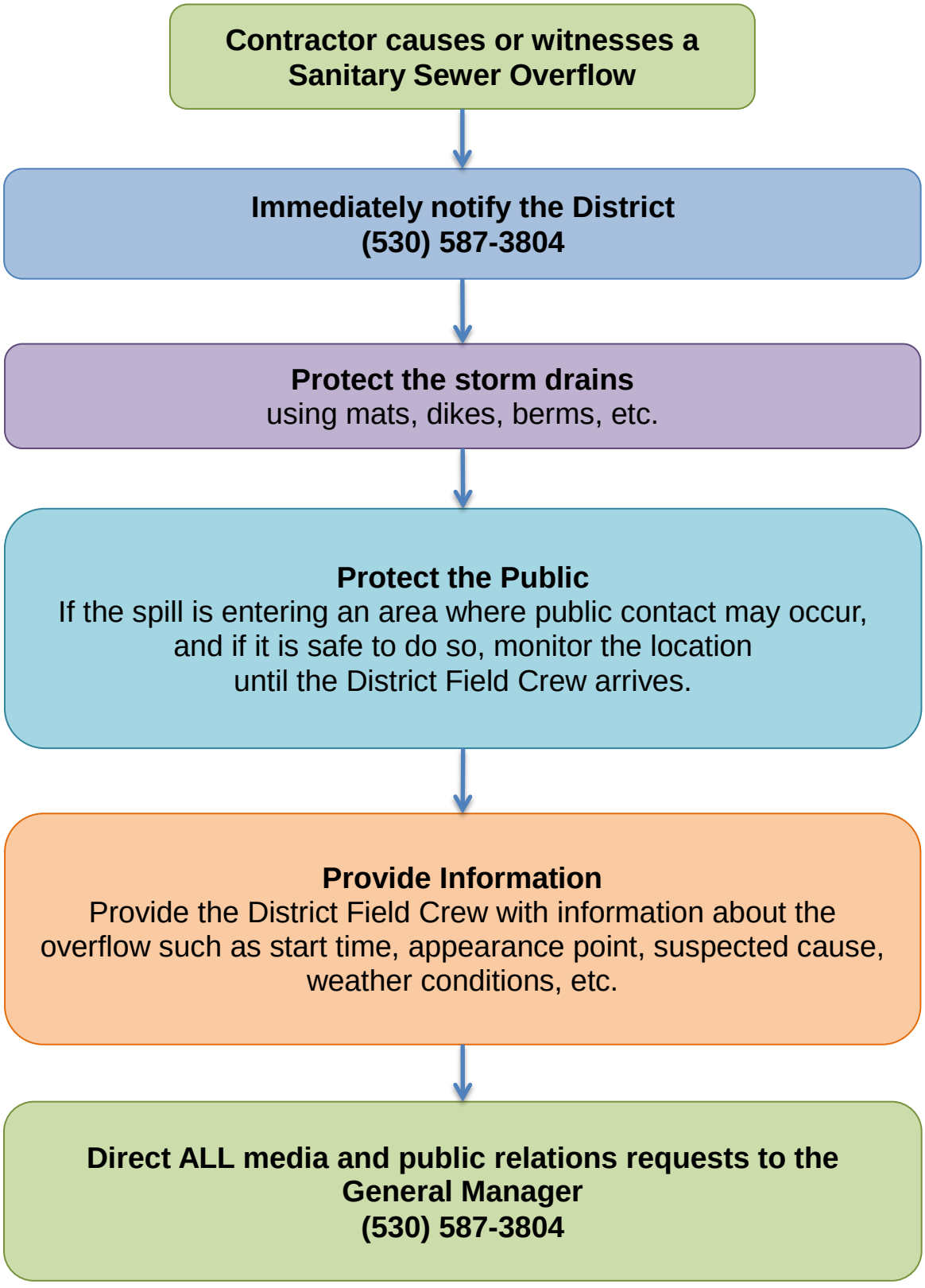
7.2 RECORD KEEPING

Training and Instructions Records are retained for 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 will include date, time, place, content, name of trainer(s), and names of attendees.

7.3 CONTRACTORS WORKING ON DISTRICT SEWER FACILITIES

All contractors hired by the District to work on District sewer facilities will be required to develop a project specific OERP, will provide project personnel with training regarding the content of the contractor's OERP and their role in the event of an SSO, and to follow that OERP in the event that they cause or observe an SSO. Emergency response procedures shall be discussed at project pre-construction meetings, regular project meetings and after any contractor involved incidents. All service contractors will be provided, and required to observe the ***Contractor Overflow Response Procedure*** below.

Contractor Overflow Response Procedure



APPENDIX A: OVERFLOW SIGNAGE

Overflow Emergency Response Plan

Public Posting

DANGER

RAW SEWAGE • AVOID CONTACT

PELIGRO

AGUA CONTAMINADA • EVITE TODO CONTACTO

Truckee Sanitary District

(530) 587-3804

Truckee Sanitary District

Overflow Emergency Response Plan
Appendix B

Sanitary Sewer Overflow and Backup Response Workbook

Sanitary Sewer Overflow/Backup Response Workbook

- ❑ If this is a Category 1 SSO greater than or equal to 1,000 gallons, **immediately notify the Superintendent at (530) 913-0001** or the **General Manager at (530) 587-3804** or **after hours Manager on Call** (to make the 2-hour notification to CalOES).
- ❑ **Refer to the Regulatory Reporting Guide (B-1)** for additional reporting requirements
- ❑ **If there is a backup into a residence or business:**
  - Notify the Superintendent at **(530) 913-0001** or Manager on Call
  - If unreachable, contact the General Manager at **(530) 587-3804 or (530) 913-0013**
- ❑ **For any media inquiries/requests: General Manager** at **(530) 587-3804**

Don't Forget to Take Pictures & Videos!

Field Crew:

- ❑ Follow the instructions on the Overflow/Backup Response Flowchart and complete forms as indicated.
- ❑ Add employee name, initials, and date to the right. Deliver this workbook to O&M Superintendent.

Print Name: _____
Initial: _____
Date: _____
Time: _____

O&M Superintendent:

- ❑ Review/Complete the Event File, SSO Event Checklist (A-2) and the forms in this booklet. Contact the Field Crew for additional information if necessary.
- ❑ Confirm required regulatory notifications made (B-3).
- ❑ Review and approve volume estimates and assure photos/videos are documented in file and stored in event file.
- ❑ If this was a Sewer Backup, confirm completion of Backup Form Checklist F-1.
- ❑ Conduct the debrief analysis of SSO with all participants.
- ❑ Complete the Failure Analysis Form (G-1, Pages 1 and 2).
- ❑ Enter data into CIWQS; LRO certifies report.
- ❑ Add name, initials, and date to the right.
- ❑ Complete Backup Response Workbook and forward all documentation to the O&M Administrative Specialist.

Print Name: _____
Initial: _____
Date: _____
Time: _____

Administrative Specialist:

- ❑ Complete the Administrative Recordkeeping Checklist.
- ❑ Scan and file final event documentation.
- ❑ Add name, initials, and date to the right.

Print Name: _____
Initial: _____
Date: _____
Time: _____

SSO Event Checklist (SUPERINTENDENT) A-2

Date of SSO: _____ SSO Location/Name: _____

CIWQS Event ID #: _____ Category? ☐ 1 ☐ 2 ☐3 OES#: _____

Property Damage? ☐ Yes ☐ No Sewer Service Request #:_____

- ☐ ___ Effort made to contain and return a portion/all to the sanitary sewer
- ☐ ___ Pictures/video taken of overflow
- ☐ ___ Pictures taken of affected/unaffected area
- ☐ ___ If property damage, start that process
- ☐ ___ Pictures taken of containment efforts
- ☐ ___ If Cat 1 > 1000 gals:
  OES Control #_____
- ☐ ___ Impacted waters identified?
- ☐ ___ No impacted waters?
- ☐ ___ SSO Field Report Form D-1 to D-7 Complete (includes fields for all required fields in CIWQS, and a sketch of SSO)
- ☐ ___ Volume Estimation Worksheet(s) done
- ☐ ___ Start Time Determination Form D-1 done
- ☐ ___ Initial review of forms is complete (ensure consistency with dates, times, volumes, and other data)
- ☐ ___ Review of photos and videos (label/date)
- ☐ ___ Start Folder for all documentation for this SSO event. Put everything in it (SSO Report, Worksheets/Forms, follow-up work orders, notes, pics, drawings, etc. CIWQS print outs and emails)
- ☐ ___ Failure Analysis
  - o CCTV to determine cause
  - o Review Asset History
- ☐ ___ Determine next steps to prevent recurrence
- ☐ ___ Document findings and next steps on SSO Report
- ☐ ___ Submit Draft in CIWQS w/in 3 business days (for Categories 1 and 2 only)
- ☐ ___ Print CIWQS Draft hard copy and email
- ☐ ___ Review CIWQS, SSO Report, Worksheets, CMMS, and any other documentation to ensure data is consistent (e.g. dates, times, volumes, cause, follow-up action, etc.
- ☐ ___ Attach photos, forms etc. to CIWQS
- ☐ ___ Submit Ready to Certify in CIWQS (with sufficient time for LRO review)
- ☐ ___ Print CIWQS Ready to Certify and email
- ☐ ___ LRO review folder and CIWQS, verify accurate and consistent data
- ☐ ___ Certify in CIWQS (within 15 calendar days for Categories 1 & 2, 30 days after the month for Category 3)
- ☐ ___ Print Certified CIWQS and email
- ☐ ___ Any changes? Change in CIWQS and hard copies and explain changes, print current version
- ☐ ___ Move completed folder to SSO records
- ☐ ___ For 50,000 gallons or larger
  - □ Follow Water Quality Monitoring and Sampling procedures
  - □ Map of where samples were taken
  - □ Sampling results
  - □ Write Technical Report Certify w/in 45 days
  - □ Attach to CIWQS
  - □ Add to SSO records
  - □ If any changes are made to SSMP
    - ▪ Update SSMP and link on CIWQS to SSMP
    - ▪ Add change to SSMP Change Log
    - ▪ If change is substantive, re-certify SSMP

SSO Event Documentation

In accordance with the WDR, the District maintains records for each sanitary sewer overflow. In addition, the District utilizes the Event Checklist to assure proper inclusion in the event file of all documentation associated with an overflow event. Records include:

- Documentation of response steps and/or remedial actions taken
- Photographic/video 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 photograph/videos taken will be documented on each photo along with the filing location of the photos. For videos, create a list with the video name and all of the required information.
- Documentation of how any estimations of the volume of discharged and/or recovered overflow were calculated
- Debrief and failure analysis form G-1 and recommended changes to District procedures and processes.
- Maps of spill impact area, event signage and sampling locations
- Copies of the CIWQS certification email, draft and certified report from CIWQS.
- All sampling information, chain of custodies and sample results.
- Technical report if prepared.
- Administrative Recordkeeping Checklist

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

Deadline	Category 1 SSO	Category 2 SSO	Category 3 SSO	Private Lateral Sewage Discharge
2 hours after awareness of SSO	If the spill is greater than or equal to 1,000 gallons, call CalOES.	-	-	-
As soon as possible	If SSO impacts private property that may be a failure of the sewer main and/or if a claim for damages may be submitted against the District, notify the HR/Risk Management Administrator.			-
48 Hours after awareness of SSO	If 50,000 gal or more were not recovered, begin water quality sampling.	-	-	-
3 Business Days after awareness of SSO	Submit Draft Spill Report in the CIWQS database.	Submit Draft Spill Report in the CIWQS database.	-	-
15 Days after response conclusion	Certify Spill Report in CIWQS. Update as needed until 120 days after SSO end date.	Certify Spill Report in the CIWQS database. Update as needed until 120 days after SSO end time.	-	-
30 Days after end of calendar month in which SSO occurred	-	-	Certify Spill Report in CIWQS. Update as needed until 120 days after SSO end date.	(Voluntary) Certify Spill Report in CIWQS. Update as needed until 120 days after SSO end date.
45 days after SSO end date	If 50,000 gal or more were not recovered, submit SSO Technical Report in CIWQS.	-	-	

Note: For reporting purposes, if one SSO event results in multiple appearance points, complete one SSO report in the CIWQS SSO Online Database, and report the location of the SSO failure point, blockage or location of the flow condition that caused the SSO, including all the discharge points associated with the SSO event.

Category	Definition
1	Discharges of untreated or partially treated wastewater of any volume resulting from an enrollee's sanitary sewer system failure or flow condition that: • Reach surface water and/or reach a drainage channel tributary to a surface water; or • Reach a Municipal Separate Storm Sewer System (MS4) and are not fully captured and returned to the sanitary sewer system or not otherwise captured and disposed of properly. Any volume of wastewater not recovered from the MS4 is considered to have reached surface water unless the storm drain system discharges to a dedicated storm water or groundwater infiltration basin (e.g., infiltration pit, percolation pond).
2	Discharges of untreated or partially treated wastewater of 1,000 gallons or greater resulting from an enrollee's sanitary sewer system failure or flow condition that do not reach surface water, a drainage channel, or a MS4 unless the entire SSO discharged to the storm drain system is fully recovered and disposed of properly.
3	All other discharges of untreated or partially treated wastewater resulting from an enrollee's sanitary sewer system failure or flow condition.
Private Lateral Sewage Discharge (PLSD)	Discharges of untreated or partially treated wastewater resulting from blockages or other problems **within a privately-owned sewer lateral** connected to the enrollee's sanitary sewer system or from other private sewer assets. PLSDs that the enrollee becomes aware of may be **voluntarily** reported to the California Integrated Water Quality System (CIWQS) Online SSO Database.

Authorized Personnel:

The Superintendent, General Manager/Chief Engineer, and Assistant General Manager/District Engineer are the District's Legally Responsible Officials (LROs) and are authorized to perform regulatory reporting of SSOs electronically and to sign and certify SSO reports in CIWQS.

Contact	Telephone/Email
CAL OES	Tel: (800) 852-7550 Alt: (916) 845-8911
HR/Risk Management Administrator	Email: LJordan@truckeesan.org Tel: (530) 550-3104
Allied Public Risk Claims – Denver, CO.	Tel: (877) 533-1211 (available 24/7)
Lahontan Regional Water Quality Control Board **South Lake Tahoe**	Main: (530) 542-5400 Fax: (530) 544-2271 Robert Tucker Direct: (530) 542-5467 Email: RTucker@waterboards.ca.gov
State Water Resources Control Board **Walter Mobley**	Tel: (916) 323-0878 Email: Walter.Mobley@waterboards.ca.gov
Nevada County Environmental Health	(530) 582-7884 Haz Mat Emergency Hotline: (530) 265-1778 OR call 911
Placer County Environmental Health	Day Time: (530) 581-6240 After Hours: Sheriff Dispatch: (530) 581-6305 Haz Mat call 911
California Department of Fish and Wildlife	Northern Central Regional Office (Rancho Cordova) (916) 358-2900 After Hours: (916) 445-0411 or (916) 653-7664
For Sewage Clean Up: **BELFOR Property Restoration – Reno, NV.**	(800) 856-3333
For Environmental Cleanup: Clean Harbors	(800) 645-8265
Tahoe-Truckee Sanitation Agency	(530)587-2525

NOTIFICATIONS (DESIGNATED PRIMARY RESPONDERS)	
CAL OES (800) 852-7550	
Notification Date/Time:	
Name of Who You Spoke To:	
OES Control Number:	
General Manager, and HR/Risk Management Administrator if applicable	
Notification Date/Time:	
Name of Who You Spoke To: Left Message: ☐	
Allied Public Risk Claims, if applicable	
Notification Date/Time:	
Name of Who You Spoke To: Left Message: ☐	
Lahontan Regional Water Quality Control Board	
Notification County/Date/Time?:	
Name of Who You Spoke To: Left Message: ☐	
County Health Department:	
Notification Date/Time:	
Name of Who You Spoke To: Left Message: ☐	
Other:	
Notification Date/Time:	
Name of Who You Spoke To: Left Message: ☐	

Overflow/Backup Response Flowchart

Start Here

Does the SSO/backup appear to be due to a problem in the **District-owned/maintained** sewer line?

NO

This is a Private Lateral Sewage Discharge (PLSD)

1. Notify the property owner that the blockage is in their lateral and that the District does not have legal authority to maintain or perform work on privately-owned laterals.
2. Give customer the "Your Responsibilities as a Private Property Owner" pages F-1 and F-2.
3. Recommend to customer they hire a contractor to clear their line.
4. If customer is not home:
   - Complete Door Hanger and leave on customer's door.
   - Leave a message on the customer's voicemail.
5. If the property owner is unable or unwilling to address the cause of the overflow, immediately contact your supervisor and discuss whether Code Enforcement, the County Department of Environmental Health or Regional Water Quality Control Board should be notified.
6. If requested, or there is a public health and safety concern, break the stoppage and clean up the PLSD. Be sure to document District staff time and equipment used for potential billing purposes, and take pictures.

1. Document SSR according to District procedures.

2. STOP. Do not continue to C-1: PAGE 2

YES

1. Document arrival time.
2. Consider the need to call out additional staff, contractor or mutual aid assistance.
3. If it is possible that this is a Category 1 SSO greater than or equal to 1,000 gallons, immediately notify the O&M Superintendent make the 2-hour notification to CalOES.

BEGIN DIVERSION AND CONTAINMENT, AS NECESSARY

1. DIVERT AWAY FROM SENSITIVE AREAS:

a. Cover unplugged storm drains w/mats, or use dirt/other material to divert sewage away from sensitive areas (e.g., schools, playgrounds, intersections, etc.)

b. ENSURE PUBLIC CONTACT DOES NOT OCCUR. Use cones/barricades to isolate area.

2. CONTAIN SSO & RETURN TO SYSTEM, IF POSSIBLE:

a. Plug storm drain catch basins or use rubber mats to cover basin inlet and divert flow to catch basin

b. Build/excavate a berm to channel flow to downstream sanitary sewer manhole (*barricade manhole if left open)*

c. Use bypass pumps to pump around blockage until it can be removed

d. Divert to low area of ground where it can be collected later

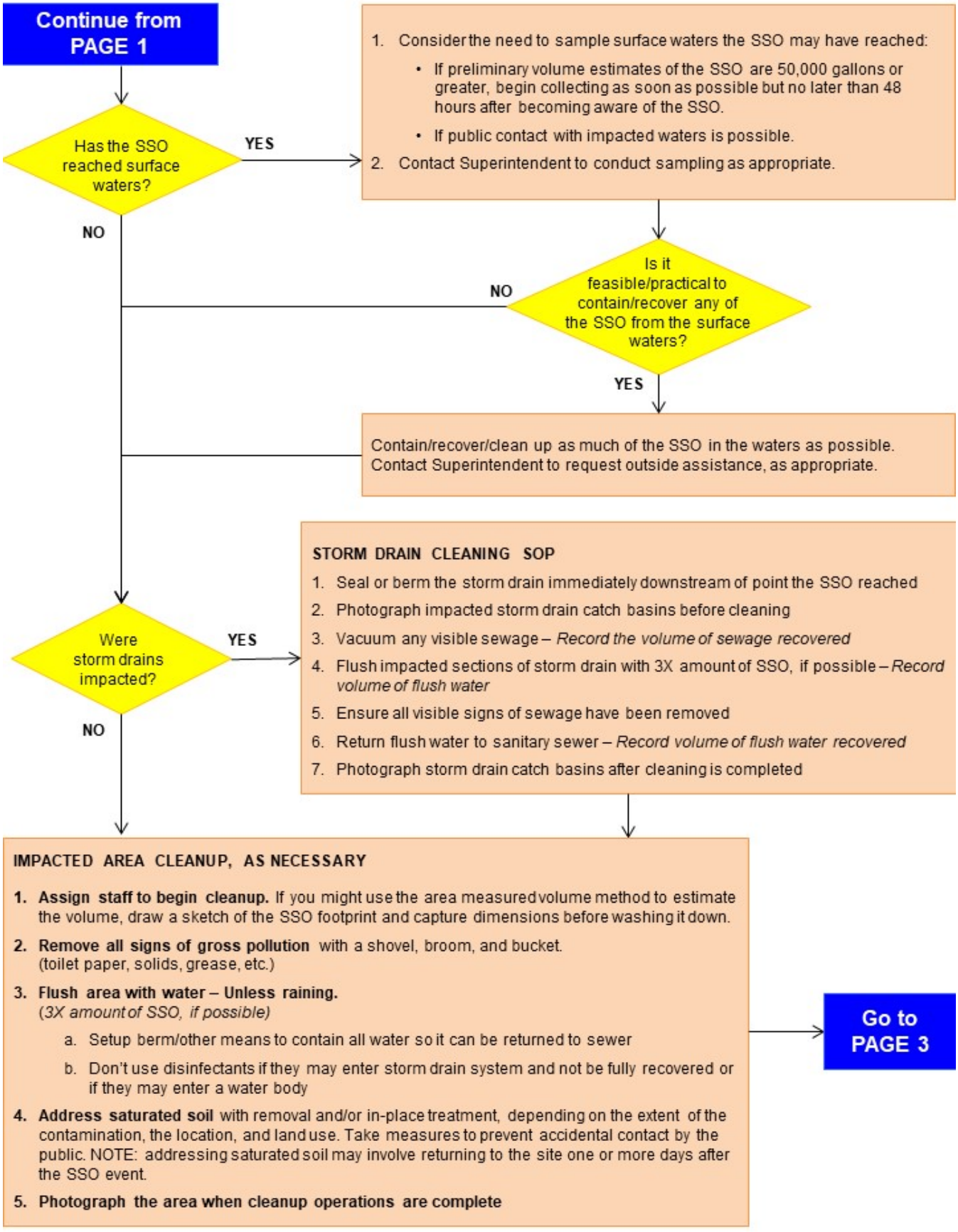
3. PHOTOGRAPH HOW THE SSO WAS DIVERTED/CONTAINED, AS APPROPRIATE

ADDRESS CAUSE OF SSO/BACKUP ASAP

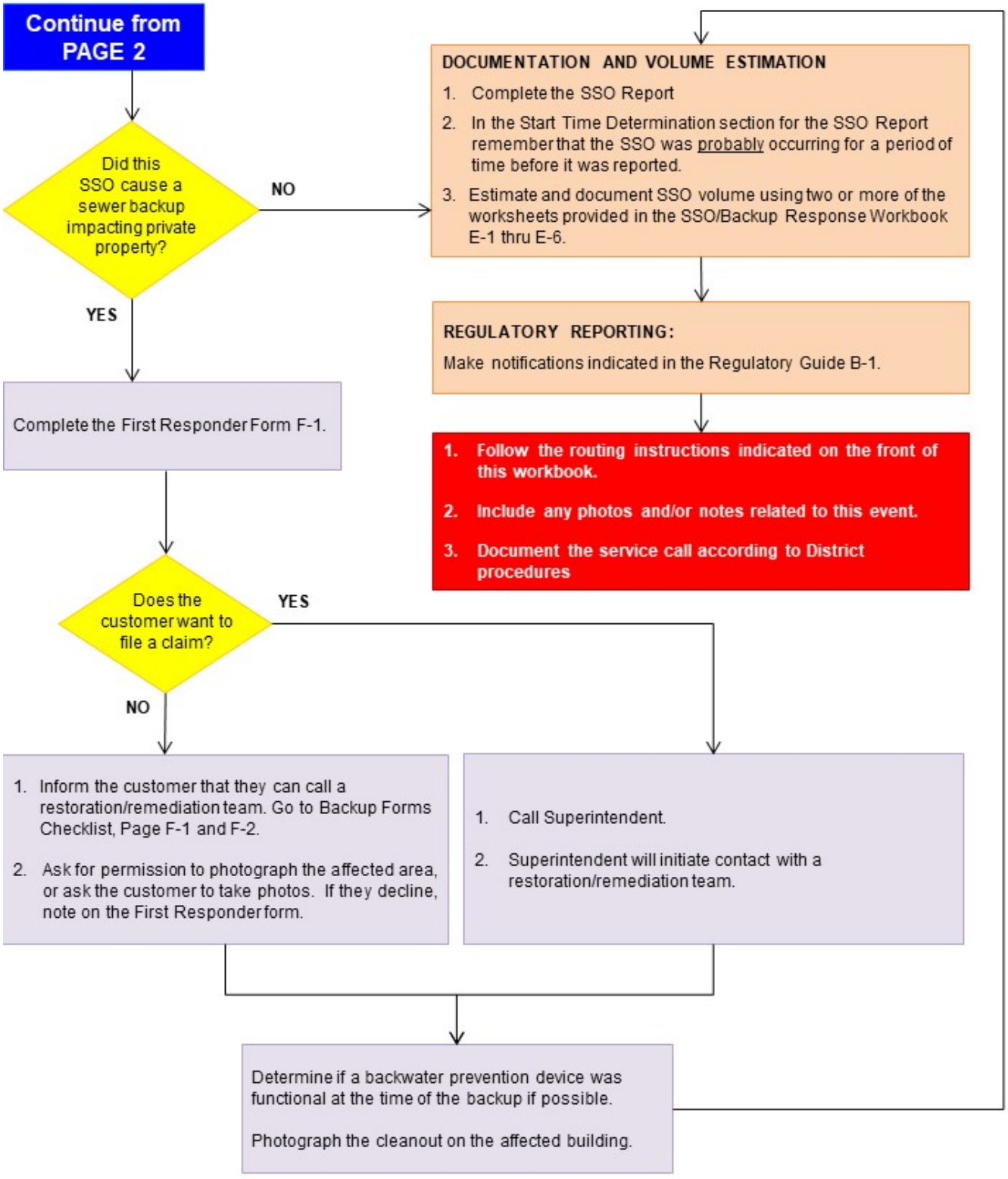
1. For lift station related SSO/Backups, contact the Lift Station Maintenance Supervisor..
2. For SSO/Backups not related to a pump station, relieve the stoppage. Note the distance from the manhole and catch/remove debris that could cause another stoppage. After flow has returned to normal, clean the pipe thoroughly.
3. Photograph staff activities while clearing the blockage, as appropriate.

Go to PAGE 2

Overflow/Backup Response Flowchart



Overflow/Backup Response Flowchart



Sanitary Sewer Overflow Field Report

PHYSICAL LOCATION DETAILS (LRO)		
Spill location name		
Latitude of spill location		
Longitude of spill location		
County		
Regional Water Quality Control Board		
VOLUMES BY DESTINATION	**Volume Spilled (Gallons)**	**Volume Recovered (Gallons)**
2.a/2.b Estimated spill volume that reached a separate storm drain that flows to a surface body of water? (If not all recovered, this is a Category 1)		
2.c/2d Estimated spill volume that directly reached a drainage channel that flows to a surface water body? (Any volume spilled is a Category 1)		
2.e/2.f Estimated spill volume discharged directly to a surface water body? (Any volume spilled is a Category 1)		
2.g/2.h Estimated spill volume discharged to land? (Includes discharges directly to land, and discharges to a storm drain system or drainage channel that flows to a storm water infiltration/retention structure, field, or other non-surface water location. Also, includes backups to building structures).		
	Volume Spilled	**Volume Recovered**
Total Volume Spilled (Verify this matches the table in between 2.h and 3 in CIWQS)		

DATE/TIME DETERMINATIONS (LRO)		
	DATE	**TIME**
Start of SSO (Use Start Time Determination/Notes Below)		
District Notified		
Collection System Maintenance Worker Dispatched		
Collection System Maintenance Worker Arrived		
End of SSO		
End of Spill Response		

SSO FIELD REPORT (FIRST RESPONDER/SUPERVISOR)
Spill location description:
Number of appearance points:
Spill appearance points: (Check all that apply) ☐ Backflow Prevention Device ☐ Force Main ☐ Gravity Mainline ☐ Inside Building/Structure ☐ Lateral Clean Out (Private/Public) ☐ Lower Lateral (Private/Public) ☐ Manhole Pump Station ☐ Upper Lateral (Private/Public) ☐ Other Sewer System Structure
Spill appearance point explanation. (Enter information here if “Other” or multiple appearance points were selected):
Final spill destination: (Check all that apply) ☐ Building/Structure ☐ Combined Storm Drain ☐ Drainage Channel ☐ Other (Specify Below) ☐ Paved Surface ☐ Separate Storm Drain ☐ Street/Curb and Gutter ☐ Surface Water ☐ Unpaved Surface
Explanation of final spill destination. (Enter information if “Other” was selected.

SSO FIELD REPORT (FIRST RESPONDER/SUPERVISOR)
Spill cause: (Check One) ☐ Air Relief Valve (ARV)/Blow Off Valve (BOV)/Backwater Valve Failure ☐ Construction Diversion Failure ☐ CS Maintenance Caused Spill/Damage ☐ Damage by Others Not Related to CS Construction/Maintenance (Specify Below) ☐ Debris from Construction ☐ Debris from Lateral ☐ Debris-General ☐ Debris-Rags ☐ Debris Wipes/Non-Dispersible ☐ Flow Exceeded Capacity (Separate CS Only) ☐ Grease Deposition (FOG) ☐ Inappropriate Discharge to CS ☐ Natural Disaster ☐ Operator Error ☐ Other (Specify Below) ☐ Pipe Structural Problem/Failure ☐ Pipe Structural Problem/Failure – Installation ☐ Pump Station Failure – Controls ☐ Pump Station Failure – Mechanical ☐ Pump Station Failure – Power ☐ Rainfall Exceeded Design, I and I (Separate CS Only) ☐ Root Intrusion ☐ Siphon Failure ☐ Surcharged Pipe (Combined CS Only) ☐ Vandalism
Spill cause explanation: (Required if Spill Cause is “Other”)

SSO FIELD REPORT (FIRST RESPONDER/SUPERVISOR)		
Where did failure occur? ☐ Air Relief Valve (ARV)/Blow Off Valve (BOV) Failure ☐ Force Main ☐ Gravity Mainline ☐ Lower Lateral (Public) ☐ Manhole ☐ Other (Specify Below) ☐ Pump Station Failure – Controls ☐ Pump Station Failure – Mechanical ☐ Pump Station Failure – Power ☐ Siphon ☐ Upper Lateral (Public)		
Explanation of where failure occurred: (Required if Where Failure Occurred is "Other")		
Was spill associated with a storm event?	YES	NO
Diameter of sewer pipe at the point of blockage or failure:	inches	
Material of sewer pipe at the point of blockage or failure:		
Estimated age of sewer asset at the point of blockage or failure (if applicable):	years	
Spill Response Activities. (Check all that apply) ☐ Cleaned-Up ☐ Mitigated Effects of Spill ☐ Contained All or Portion of Spill ☐ Other (Specify Below) ☐ Restored Flow ☐ Returned All Spoil to Sanitary Sewer System ☐ Property Owner Notified ☐ Other Enforcement Agency Notified		
Explanation of spill response activities: (Required if spill response activities is "Other"):		

SSO FIELD REPORT (FIRST RESPONDER/SUPERVISOR)		
Spill corrective action taken: (Check all that apply) ☐ Add location to, or increase frequency check, in Preventive Maintenance Program ☐ Adjusted Schedule/Method of Preventive Maintenance ☐ Enforcement Action Against FOG Source ☐ Inspected Sewer Using CCTV to Determine Cause ☐ Other (Specify Below) ☐ Plan Rehabilitation or Replacement of Sewer ☐ Repaired Facilities or Replaced Defect		
Explanation of corrective action taken: (Required if spill corrective action is “Other”)		
Is there an ongoing investigation?	YES	NO
Health warnings posted?	YES	NO
Name of impacted surface waters, if any:		

SSO FIELD REPORT (FIRST RESPONDER/SUPERVISOR)
Water quality samples analyzed for: (Circle all that apply) ☐ Dissolved Oxygen ☐ Other Chemical Indicators(s) – Specify Below ☐ Biological Indicator(s) – Specify Below ☐ No Water Quality Samples Taken ☐ Not Applicable to the Spill ☐ Other (Specify Below)
Explanation of water quality samples analyzed for: (Required if water quality samples analyzed for is "Other chemical indicator(s)", "Biological indicator(s)", or "Other")
Water quality sample results reported to: (Check all that apply) ☐ County DHS ☐ Regional Water Quality Control Board ☐ Other (Specify below) ☐ No Water Quality Samples Taken ☐ Not Applicable to this Spill
Explanation of water quality sample results reported to: (Required if water quality sample results reported to is “Other”)
Method and explanation of volume estimation methods used: (Check all that apply) ☐ Eyeball Estimate ☐ Measured Volume ☐ Duration and Flow Rate ☐ Counting Upstream Connections ☐ Other (Explain):

Miscellaneous Computations & Examples

(FIRST RESPONDER/SUPERVISOR)

To convert inches to feet (NOTE: for the purposes of this worksheet, the unit of measurement will be in feet for formula examples)	Divide the inches by 12 or use the chart on the right. **Example 1:** 27" ÷ 12 = 2.25' **Example 2:** 1¾" = ?' 1" (0.08') + ¾" (0.06') = 0.14'
Volume of one cubic foot	7.48 gallons of liquid
Area: Two-dimensional measurement represented in square feet (SQ/FT or ft^2)	Square/rectangle: Area = Length x Width Circle: Area = π x r^2 (where π ≈ 3.14 and r = radius = ½ diameter) Triangle: Area = ½ (Base x Height)
Volume: Three-dimensional measurement represented in cubic feet (CU/FT or ft^3)	Rectangle/square footprint: Volume = Length x Width x Depth Circle footprint (cylinder): Volume = π x r^2 x Depth (where π ≈ 3.14 and r = radius = ½ diameter) Triangle footprint: Volume = ½ (Base x Height) x Depth
Depth: Wet Stain on Concrete or asphalt surface	If the depth is not measurable because it is only a wet stain, use the following estimated depths: Depth of a wet stain on concrete surface: 0.0026' (1/32") Depth of a wet stain on asphalt surface: 0.0013' (1/64") These were determined to be a reasonable depth to use on the respective surfaces through a process of trial and error. One gallon of water was poured onto both asphalt and concrete surfaces. Once the area was determined as accurately as possible, different depths were used to determine the volume of the wetted footprint until the formula produced a result that (closely) matched the one gallon spilled. This process was repeated several times.
Depth: Contained or "Ponded" sewage	Measure actual depth of standing sewage whenever possible. When depth varies, measure several representative sample points and determine the average. Use that number in your formula to determine volume.

Convert Inches to Feet

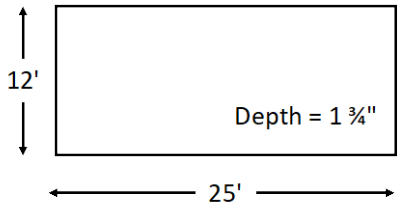
Inches	Feet
1/8"	0.01'
1/4"	0.02'
3/8"	0.03'
1/2"	0.04'
5/8"	0.05'
3/4"	0.06'
7/8"	0.07'
1"	0.08'
2"	0.17'
3"	0.25'
4"	0.33'
5"	0.42'
6"	0.50'
7"	0.58'
8"	0.67'
9"	0.75'
10"	0.83'
11"	0.92'
12"	1.00'

Miscellaneous Computations & Examples (continued)

Convert Inches to Feet	
Inches	**Feet**
1/8"	0.01'
1/4"	0.02'
3/8"	0.03'
1/2"	0.04'
5/8"	0.05'
3/4"	0.06'
7/8"	0.07'
1"	0.08'
2"	0.17'
3"	0.25'
4"	0.33'
5"	0.42'
6"	0.50'
7"	0.58'
8"	0.67'
9"	0.75'
10"	0.83'
11"	0.92'
12"	1.00'

Area/Volume of a Rectangle or Square

Formula: Length x Width x Depth = Volume in **cubic feet**



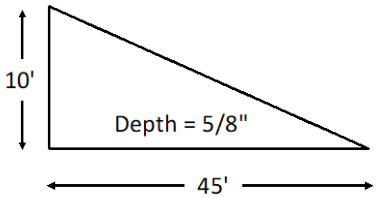
25'	X	12'	X	0.14'	=	**42 Cubic Feet**
Length		Width		Depth		Volume

Multiply the volume by 7.48 gallons to determine the volume in **gallons**:

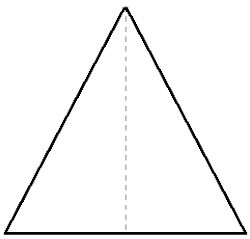
42 ft^3.	X	7.48	=	**314.16 gallons**
Volume		gal/ft^3		Volume

Area/Volume of a Right Triangle

Formula: Base x Height x Depth = Volume in **cubic feet**



For isosceles triangles (two sides are equal lengths), break it down into two right triangles and compute area as you would for the right triangle.

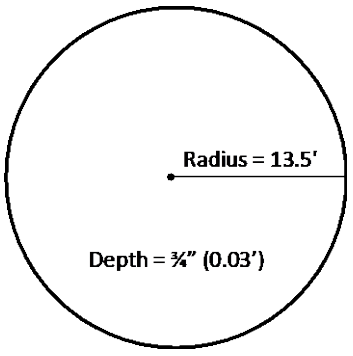


45'	X	10'	X	0.5	X	0.05'	x	7.48	=	84.15 gallons
Base		Height				Depth		gal/ft^3		Volume

Area/Volume of a Circle

Formula: π x r^2 x 0.785 x Depth = Volume in **cubic feet**

The diameter is a straight line passing from side to side through the center of a circle.



13.5'	X	13.5'	X	3.14	X	0.03'	x	7.48	=	128.42 gallons
Radius		Radius		π		Depth		gal/ft^3		Volume

Volume Estimation: Eyeball Estimation Method (for ≤100 gallons) E-2

STEP 1: Position yourself so that you have a vantage point where you can see the entire SSO.

STEP 2: Imagine one or more buckets or barrels of water tipped over. Depending on the size of the SSO, select a bucket or barrel size as a frame of reference. It may be necessary to use more than one bucket/barrel size.

STEP 3: Estimate how many of each size bucket or barrel it would take to make an equivalent spill. Enter those numbers in Column A of the row in the table below that corresponds to the bucket/barrel sizes you are using as a frame of reference.

STEP 4: Multiply the number in Column A by the multiplier in Column B. Enter the result in Column C.

	A	B	C
Size of bucket(s) or barrel(s)	**How many of this size?**	**Multiplier**	**Estimated SSO Volume (gallons)**
1 gallon water jug		x 1 gallons	
5 gallon bucket		x 5 gallons	
32 gallon trash can		x 32 gallons	
55 gallon drum		x 55 gallons	
Other: _____ gallons		x _____ gallons	
Estimated Total SSO Volume:			

STEP 5: Is rainfall a factor in the SSO? ☐Yes ☐No

If yes, what volume of the observed spill volume do you estimate is rainfall? _____ gallons

If yes, describe how you determined the amount of rainfall in the observed spill?

STEP 6: Calculate the estimated SSO volume by subtracting the rainfall from the SSO volume:

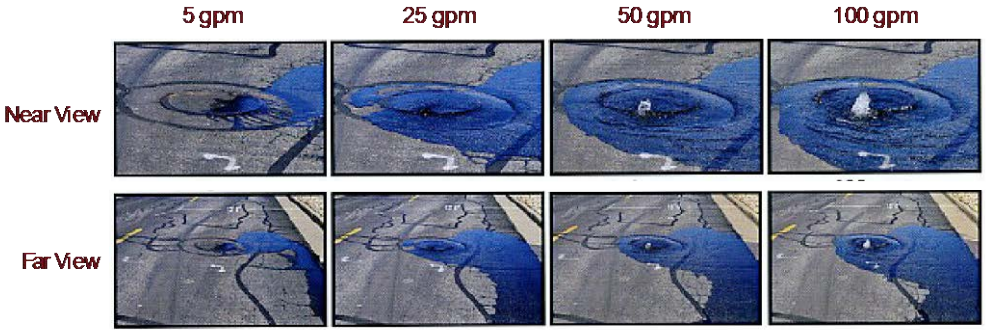
_____ gallons − _____ gallons = _____ gallons

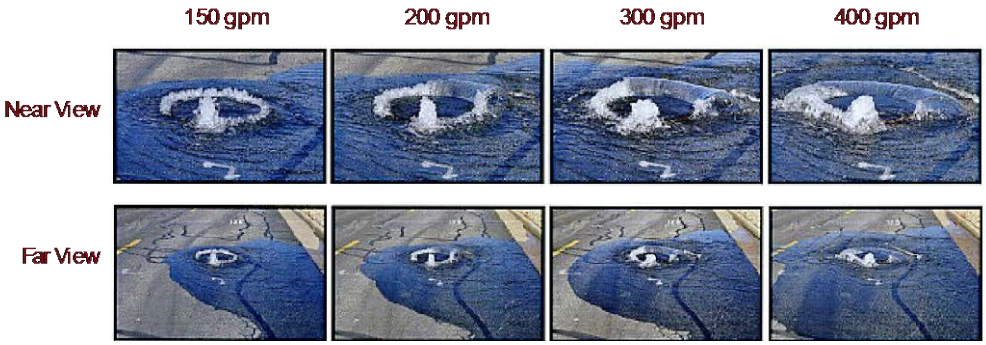
Estimated SSO Volume — Rainfall — **Total Estimated SSO Volume**

Volume Estimation: Duration and Flow Rate Comparison Method E-3

Compare the SSO to reference images below to estimate flow rate of the current overflow. **NOTE: If the manhole cover in your picture has vent holes or more than one pry hole, do not use these pictures for comparison.**

Describe which reference photo(s) were used and any additional factors that influenced applying the reference photo data to the actual SSO:





SSCSC Manhole Overflow Gauge: CWEA Southern Section Collections Systems Committee
Overflow Simulation courtesy of Eastern Municipal Water District

Flow Rate Based on Photo Comparison: _____ gallons per minute (gpm)

Start Date and Time	1.
End Date and Time	2.
SSO Event Total Time Elapsed (subtract Line 1 from Line 2. Show in minutes.)	3.
Average Flow Rate GPM (Account for diurnal flow pattern)	4.
Total Volume Estimated Using Duration and Flow Method (Line 3 x Line 4)	5.

Volume Estimation: Area/Volume Method

SSO Date: _____ Location: _____

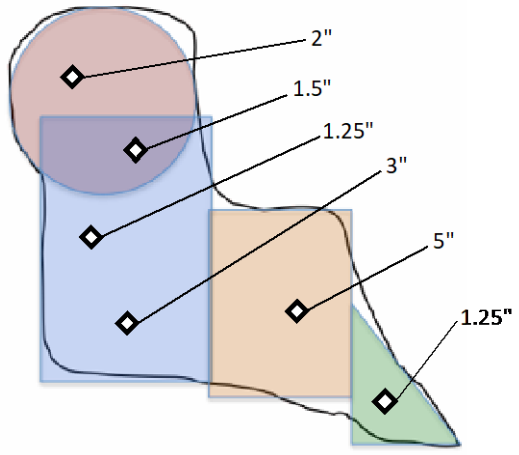
STEP 1: Describe spill area surface: ☐ Asphalt ☐ Concrete ☐ Dirt ☐ Landscape ☐ Inside Building

☐ Other: _____

STEP 2: Draw/sketch the outline (footprint) of the spill. Then break the footprint down into recognizable shapes. See example below.

1. Sketch the outline of the spill (black line)
2. Break the sketch down into recognizable shapes (circles, squares, etc.) as well as you can.
3. Determine the volume of each shape. (note: in this example, after the volume of the cirle is determined, multiply it by approximately 65% so that the overlap area won't be counted twice.
4. If the spill is of varying depths, take several measurements at different depths and find the average. If the spill affects a dry unimproved area such as a field or dirt parking lot, determine the aread of the wetted ground in the same manner as you would on a hard surface. Using a round-point shovel, dig down into the soil until you find dry soil. Do this in several locations within the wetted area and measure the depth of the wet soil. Average the measurement/thicknes of the wet soil and determine the average depth of the wet soil.

Example (right): 2" + 1.5" + 1.25" + 3" + 5" + 1.25" = 14.0"
14.0" ÷ 6 measurements = 2.33"
Average Depth = 2.33" (0.194')



STEP 3: Calculate the area of the footprint by completing the table below for each shape in Step 2.

If two shapes overlap, select one of the two shapes and estimate the percentage of that shape that does not overlap. Enter that percentage in the % Not Overlapping column. This will ensure that the overlap area is only counted once. Refer to the example on the previous page.

Rectangles	Length	X	Width	X	% Not Overlapping*	=	Area	X	Depth	=	Volume
	ft	X	ft	X	%	=	ft^2	X	ft	=	ft^3
	ft	X	ft	X	%	=	ft^2	X	ft	=	ft^3
	ft	X	ft	X	%	=	ft^2	X	ft	=	ft^3

Triangles	Base	X	Height	÷	X	% Not Overlapping*	=	Area	X	Depth	=	Volume
	ft	X	ft	÷ 2	X	%	=	ft^2	X	ft	=	ft^3
	ft	X	ft	÷ 2	X	%	=	ft^2	X	ft	=	ft^3
	ft	X	ft	÷ 2	X	%	=	ft^2	X	ft	=	ft^3

Circles	π	X	Radius	X	Radius	X	% Not Overlapping*	=	Area	X	Depth	=	Volume
	3.14	X	ft	X	ft	X	%	=	ft^2	X	ft	=	ft^3
	3.14	X	ft	X	ft	X	%	=	ft^2	X	ft	=	ft^3
	3.14	X	ft	X	ft	X	%	=	ft^2	X	ft	=	ft^3

Total Spill Volume (sum of all three tables above): _____ ft^3

STEP 4: Convert from cubic feet to gallons by multiplying by 7.48.

_____ ft^3 x 7.48 gallons = _____ gallons

spill volume in cubic feet **Total estimated volume**

Volume Estimation: Upstream Connections Method E-5

SSO Date: _____ Location: _____

STEP 1: Determine the number of Equivalent Dwelling Units (EDUs) for this SSO: _____ EDUs
NOTE: A single-family residential home = 1 EDU. For commercial buildings, refer to District documentation.

STEP 2: This volume estimation method utilizes daily usage data based on flow rate studies of several jurisdictions in California. Column A shows how an average daily of usage of 180 gallons per day is distributed during each 6-hour period. Adjust the table as necessary to accurately represent the actual data.

Complete Column E by entering the number of minutes the SSO was active during each 6-hour time period. Multiply column D times Column E to calculate the gallons spilled during each time period. Add the numbers in Column F together for the Total Estimated SSO Volume per EDU.

	Flow Rate Per EDU				**SSO**	
	A	**B**	**C**	**D**	**E**	**F**
Time Period	Gallons per Period	Hours per period	A ÷ B = Gallons per Hour	C ÷ 60 = Gallons per Minute	Minutes SSO was active during period	D × E = Gallons spilled per period
6am-noon	72	6	12	0.20		
noon-6pm	36	6	6	0.10		
6pm-midnight	54	6	9	0.15		
midnight-6am	18	6	3	0.05		
Total Estimated SSO Volume per EDU:						

STEP 3: Multiply the Estimated SSO Volume per EDU from Step 2 by the number of EDUs from Step 1.

_____ gallons (Volume per EDU) X _____ (# of EDUs) = _____ gallons (Estimated SSO Volume)

STEP 4: Adjust SSO volume as necessary considering other factors, such as activity that would cause a fluctuating flow rate (doing laundry, taking showers, etc.). Explain rationale below and indicate adjusted SSO estimate (attach a separate page if necessary).

Total Estimated SSO Volume: _____ gallons

Drawing Worksheet (FIRST RESPONDER/SUPERVISOR) E-6

Backup Forms Checklist (Backup Only) F-1

First Responder Documentation of Forms Provided to Customer

******* FOR DISTRICT USE ONLY *******

Complete this form only if there is a backup into a residence or business.

Instructions to Field Crew:

1. Take photo of each form before giving it to the customer for documentation.
2. Tear forms F-1 and F-2 listed below out of this workbook and hand to customer.
3. Check each item that was provided to the customer.
4. Have customer sign below.

Forms/Documents:

☐ Form F-1: Customer Information Letter

☐ Form F-2: Your Responsibilities as a Private Property Owner

Forms Provided to: _____
Customer Name

_____

Forms Provided by: _____ _____
Employee Name Initial

Instruction to First responder:

Send photos, including the photo of the forms/documents,
and a copy of the First Responder form to the O&M Superintendent.

Customer Information Letter (Backup Only) F-1 (English)

Dear Property Owner:

We recognize that sewer backup incidents can be stressful and require immediate response while all facts concerning how an incident occurred are still unknown. Rest assured that we do all we can to prevent this type of event from occurring in the first place.

If the District is found to be responsible for the incident, we are committed to cleaning and restoring your property, and to protecting the health of those affected during the remediation process.

The cleaning contractor contacted by the District has been selected because of their adherence to established protocols that are designed to assure to all parties thorough, cost-effective and expeditious cleaning services. You also have the right to select your own cleaning contractor, but the District does not guarantee payment of fees/expenses incurred and reserves the right to dispute fees/expenses deemed not usual and customary.

To discuss this matter, contact the Superintendent at (530) 550-3111. To submit a claim for damages, contact the HR/Risk Management Administrator at (530) 550-3104.

Sincerely,
Truckee Sanitary District

What you need to do now:

- Minimize the impact of the loss by responding promptly to the situation.
- Do not attempt to clean the area yourself, let the cleaning and restoration company handle this.
- Keep people and pets away from the affected area(s) until cleanup has been completed.
- Turn off any appliances that use water.
- Turn off heating/air conditioning systems.
- Do not remove items from the area – the cleaning and restoration company will handle this.
- If you had recent plumbing work done, contact your plumber or contractor and inform them of this incident.

Carta de Información del Cliente (Backup Only) F-1 (en español)

Estimado propietario:

Reconocemos que los incidentes de respaldo de alcantarillado pueden ser estresantes y requieren una respuesta inmediata, mientras que todos los hechos sobre cómo ocurrió un incidente aún se desconocen. Tenga la seguridad de que hacemos todo lo posible para evitar que este tipo de evento ocurra en primer lugar.

Si se determina que el Distrito es responsable del incidente, nos comprometemos a limpiar y restaurar su propiedad, y a proteger la salud de los afectados durante el proceso de reparación.

El contratista de limpieza contactado por el Distrito ha sido seleccionado debido a su adhesión a los protocolos establecidos que están diseñados para garantizar a todas las partes servicios de limpieza exhaustivos, rentables y rápidos. También tiene derecho a seleccionar su propio contratista de limpieza, pero el Distrito no garantiza el pago de los honorarios / gastos incurridos y se reserva el derecho de disputar los honorarios / gastos que no se consideran habituales y habituales.

Para discutir este asunto, comuníquese con el Superintendente de Mantenimiento y Servicios Públicos al (530) 550-2111. Para presentar un reclamo por daños, complete el Formulario de reclamo y comuníquese con el administrador de gestión de riesgos hr al (530) 550-3104.

Sinceramente,
Distrito de Saneamiento del Condado de Seaside

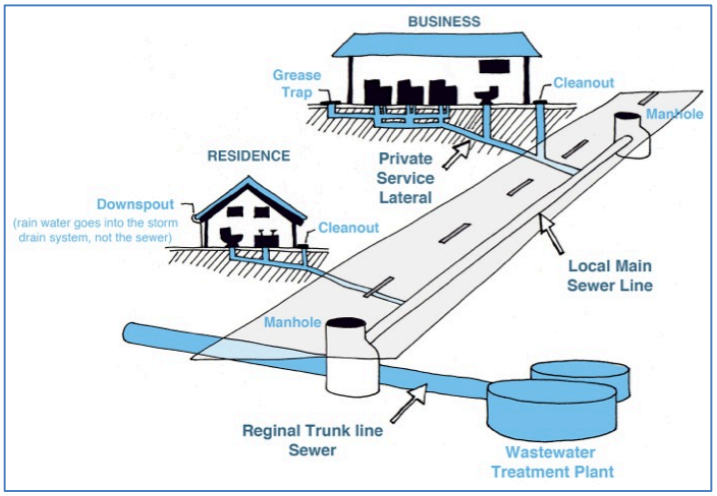
Lo que debes hacer ahora:

- Minimice el impacto de la pérdida respondiendo rápidamente a la situación.
- No intente limpiar el área usted mismo, deje que la empresa de limpieza y restauración se encargue de esto.
- Mantenga a las personas y las mascotas alejadas de las áreas afectadas hasta que se complete la limpieza.
- Apague cualquier aparato que use agua.
- Apague los sistemas de calefacción / aire acondicionado.
- No retire elementos del área; la empresa de limpieza y restauración se encargará de esto.
- Si ha realizado trabajos recientes de plomería, comuníquese con su plomero o contratista e infórmeles sobre este incidente.

Your Responsibilities as a Private Property Owner (Backup Only) F-2: Page 1

How a Sewer System Works

A property owner's sewer pipes are called ***service laterals*** and are connected to larger local main and regional trunk lines. Service laterals run from the connection at the home to the connection with the District's sewer system. These laterals are the responsibility of the property owner and must be maintained by the property owner.



How do sewage spills happen?

Sewage spills occur when the wastewater in underground pipes overflows through a manhole, cleanout, or broken pipe. Most spills are relatively small and can be stopped and cleaned up quickly, but left unattended they can cause health hazards, damage to homes and businesses, and threaten the environment, local waterways, and beaches. Common causes of sewage spills include grease build-up, tree roots, broken/cracked pipes, missing or broken cleanout caps, undersized sewers, and groundwater/rainwater entering the sewer system through pipe defects and illegal connections.

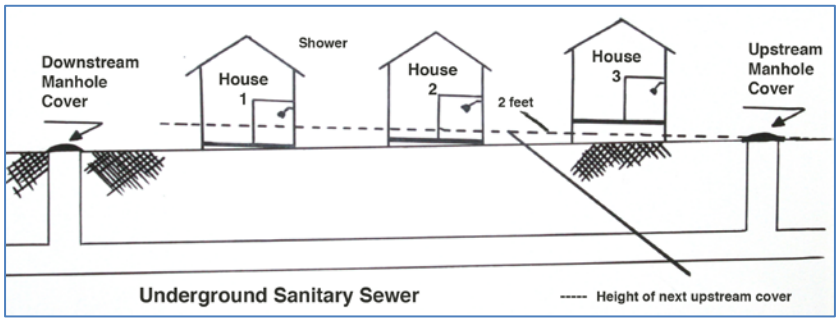
Prevent most sewage backups with a Backflow Prevention Device

This type of device can help prevent sewage backups into homes and businesses. If you don't already have a Backflow Prevention Device, contact a professional plumber or contractor to install one as soon as possible.

Is my home required to have a backflow prevention device?

Section 710.1 of the Uniform Plumbing Code (U.P.C.) states: *"Drainage piping serving fixtures which have flood level rims located below the elevation of the next upstream manhole cover or private sewer serving such drainage piping **shall** be protected from backflow of sewage by installing an approved type of backwater valve."* The intent of Section 710.1 is to protect the building interior from mainline sewer overflows or surcharges.

Additionally, U.P.C. 710.6 states: *"Backwater valves **shall** be located where they will be accessible for inspection and repair at all times and, unless continuously exposed, shall be enclosed in a masonry pit fitted with an adequately sized removable cover."*



Your Responsibilities as a Private Property Owner (Backup Only) F-2: Page 2

Spill cleanup inside the home:

For large clean ups, a professional cleaning firm should be contacted to clean up impacted areas. If you hire a contractor, it is recommended to get estimates from more than one company. Sometimes, homeowner's insurance will pay for the necessary cleaning due to sewer backups. Not all policies have this coverage, so check with your agent.

If you decide to clean up a small spill inside your home, protect yourself from contamination by observing the following safety measures. Those persons whose resistance to infection is compromised should not attempt this type of clean up.

Seek immediate attention if you become injured or ill during or after the cleanup process.

Other Tips:

- Keep children and pets out of the affected area.
- Turn off heating/air conditioning systems
- Wear rubber boots, rubber gloves, and goggles during cleanup.
- Discard items that cannot be washed and disinfected (such as: mattresses, rugs, cosmetics, toys, etc.)
- Remove and discard drywall and insulation that has been contaminated with sewage or flood waters.
- Thoroughly clean all hard surfaces (such as flooring, concrete, molding, wood and metal furniture, countertops, appliances, sinks and other plumbing fixtures) with hot water and laundry or dish detergent.
- Help the drying process with fans, air conditioning units, and dehumidifiers.
- After completing cleanup, wash your hands with soap and water. Use water that has been boiled for 1 minute (allow the water to cool before washing your hands) OR use water that has been disinfected (solution of 1/8 teaspoon of household bleach per 1 gallon of water). Let it stand for 30 min. If water is cloudy, use ¼ teaspoon of household bleach per 1 gallon of water.
- Wash clothes worn during cleanup in hot water & detergent (wash apart from uncontaminated clothes).
- Wash clothes contaminated with sewage in hot water and detergent. Consider using a Laundromat until your onsite wastewater system has been professionally inspected and serviced.

Spill cleanup outside the home:

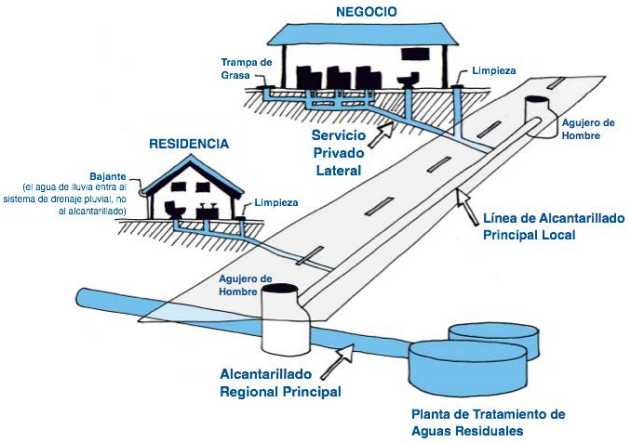
- Keep children and pets out of the affected area until cleanup has been completed.
- Wear rubber boots, rubber gloves, and goggles during cleanup of affected area.
- Clean up sewage solids (fecal material) and place in properly functioning toilet or double bag and place in garbage container.
- On hard surfaces areas such as asphalt or concrete, it is safe to use a 2% bleach solution, or ½ cup of bleach to 5 gallons of water, but don't allow it to reach a storm drain as the bleach can harm the environment.
- After cleanup, wash hands with soap and water. Use water that has been boiled for 1 minute (allow to cool before washing your hands) OR use water that has been disinfected (solution of 1/8 teaspoon of household bleach per 1 gallon of water). Let it stand for 30 min. If water is cloudy, use ¼ teaspoon of household bleach per 1 gallon of water.
- Wash clothes worn during cleanup in hot water and detergent (wash apart from uncontaminated clothes).
- Wash clothes contaminated with sewage in hot water and detergent. Consider using a laundromat until your onsite wastewater system has been professionally inspected and serviced.

Cómo funciona un sistema de alcantarillado

Las tuberías de alcantarillado de un propietario se denominan servicios laterales y están conectadas a líneas troncales principales y regionales locales más grandes. Los servicios laterales se ejecutan desde la conexión en el hogar hasta la conexión con el sistema de alcantarillado del Distrito. Estos laterales son responsabilidad del propietario y deben ser mantenidos por el propietario.

¿Cómo ocurren los derrames de aguas residuales?

Los derrames de aguas residuales ocurren cuando las aguas residuales en las tuberías subterráneas se desbordan a través de un pozo de acceso, limpieza o tubería rota. La mayoría de los derrames son relativamente pequeños y se pueden detener y limpiar rápidamente, pero si se los deja desatendidos, pueden causar riesgos para la salud, dañar viviendas y negocios y amenazar el medio ambiente, las vías fluviales locales y las playas. Las causas comunes de derrames de aguas residuales incluyen acumulación de grasa, raíces de árboles, tuberías rotas / agrietadas, tapas de limpieza faltantes o rotas, alcantarillas de tamaño insuficiente y aguas subterráneas / pluviales que ingresan al sistema de alcantarillado a través de defectos en las tuberías y conexiones ilegales.



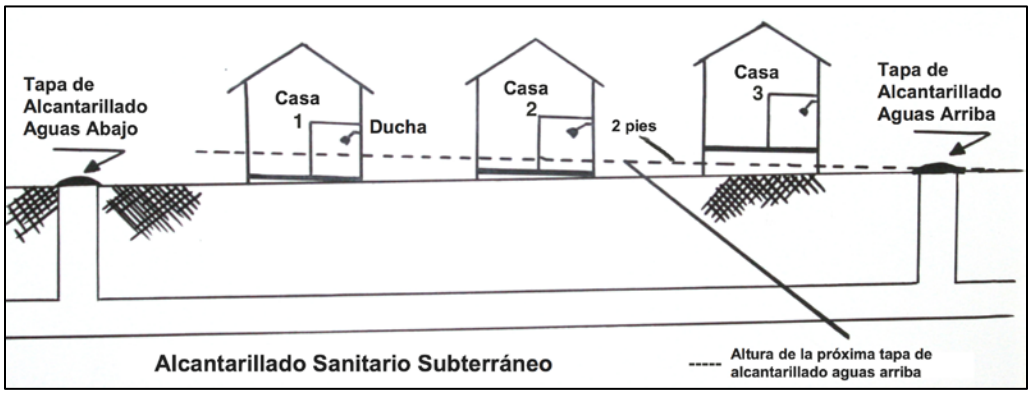
Prevenga la mayoría de las copias de seguridad de aguas residuales con un dispositivo de prevención de reflujo

Este tipo de dispositivo puede ayudar a prevenir las copias de seguridad de aguas residuales en hogares y empresas. Si aún no tiene un dispositivo de prevención de reflujo, comuníquese con un plomero o contratista profesional para instalar uno lo antes posible.

¿Se requiere que mi hogar tenga un dispositivo de prevención de reflujo?

La Sección 710.1 del Código Uniforme de Plomería (UPC) establece: “Los accesorios de tuberías de drenaje que tienen llantas de nivel de inundación ubicadas debajo de la elevación de la siguiente boca de alcantarilla corriente arriba o la alcantarilla privada que atiende dicha tubería de drenaje deben protegerse contra el reflujo de aguas residuales al instalar un tipo de válvula de evacuación ”. La intención de la Sección 710.1 es proteger el interior del edificio de los desagües o sobrecargas de alcantarillado de la línea principal.

Adicionalmente, U.P.C. 710.6 dice: Las válvulas de aguas residuales deben ubicarse donde puedan ser inspeccionadas y reparadas en todo momento y, a menos que estén continuamente expuestas, deben estar encerradas en un pozo de mampostería equipado con una cubierta removible del tamaño adecuado.



Limpieza de derrames dentro de la casa:

Para grandes limpiezas, se debe contactar a una empresa de limpieza profesional para limpiar las áreas afectadas. Si contrata a un contratista, se recomienda obtener estimaciones de más de una compañía. A veces, el seguro del propietario de vivienda pagará la limpieza necesaria debido a las reservas de alcantarillado. No todas las pólizas tienen esta cobertura, así que consulte con su agente.

Si decide limpiar un pequeño derrame dentro de su casa, protéjase de la contaminación observando las siguientes medidas de seguridad. Aquellas personas cuya resistencia a la infección esté comprometida no deben intentar este tipo de limpieza.

Busque atención inmediata si se lesiona o se enferma durante o después del proceso de limpieza.

Otros consejos:

- Mantenga a los niños y mascotas fuera del área afectada.
- Apague los sistemas de calefacción / aire acondicionado
- Use botas de goma, guantes de goma y gafas durante la limpieza.
- Deseche los artículos que no se puedan lavar y desinfectar (como: colchones, alfombras, cosméticos, juguetes, etc.)
- Retire y deseche los paneles de yeso y el aislamiento contaminado con aguas residuales o aguas de inundación.
- Limpie a fondo todas las superficies duras (como pisos, concreto, molduras, muebles de madera y metal, mostradores, electrodomésticos, fregaderos y otros accesorios de plomería) con agua caliente y ropa o detergente para platos.
- Ayude al proceso de secado con ventiladores, unidades de aire acondicionado y deshumidificadores.
- Después de completar la limpieza, lávese las manos con agua y jabón. Use agua que haya sido hervida por 1 minuto (deje que el agua se enfríe antes de lavarse las manos) O use agua que haya sido desinfectada (solución de 1/8 cucharadita de lejía doméstica por 1 galón de agua). Dejar reposar durante 30 min. Si el agua está turbia, use ¼ cucharadita de lejía de uso doméstico por 1 galón de agua.
- Lave la ropa usada durante la limpieza con agua caliente y detergente (lave aparte de la ropa no contaminada).
- Lavar la ropa contaminada con aguas residuales en agua caliente y detergente. Considere usar una lavandería hasta que su sistema de aguas residuales en el sitio haya sido inspeccionado y reparado profesionalmente.

Limpieza de derrames fuera de la casa:

- Mantenga a los niños y las mascotas fuera del área afectada hasta que se haya completado la limpieza.
- Use botas de goma, guantes de goma y gafas protectoras durante la limpieza del área afectada.
- Limpie los sólidos de alcantarillado (material fecal) y colóquelos en un inodoro o bolsa doble que funcione correctamente y colóquelos en un contenedor de basura.
- En áreas de superficies duras como el asfalto o el concreto, es seguro usar una solución de lejía al 2%, o ½ taza de lejía a 5 galones de agua, pero no permita que llegue a un drenaje de tormenta ya que la lejía puede dañar la ambiente.
- Después de la limpieza, lávese las manos con agua y jabón. Use agua que haya sido hervida por 1 minuto (deje enfriar antes de lavarse las manos) O use agua que haya sido desinfectada (solución de 1/8 cucharadita de cloro por 1 galón de agua). Dejar reposar durante 30 min. Si el agua está turbia, use ¼ cucharadita de lejía de uso doméstico por 1 galón de agua.
- Lave la ropa usada durante la limpieza con agua caliente y detergente (lave aparte de la ropa no contaminada).
- Lavar la ropa contaminada con aguas residuales en agua caliente y detergente. Considere usar una lavandería hasta que su sistema de aguas residuales en el sitio haya sido inspeccionado y reparado profesionalmente.

Collection System Failure Analysis

OFFICE USE ONLY (LRO)

Incident Report #	Prepared By		
SSO/Backup Information			
Cause			
Summary of Historical SSOs/Backups/Service Calls/Other Problems			
Date	Cause	Date Last Cleaned	Crew
Records Reviewed By:		Record Review Date:	
Summary of CCTV Information			
CCTV Inspection Date		File Name/Number	
CCTV Tape Reviewed By		CCTV Review Date	
Observations			

Go to Side B

Recommendations					
☐	Type	Specific Actions	Who is Responsible?	Completion Deadline	Who Will Verify Completion?
	No Changes or Repairs Required				
	Repair(s)				
	Construction				
	Capital Improvement(s)				
	Change(s) to Maintenance Procedures				
	Change(s) to Overflow Response Procedures				
	Training				
	Misc.				
Comments/Notes:					
Reviewed by:			Review Date:		

Overflow Emergency Response Plan
Public Posting

DANGER

RAW SEWAGE • AVOID CONTACT

PELIGRO

AGUA CONTAMINADA • EVITE TODO CONTACTO

Truckee Sanitary District

(530) 587-3804

Sewer System Management Plan - Appendix F
TRUCKEE SANITARY DISTRICT
WATER QUALITY MONITORING PROGRAM

INTRODUCTION

This Water Quality Monitoring Program (WQMP) provides the Truckee Sanitary District's (District) response activities and standard operating procedures to be utilized in the Overflow Emergency Response Plan (OERP), in the event a sanitary sewer overflow (SSO) exceeds 50,000 gallons. Smaller spills may require sampling as directed by the General Manager, District Engineer or Superintendent. This program is reviewed periodically and may be updated, as necessary.

State Water Resources Control Board Order No. WQ 2013-0058-EXEC, Amending Monitoring and Reporting Program for Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (Effective September 9, 2013), requires the following:

SSO WDR SECTION D. WATER QUALITY MONITORING REQUIREMENTS

To comply with subsection D.7(v) of the SSS WDRs, the enrollee shall develop and implement an SSO WQMP to assess impacts from SSOs to surface waters in which 50,000 gallons or greater are spilled to surface waters. The SSO WQMP, shall, at a minimum:

1. Contain protocols for water quality monitoring.
2. Account for spill travel time in the surface water and scenarios where monitoring may not be possible (e.g. safety, access restrictions, etc.).
3. Require water quality analysis for ammonia and bacterial indicators to be performed by an accredited or certified laboratory.
4. Require 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.
5. Within 48 hours of the enrollee becoming aware of the SSO, require water quality sampling for, at a minimum, the following constituents:
    i. Ammonia
    ii. Appropriate Bacterial indicator(s) per the applicable Basin Plan water quality objective or Regional Board direction, which may include total and fecal coliform, enterococcus, and e-coli.

Additionally, for spills greater than 50,000 gallons, an SSO Technical Report is required and must be submitted within 45 calendar days from the SSO end date. The SSO Technical Report requirements are described in Element VI of the OERP.

RESPONSIBILITY

The following table contains the roles and responsibilities as assigned by the District:

Roles and Responsibility	Responsible Classification
Provide and document regular training on WQMP for all District classifications that have a role or responsibility in the WQMP and identified herein	Operations and Maintenance Superintendent
Identification and assessment of potential impacts to local areas with surface waters that may require WQMP (i.e. aerial crossings, creeks, waterways, rivers, etc.)	Operations and Maintenance Superintendent
Certification of calibration of sampling equipment and maintenance of calibration records	Operations and Maintenance Superintendent
Determination of specific sampling protocols and analytic methods to be used for the District-required testing	Operations and Maintenance Superintendent
Determination of appropriate bacterial indicators for sampling	Operations and Maintenance Superintendent
Monthly completion of the monitoring and sampling kit checklist	Operations and Maintenance Superintendent
Annual review of all standard operating procedures related to this WQMP especially the Sample Collection procedures	Operations and Maintenance Superintendent
Decision to invoke a WQMP and direct the monitoring program to conclusion	Operations and Maintenance Superintendent
Selection of sampling locations	Operations and Maintenance Superintendent
Coordination of field sampling	Field Supervisors, Operations and Maintenance Superintendent
Conduct field sampling per District protocols	Any properly trained field staff
Authorization and direction for placement of public notifications and signage	Any properly trained field staff
Photographs of sampling and signage placed to protect public health and safety	Any properly trained field staff
Preparation of Chain of Custody for all samples taken including proper labeling	Any properly trained field staff
Determination of spill travel time, if applicable	Operations and Maintenance Superintendent or their designee
Review and evaluate lab results for termination of sampling and to determine the nature and impact of the release	Operations and Maintenance Superintendent or their designee
Decision to terminate sampling	Operations and Maintenance Superintendent or their designee

Roles and Responsibility	Responsible Classification
Preparation of detailed sampling location map	Operations and Maintenance Superintendent or their designee
Conduct sample analysis	Tahoe-Truckee Sanitation Agency Lab or WetLab
Preparation of water quality sampling activities narrative for Technical Report	Operations and Maintenance Superintendent or their designee
Review and Approval of Technical Report	Operations and Maintenance Superintendent or their designee
Certification and placement of Technical report in the CIWQS spill reporting system	Operations and Maintenance Superintendent (LRO) or their backup LRO
Failure Analysis Investigation of all water quality monitoring from the SSO event to determine all necessary changes or modifications to the WQMP	Operations and Maintenance Superintendent
Audits of the WQMP as required by District SSMP Element 10, Audit	Operations and Maintenance Superintendent
Management of Change responsibilities for the WQMP and all associated forms and documents required for use during an event	Operations and Maintenance Superintendent

IDENTIFICATION OF LOCAL SURFACE WATERS AND CHARACTERISTICS

An important element of any water quality monitoring program is the proper and thorough understanding of the service area and the various challenges the geography and sanitary sewer infrastructure of the service area present for the potential of wastewater reaching surface waters or storm water facilities. By evaluating the areas of concern in a service area such as lakes, rivers, dry creeks, aerial pipeline crossings over water ways and all storm water related infrastructure, the District can be better prepared to timely respond to any SSO reaching surface waters and to minimize the impacts of an SSO in or around local surface waters and storm water infrastructure.

SURFACE WATERS OF CONCERN

For the purposes of this Plan, surface waters are defined as all waters whose surface is naturally exposed to the atmosphere, for example, rivers, lakes, reservoirs, ponds, streams, impoundments, etc., and all springs, wells, or other collectors directly influenced by surface water. In addition, the District will also identify and evaluate areas where collection system pipelines and force mains cross over or under waterways as these crossings can require additional resources and equipment to properly address any SSO from these collection system assets.

Surface waters of concern are those surface waters within the District's service area that may be impacted by a sanitary sewer overflow from the District's sanitary sewer collection system. Prior planning, review and evaluation of potential failure mechanisms can help minimize any potential impacts to surface waters or storm water infrastructure when and if the WQMP must be invoked. Any review of these important areas of potential surface water contamination in advance of an SSO should allow the District to be better prepared to respond to an SSO with the proper equipment and a better understanding of the procedures

that may need to be invoked during the SSO such as flow rate of a creek or stream, and potential areas of significant environmental concern.

See Surface Water Map and Surface Waters of Concern List, Appendix B.

WATER QUALITY SAMPLING EQUIPMENT

The following list describes equipment that should be stocked and readily available for each water quality sampling event.

- Personnel protective equipment including latex/nitrile gloves and eye protection
- 4 – 120 mL sterile glass containers for coliform analysis
- 3 – 500 mL poly containers preserved with H2SO4 for ammonia analysis
- Sample extension pole and ladles
- Coolers with ice packs
- Chain of Custody forms

Ensure that there are adequate quantities of sample containers-kits if there are more than three sample locations.

SAFETY

Be aware of safety issues and do not subject personnel to unsafe conditions in order to comply with this Water Quality Monitoring Plan. Scenarios where monitoring may not be possible may include, but are not limited to, heavy rain/storm events where access points have been compromised, flooding around low-level areas, or fast-moving water. Employ the buddy system as required to maximize employee safety when sample collection is required.

ESTIMATION OF SPILL TRAVEL TIME

The follow methods are recommended to estimate spill travel time and direction:

- Method-1; use a velocity probe if available to determine the rate of flow in the surface water or
- Method-2; take visual ft/sec measurement from above, based on floating debris, to estimate the number of feet the debris has traveled in seconds.

Either method will provide a means to estimate the distance traveled and identify where the SSO may be headed within the waterway.

WATER QUALITY SAMPLING PROCEDURES (WQSP)

SSO’s greater than 50,000 gallons that have reached any surface water require water quality sampling within 48 hours after initial SSO notification. Smaller spills may require sampling as directed by the

General Manager, District Engineer or Superintendent. The Spill Sample Kit is located in the Data Room in the FOB. Please note extreme care must be taken to ensure samples are properly collected, stored, and transported. The samples shall be analyzed for ammonia and fecal coliform, which then can be sampled at T-TSA in Truckee, or WetLab in Sparks. Additional analysis may be required by the regional water quality board or county environmental health department. The following steps shall be followed to insure samples are collected properly.

- Upon notification to perform water quality sampling at a SSO location
  - In the FOB Data Room, collect the red WQ sampling ice chest. This ice chest has the bottles, Chain of Custody forms, zip lock bags, gloves, etc.
  - Also, collect the Blue WQ sampling ice chest. This ice chest will hold the collected samples. Load blue cooler with ice from the FOB lunchroom.

- A spill in a water body will require (2) two samples collected at (3) three locations. 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.
  - Collect first set of samples 100' upstream of the point of entry of the SSO.
  - Collect second set of samples 100' downstream of the point of entry of the SSO.
  - Collect third set of samples at or near the point of entry of the SSO.

- For ammonia samples:
  - Put on sterile blue nitrile gloves while handling the sample containers. Change gloves after each sample bottle is filled.
  - Grab 500 mL sample bottle:
    - Label bottle with Sharpie with the date, time, and location
  - To take grab sample:
    - Rinse bottle twice and then third dip will 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.
    - Fill the sample container to the 500 mL line and quickly replace lid and tighten securely.
    - Place sample bottle into its own unused zip lock bag and place into Blue WQ sampling cooler.
    - Fill out chain of custody (COC) forms for each sample. Fill out the highlighted sections as required. Take care to be specific in describing the sample on the form.
    - Place COC form in a zip lock bag and place in the Blue WQ sampling cooler with the samples.

- For the fecal coliform samples:
  - Put on sterile blue nitrile gloves while handling the sample containers. Change gloves after each sample bottle is filled.
  - Grab 120 mL sample bottle
    - Label bottle with Sharpie with the date, time, and location

- To take grab sample
  - 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.
  - Fill the sample container to the 120 mL line, and quickly replace lid and tighten securely.
  - Place sample bottle into its own unused zip lock bag and place into Blue WQ sampling cooler.
  - Fill out chain of custody (COC) forms for each sample. Fill out the highlighted sections as required. (The same COC form can be used for each of the samples drawn.)
  - Place COC forms (one per bottle) in a zip lock bag and place in the Blue WQ sampling cooler with the samples.

- Take photos at the all sample sites (upstream, downstream, & point of entry).

- Samples shall be transported and analyzed at T-TSA or WetLab within 6-24 hours of being collected. Contact T-TSA or WetLab as soon as possible after it is determined the spill requires water quality sampling. Let them know you need the lab to accept and set up these samples within 6-24 hours of being collected.

  → TTSA Lab: (530) 587-2525

  → WetLab: (775) 355-0202

See Chain of Custody Forms, Appendix B.

RECORDKEEPING

All sampling related records associated with this WQMP should be contained in the appropriate SSO Event File. These records shall include at least the following documents related to the WQMP:

- A narrative description of water quality sampling activities associated with the event.
- Timeline of the sampling activities until sampling is terminated.
- All surface water sampling worksheets.
- Computations of spill travel time in surface waters, if appropriate.
- Chain of Custody for all samples.
- Sampling Map of all sample locations.
- All photos or video showing sampling activities.
- Final analytical results from the certified laboratory conducting the sample analysis along with an Agency evaluation of the results to determine the nature and impact of the release.

- Failure analysis reviews of the WQMP including recommendations for changes and modifications.
- Calibration records for specific equipment used in the sampling processes.
- Notification documentation for all public and private agencies involved with or requiring monitoring related to final sample results.

The District shall maintain all records including records from service contractors associated with this WQMP as part of the file records for an SSO as required by the WDR and MRP.

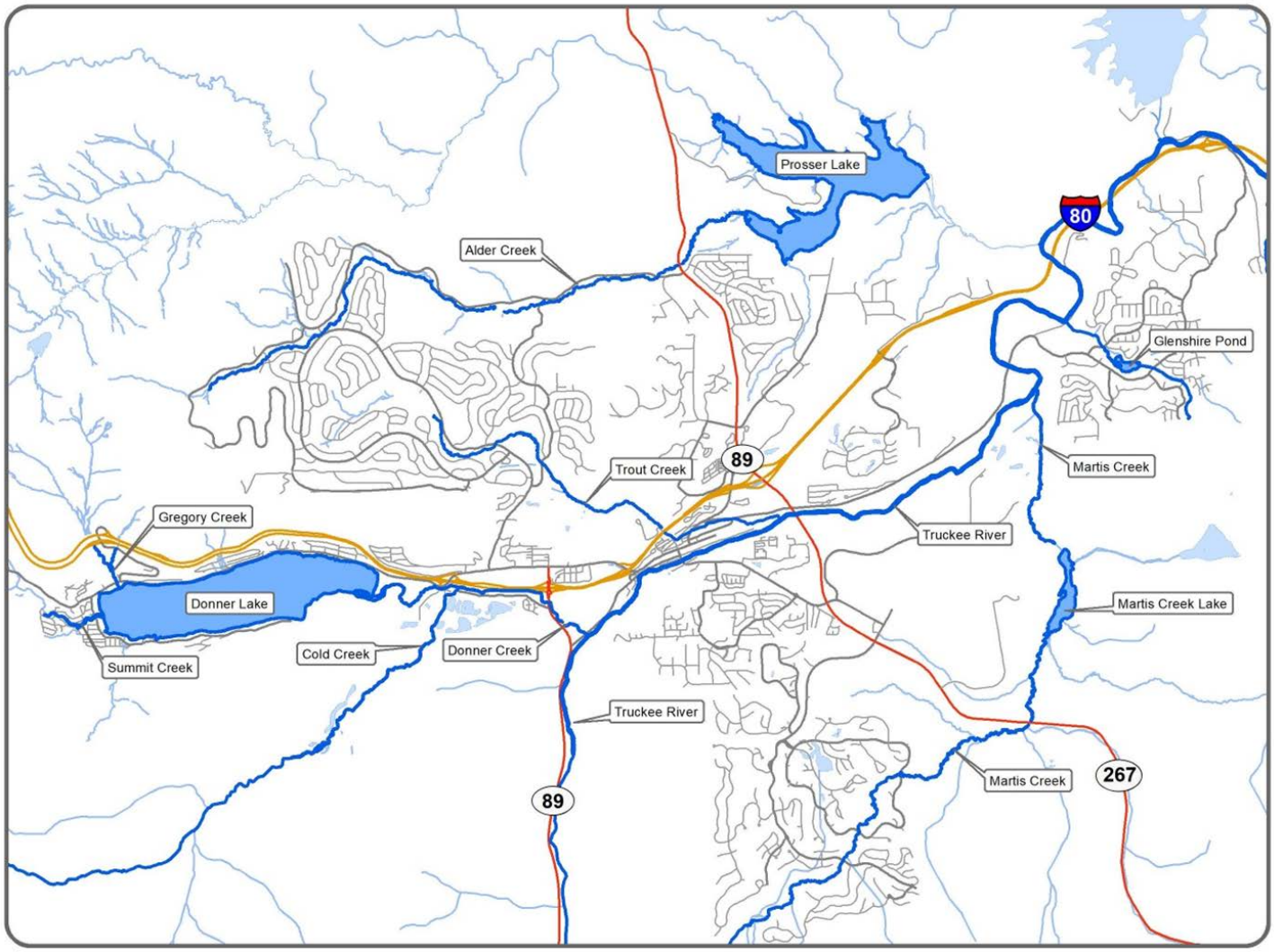
TRAINING AND FIELD EXERCISE PROGRAM

The following table contains the District's WQMP and WQSP Training and Field Exercise Program:

Training and Field Exercise Program	
Who Is Trained To Collect Surface Water Samples?	Field Supervisors, Field Staff
Trainer Qualifications	The trainer shall have experience and education in surface water sampling, techniques, and documentation.
Training Curriculum	At a minimum, training shall include: • The District's Water Quality Monitoring Plan • Sampling technique, including hands on practice • Sampling equipment calibration, use and decontamination procedures, including hands on practice • Sampling safety • Completion of the Sampling Equipment Calibration, if applicable
Training Documentation	Attendees shall be required to sign-in to all training on the appropriate forms used by the District.
Refresher Training Frequency	Annually
Who is Responsible for Ensuring Training Occurs?	Superintendent, District Engineer
Required Training Records	Employee training sign in log
Who is Responsible for Maintaining Records?	Superintendent, O&M Admin Specialist

APPENDIX A: SURFACE WATER MAP

Insert both chain of custody forms



SURFACE WATERS OF CONCERN

Creeks	**Lakes**	**Rivers:**
Alder Creek	Donner Lake	Truckee River
Cold Creek	Martis Lake	
Donner Creek	Prosser Lake	
Gregory Creek		
Martis Creek	**Ponds**	
Summit Creek	Glenshire Pond	
Trout Creek		

Billing Information:

Company Name _____

Attn: _____

Address _____

City, State, Zip _____

Phone Number _____ Fax _____

Tahoe-Truckee Sanitation Agency
13720 Butterfield Dr.
Truckee, CA 96161
(530)587-2525
(530)587-5840 fax

Samples Collected From Which State? 10035
CA _____ **Other** _____ *Page #* _____ *of* _____

Consultant / Client Name	Job #	Job Name
Address	**Report Attention / Project Manager**	
City, State, Zip	Name:	
	Email:	
	Phone: _____ Mobile: _____	

Analyses Required

Data Validation Level: III or IV

EDD / EDF? YES ___ *NO* ___

Global ID # _____

Time Sampled	Date Sampled	Matrix* See Key Below	P.O. # / Lab ID Number (Office Use Only)	Sample Description	TAT	Field Filtered	# Containers**								REMARKS

ADDITIONAL INSTRUCTIONS:

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action. Sampled By: _____

Relinquished by: (Signature/Affiliation)	Received by: (Signature/Affiliation)	Date:	Time:
Relinquished by: (Signature/Affiliation)	Received by: (Signature/Affiliation)	Date:	Time:
Relinquished by: (Signature/Affiliation)	Received by: (Signature/Affiliation)	Date:	Time:

*Key: AQ - Aqueous SO - Soil WA - Waste OT - Other AR - Air **: L-Liter V-Voa S-Soil Jar P - Plastic OT-Other

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this coc. The liability of the laboratory is limited to the amount paid for the report.

WETLAB
WESTERN ENVIRONMENTAL TESTING LABORATORY
Specializing in Soil, Hazardous Waste and Water Analysis.

475 E. Greg Street #119 | Sparks, Nevada 89431 | www.WETLaboratory.com
tel (775) 355-0202 | fax (775) 355-0817
1084 Lamoille Highway | Elko, Nevada 89801
tel (775) 777-9933 | fax (775) 777-9933
3230 Polaris Ave., Suite 4 | Las Vegas, Nevada 89102
tel (702) 475-8899 | fax (702) 776-6152

WETLAB Order ID. _____
Sparks Control # _____
Elko Control # _____
LV Control # _____
Report Due Date
Page _____ of _____

Client
Address
City, State & Zip
Contact
Phone | Collector's Name
Fax | PWS/Project Name
P.O. Number | PWS/Project Number
Email

Turnaround Time Requirements
Standard ☐
5 Day* (25%) ☐ 72 Hour* (50%) ☐
48 Hour* (100%) ☐ 24 Hour* (200%) ☐
*Surcharges Will Apply

Samples Collected From Which State?
NV ☐ CA ☐ Other ☐

Compliance Monitoring?
Yes ☐ No ☐

Report to Regulatory Agency?
Yes ☐ No ☐

Report Results Via
PDF ☐ EDD ☐
Other _____

Standard QC Required?
Yes ☐ No ☐

Billing Address (if different than Client Address)
Company _____
Address _____
City, State & Zip _____
Contact _____
Phone _____ Fax _____
Email _____

SAMPLE ID/LOCATION	DATE	TIME	PRES TYPE *	SAMPLE TYPE **	NO. OF CONTAINERS	Analyses Requested	Spl. No.

Instructions/Comments/Special Requirements:

Sample Matrix Key** DW = Drinking Water WW = Wastewater SW = Surface Water MW = Monitoring Well SD = Solid/Sludge SO = Soil HW = Hazardous Waste OTHER: _____

***SAMPLE PRESERVATIVES:** 1=Unpreserved 2=H2SO4 3=NaOH 4=HCl 5=HNO3 6=Na2S2O3 7=ZnOAc+NaOH 8=HCl/VOA Vial

Temp	Custody Seal	# of Containers	DATE	TIME	Samples Relinquished By	Samples Received By
°C	Y N None					
°C	Y N None					
°C	Y N None					
°C	Y N None					

WETLAB'S Standard Terms and Conditions apply unless written agreements specify otherwise. Payment terms are Net 30.

Client/Collector attests to the validity and authenticity of this (these) sample(s) and, is (are) aware that tampering with or intentionally mislabeling the sample(s) location, date or time of collection may be considered fraud and subject to legal action (NAC445.0636). _____ initial

To the maximum extent permitted by law, the Client agrees to limit the liability of WETLAB for the Client's damages to the total compensation received, unless other agreements are made in writing. This limitation shall apply regardless of the cause of action or legal theory pled or asserted. _____ initial

WETLAB will dispose of samples 90 days from sample receipt. Client may request a longer sample storage time for an additional fee. Please contact your Project Manager for details. _____ initial

301.2E