TRUCKEE SANITARY DISTRICT
BOARD OF DIRECTORS
RESOLUTION 2025-114

A RESOLUTION ADOPTING THE UPDATED SEWER SYSTEM MANAGEMENT PLAN (SSMP) IN ACCORDANCE WITH STATE WATER RESOURCES CONTROL BOARD REQUIREMENTS

WHEREAS, the State Water Resources Control Board (SWRCB) has adopted Statewide General Waste Discharge Requirements (WDRs) for publicly owned sanitary sewer systems, requiring the development, implementation, and periodic updating of a Sewer System Management Plan (SSMP); and

WHEREAS, the Truckee Sanitary District first adopted its SSMP in July 2009 and has updated the SSMP as required by the WDRs; and

WHEREAS, the updated SSMP reflects current practices, regulatory requirements (including Water Quality Order No. 2022-0103-DWQ), and any significant changes since the last update; and

WHEREAS, the previous SSMP update was approved by the Truckee Sanitary District on June 17, 2021; and

WHEREAS, the Truckee Sanitary District will file a recertification of the SSMP update with the State Water Resources Control Board as required;

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF DIRECTORS OF THE TRUCKEE SANITARY DISTRICT AS FOLLOWS:

The updated Sewer System Management Plan (SSMP), attached hereto as Exhibit A and presented to the Truckee Sanitary District on July 17, 2025, is hereby adopted.

PASSED AND ADOPTED by the Board of Directors of the Truckee Sanitary District, State of California, at a regular meeting held on the 17th day of July 2025, by the following vote:

AYES:	Gilmore, Hansford, Salmon, Smart, Waters
NOES:	None
ABSENT:	None
ABSTAIN:	None

Jerry Gilmore
President of the Board of Directors

ATTEST:

Sanna Sclosser
Board Secretary

Sewer System Management Plan
July 17, 2025

Originally Certified: July 16, 2009
Readopted: October 15, 2015
Readopted: June 17, 2021
Readopted: July 17, 2025
District Water Discharge ID (WDID) #6SSO11120

Table of Contents

List of Tables

List of Supplements

List 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 ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry about 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 a fine and imprisonment for knowing violations.

Sanna Schlosser, PE, PMP
General Manager

Element 1: Goal and Introduction

The goal of the Sewer System Management Plan (Plan) is to provide a plan and schedule to: (1) properly manage, operate, and maintain all parts of the sanitary sewer system, (2) reduce and prevent spills, and (3) contain and mitigate spills that do occur.

The Plan must include a narrative Introduction section that discusses the following items:

1.1 Regulatory Context

The Plan introduction section must provide a general description of the local sewer system management program and discuss Plan implementation and updates.

1.2 Sewer System Management Plan Update Schedule

The Plan Introduction section must include a schedule for the Enrollee to update the Plan, including the schedule for conducting internal audits. The schedule must include milestones for incorporation of activities addressing prevention of sewer spills.

1.3 Sewer System Asset Overview

The Plan Introduction section must provide a description of the Enrollee-owned assets and service area, including but not limited to:

- Location, including county(ies);
- Service area boundary;
- Population and community served;
- System size, including total length in miles, length of gravity mainlines, length of pressurized (force) mains, and number of pump stations and siphons;
- Structures diverting stormwater to the sewer system;
- Data management systems;
- Sewer system ownership and operation responsibilities between Enrollee and private entities for upper and lower sewer laterals;
- Estimated number or percent of residential, commercial, and industrial service connections; and
- Unique service boundary conditions and challenge(s).

Additionally, the Plan Introduction section must provide reference to the Enrollee's up-to-date map of its sanitary sewer system, as required in section 4.1 (Update Map of Sanitary Sewer System) of this Attachment.

1.1 Regulatory Context

This Sewer System Management Plan (SSMP), or "Plan", has been prepared by Truckee Sanitary District (TSD) for meeting compliance with the State Water Resources Control Board 2022 General Water Discharge Requirements, Order WQ 2022-0103-DWQ for Sanitary Sewer Systems (referred to throughout this document as WDR).The Plan is a living planning document that documents ongoing local sewer system management program activities, procedures, and decision-making, and is used in the planning, management, operation, and maintenance of TSD's sanitary sewer system. The goal of the Plan is to assist with the reduction and prevention of sanitary sewer spills, and if a spill does occur, help navigate containment and mitigation. TSD Board adopted the original SSMP on July 29, 2009, as required by the Sanitary Sewer Waste Discharge Requirements (WDR) and has subsequently readopted per updated requirements. The SSMP is organized into 11 core elements following attachment D of the WDR, with inclusion of specification requirements, and each individual element highlights compliance, effectiveness, implementation, and resilience.

1.2 Sewer System Management Plan Update Schedule

The District uses the State Water Board's online lookup tool for ensuring all required due dates for updating its SSMP and completing its required SSMP Audits. The District's most recent audit was completed and submitted for the period of August 2, 2021, to August 2, 2024. See Intro Figures 1 and 2 for the District's SSMP Internal Audit and Update upload completions and schedules from CIWQS.

Sanitary Sewer Systems General Order – Internal Audit Report

Back to Sanitary Sewer Systems Main Menu

Sanitary Sewer System: Truckee Sanitary District CS
Agency: Truckee SD
Regional Board: Region 6A - South Lake Tahoe
WDID: 6SSO11120

Internal Audit Reports

Notes:

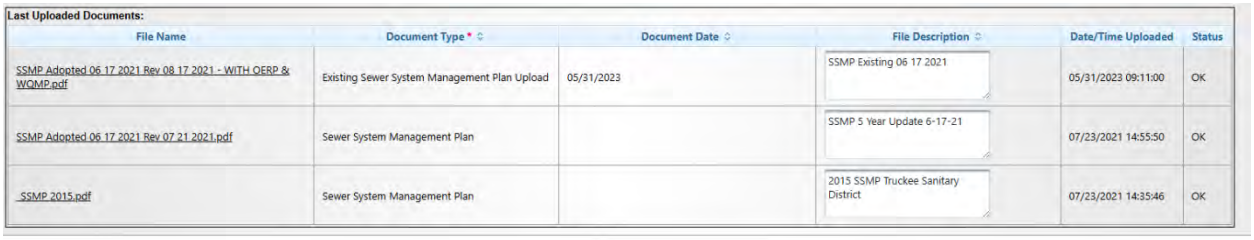
- The Internal Audit report will be enabled when the Audit period is started and will be available until Audit report is Certified.
- Once the Audit Report is Certified, no further changes are allowed (even when Audit period is valid). Email SanitarySewer@waterboards.ca.gov if you need to withdraw a certified report.
- If you are not submitting the Audit report by the due date, click Submit/Certify to provide a justification for the late submittal. You are still required to submit and certify the Audit report.

(1 of 1) Display 20 per page

Audit Report ID	Audit Period	Audit Period Type	Report Due Date	Report Status	Report Certification Date	Certified By	Notes	No of Documents	Submit/Certify
862	08/02/2021 - 08/02/2024	3-Year	02/02/2025	Certified	02/03/2025 15:01:34	Blake Tresan		1	View Certified Report
1561	08/03/2024 - 08/02/2027	3-Year	02/02/2028	Not Started				0	Submit/Certify
2338	08/03/2027 - 08/02/2030	3-Year	02/02/2031	Not Started				0	Submit/Certify

(1 of 1) Display 20 per page

Figure 1-1: SSMP Internal Audit Reports Upload and Schedule



Last Uploaded Documents:

File Name	Document Type *	Document Date	File Description	Date/Time Uploaded	Status
SSMP Adopted 06 17 2021 Rev 08 17 2021 - WITH QERP & WQMP.pdf	Existing Sewer System Management Plan Upload	05/31/2023	SSMP Existing 06 17 2021	05/31/2023 09:11:00	OK
SSMP Adopted 06 17 2021 Rev 07 21 2021.pdf	Sewer System Management Plan		SSMP 5 Year Update 6-17-21	07/23/2021 14:55:50	OK
SSMP 2015.pdf	Sewer System Management Plan		2015 SSMP Truckee Sanitary District	07/23/2021 14:35:46	OK

Figure 1-2: SSMP Updates Uploaded to CIWQS

1.3 Sewer System Asset Overview

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 12,500 residential and 600 commercial service connections as of June 2025. The sewer system consists of 215 miles of gravity sewer pipeline segments, 4419 manholes, 16 miles of force mains, forty-four (44) lift stations, and 24 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-five (75) miles of lower laterals, and private property owners have 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. The following figures and tables provide additional information about the District's assets. Additional information about the District service territory and data management is included in Element 4.

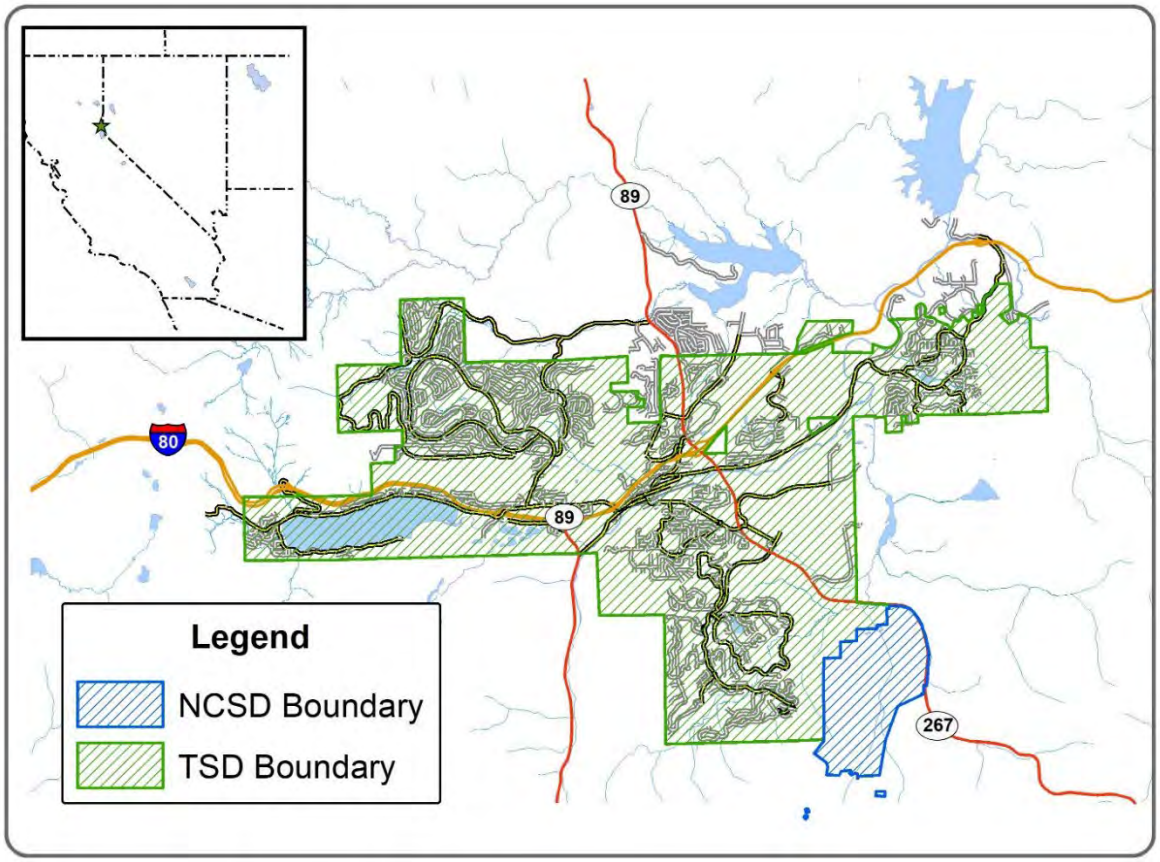


Figure 1-3: TSD Sewer System Area Map

Table 1-1: Gravity Sewer System Size Distribution

Diameter, Inches	Number of Line Segments	Pipe Length, Linear Feet	Portion of Sewer System, %
4	37	4,616	0.41
6	3533	903,905	79.87
8	513	125,675	11.07
10	130	38,678	3.38
12	97	27,160	2.41
14	38	11,835	1.04
15	45	10,396	0.92
16	5	813	0.07
18	14	3,191	0.28
20	2	766	0.07
21	13	4,517	0.40
24	6	987	0.09
Total	4,433	1,132,925	100.00
Total, Miles		215	100%

Source: District CMMS 2025

Table 1-2: Gravity Sewer System Materials and Construction

Material	Number of Line Segments	Pipe Length, LF	Percent of Sewer System
VCP	414	94,953	8.38
PVC	2467	601,892	53.13
DIP	77	19,015	1.68
ACP	1444	407,282	35.95
Techite	31	9,784	0.86
Total	4,433	1,132,925	100.00
Total, Miles		215	100%

Source: District CMMS 2025

Table 1-3: Gravity Sewer System Inventory of Lines by Pipe Age

Age in Years	Construction Period	Linear Feet of Gravity Sewers	Miles of Gravity Sewer	Percent of System
0-15	2010 - current	75,634	14.32	7
16 – 35	1990 – 2009	392,567	74.35	35
36 – 55	1970 – 1989	613,058	116.11	54
56 – 75	1950 – 1969	51,667	9.79	4
76 – 95	1930 – 1949	0	0	0%
95 – 115	1910 – 1929	0	0	0%
>115	Before 1900	0	0	0%
Total		1,132,925	214.5	100%

Source: District CMMS 2025

Table 1-4: 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	1,015	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

Siphon Name US Structure	Construction Date	Length Linear feet	Size Inches	Pipe Material
GD17-A07	2/25/1987	964	14	PVC
GD17-A09	2/25/1987	771	12	PVC
GD17-A10	2/25/1987	370	12	PVC
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 CMMS 2025

1.4 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 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 a sanitary sewer spill

Refers to the time at which TSD becomes aware of a spill 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 because 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)

Spill Emergency Response Plan (SERP)

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)

Preventative Maintenance

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 Spill or Spill Event

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

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

b. Spills 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.

Spills that include multiple appearance points resulting from a single cause will be considered one Spill 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 spill events.

Spill Categories:

Category 1: A spill of any volume of sewage from or caused by a sanitary sewer system regulated under the General Order that results in a discharge to:

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

Any spill volume not recovered from a drainage conveyance system is considered a discharge to surface water unless the drainage conveyance system discharges to a dedicated stormwater infiltration basin or facility**.**

Category 2: A spill of 1,000 gallons or greater, from or caused by a sanitary sewer system regulated under the General Order that does not discharge to a surface water. A spill of 1,000 gallons or greater that spills out of a lateral but is caused by failure or blockage in the main lines of the sanitary sewer system.

Category 3: A spill of equal to or greater than 50 gallons and less than 1,000 gallons, from or caused by a sanitary sewer system regulated under the General Order that does not discharge to a surface water. A spill of equal to or greater than 50 gallons and less than 1,000

gallons, that spills out of a lateral but is caused by a failure or blockage in the main lines of the sanitary sewer system.

Category 4: A spill of less than 50 gallons, from or caused by a sanitary sewer system regulated under this General Order that does not discharge to a surface water. A spill of less than 50 gallons that spills out of a lateral but is caused by a failure or blockage in the main lines of the sanitary sewer system.

Sanitary Sewer System (SSS)

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

Sanitary Sewer Spill Emergency Response Plan (SERP)

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 Program (WQMP)

Element 2: Organization

The Plan must identify organizational staffing responsible and integral for implementing the local Sewer System Management Plan through an organization chart or similar narrative document that includes:

- The name of the Legally Responsible Official as required in section 5.1 (Designation of a Legally Responsible Official) of this General Order.
- The position titles, telephone numbers, and email addresses for management, administrative, and maintenance positions responsible for implementing specific SSMP elements;
- Organizational lines of authority; and
- Chain of communication for reporting spills from receipt of complaint or other information, including the person responsible for reporting spills to the State and Regional Water Boards and other agencies, as applicable. (For example, county health officer, county environmental health agency, and State Office of Emergency Services.)

The purpose of this section is to identify District staff responsible for implementing this SSMP, responding to spill events and meeting the spill 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 Spills. The District's organization chart is shown in **Figure 2 – 1**.

The O&M Superintendent is the Legally Responsible Official (LRO) and reports each Spill 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 District Engineer are both backup LROs, in case the O&M Superintendent is unavailable

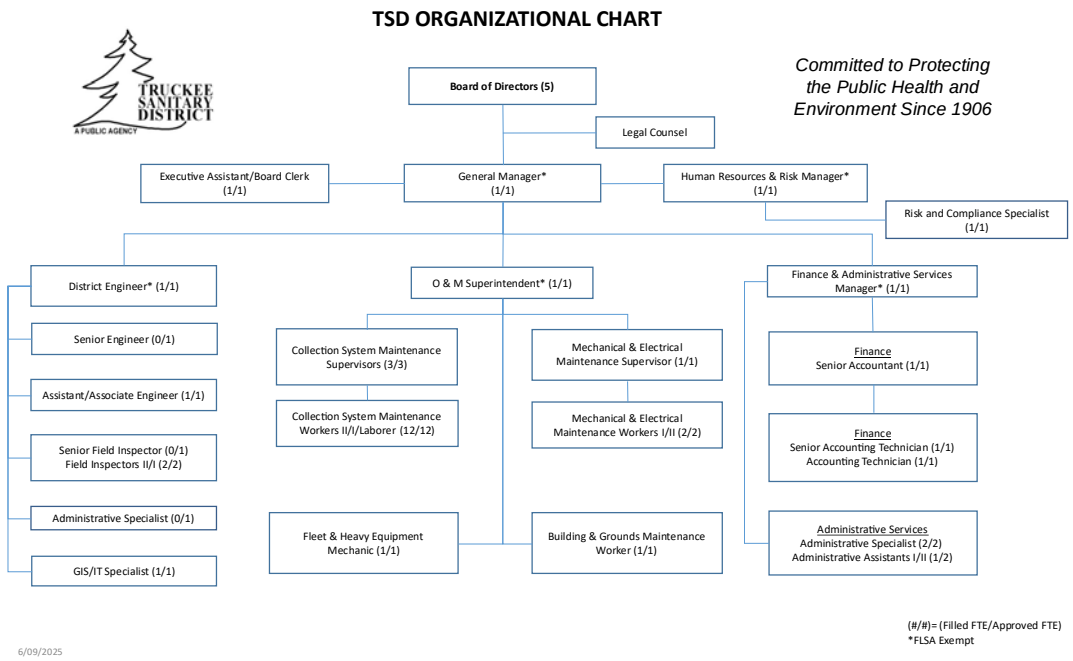


Figure 2-1: District Sewer Program Organization Chart

General Manager (LRO) – Under policy direction, plans, organizes, and provides administrative direction and oversight for all District functions and activities; serves as the District Treasurer and District Secretary; 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.

Human Resources & Risk Manager – 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.

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; 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; aids 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.

Mechanical & Electrical 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.

Mechanical & Electrical 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.

Risk & Compliance Specialist – Under direction, provides technical support in the administration, implementation and coordination of the District's risk and compliance departments' programs including, but not limited to, environment, safety, risk management and human resources in compliance with federal, state, and local laws/regulations; prepares, executes and monitors a diverse range of technical documents such as operational policies and procedures, Injury Illness and Prevention Program, and Worker's Compensation related documents; ensures policies, procedures, and processes are in compliance with laws and regulations; 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 Human Resources and Risk department are effectively executed; ensures compliance of personnel files, employee new hire and onboarding processes, 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

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 Error! Reference source not found. below.

Table 2-1: Responsible Officials for SSMP Elements

Element	Element Name	Responsible District Official	Phone	Email
1	Goal and Introduction	General Manager	530-550-3125	sschlosser@truckeesan.org
2	Organization	General Manager	530-550-3125	sschlosser@truckeesan.org
3	Legal Authority	General Manager	530-550-3125	sschlosser@truckeesan.org
4	Operation & Maintenance Program	O&M Superintendent	530-550-3111	rlopez@truckeesan.org
5	Design & Performance Provisions	District Engineer	530-550-3135	sbergeron@truckeesan.org
6	Spill Emergency Response Plan (SERP)	O&M Superintendent	530-550-3111	rlopez@truckeesan.org
7	Sewer Pipe Blockage Control Program	District Engineer	530-550-3135	sbergeron@truckeesan.org
8	System Evaluation, Capacity Assurance and Capital Improvements	District Engineer	530-550-3135	sbergeron@truckeesan.org
9	Monitoring, Measurement and Program Modifications	O&M Superintendent	530-550-3111	rlopez@truckeesan.org
10	Internal Audits	O&M Superintendent	530-550-3111	rlopez@truckeesan.org
11	Communication Program	General Manager	530-550-3125	sschlosser@truckeesan.org
App A	SSMP Board Adoption Documents	General Manager	530-550-3125	sschlosser@truckeesan.org
App B	SSMP Audit Report	O&M Superintendent	530-550-3111	rlopez@truckeesan.org
App C	SSMP Change Log	O&M Superintendent	530-550-3111	rlopez@truckeesan.org
App D	SERP	O&M Superintendent	530-550-3111	rlopez@truckeesan.org
App E	Water Quality Monitoring Program	O&M Superintendent	530-550-3111	rlopez@truckeesan.org

Source: District supplied information 2025

The Spill reporting process, chain of communication, and responsibilities are described in the Spill 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.

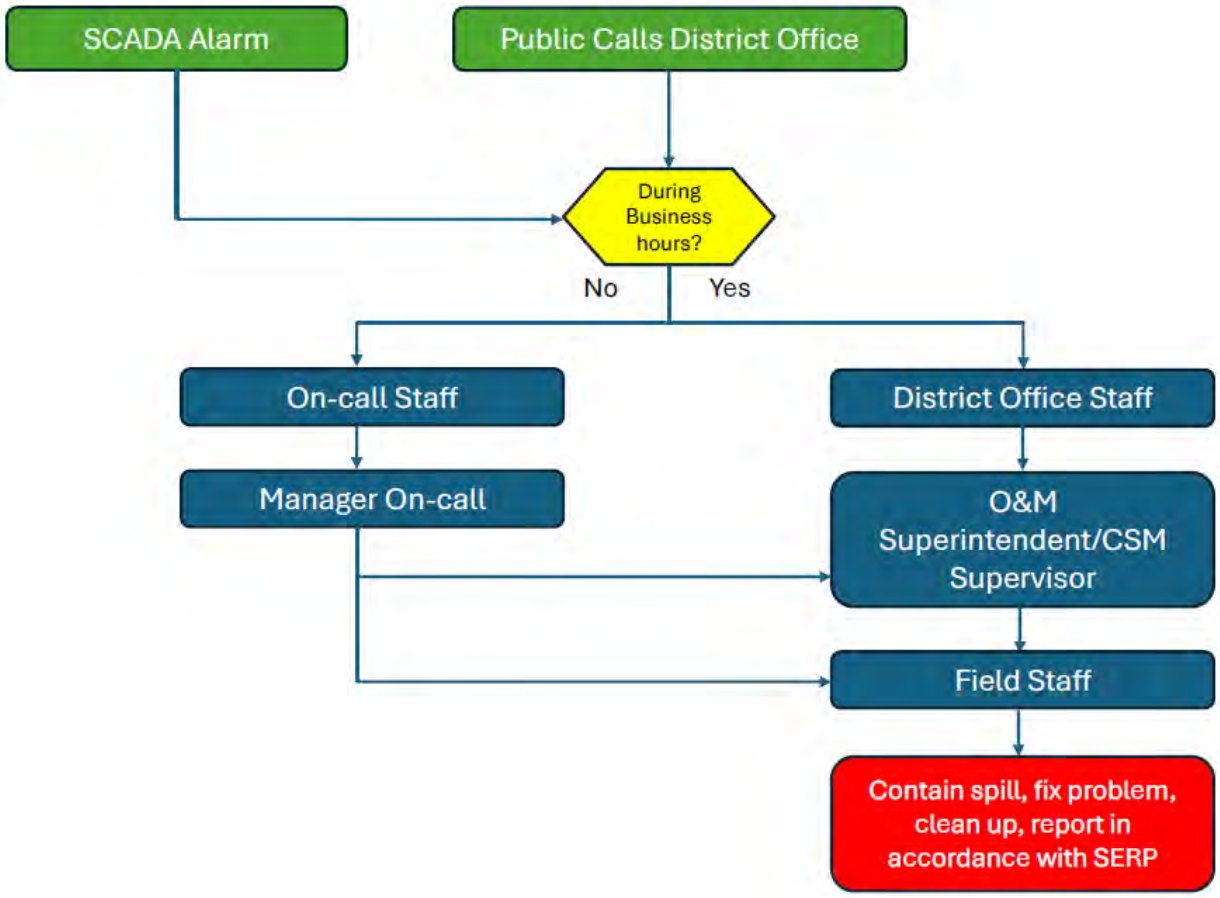


Figure 2-2: Reporting Chain of Communications

Element 3: Legal Authority

The Plan must include copies or an electronic link to the Enrollee's current sewer system ordinances, service agreements and/or other legally binding procedures to demonstrate the Enrollee possesses the necessary legal authority to:

1. Prevent illicit discharges into its sanitary sewer system from inflow and infiltration (I&I); unauthorized stormwater; chemical dumping; unauthorized debris; roots; fats, oils, and grease; and trash, including rags and other debris that may cause blockages;
2. Collaborate with storm sewer agencies to coordinate emergency spill responses, ensure access to storm sewer systems during spill events, and prevent unintentional cross connections of sanitary sewer infrastructure to storm sewer infrastructure;
3. Require that sewer system components and connections be properly designed and constructed;
4. Ensure access for maintenance, inspection, and/or repairs for portions of the lateral owned and/or operated by the Enrollee;
5. Enforce any violation of its sewer ordinances, service agreements, or other legally binding procedures; and
6. Obtain easement accessibility agreements for locations requiring sewer system operations and maintenance, as applicable.

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 1-2021 as amended by Resolution No. 2022-119 The document in its entirety is accessible to

the public through our website, www.truckeesan.org, under the District Code icon. The District Code can also be viewed by clicking here.

Requirement	District Ordinance 1-2021 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; and Chapter 9
Require proper installation, testing, and inspection of new and rehabilitated sewers	10.02 10.01-10.08 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

Figure 3-1: Summary of Legal Authorities

3.1 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.

Additionally, TSD has an agreement with the State of California – Department of Transportation (Caltrans) in the form of a blanket encroachment permit to allow TSD crews to perform routine maintenance on the District facilities within State Highway rights-of-way. TSD has similar agreements, in the form of encroachment permits, with both the Town of Truckee and Placer County, for access to District facilities on their rights-of-ways.

Element 4: Operation and Maintenance Program

The Plan must include the items listed below that are appropriate and applicable to the Enrollee's system.

4.1 Updated Map of Sanitary Sewer System

An up-to-date map(s) of the sanitary sewer system, and procedures for maintaining and providing State and Regional Water Board staff access to the map(s). The map(s) must show gravity line segments and manholes, pumping facilities, pressure pipes and valves, and applicable stormwater conveyance facilities within the sewer system service area boundaries.

4.2 Preventive Operation and Maintenance Activities

A scheduling system and a data collection system for preventive operation and maintenance activities conducted by staff and contractors.

The scheduling system must include:

- Inspection and maintenance activities;
- Higher frequency inspections and maintenance of known problem areas, including areas with tree root problems;
- Regular visual and closed-circuit television (CCTV) inspections of manholes and sewer pipes.

The data collection system must document data from system inspection and maintenance activities, including system areas/components prone to root-intrusion potentially resulting in system backup and/or failure.

4.3 Training

In-house and external training provided on a regular basis for sanitary sewer system operations and maintenance staff and contractors. The training must cover:

- The requirements of this General Order
- The Enrollee's Spill Emergency Response Plan procedures and practice drills;
- Skilled estimation of spill volume for field operators; and
- Electronic CIWQS reporting procedures for staff submitting data.

4.4 Equipment Inventory

An inventory of sewer system equipment, including the identification of critical replacement and spare parts.

4.1 Updated Map of Sanitary Sewer System

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. The District Engineer manages system map updates. **Figure 4 – 1** provides a snapshot of the information available through GIS for the District sewer collection system. System maps are available to the public at our website: GIS and Mapping - Truckee Sanitary District

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 Spill, storm drainage catch basins and storm drainage pipes to be able to 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.

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.

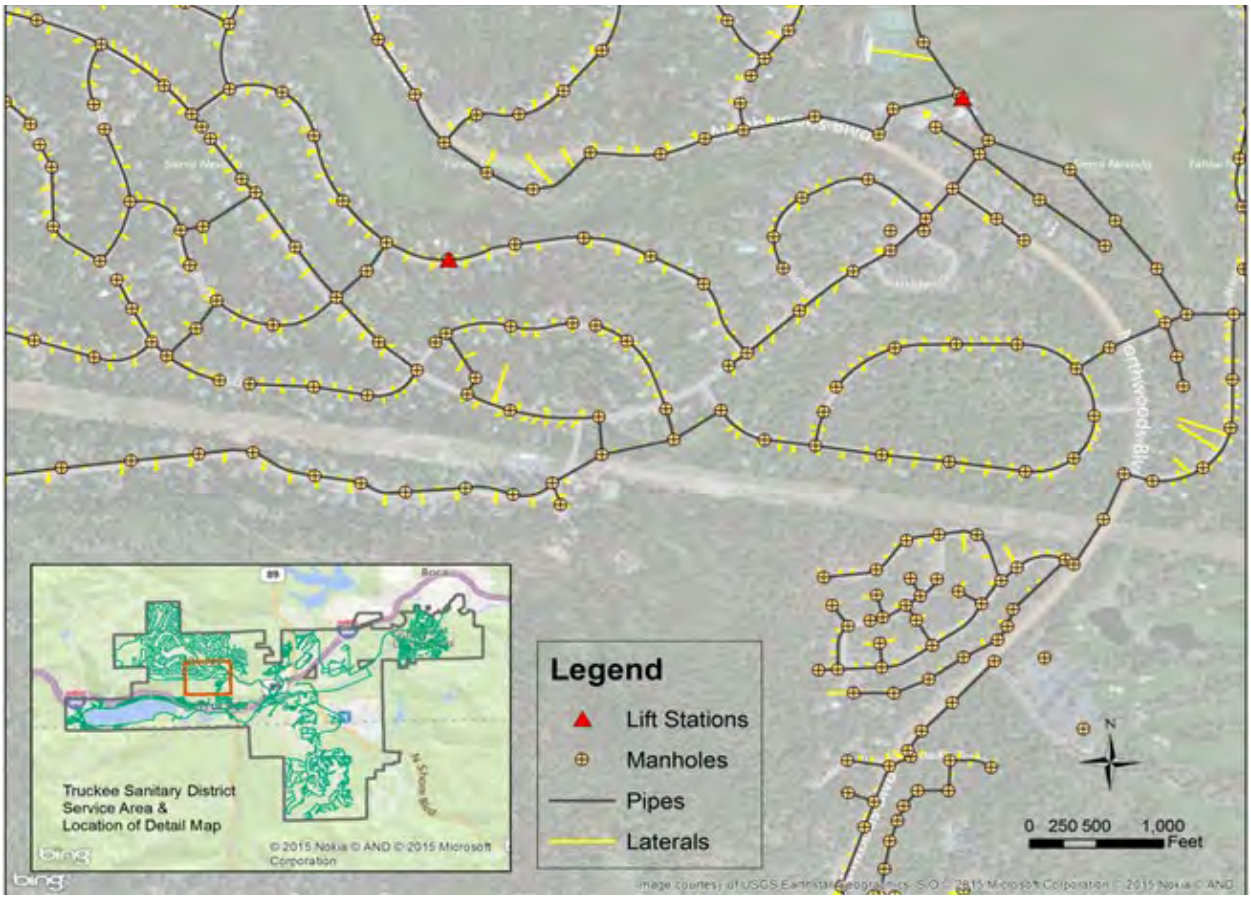


Figure 4-1: GIS System Map Snapshot

4.2 Preventative Operation and Maintenance Activities

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 Spills. 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 the 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 observe 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
2013	359,754	371,241	730,995	138.45	65.00%
2014	321,597	307,881	629,478	119.22	55.97%
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%
2021	398,205	562,966	977,267	185.09	86.09 %
2022	443,079	396,204	839,283	158.96	73.93 %
2023	399,804	295,937	695,741	131.77	61.29 %
2024	445,255	510,040	955,295	180.93	84.15 %
Total	4,963,331	5,276,033	10,291,460	1949.15	906.58 %
Averages	413,611	439,669	857,622	162.43	75.55%

Source: District supplied infrastructure file 2025

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 the District to develop needs-based cleaning schedules. Staff places pipeline segments on a higher or lower frequency schedule based upon past cleaning results, history of Spill 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
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)
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
2020	392,663	74	34.5
2021	368,134	70	33.6
2022	322,388	61	29.3
2023	248,269	47	22.6
2024	265,934	50	24.0
Annual Average	314,837	59.6	28.7

Source: District supplied infrastructure file 2025

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
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

Pump Station Name	Type Large/Small	Construct Date	No. Pumps	Pump GPM	Pump Manu-facturer	Pump HP	Standby Generator-KW
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
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 2025

A complex set of Preventative Maintenance work orders allows field personnel 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.

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 $350,000 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.

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)	
Spills	
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	

4.2.1.4: Force Main Maintenance

There is 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 Listed in **Table 4 - 4** 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
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

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

Source: District supplied infrastructure file 2025

4.2.2 Sewer Inverted Siphon

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 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
2016	0	0	0 %
2017	0	0	0 %
2018	1,237	0.23	0.11 %
2019	61,184	11.59	5.57 %

Calendar Year	Linear Feet	Miles	Percent of System
2020	0	0	0 %
2021	6,324	1.20	0.56 %
2022	0	0	0 %
2023	0	0	0 %
2024	0	0	0 %
Total	68,745	13.02	6.06 %
Annual Average	7,638	1.45	0.67 %

Source: District supplied infrastructure file 2025

4.3 Training

All District staff and service contractor employees that have a role in responding to, reporting and/or mitigating a sewer system spill, 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, SERP and the WQMP. Staff also conduct, at least annually, field exercises on proper procedures for the handling of sewage spills and sampling requirements pursuant to the District WQMP, including estimation of spill volume. LROs with access to CIWQS spill reporting are trained in-house on navigating and reporting procedures of the portal.

New employees receive this training before they are placed in a position where they may have to respond to spills. Beginning in January 2015, spill 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.

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.

4.4 Equipment Inventory

Supplement 4-2: Critical System Equipment Inventory

Equipment Number	Equipment Description	Year Purchased	Location
Unit 42	Vactor Combination Cleaner/Vacuum Truck - 2017 Freightliner AWD	2017	FOB
Unit 41	Vactor Combination Cleaner/Vacuum Truck- 2013 Freightliner AWD	2012	FOB
Unit 43	Hydro-Cleaning Truck - 2020 Dodge Pipe Hunter AWD	2020	VSF
Unit 46	Hydro-Cleaning Truck – 2024 Chevrolet Pipe Hunter AWD	2024	VSF
Unit 31	TV Van - 2023 Ford Transit 350 AWD	2023	VSF
Unit 32	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
G-16	Generator - Portable Honda 3000W	2023	VSF

Equipment Number	Equipment Description	Year Purchased	Location
Unit 21	Utility Off Road Side-by-Side Vehicle - 2016 Kawasaki Mule	2017	VSF
Unit 56	Loader w/ Bucket/Blade - 2005 Caterpillar 938G	2005	VSF
Unit 57	Backhoe Loader - 2006 Caterpillar 430-D	2006	VSF
Unit 58	Mini Excavator - 2009 Caterpillar	2008	VSF
Unit 59	Loader Compact Wheel w/ Bucket/Blade - 2019 Caterpillar 907M	2019	VSF
T-01	Trailer Flatbed/Large - 2001 Trailmax	2001	VSF
T-12	Trailer Flatbed/Small - 2012 Trailmax	2011	VSF
Unit 53	Dump Truck 10yd - 2019 Freightliner 4x4	2018	VSF
Unit 54	Dump Truck 5yd - 2009 GMC C5500 4x4	2009	VSF
Unit 20	Utility Truck w/ Crane & Generator 4x4 - Lift Stations	2018	FOB
Unit 22	Utility Truck w/ Crane & Generator 4x4 - Lift Stations	2021	FOB
Unit 44	Utility Truck 4X4 - Confined Space Entry/Flagging	2019	VSF
Unit 134	Utility Truck 1 Ton 4x4 w/ Snowplow Attachment	2020	VSF
Unit 50	Utility Truck 1 Ton 4x4	2008	VSF
Unit 33	Utility Truck 4x4	2019	VSF
Unit 51	Utility Truck 4x4	2006	VSF
Unit 45	Utility Truck 4x4	2019	VSF
Unit 52	Utility Truck 4x4	2008	VSF
Unit 60	McLean Snowblower	2024	VSF
C-01	Air Compressor Portable Ingersol/Rand w/ Jackhammer - 160CFM	2007	VSF
3122-3124	Emergency Lighting on Tripod (1 of 3)	2013	VSF
Unit 55	Chevy Silverado 5500 w/ IMT Bed 4x4	2020	VSF
Unit 30	Chevy 1500 ½ Ton Pickup 4x4	2016	VSF

Supplement 4-3: 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 2025

Element 5: Design and Performance Provisions

The Plan must include the following items as appropriate and applicable to the Enrollee's system:

5-1: Updated Design Criteria and Construction Standards and Specifications

Updated design criteria, and construction standards and specifications, for the construction, installation, repair, and rehabilitation of existing and proposed system infrastructure components, including but not limited to pipelines, pump stations, and other system appurtenances. If existing design criteria and construction standards are deficient to address the necessary component-specific hydraulic capacity as specified in section 8 (System Evaluation, Capacity Assurance and Capital Improvements) of this Attachment, the procedures must include component-specific evaluation of the design criteria.

5-2: Procedures and Standards

Procedures, and standards for the inspection and testing of newly constructed, newly installed, repaired, and rehabilitated system pipelines, pumps, and other equipment and appurtenances.

5.1 Updated Design Criteria, Construction Standards, and Specifications

As discussed in Element 3, District design and construction standards are provided as part of the District Code, Chapter 7 and Appendices A-5 and A-7. 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 Procedures and Standards

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

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.

Element 6: Spill Emergency Response Plan

The Plan must include an up-to-date Spill Emergency Response Plan to ensure prompt detection and response to spills to reduce spill volumes and collect information for prevention of future spills. The Spill Emergency Response Plan must include procedures to:

- Notify primary responders, appropriate local officials, and appropriate regulatory agencies of a spill in a timely manner;
- Notify other potentially affected entities (for example, health agencies, water suppliers, etc.) of spills that potentially affect public health or reach waters of the State;
- Comply with the notification, monitoring and reporting requirements of this General Order, State law and regulations, and applicable Regional Water Board Orders;
- Ensure that appropriate staff and contractors implement the Spill Emergency Response Plan and are appropriately trained;
- Address emergency system operations, traffic control and other necessary response activities;
- Contain a spill and prevent/minimize discharge to waters of the State or any drainage conveyance system;
- Minimize and remediate public health impacts and adverse impacts on beneficial uses of waters of the State;
- Remove sewage from the drainage conveyance system;
- Clean the spill area and drainage conveyance system in a manner that does not inadvertently impact beneficial uses in the receiving waters;
- Implement technologies, practices, equipment, and interagency coordination to expedite spill containment and recovery;
- Implement pre-planned coordination and collaboration with storm drain agencies and other utility agencies/departments prior, during, and after a spill event;
- Conduct post-spill assessments of spill response activities;
- Document and report spill events as required in this General Order; and
- Annually review and assess effectiveness of the Spill Emergency Response Plan, and update the Plan as needed.

6.1 Spill Emergency Response Plan

6.1.1 Purpose

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

6.1.2 Policy

The District employees are required to report all wastewater spills from public sewer infrastructure and to take the appropriate action to secure the wastewater spill area, properly report to the appropriate regulatory agencies, relieve the cause of the spill, 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 regarding sewer spills as set forth by the Lahontan Regional Water Quality Control Board (*LRWQCB)* and the California State Water Resources Control Board (*SWRCB).*

6.1.3 Goals

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

- Work safely;
- Respond quickly to minimize the volume of the Spill.
- Eliminate the cause of the Spill;
- 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 Spill;
- Meet the regulatory reporting requirements;
- Evaluate the causes of failure related to certain Spills; and
- Revise response procedures resulting from the debrief and failure analysis of certain Spills.

6.1.4 Full Spill Emergency Response Plan

The full copy of the District Spill Emergency Response Plan effective July 2023 can be found in Appendix D along with copies of all instructions and forms in the Backup Response Workbook. All Spill sampling and testing shall be conducted per the District Water Quality Monitoring Plan (WQMP) which is included in Appendix E.

6.1.5 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 Spill Emergency Response Plan July 26, 2023

Element 7: Sewer Pipe Blockage Control Program

The Sewer System Management Plan must include procedures for the evaluation of the Enrollee's service area to determine whether a sewer pipe blockage control program is needed to control fats, oils, grease, rags and debris. If the Enrollee determines that a program is not needed, the Enrollee shall provide justification in its Plan for why a program is not needed**.** The procedures must include, at minimum:

- An implementation plan and schedule for a public education outreach program that promotes proper disposal of pipe-blocking substances;
- A plan and schedule for the disposal of pipe-blocking substances 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 substances generated within a sanitary sewer system service area;
- The legal authority to prohibit discharges to the system and identify measures to prevent spills and blockages;
- Requirements to install grease removal devices (such as traps or interceptors), design standards for the removal devices, maintenance requirements, best management practices requirements, recordkeeping and reporting requirements;
- Authority to inspect grease producing facilities, enforcement authorities, and whether the Enrollee has sufficient staff to inspect and enforce the fats, oils, and grease ordinance;
- An identification of sanitary sewer system sections subject to fats, oils, and grease blockages and establishment of a cleaning schedule for each section; and
- Implementation of source control measures for all sources of fats, oils, and grease

7.1 Nature and Extent of Sewer Pipe Blockage Control Program

The District has ninety-five (96) 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 for 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.

If the interceptor needs to be pumped or repaired, a Notice of Inspection will be given to the restaurant. Interceptors must be pumped within 10 days. District Inspector will follow up with the establishment. 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. Of the 96 FSEs, 53 establishments have grease traps and 43 have grease interceptors.

7.2 Response to GWDR Requirements

7.2.1 Requirement (a):

An implementation plan and schedule for a public education outreach program that promotes proper disposal of pipe-blocking substances

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 owners and operators. The District also provides educational materials and tools regarding FOG at community events. The District participates in at least 7 community events throughout the year where educational information concerning best kitchen practices to reduce FOG is introduced and educational materials describing common pipe blocking substances are explained.

7.2.2 Requirement (b):

A plan and schedule for the disposal of pipe-blocking substances 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 substances generated within a sanitary sewer system service area

Response:

The District has developed a plan to inspect grease interceptors on a routine basis dependent upon their grease accumulated history. These inspections are set on a reoccurring schedule of 1-month, 3-month, or 6-month cycle. Owners are notified to have their interceptors pumped down by local grease haulers to area rendering companies. TSD receives notification from the grease hauler when individual units are pumped out.

7.2.3 Requirement (c):

The legal authority to prohibit discharges to the system and identify measures to prevent spills and blockages.

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 8.02 defines commercial food establishments
- Chapter 8.03 establishes requirements for grease interceptors
- Chapter 8.04 establishes requirements for grease traps
- Chapter 8.05 establishes requirements for sand/oil interceptors
- Chapter 8.08 defines various triggers for compliance
- Chapter 12 Enforcement

7.2.4 Requirement (d):

Requirements to install grease removal devices (such as traps or interceptors), design standards for the removal devices, maintenance requirements, best management practices requirements, recordkeeping 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.

7.2.5 Requirement (e):

Authority to inspect grease producing facilities, enforcement authorities, and whether the Enrollee has sufficient staff to inspect and enforce the fats, oils, and grease ordinance.

Response:

District Code Section (3 and 4) provides the requirements for inspections and Section provides the authority for enforcement. District inspection staff are maintained at a staffing level to include the duties of FOG inspection on a routine basis.

7.2.6 Requirements (f) and (g):

- An identification of sanitary sewer system sections subject to fats, oils, and grease blockages and establishment of a cleaning schedule for each section; and

  Implementation of source control measures for all sources of fats, oils, and grease reaching the sanitary sewer system for each section identified above.

Response:

District staff routinely televises sewer pipes for condition assessment. Sewer pipes identified as having high grease accumulations are placed on a high frequency cleaning list to prevent blockages.

Source control measures employed by the District include contact with the property owners, operators of food establishments to provide education on proper kitchen practices and elimination of pipe blocking materials. Public outreach materials have been developed to address common sources and prevention of FOG discharged into the sewer system. District staff provide these materials to property owners and operators.

Element 8: System Evaluation, Capacity Assurance and Capital Improvements

The Plan must include procedures and activities for:

- Routine evaluation and assessment of system conditions;
- Capacity assessment and design criteria;
- Prioritization or corrective actions; and
- A capital improvement plan.

8.1 System Evaluation and Condition Assessment

The Plan must include procedures to:

- Evaluate the sanitary sewer system assets utilizing the best practices and technologies available;
- Identify and justify the amount (percentage) of its system for its condition to be addressed each year;
- Prioritize the condition assessment of system areas that:
    - Hold a high level of environmental consequences if vulnerable to collapse, failure, blockage, capacity issues, or other system deficiencies;
    - Are located in or within the vicinity of surface waters, sleep terrain, high groundwater elevations, and environmentally sensitive areas;
    - Are within the vicinity of a receiving water with a bacterial-related impairment on the most current Clean Water Act section 303(d) List;
- Assess the system conditions using visual observations, video surveillance and/or other comparable system inspection methods;
- Utilize observations/evidence of system conditions that may contribute to exiting of sewage from the system which can reasonably be expected to discharge into a water of the State;
- Maintain documents and recordkeeping of system evaluation and condition assessment inspections and activities; and
- Identify system assets vulnerable to direct and indirect impacts of climate change, including but not limited to; sea level rise; flooding and/or erosion due to increased storm volumes, frequency, and/or intensity; wildfires; and increased power disruptions.

8.2 Capacity Assessment and Design Criteria

The Plan must include procedures to identify system components that are experiencing or contributing to spills caused by hydraulic deficiency and/or limited capacity, including procedures to identify the appropriate hydraulic capacity of key system elements for:

- Dry-weather peak flow conditions that cause or contribute to spill events;
- The appropriate design storm(s) or wet weather events that cause or contribute to spill events;
- The capacity of key system components; and
- Identify the major sources that contribute to the peak flows associated with sewer spills.

The capacity assessment must consider:

- Data from existing system condition assessments, system inspections, system audits, spill history, and other available information;
- Capacity of flood-prone systems subject to increased infiltration and inflow, under normal local and regional storm conditions;
- Capacity of systems subject to increased infiltration and inflow due to larger and/or higher-intensity storm events as a result of climate change;
- Increases of erosive forces in canyons and streams near underground and above-ground system components due to larger and/or higher-intensity storm events;
- Capacity of major system elements to accommodate dry weather peak flow conditions, and updated design storm and wet weather events; and
- Necessary redundancy in pumping and storage capacities.

8.3 Prioritization of Corrective Action

The findings of the condition assessment and capacity assessments must be used to prioritize corrective actions. Prioritization must consider the severity of the consequences of potential spills.

8.4 Capital Improvement Plan

The capital improvement plan must include the following items:

- Project schedules including completion dates for all portions of the capital improvement program;
- Internal and external project funding sources for each project; and

- Joint coordination between operation and maintenance staff, and engineering staff/consultants during planning, design, and construction of capital improvement projects; and interagency coordination with other impacted utility agencies.

8.1 System Evaluation and Condition Assessment

The District routinely evaluates the system to assess the condition. Based on these evaluation projects are created to address system deficiencies or defects. The system is evaluated by results of preventative maintenance work orders at lift stations, routine CCTV of pipelines, routine inspection on manholes and routing cleaning of lines. The District cleans its gravity sewer mains on a 3-year cleaning cycle. The District conducts CCTV inspections of its main sewer lines on a 4-year frequency. The District conducts CCTV inspections of its lower lateral sewer lines on a 15-year frequency. These cycles have approximate timelines. Pipeline condition is assessed using NASSCO's PACP and LACP programs. Cleaning and CCTV results are compiled and projects created to address issues found. Mostly common results are pipeline rehabilitation projects. 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 manhole rehabilitation capital program. A complex set of Preventative Maintenance work orders allows field personnel 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. Based on these inspections, capital projects are developed to upgrade or replace critical components of the lift stations.

8.2 Capacity Assessment and Design Criteria

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 is discharged 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 has been modeled using Innovyze® InfoSewer® computerized hydraulic modeling software. Carollo Engineering was contracted to calibrate and analyze the District's hydraulic model and published their findings in TSD Sewer System Hydraulic Model Update Report in 2019.

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 Prioritization of Corrective Action

The findings of the condition assessment and capacity assessments must be used to prioritize corrective actions. Prioritization must consider the severity of the consequences of potential spills.

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 $350,000 bi-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.

The hydraulic model 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.

Currently, the District is recalibrating the hydraulic model to include the additional of overflow tanks at the major lift stations. Based on the results the District will prioritize the lift station upgrade projects and gravity sewer line upsizing. Priority will be assigned based on the severity of the consequence of a potential spill. The hydraulic model results are to be evaluated in Q4 2026.

8.4 Capital Improvement Plan

The District has identified the following projects based on condition assessment throughout the years. A complete list of capital projects identified between fiscal year 21/25 and 26/30 are presented on the following pages.

Supplement 8-1: Capital Improvement Program FY21-FY25

Capital Improvement Project	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	Status
Vehicle Storage Expansion Construction	925,000	-	-	-	-	Complete
Town Paving Project - Manhole Adjustments	120,000	-	120,000	-	120,000	
Install/Replace/Upgrade existing long laterals Tahoe Donner	100,000	-	100,000	-	100,000	Project cancelled
Easement Acquisitions	75,000	-	-	75,000	-	Placeholder as needed
Lift Station Electrical Upgrade	50,000	50,000	50,000	50,000	50,000	Completed upgrades at all Donner Lake Stations
Alder Creek Electrical Retrofit	50,000	-	-	-	-	Complete
TSD Manhole Rehabilitation Projects	50,000	-	~~50,000~~	50,000	-	Moved to FY 24
Drywell Cathotic Protection Coating - LS 5	35,000	-	-	-	-	Complete
Pipeline Rehabilitation	150,000	~~150,000~~	150,000	-	~~150,000~~	Moved to FY21 and FY23
Lift Station 1B Upgrade Capacity	-	150,000	-	-	-	Reanalysis hydraulic model to include overflow tank capacity
Alder Creek Force Main Check Valve Upgrade	-	100,000	-	-	-	Replacement check valve in stock
Alder Creek LS Emergency Overflow Tank Expansion	-	60,000	-	-	-	Reanlaysis of project
Extending Laterals to Committed Donner Lake Lots	-	50,000	-	50,000	50,000	Requires additional research
Donner Lake Sub Station Plumbing Replacement	-	10,000	-	-	10,000	Station investigation reports replacement in FY27
Foxmead/River Park LS Upgrade	-	-	250,000	-	-	Moved to FY25/26
Lahontan Lift Station Upgrade for Capacity	-	-	100,000	100,000	100,000	Complete
Conversion of Telemetry phone lines to Radio	-	-	60,000	-	-	Master plan for communication to be completed in FY26
Flow Meter Upgrades (Schaffer's Mill Road)	-	-	25,000	-	-	Complete
Donner Creek Bypass System	-	-	-	250,000	250,000	Review and research bypass options
Drywell Cathodic Protection Upgrade	-	-	-	10,000	-	Complete
Collection System Infrastructure Projects Subtotal	1,555,000	570,000	905,000	585,000	830,000	

Supplement 8-2: Capital Improvement Program FY26-FY30

Capital Improvement Project	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	Status
SCADA Upgrade	250,000	-	-	-	-	Scheduled for Q3/Q4 of 2026
Town Paving Project - Manhole Adjustments	275,000	250,000	250,000	250,000	250,000	
Upgrade Lift Stations Communications	100,000	100,000	100,000	-	-	Project underway
Coachland Wet Well Rehabilitation	100,000	-	-	-	-	Scheduled for September
Glenshire Lift Stations Control Upgrades	100,000	-	-	-	-	In design
Foxmead LS Upgrade	75,000	325,000				Feasability sudy in progress
Admin Server Upgrade	75,000	-	-	-	-	
Drywell Coating - All Drywells	50,000	50,000	50,000	-	-	
District Website Update	45,000	-	-	-	25,000	
Backup Recovery Servery	35,000	-	-	-	-	
Pipeline Rehabilitation	-	350,000	-	350,000	-	
Alder Creek LS Emergency Solutions	-	200,000	-	-	-	
District Master Plan & Lift Station Master Plan	-	200,000				
TSD Manhole Rehabilitation Projects	-	150,000	-	150,000		
Schussing Lift Station Control Upgrade	-	150,000	-	-	-	
Donner Lake Sub Station Plumbing Replacement	-	50,000	-	-	-	
Electrical Upgrade for EV Fleet Requirements	-	35,000	150,000	-	-	
Replace Pumps and Motors Alder Creek	-		250,000		-	
Easement Acquisitions	-	-	75,000	-	75,000	
Donner Creek Bypass System	-		-	500,000	500,000	
Corporate Yard Parking Lot Slurry	-		-	-	75,000	
Collection System Infrastructure Projects Subtotal	1,195,000	1,860,000	875,000	1,250,000	925,000	

Additionally, the District has identified the following projects based on capacity analysis from the hydraulic model. The projects will be reviewed in FY26.

Table 8-1: Potential CIP Projects Based on FY25 Hydraulic Model

CAPITAL PROJECT	FY26	FY27	FY28	FY29	FY30
Pipes					
Pipeline Capacity Expansion - CT09-B28	-	90,000	-	-	-
Pipeline Capacity Expansion - TD24-A07	-	100,000	-	-	-
Pipeline Capacity Expansion - CT07-A08	-	-	50,000	-	-
Pipeline Capacity Expansion - CT07-A08a	-	-	120,000	-	-
Extending Laterals to Committed Donner Lake Lots	-	-	-	50,000	-
Total Pipes	-	190,000	170,000	50,000	-
Lift Stations					
Lahontan Lift Station Upgrade for Capacity - LAH3	-	250,000	-	-	-
Lahontan Lift Station Upgrade for Capacity - LAH3-FM	-	200,000	-	-	-
Lahontan Lift Station Upgrade for Capacity - LAH4	-	-	250,000	-	-
Lahontan Lift Station Upgrade for Capacity - LAH5	-	-	-	250,000	-
Lift Station 1B Upgrade Capacity	-	-	-	-	275,000
Total Lift Stations	-	450,000	250,000	250,000	275,000
Fleet					
Hydrojetting Truck - O&M/Cleaning (1)	-	-	-	-	-
Total Fleet	-	-	-	-	-
Facilities					
Administration Building Expansion Design	-	-	-	-	250,000
Total Facilities	-	-	-	-	250,000
TOTAL CAPITAL EXPENDITURES	-	640,000	420,000	300,000	525,000

Element 9: Monitoring, Measurement, and Program Modifications

The Plan must include an Adaptive Management section that addresses Plan-implementation effectiveness and the steps for necessary Plan improvement, including:

- Maintaining relevant information, including audit findings, to establish and prioritize appropriate Plan activities;
- Monitoring the implementation and measuring the effectiveness of each Plan element;
- Assessing the success of the preventative operation and maintenance activities;
- Updating Plan procedures and activities, as appropriate, based on results of monitoring and performance evaluations; and identifying and illustrating spill trends, including frequency, locations and estimated volumes.

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 Spills	Number by Underlying Cause per 100 Miles
Repeat Spills	Number by Address
Response Time	Minutes per Spill after Notification
Pump Station Spills	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 2015 through 2024. 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.

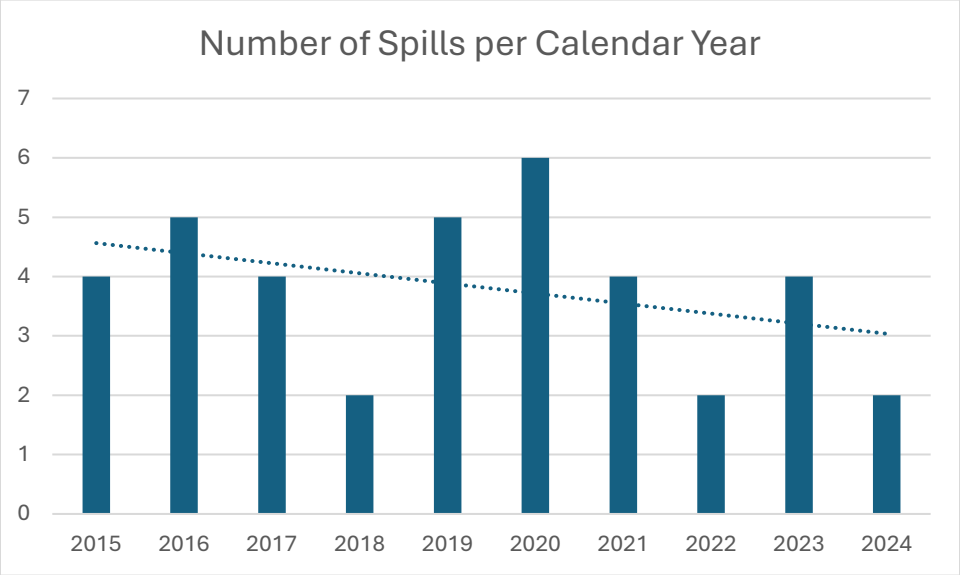


Figure 9-1: Spills per Fiscal Year

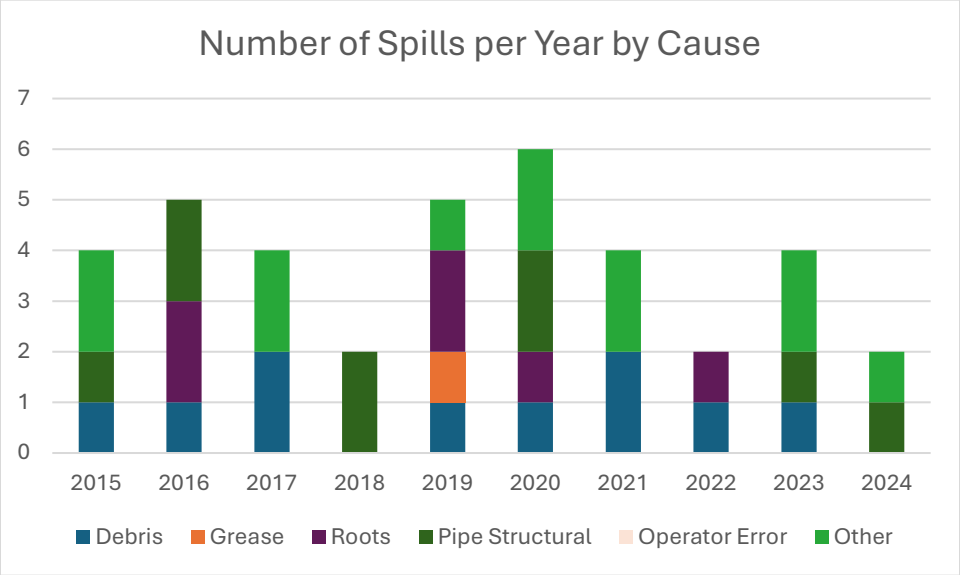


Figure 9-2: Spills per Fiscal Year by Cause

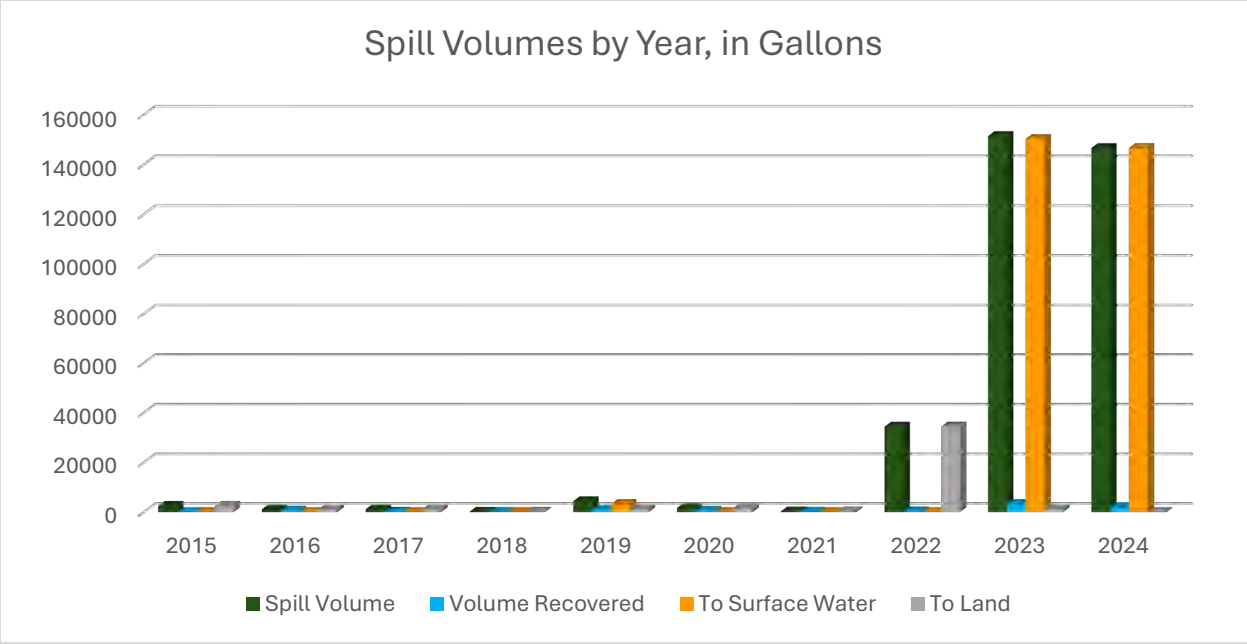


Figure 9-3: Historical Spill and Recovered Volumes by Fiscal Year

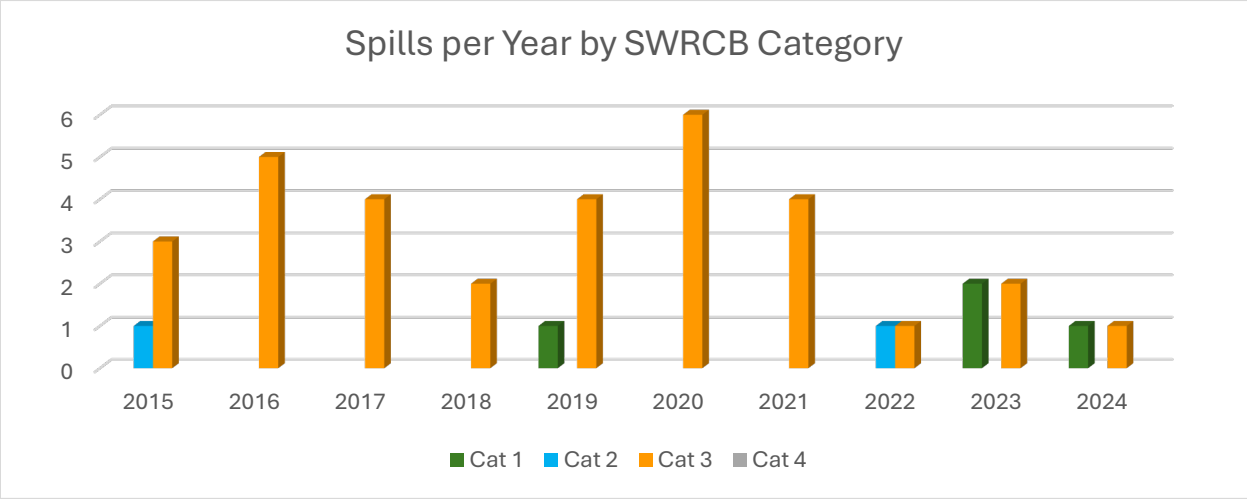


Figure 9-4: Spills by SWRCB Categories per Fiscal Year

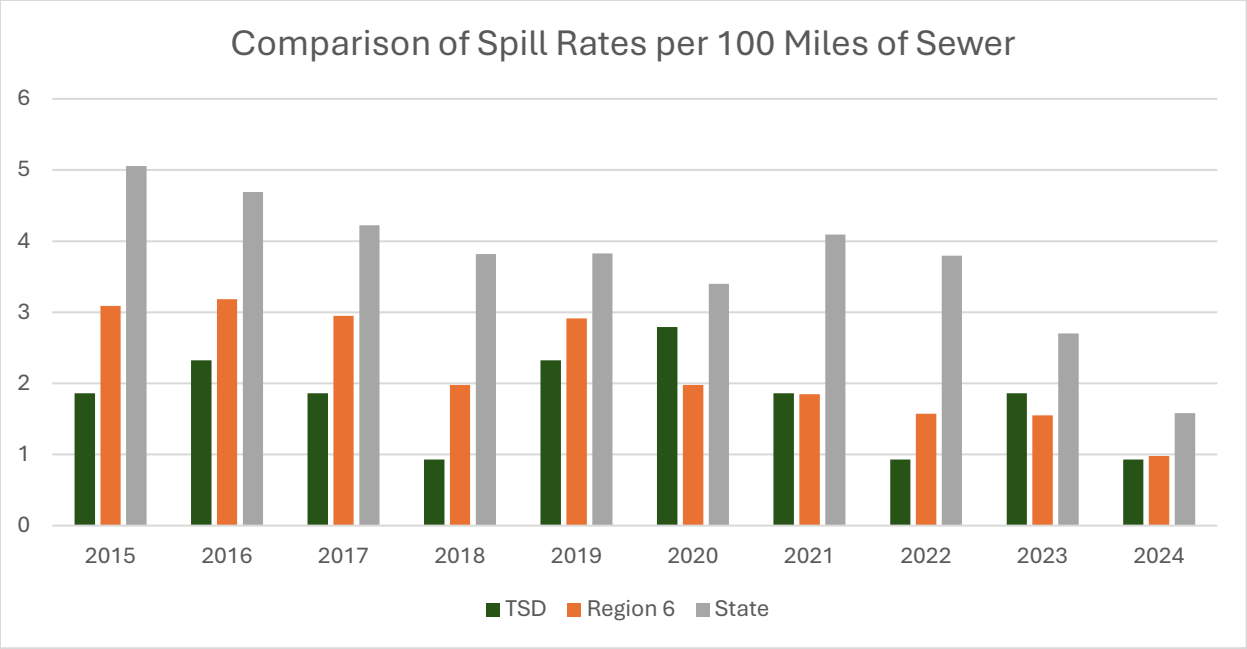


Figure 9-5: Comparison of Spill Rate per 100 Miles of Sewer

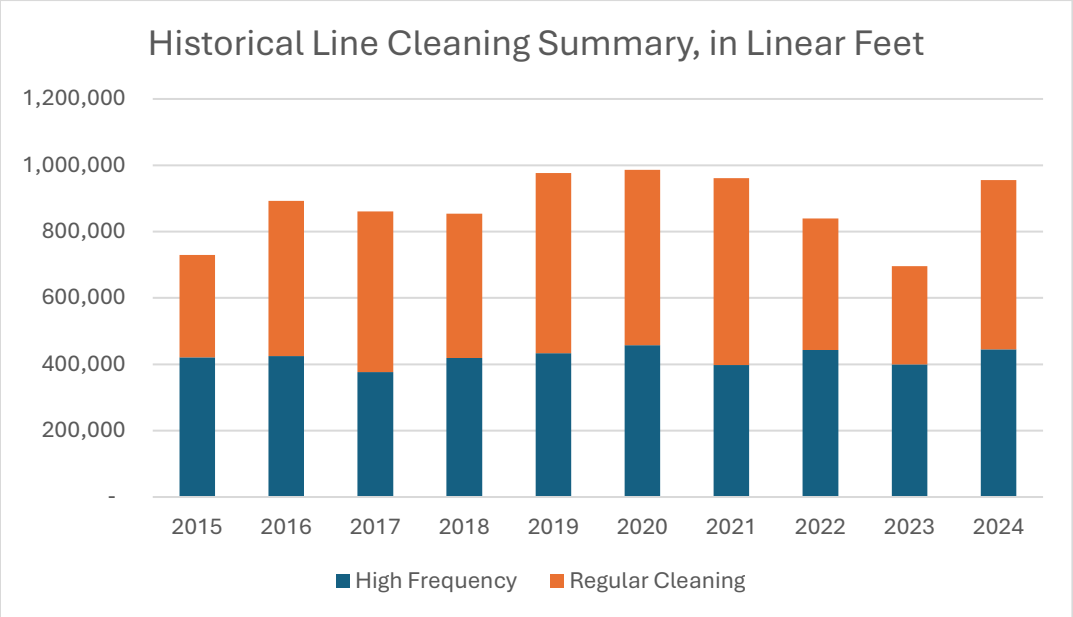


Figure 9-6: Historical Line Cleaning Summary

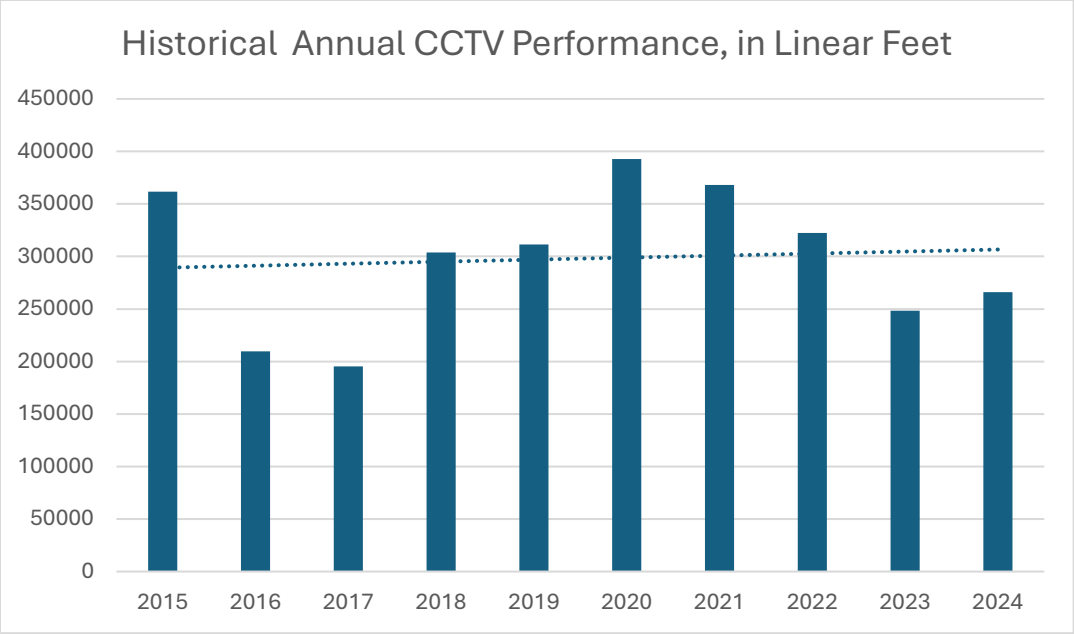


Figure 9-7: Historical Annual CCTV Performance

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 Spill data as of December 31, 2024 for WDID 6SSO11120

Element 10: Internal Audits

> The Plan shall include internal audit procedures, appropriate to the size and performance of the system, for the Enrollee to comply with section 5.4 (Sewer System Management Plan Audits) of this General Order.

The Reissued WDR requires the District to conduct an internal audit of its SERP, and implementation of its Plan, at a minimum frequency of once every three years from the original adoption date. The District's sewer system operators must be involved in completing the audit. At a minimum, the audit must:

- Evaluate the implementation and effectiveness of the Enrollee's SSMP in preventing spills;
- Evaluate the Enrollee's compliance with this general order;
- Identify SSMP deficiencies in addressing ongoing spills and discharges to waters of the State; and
- Identify necessary modifications to the SSMP to correct deficiencies.

The Enrollee shall submit a compete audit report that includes:

- Audit findings and recommended corrective actions;
- A statement that sewer system operators' input on the audit findings has been considered; and

A proposed schedule for the Enrollee to address the identified deficiencies. The District's most recent audit was conducted and completed on February 2, 2025. The audit was conducted by Fischer Compliance LLC, with input from the Engineering, O&M and Risk departments, including sewer system operators. The complete Audit Report can be found in Appendix B.

Element 11: Communication Program

The Plan must include procedures for the Enrollee to communicate with:

- The public for:
  - Spills and discharges resulting in closures of public areas, or that enter a source of drinking water, and
  - The development, implementation, and update of its Plan, including opportunities for public input to Plan implementation and updates.
- Owners/operators of systems that connect into the Enrollee's system, including satellite systems, for:
  - System operation, maintenance, and capital improvement-related activities.

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 for coordinating 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 regularly provides the Board at scheduled monthly meetings, with an O&M Report which is included in the public meeting minutes and placed on the District website. The information includes the performance measures listed in Element 9: Monitoring, Measurement, and Program Modifications, and Operations performance results, and is compiled following the end of the calendar year in the Annual O&M Production Report.

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 meetings are documented and filed with the District.

Appendices

Appendix A: Sewer System Management Plan Adoption Documents

Appendix B: Sewer System Management Audit Reports

Appendix C: Sewer System Management Change Plan Log

Appendix D: Spill Emergency Response Plan (SERP)

Appendix E: Water Quality Monitoring Program

Appendix A: Sewer System Management Plan Adoption Documents

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Appendix B: Sewer System Management Audit Report

Excerpts for Certificate and Executive Summary from

Sewer System Management Plan (SSMP) Audit Report

8/2/2021 to 8/2/2024

Sanitary Sewer Collection System:

Waste Discharge ID (WDID): #6SSO11120

REVIEWED AND APPROVED BY:

Blake Tresan, General Manager-Chief Engineer
Legally Responsible Official

Truckee Sanitary District
Sanitary Sewer Collection System

(Signed)

PREPARED BY:

FISCHER COMPLIANCE LLC
PRACTICES THAT COMPLY


FISCHER LLC
COMPLIANCE
PRACTICES THAT COMPLY
CERTIFICATE
OF COMPLETION
August 2, 2021 to August 2, 2024
SEWER SYSTEM MANAGEMENT PLAN AUDIT
• Regulatory review, agency expectations and compliance best practices
• Regional Water Quality Control Board inspector expectations
• Completion of State Water Board Pre-Inspection Questionnaire
• Completion of Compliance Evaluation Inspection (CEI)
• Findings/Best Practice Recommendations for further improving agency program effectiveness, compliance, and resilience
James Fischer
James Fischer, PE
NPDES Compliance Inspector

FISCHER COMPLIANCE LLC
PRACTICES THAT COMPLY

January 27, 2025
AL: Mr. Blake Tresan, General Manager-Chief Engineer
Legally Responsible Official
12304 Joerger Drive
Truckee, CA 96161

Dear Mr. Tresan,

We are pleased to present the 2021-2024 Sewer System Management Plan (SSMP) Audit Report for the Truckee Sanitary District. The Audit meets and exceeds compliance with the Reissued WDR (State Water Board, Water Quality Order No. 2022-0103-DWQ, Attachment D-10 and Specifications 5.4). The Audit shed light on many existing and successful best practices and presents additional areas to address with the Reissued WDR.

Detailed desktop and field reviews incorporating USEPA/Water Board Compliance Evaluation Inspection (CEI) procedures, including comprehensive interviews with management and field staff were relied upon for generating the Audit findings and best practice recommendations. With completion of the Audit, the District becomes one of the few leading systems to be comprehensively evaluated under the Reissued WDR ahead of the required deadline.

We recommend utilizing the SSMP Audit developed in checklist format as a fully customized roadmap for improving SSMP compliance, implementation, and effectiveness. The District should complete Appendix 3 (SSMP Implementation Plan/Schedule) as soon as practical for addressing necessary improvements to reduce spills and potential enforcement exposure.

We look forward to providing continued Reissued WDR compliance support for the District.

Sincerely,

James Fischer

James Fischer, P.E.
Principal, Creden5aled U.S. EPA NPDES Compliance Inspector

PART 1 – EXECUTIVE SUMMARY

The Truckee Sanitary District (District) is charged with complying the State Water Resources Control Board (SWRCB) General Reissued Waste Discharge Requirements (WDR) for Sanitary Sewer Systems ("Reissued WDR", Order No. 2022-0103-DWQ). The Reissued WDR replaced the original 2006 WDR (Order No. 2006-003-DWQ and its Monitoring and Reporting Program, Order No. 2013-0058-EXEC), which became effective on June 5, 2023.

The Reissued WDR requirements are the strictest sewer regulations in the country requiring a proactive approach for operations, maintenance, and management of sanitary sewer collection system to reduce or eliminate sewer spills. Attachment D-10 of the Reissued WDR requires periodic SSMP Audits to be completed by the District at least every three years.

To comply with the SSMP Audit requirements, Fischer Compliance LLC in collaboration with District management completed a Sewer System Management Plan (SSMP) Audit covering Aug 2, 2021 through Aug 2024 (due for approval by District management and uploading to CIWQS no later than 6 months, by 2/2/2025).

This Audit report meets and exceeds the minimum requirements specified in the Reissued WDR (Attachment D-10 and Specifications 5.4), scaled to the size/complexity of the District's sewer system. This includes evaluating the SSMP implementation and effectiveness, compliance with the Reissued WDR, and identifying deficiencies in addressing ongoing spills.

REGULATORY BACKGROUND

2006 WDR:

To provide a consistent, statewide regulatory approach to address sewage spills, the State Water Resources Control Board (State Water Board) adopted Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, Order No. 2006-0003 (SSS WDRs), on Aug 2, 2006. All public agencies that own or operate a sanitary sewer system that is comprised of more than one mile of pipes or sewer lines that convey wastewater to a publicly owned treatment facility were required to apply for coverage under the Order.

2022 WDR:

The 2006 WDR was rescinded and replaced with a "Reissued WDR" (Order No. 2022-0103-DWQ), adopted on December 5, 2023 which became effective on 6/5/2023. The Reissued WDR updates many aspects of the 16-year-old Order and includes several new requirements for Sewer System Management Plans.

SSMP AUDIT REQUIREMENTS

This section provides details about the SSMP Audit requirements mandated by the Reissued WDR. An SSMP is a spill reduction/mitigation plan that lays the foundation for how a District implements its work programs, assesses effectiveness of its maintenance program, and provides resilience to bounce-back from emergencies, upsets, and scrutiny by regulators conducting a Compliance Evaluation Inspection (CEI) or formal spill investigation.
The Reissued WDR includes the following specific requirements for completion of SSMP Internal Audits:

Specifications 5.4 (Sewer System Management Plan Audits, page 19):

"The Enrollee shall conduct an internal audit of its Sewer System Management Plan, and implementation of its Plan, at a minimum frequency of once every three years. The audit must be conducted for the period after the end of the Enrollee's last required audit period. ***Within six months after the end of the required 3-year audit period,*** *the Legally Responsible Official shall submit an audit report into the online CIWQS Sanitary Sewer System Database per the requirements in section 3.10 (Sewer System Management Plan Audit Reporting Requirements) of Attachment E1 of this General Order. Audit reports submitted to the CIWQS Sanitary Sewer System Database will be viewable only to Water Boards staff.*

The internal audit shall be appropriately scaled to the size of the system(s) and the number of spills. The Enrollee's sewer system operators must be involved in completing the audit. At minimum, the audit must:

- *Evaluate the implementation and effectiveness of the Enrollee's Sewer System Management Plan in preventing spills.*
- *Evaluate the Enrollee's compliance with this General Order.*
- *Identify Sewer System Management Plan deficiencies in addressing ongoing spills and discharges to waters of the State; and*
- *Identify necessary modifications to the Sewer System Management Plan to correct deficiencies.*

The Enrollee shall submit a complete audit report that includes:

- *Audit findings and recommended corrective actions.*
- *A statement that sewer system operators' input on the audit findings has been considered; and*
- *A proposed schedule for the Enrollee to address the identified deficiencies."*

Attachment D-10 (Internal Audits, page D-10):

The Plan shall include internal audit procedures, appropriate to the size and performance of the system, for the Enrollee to comply with section 5.4 (Sewer System Management Plan Audits) of this General Order."

SSMP AUDITING PROCEDURES

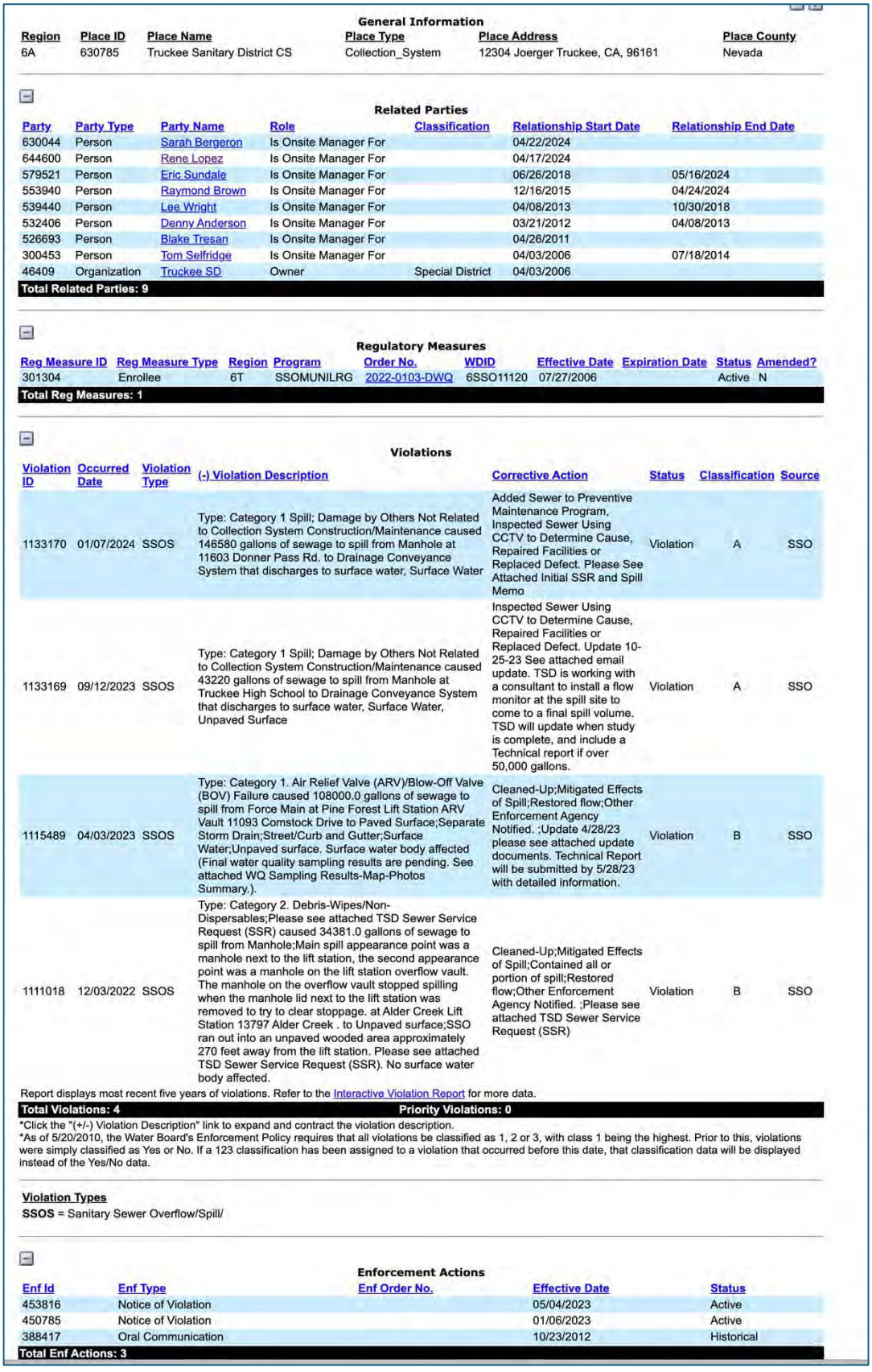
A comprehensive SSMP Audit was completed in partnership with managers responsible for providing the auditing team with all data requests and information evaluated in the project. The following key elements were reviewed for completion of the Audit:

- Assessment of the District's existing SSMP
- Detailed interviews with District collection system management and field staff operators
- Completion of a Compliance Evaluation Inspection (CEI) mirroring procedures established and implemented by U.S. EPA and the Water Board staff assessing compliance and taking enforcement for noncompliance with the California Water Code, Federal Clean Water Act, and the Reissued WDR (see Appendix 1)
- Review of District spill reports, system data, and other documentation
- Guidelines and recommendations for SSMPs (see Appendix 5, incorporated throughout the Audit Report for thoroughness) prepared and published by the Bay Area Clean Water Agencies (BACWA) posted on the SWRCB's website.

COLLECTION SYSTEM INFORMATION

The District operates a sanitary sewer system that serves a full-_me population of approximately 17,000 and encompasses approximately 39 square miles in Placer and Nevada Counties. 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, 4419 manholes, 16 miles of force mains, forty-four (44) lip stations, and 24 sewer flow metering sites. The lip stations include twenty (20) large lip stations and twenty-four (24) small lip stations. The sewer pipelines range in size from four (4) inches to twenty-four (24) inches in diameter. The District is responsible for seventy-five (75 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.

Figure 1 below provides a "Facility-At-A-Glance report providing publicly-available information from the State Water Board's database for the system. The purpose of the report is to convey current staffing and present the official regulatory measures information for the collection system including identification of historic violations determined by the Regional Water Board, list inspection data and any past enforcement actions. The District has a total of 3 informal enforcement actions between 2012 and 2023 taken by the Regional Board (Lahontan) to date.



General Information

Region	Place ID	Place Name	Place Type	Place Address	Place County
6A	630785	Truckee Sanitary District CS	Collection_System	12304 Joerger Truckee, CA, 96161	Nevada

Related Parties

Party	Party Type	Party Name	Role	Classification	Relationship Start Date	Relationship End Date
630044	Person	Sarah Bergeron	Is Onsite Manager For		04/22/2024	
644600	Person	Rene Lopez	Is Onsite Manager For		04/17/2024	
579521	Person	Eric Sundale	Is Onsite Manager For		06/26/2018	05/16/2024
553940	Person	Raymond Brown	Is Onsite Manager For		12/16/2015	04/24/2024
539440	Person	Lee Wright	Is Onsite Manager For		04/08/2013	10/30/2018
532406	Person	Denny Anderson	Is Onsite Manager For		03/21/2012	04/08/2013
526693	Person	Blake Tresan	Is Onsite Manager For		04/26/2011	
300453	Person	Tom Selfridge	Is Onsite Manager For		04/03/2006	07/18/2014
46409	Organization	Truckee SD	Owner	Special District	04/03/2006	

Total Related Parties: 9

Regulatory Measures

Reg Measure ID	Reg Measure Type	Region	Program	Order No.	WDID	Effective Date	Expiration Date	Status	Amended?
301304	Enrollee	6T	SSOMUNILRG	2022-0103-DWQ	6SSO11120	07/27/2006		Active	N

Total Reg Measures: 1

Violations

Violation ID	Occurred Date	Violation Type	(-) Violation Description	Corrective Action	Status	Classification	Source
1133170	01/07/2024	SSOS	Type: Category 1 Spill; Damage by Others Not Related to Collection System Construction/Maintenance caused 146580 gallons of sewage to spill from Manhole at 11603 Donner Pass Rd. to Drainage Conveyance System that discharges to surface water, Surface Water	Added Sewer to Preventive Maintenance Program, Inspected Sewer Using CCTV to Determine Cause, Repaired Facilities or Replaced Defect. Please See Attached Initial SSR and Spill Memo	Violation	A	SSO
1133169	09/12/2023	SSOS	Type: Category 1 Spill; Damage by Others Not Related to Collection System Construction/Maintenance caused 43220 gallons of sewage to spill from Manhole at Truckee High School to Drainage Conveyance System that discharges to surface water, Surface Water, Unpaved Surface	Inspected Sewer Using CCTV to Determine Cause, Repaired Facilities or Replaced Defect. Update 10-25-23 See attached email update. TSD is working with a consultant to install a flow monitor at the spill site to come to a final spill volume. TSD will update when study is complete, and include a Technical report if over 50,000 gallons.	Violation	A	SSO
1115489	04/03/2023	SSOS	Type: Category 1. Air Relief Valve (ARV)/Blow-Off Valve (BOV) Failure caused 108000.0 gallons of sewage to spill from Force Main at Pine Forest Lift Station ARV Vault 11093 Comstock Drive to Paved Surface;Separate Storm Drain;Street/Curb and Gutter;Surface Water;Unpaved surface. Surface water body affected (Final water quality sampling results are pending. See attached WQ Sampling Results-Map-Photos Summary.).	Cleaned-Up;Mitigated Effects of Spill;Restored flow;Other Enforcement Agency Notified. ;Update 4/28/23 please see attached update documents. Technical Report will be submitted by 5/28/23 with detailed information.	Violation	B	SSO
1111018	12/03/2022	SSOS	Type: Category 2. Debris-Wipes/Non-Dispersables;Please see attached TSD Sewer Service Request (SSR) caused 34381.0 gallons of sewage to spill from Manhole;Main spill appearance point was a manhole next to the lift station, the second appearance point was a manhole on the lift station overflow vault. The manhole on the overflow vault stopped spilling when the manhole lid next to the lift station was removed to try to clear stoppage. at Alder Creek Lift Station 13797 Alder Creek . to Unpaved surface;SSO ran out into an unpaved wooded area approximately 270 feet away from the lift station. Please see attached TSD Sewer Service Request (SSR). No surface water body affected.	Cleaned-Up;Mitigated Effects of Spill;Contained all or portion of spill;Restored flow;Other Enforcement Agency Notified. ;Please see attached TSD Sewer Service Request (SSR)	Violation	B	SSO

Report displays most recent five years of violations. Refer to the Interactive Violation Report for more data.

Total Violations: 4 **Priority Violations: 0**

*Click the "(+/-) Violation Description" link to expand and contract the violation description.
*As of 5/20/2010, the Water Board's Enforcement Policy requires that all violations be classified as 1, 2 or 3, with class 1 being the highest. Prior to this, violations were simply classified as Yes or No. If a 123 classification has been assigned to a violation that occurred before this date, that classification data will be displayed instead of the Yes/No data.

Violation Types

SSOS = Sanitary Sewer Overflow/Spill/

Enforcement Actions

Enf Id	Enf Type	Enf Order No.	Effective Date	Status
453816	Notice of Violation		05/04/2023	Active
450785	Notice of Violation		01/06/2023	Active
388417	Oral Communication		10/23/2012	Historical

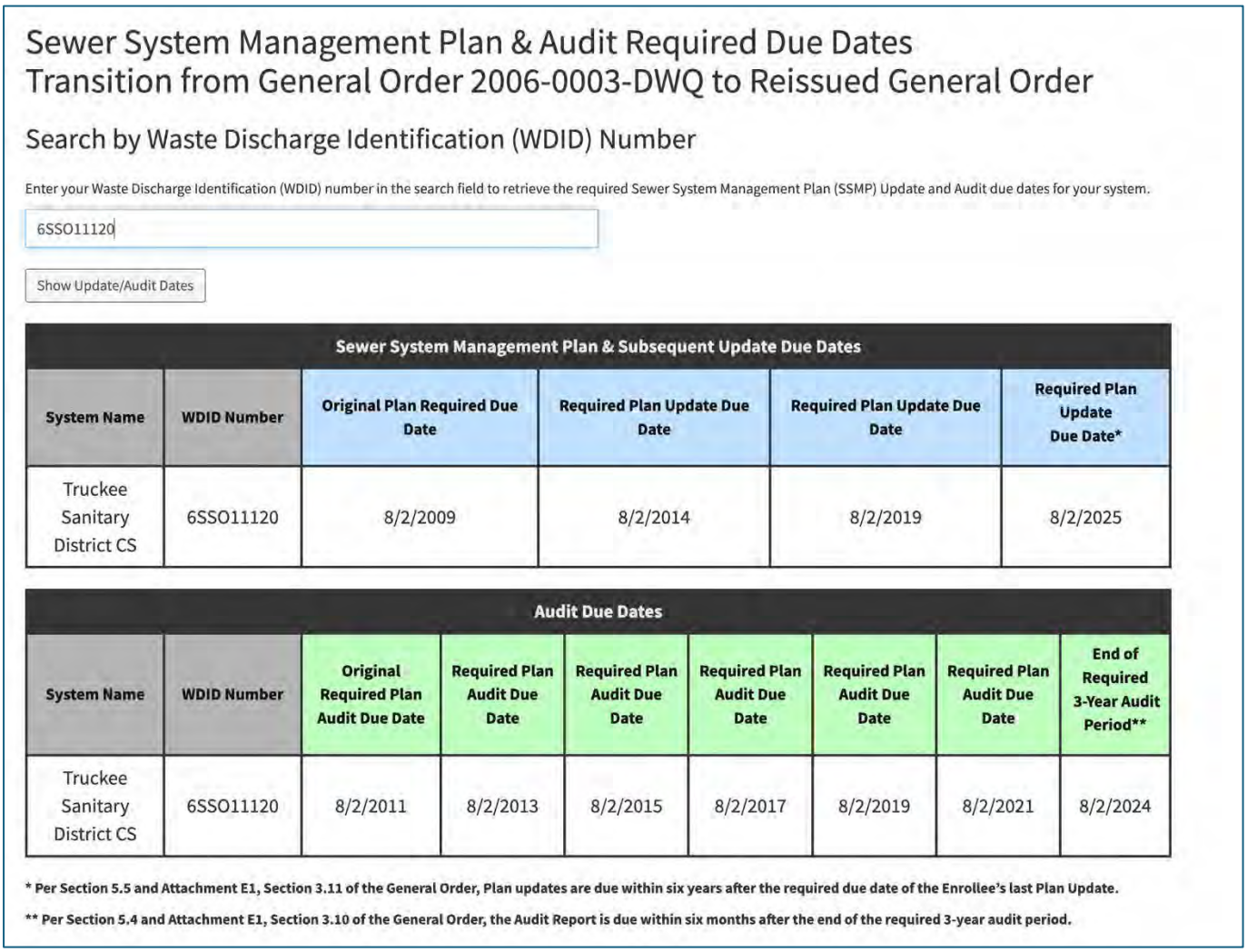
Total Enf Actions: 3

Figure 1 - District Facility At-A-Glance report (downloaded from CIWQS, 1/22/25)

SSMP/AUDIT DUE DATES

This section provides an overview of upcoming due dates for the District to update its SSMP and complete its next SSMP Audit. Figure 4 below displays a summary of the upcoming due dates for the District posted on the State Water Board's online Lookup Tool (due 8/2/2025 for its 2025 SSMP Update and by 2/2/25 for its next required SSMP Audit, 6 months aper the end of the Audit period shown in the table).

Figure 2 displays the District's upcoming due dates using the State Water Board's lookup tool for required due dates for its next SSMP Update and SSMP Audit as required by the Reissued WDR.



Sewer System Management Plan & Audit Required Due Dates
Transition from General Order 2006-0003-DWQ to Reissued General Order

Search by Waste Discharge Identification (WDID) Number

Enter your Waste Discharge Identification (WDID) number in the search field to retrieve the required Sewer System Management Plan (SSMP) Update and Audit due dates for your system.

6SSO11120

Show Update/Audit Dates

Sewer System Management Plan & Subsequent Update Due Dates

System Name	WDID Number	Original Plan Required Due Date	Required Plan Update Due Date	Required Plan Update Due Date	Required Plan Update Due Date*
Truckee Sanitary District CS	6SSO11120	8/2/2009	8/2/2014	8/2/2019	8/2/2025

Audit Due Dates

System Name	WDID Number	Original Required Plan Audit Due Date	Required Plan Audit Due Date	Required Plan Audit Due Date	Required Plan Audit Due Date	Required Plan Audit Due Date	Required Plan Audit Due Date	End of Required 3-Year Audit Period**
Truckee Sanitary District CS	6SSO11120	8/2/2011	8/2/2013	8/2/2015	8/2/2017	8/2/2019	8/2/2021	8/2/2024

* Per Section 5.5 and Attachment E1, Section 3.11 of the General Order, Plan updates are due within six years after the required due date of the Enrollee's last Plan Update.

** Per Section 5.4 and Attachment E1, Section 3.10 of the General Order, the Audit Report is due within six months after the end of the required 3-year audit period.

Figure 2- District SSMP Update/Audit Due Dates (SWRCB website)

SPILL PERFORMANCE

This section provides an overview to showcase District spill performance information including trends and benchmarks to allow a comparison of the District's performance against other collection system agencies within the Regional Water Board area and State.

Certified Spills (2007-2024)

- Figure 3 below and Appendix 2A-2C provide more information for sewer managers to view their current and historical spill performance and help them compare how they compare with the regional and state spill rates and other collection systems in the region.

SEARCH CRITERIA: [REFINE SEARCH] [NEW SEARCH] [GLOSSARY]
Collection_System (**Truckee Sanitary District CS**)
WDID (**6SSO11120**)
Date Range: Start_Date (**08/02/2021**) End_Date (**08/02/2024**)

DRILLDOWN HISTORY: [GO BACK TO LISTING OF COLLECTION SYSTEMS]
Truckee Sanitary District CS
Agency: Truckee SD

General Information

Region	Place ID	Place Name	CS Category	Place Address	Place County
6A	630785	Truckee Sanitary District CS	Municipal(Public)	12304 Joerger Truckee CA 96161	Nevada

Collection System Spill Summary

Operational Indices: Truckee Sanitary District CS

Spill Rate Indice (spills/100mi/yr)

	Category 1			Category 2		Category 3	
	Main System	Laterals	Other	Main System	Other	Main System	Other
Truckee Sanitary District CS	0.43	0.0	0.0	0.14	0.0	0.14	0.0
State Municipal(Public) Average	1.9	8.24	1.14	1.89	2.85	3.42	0.75
Region Municipal Average	0.48	0.0	0.15	7.58	0.22	14.0	0.16

Net Volume Spills Indice (gallons/1000 Capita/yr)

	Category 1			Category 2		Category 3	
	Main System	Laterals	Other	Main System	Other	Main System	Other
Truckee Sanitary District CS	5787.0	0.0	0.0	674.42	0.0	0.99	0.0
State Municipal(Public) Average	8971.05	265.7	3452.8	265.8	2603.82	89.35	55.22
Region Municipal Average	1951.88	0.0	12.56	136.87	29.6	4.64	0.0

Figure 3 - District CIWQS Operational Report (2021-2024)

SSMP AUDIT FINDINGS

This section provides a high-level summary of the SSMP Audit findings (see Tables 1 and 2 below) for incorporation into the District's 2025 SSMP Update due on or before 8/2/2025. The summary provides quick-reference details to all key Audit findings for management and staff to facilitate implementation for addressing all identified violations and areas of concern with the Reissued WDR.

Table 1 Summary of District SSMP Audit Findings (Reissued WDR, ATTACHMENTS)

SSMP AUDIT FINDINGS (ATTACHMENTS)							
WDR Reqs.	**Best Practices**		**Violations**		**Areas of Concern**		**Audit References**
A . D-1		1		3		0	See Element 1 Analysis/Findings and Appendix 1
A . D-2		0		0		0	See Element 2 Analysis/Findings and Appendix 1
A . D-3		0		0		3	See Element 3 Analysis/Findings and Appendix 1
A . D-4		2		0		4	See Element 4 Analysis/Findings and Appendix 1
A . D-5		0		0		0	None
A . D-6		4		0		3	See Element 6 Analysis/Findings and Appendix 1
A . D-7		1		0		1	See Element 7 Analysis/Findings and Appendix 1
A . D-8		1		0		0	See Appendix 1 best practice finding
A . D-9		0		0		0	None
A . D-10		0		o		0	See Element 10 Analysis/Findings and Appendix 1
A . D-11		1		0		0	See Appendix 1 best practice finding
A . E1		1		22		0	See E1 Analysis/Findings and Appendix 1
Totals		**10**		**26**		**11**	**See all Elements and Appendix 1**

Table 2 Summary of SSMP Audit Findings (Reissued WDR, SPECIFICATIONS)

SSMP AUDIT FINDINGS (ATTACHMENTS)							
WDR Specs.	**Best Practices**		**Violations**		**Areas of Concern**		**Audit References**
5.1 (LRO)		0		0		0	None
5.2 (SSMP 1)		0		0		0	None
5.3 (SSMP 2)		0		0		0	None
5.4 (Audits)		0		0			See Element 10 Analysis/Findings and Appendix 1
5.6 (Resilience)		0		0		1	See Element 8 Analysis/Findings and Appendix 1
5.10 (Resources)		0		0		0	None
5.11 (Performance)		0		0			None
5.12 (SERP)		0		0			None
5.13 (NMRR)		0		22		0	See Element E1 Analysis/Findings and Appendix 1
5.14 (Private spills)		0		1		0	None
5.15 (Repor5ng)		1		0		0	None
5.19 (Proper O/M)		0		0		4	See Element 4 Analysis/Findings and Appendix 1
Totals		**1**		**22**		**5**	**See individual Element Analysis/Findings**

AUDIT CONCLUSIONS

The SSMP Audit completed by Fischer Compliance LLC in collaboration with District management and field operations staff shed light on many existing successful work programs in place and includes identified violations and areas of concern with the Reissued WDR which must be addressed to reduce potential enforcement liability/exposure for the District. When comparing the District spill data/metrics performance with other collection systems in the region, the District performs well.

Detailed Auditing procedures incorporating review of questionnaires, the District's existing SSMP, interviews and other data were relied on for generating the detailed Audit findings for documenting the District's SSMP compliance, implementation, and effectiveness. To facilitate the project and improve effectiveness of the Audit process, the District dedicated an internal staff person for managing the project, responding to questions/data requests, and provide regular communications to auditors in every phase of the project.

Several specific technical recommendations along with an implementation plan/schedule were generated for helping the District get a jump start on updating its SSMP, many months ahead of schedule before its due date on 8/2/2025. The Audit also revealed several areas to provide an advantage to help prepare the District for regulatory compliance inspections and improve SSMP effectiveness. This includes providing insights for the District to reflect on additional ways for further improving existing work programs and spill reduction measures.

Appendix 1 serves as the heart of the Audit containing detailed Compliance Evaluation Inspection (CEI) reports for supporting findings and conclusions. Appendix 2 allows the District and regulators to evaluate spill performance and other data to help compare the District's performance against other collection systems in the region. Appendix 3 includes a checklist to help the District outline and track progress to address the Audit findings, refine updating of the District's SSMP (due by 8/2/2025), and provide an overall roadmap for focusing priorities and attention with the system over the next several years. Appendix 4-5 provide additional references for assisting the District with more tools for evaluating system effectiveness, tracking performance, and reviewing compliance differences between the 2006 and 2022 WDRs.

POST-AUDIT RECOMMENDATIONS

The District should complete Appendix 3 (SSMP Implementation Plan/Schedule) as soon as practical to commit to ongoing/future improvements to reduce the District's enforcement liability exposure. This exercise also provides valuable information for management to help expedite completion of the District's required 2025 SSMP Update due by 8/2/2025.

Appendix C: Sewer System Management Plan Change Log

LOG OF SSMP CHANGES			
Approval Date	SSMP Element #	Description of Change / Revision Made	Person Authorizing Change
07/2025	1.	A comprehensive update was completed for the SSMP update for 08/2025	SS
07/2025	1.1	A comprehensive update was completed for the SSMP update for 08/2025	SS
07/2025	1.2	A comprehensive update was completed for the SSMP update for 08/2025	SS
07/2025	1.3	A comprehensive update was completed for the SSMP update for 08/2025	SS
07/2025	2.	A comprehensive update was completed for the SSMP update for 08/2025	SS
07/2025	3.	A comprehensive update was completed for the SSMP update for 08/2025	SS
07/2025	4.	A comprehensive update was completed for the SSMP update for 08/2025	SS
07/2025	4.1	A comprehensive update was completed for the SSMP update for 08/2025	SS
07/2025	4.2	A comprehensive update was completed for the SSMP update for 08/2025	SS
07/2025	4.3	A comprehensive update was completed for the SSMP update for 08/2025	SS
07/2025	4.4	A comprehensive update was completed for the SSMP update for 08/2025	SS
07/2025	5.	A comprehensive update was completed for the SSMP update for 08/2025	SS
07/2025	5.1	A comprehensive update was completed for the SSMP update for 08/2025	SS

07/2025	5.2	A comprehensive update was completed for the SSMP update for 08/2025	SS
07/2025	6.	A comprehensive update was completed for the SSMP update for 08/2025	SS
07/2025	7.	A comprehensive update was completed for the SSMP update for 08/2025	SS
07/2025	8.	A comprehensive update was completed for the SSMP update for 08/2025	SS
07/2025	8.1	A comprehensive update was completed for the SSMP update for 08/2025	SS
07/2025	8.2	A comprehensive update was completed for the SSMP update for 08/2025	SS
07/2025	8.3	A comprehensive update was completed for the SSMP update for 08/2025	SS
07/2025	8.4	A comprehensive update was completed for the SSMP update for 08/2025	SS
07/2025	9.	A comprehensive update was completed for the SSMP update for 08/2025	SS
07/2025	10.	A comprehensive update was completed for the SSMP update for 08/2025	SS
07/2025	11.	A comprehensive update was completed for the SSMP update for 08/2025	SS

Appendix D: Spill Emergency Response Plan (SERP)

Truckee Sanitary District

Sewer Spill Emergency Response Plan

Effective Date: _____

Revised Date: _____

Approved by: _____

Signature: _____

Date: _____

Prepared by: David Patzer
DKF Solutions Group, LLC
dpatzer@dkfsolutions.com

TABLE OF CONTENTS

1. PURPOSE

The purpose of the Truckee Sanitary District Spill Emergency Response Plan (SERP) is to support a prompt, orderly and effective response to spills (sanitary), reduce spill volumes, and collect information for prevention of future spills. A "spill" in this document is defined, by State Water Board Order No. WQ 2022-0103-DWQ as a discharge of sewage from any portion of a sanitary sewer system due to a sanitary sewer system overflow, operational failure, and/or infrastructure failure.

The SERP provides guidelines for District personnel to follow in responding to, cleaning up, reporting, and properly documenting spills that may occur within the District's service area. This SERP satisfies the State Water Board Order No. WQ 2022-0103-DWQ, which require wastewater collection agencies to have a Spill Emergency Response Plan.

Additionally, the SERP outlines procedures for responding to sanitary sewer spill backups into structures as required by the District's insurer. "Backup" is a term typically used by insurers to describe property damage resulting from exposure and contact to untreated or partially treated sewage.

2. POLICY

The District's employees are required to report all spills from agency owned sewer mains and publicly owned laterals found and to take the appropriate action to secure the spill area, properly report to the appropriate regulatory agencies, relieve the cause of the spill, 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's goal is to respond to sewer system spills as soon as possible following notification. The District will follow reporting procedures regarding sewer spills as set forth by the Lahontan Regional Water Quality Control Board and the State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR).

3. DEFINITIONS AS USED IN THIS SERP

ANNUAL REPORT: An Annual Report (previously termed as Collection System Questionnaire in previous State Water Board Order No. 2006-0003-DWQ) is a mandatory report in which the District provides a calendar-year update of its efforts to prevent spills.

BASIN PLAN: A Basin Plan is a water quality control plan specific to a Regional Water Quality Control Board (Regional Water Board), that serves as regulations to: (1) define and designate beneficial uses of surface and groundwaters, (2) establish water quality objectives for protection of beneficial uses, and (3) provide implementation measures.

BENEFICIAL USES: The term "Beneficial Uses" is a Water Code term, defined as the uses of the waters of the State that may be protected against water quality degradation. Examples of beneficial uses include but are not limited to, municipal, domestic, agricultural, and industrial supply; power generation; recreation; aesthetic enjoyment; navigation; and preservation and enhancement of fish, wildlife, and other aquatic resources or preserves.

CALIFORNIA INTEGRATED WATER QUALITY SYSTEM (CIWQS): CIWQS is the statewide database that provides for mandatory electronic reporting as required in State and Regional Water Board-issued waste discharge requirements.

DATA SUBMITTER: A Data Submitter is an individual designated and authorized by the District's Legally Responsible Official to enter spill data into the online CIWQS Sanitary Sewer System Database. A Data Submitter does not have the

authority of a Legally Responsible Official to certify reporting entered into the online CIWQS Sanitary Sewer System Database.

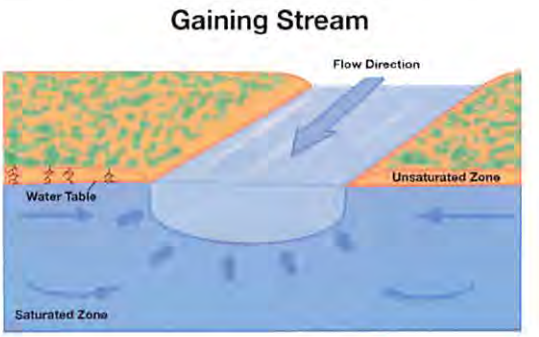
DRAINAGE CONVEYANCE SYSTEM: A drainage conveyance system is a publicly- or privately-owned separate storm sewer system, including but not limited to drainage canals, channels, pipelines, pump stations, detention basins, infiltration basins/facilities, or other facilities constructed to transport stormwater and non-stormwater flows.

ENVIRONMENTALLY SENSITIVE AREA: An environmentally sensitive area is a designated agricultural and/or wildlife area identified to need special natural landscape protection due to its wildlife or historical value.

EXFILTRATION: Exfiltration is the underground exiting of sewage from a sanitary sewer system through cracks, offset or separated joints, or failed infrastructure due to corrosion or other factors.

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

HYDROLOGICALLY CONNECTED: Two waterbodies are hydrologically connected when one waterbody flows, or has the potential to flow, into the other waterbody. For the purpose of the SWRCB Order, groundwater is hydrologically connected to a surface water when the groundwater feeds into the surface water. See image, right. The surface waterbody in this example is termed a gaining stream as it gains flow from surrounding groundwater.



LATERAL (INCLUDING LOWER AND UPPER LATERAL): A lateral is an underground segment of smaller diameter pipe that transports sewage from a customer's building or property (residential, commercial, or industrial) to the District's main sewer line in a street or easement. Upper and lower lateral boundary definitions are subject to local jurisdictional codes and ordinances, or private system ownership. A lower lateral is the portion of the lateral located between the sanitary sewer system main, and either the property line, sewer clean out, curb line, established utility easement boundary, or other jurisdictional locations. An upper lateral is the portion of the lateral from the property line, sewer clean out, curb line, established utility easement boundary, or other jurisdictional locations, to the building or property.

LEGALLY RESPONSIBLE OFFICIAL: A Legally Responsible Official is an official representative, designated by the District, with authority to sign and certify submitted information and documents required by State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR).

MAINLINE SEWER: Refers to District wastewater collection system piping downstream of the sewer laterals that is not a private sewer lateral connection to a building.

MAINTENANCE HOLE OR MANHOLE: Refers to an engineered structure that is intended to provide access to a sanitary sewer for maintenance and inspection

NOTIFICATION OF A SPILL: Refers to the time at which the District becomes aware of a spill event through observation or notification by the public or other source.

NUISANCE: For the purpose of the State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR), a nuisance, as defined in Water Code section 13050(m), is anything that meets all of the following requirements:

- 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;
- 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; and
- Occurs during, or as a result of, the treatment or disposal of wastes.

PREVENTATIVE MAINTENANCE: Refers to maintenance activities intended to prevent failures of the wastewater collection system facilities (e.g. cleaning, CCTV, inspection).

PRIVATE LATERAL SEWAGE SPILL – Spills that are caused by blockages or other problems within a privately-owned lateral.

PRIVATE SANITARY SEWER SYSTEM: A private sanitary sewer system is a sanitary sewer system of any size that is owned and/or operated by a private individual, company, corporation, or organization. A private sanitary sewer system may or may not connect into a publicly owned sanitary sewer system.

PRIVATE SEWER LATERAL: A private sewer lateral is the privately-owned lateral that transports sewage from private property(ies) into a sanitary sewer system.

POTENTIAL TO DISCHARGE, POTENTIAL DISCHARGE: Potential to Discharge, or Potential Discharge, means any exiting of sewage from a sanitary sewer system which can reasonably be expected to discharge into a water of the State based on the size of the sewage spill, proximity to a drainage conveyance system, and the nature of the surrounding environment.

RECEIVING WATER: A receiving water is a water of the State that receives a discharge of waste.

SANITARY SEWER SYSTEM: A sanitary sewer system is a system that is designed to convey sewage, including but not limited to, pipes, manholes, pump stations, siphons, wet wells, diversion structures and/or other pertinent infrastructure, upstream of a wastewater treatment plant headworks, including:

- Laterals owned and/or operated by the District;
- Satellite sewer systems; and/or
- Temporary conveyance and storage facilities, including but not limited to temporary piping, vaults, construction trenches, wet wells, impoundments, tanks, and diversion structures.

For purpose of the State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR), sanitary sewer systems include only systems owned and/or operated by the District.

SATELLITE SEWER SYSTEM: A satellite sewer system is a portion of a sanitary sewer system owned or operated by a different owner than the owner of the downstream wastewater treatment facility ultimately treating the sewage.

SEWAGE: Sewage, and its associated wastewater, is untreated or partially treated domestic, municipal, commercial and/or industrial waste (including sewage sludge), and any mixture of these wastes with inflow or infiltration of stormwater or groundwater, conveyed in a sanitary sewer system.

SEWER BACKUP A sanitary sewer spill resulting from a sanitary sewer system overflow, operational failure, and/or infrastructure failure in a publicly owned sewer system, with an appearance point and subsequent discharge into a structure.

SPILL: A spill is a discharge of sewage from any portion of a sanitary sewer system due to a sanitary sewer system overflow, operational failure, and/or infrastructure failure. Exfiltration of sewage is not considered to be a spill under the State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR) if the exfiltrated sewage remains in the subsurface and does not reach a surface water of the State.

- **Category 1 Spill:**

  A Category 1 spill is a spill of any volume of sewage from or caused by a sanitary sewer system regulated under the State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR) that results in a discharge to:

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

  Any spill volume not recovered from a drainage conveyance system is considered a discharge to surface water, unless the drainage conveyance system discharges to a dedicated stormwater infiltration basin or facility.

  A spill from a District-owned and/or operated lateral that discharges to a surface water is a Category 1 spill; the District shall report all Category 1 spills per section 3.1 of Attachment E1 (Notification, Monitoring, Reporting and Recordkeeping Requirements) of State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR).

- **Category 2 Spill**

  A Category 2 spill is a spill of 1,000 gallons or greater, from or caused by a sanitary sewer system regulated under the State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR) that does not discharge to a surface water. A spill of 1,000 gallons or greater that spills out of a lateral and is caused by a failure or blockage in the sanitary sewer system, is a Category 2 spill.

- **Category 3 Spill**

  A Category 3 spill is a spill of equal to or greater than 50 gallons and less than 1,000 gallons, from or caused by a sanitary sewer system regulated under the State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR) that does not discharge to a surface water. A spill of equal to or greater than 50 gallons and less than 1,000 gallons, that spills out of a lateral and is caused by a failure or blockage in the sanitary sewer system is a Category 3 spill.

- **Category 4 Spill**

  A Category 4 spill is a spill of less than 50 gallons, from or caused by a sanitary sewer system regulated under the State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR) that does not discharge to a surface water. A spill of less than 50 gallons that spills out of a lateral and is caused by a failure or blockage in the sanitary sewer system is a Category 4 spill.

TRAINING: Training is in-house or external education and guidance needed that provides the knowledge, skills, and abilities to comply with the State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR).

WASH DOWN WATER: Wash down water is water used to clean a spill area.

WASTE: Waste, as defined in Water Code section 13050(d), includes sewage and any and all other waste substances, liquid, solid, gaseous, or radioactive, associated with human habitation, or of human or animal origin, or from any producing, manufacturing, or processing operation, including waste placed within containers of whatever nature prior to, and for purposes of, disposal.

WATERS OF THE STATE: Waters of the State are surface waters or groundwater within boundaries of the state as defined in Water Code section 13050(e), in which the State and Regional Water Boards have authority to protect beneficial uses. Waters of the State include, but are not limited to, groundwater aquifers, surface waters, saline waters, natural washes and pools, wetlands, sloughs, and estuaries, regardless of flow or whether water exists during dry conditions. Waters of the State include waters of the United States.

WATERS OF THE UNITED STATES: Waters of the United States are surface waters or waterbodies that are subject to federal jurisdiction in accordance with the Clean Water Act.

WATER QUALITY OBJECTIVE: A water quality objective is the limit or maximum amount of pollutant, waste constituent or characteristic, or parameter level established in statewide water quality control plans and Regional Water Boards' Basin Plans, for the reasonable protection of beneficial uses of surface waters and groundwater and the prevention of nuisance.

4. STATE REGULATORY REQUIREMENTS FOR ELEMENT 6, SPILL EMERGENCY RESPONSE PLAN

The Sewer System Management Plan (SSMP) must include an up to date Spill Emergency Response Plan (SERP) to ensure prompt detection of and response to spills to reduce spill volumes and collect information for prevention of future spills. The SERP must include procedures to:

- Notify primary responders, appropriate local officials, and appropriate regulatory agencies of a spill in a timely manner;
- Notify other potentially affected entities (for example, health agencies, water suppliers, etc.) of spills that potentially affect public health or reach waters of the State;
- Comply with the notification, monitoring and reporting requirements of State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR), State law and regulations, and applicable Regional Water Board Orders;
- Ensure that appropriate staff and contractors implement the SERP and are appropriately trained;
- Address emergency system operations, traffic control and other necessary response activities;
- Contain a spill and prevent/minimize discharge to waters of the State or any drainage conveyance system;
- Minimize and remediate public health impacts and adverse impacts on beneficial uses of waters of the State;
- Remove sewage from the drainage conveyance system;
- Clean the spill area and drainage conveyance system in a manner that does not inadvertently impact beneficial uses in the receiving waters;
- Implement technologies, practices, equipment, and interagency coordination to expedite spill containment and recovery;
- Implement pre-planned coordination and collaboration with storm drain agencies and other utility agencies/departments prior, during, and after a spill event;
- Conduct post-spill assessments of spill response activities;
- Document and report spill events as required in State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR); and
- Annually, review and assess effectiveness of the Spill Emergency Response Plan, and update it as needed.

The Sewer System Management Plan is available to the public at https://truckeesan.wpengine.com/public-documents/.

5. SPILL EMERGENCY RESPONSE PLAN OBJECTIVES

The Spill Emergency Response Plan includes measures to protect public health and the environment. The District will respond to spills from its system(s) in a timely manner that minimizes water quality impacts and nuisance by:

- Immediately stopping the spill and preventing/minimizing a discharge to waters of the State;
- Intercepting sewage flows to prevent/minimize spill volume discharged into waters of the State;
- Thoroughly recovering, cleaning up and disposing of sewage and wash down water; and
- Cleaning publicly accessible areas while preventing discharges to waters of the State.

Additionally, District Staff will:

- Work safely;
- Properly document each spill event in a separate file including photos and/or video where applicable;
- Collect information for prevention of future spills;
- Minimize public contact with the spilled wastewater;
- Mitigate the impact of the spill;
- Meet the regulatory reporting requirements;
- Evaluate the causes of failure related to spills;
- Perform post-spill response evaluation for adherence to procedures and effectiveness of response; and
- Revise response procedures, modify maintenance practices or provide additional training based on the results from the debrief and failure analysis of spills, if needed.

6. SPILL DETECTION AND NOTIFICATION

ref. State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR), *ATTACHMENT D, Element 6, Page D-6*

The processes that are employed to notify the District of the occurrence of a spill include: observation by the public, receipt of an alarm, or observation by District staff during the normal course of their work.

6.1 LIFT STATION ALARMS

The District operates 44 wastewater lift stations. In the event of a station failure the SCADA alarm system is activated and the District is contacted. To prevent spills, wastewater from the wet well can either be pumped into a vacuum truck for disposal to a nearby sanitary sewer manhole or bypassed around the station into the sanitary sewer system.

6.2 PUBLIC OBSERVATION

Public observation is the most common way that the District is notified of blockages and spills. Contact numbers and information for reporting sewer spills and backups are on the District's website: https://www.truckeesan.org. The District's telephone number for reporting sewer problems is 530-587-3804.

- Normal Work Hours: Sewer service requests are answered by the District Admin staff during business staff. Staff will take the callers info and nature of complaint. This information is relayed to the

Collection System Supervisor or Superintendent and they will dispatch available staff. Collection staff will perform an investigation and note their findings and actions taken, if any, and this info is entered into Lucity (CMMS).

- After Hours: The main number rolls over to an answering service after hours. The answering service will take the callers info and nature of complaint. This information is relayed to the On Call employee. The On Call employee will perform an investigation and note their findings and actions taken, if any, and this info is entered into Lucity (CMMS).

When calls are received, either during normal work hours or after hours, the individual receiving the call will collect and include in the spill event file, at a minimum, the following information to record the complaint:

- Date, time, and method of notification,
- Date and time the complainant first noticed the spill, if available,
- Narrative description of the complaint, including any information the caller provided regarding whether the spill has reached surface waters or a drainage conveyance system, if available,
- Complainant's contact information, if available, and
- Final resolution of the complaint.

If the spill or backup is not in the District's service area the individual receiving the call provides the customer with the contact information for the responsible agency, and then notifies that agency.

If the spill or backup is in the District's service area, the Field Crew (during business hours) or standby employee (after hours) will respond to the address of the complaint and do an investigation. If the complaint is not a spill, the crew members' findings and actions taken, if any, are logged into the District Computerized Maintenance Management System (CMMS) using a field laptop if available. If a field laptop is not available, the information will be entered into the CMMS when the employee returns to the District.

If the complaint is a spill, the crew member will complete the Sanitary Sewer Spill and Backup Response Workbook and then enter the findings and actions taken into the District's CMMS.

6.3 DISTRICT STAFF OBSERVATION

District staff conducts periodic inspections of its sewer system facilities as part of their routine activities. Any problems noted with the sewer system facilities are reported to appropriate District staff that, in turn, responds to emergency situations. Work orders are issued to correct non-emergency conditions.

6.4 CONTRACTOR OBSERVATION

Contractors working on the District sewer system will be informed of contractor spill response procedures. Contractors working on behalf of property owners will be provided spill response information by District Office when they pull a permit. The following procedures are to be followed in the event that a contractor/plumber causes or witnesses a sanitary sewer spill. If the contractor/plumber causes or witnesses a spill they should:

1. Immediately notify the District at (530) 587-3804 and provide the following information if available:
    a. Date, time contractor first noticed the spill
    b. Description of the contractor's observation, including any information regarding whether the spill has reached surface waters or a drainage conveyance system

c. Contractor's contact information

2. Protect storm drains.
3. Protect the public.
4. Direct ALL media and public relations requests to the General Manager – Chief Engineer.

6.5 NO OBSERVATION

If there are no witnesses or no call was received for a spill, the District staff will contact nearby residences or business owners in the vicinity of the spill, in an attempt to obtain information that brackets a given start time that the spill began. This information will be collected and documented on the Sanitary Sewer Spill Report in the Sanitary Sewer Spill/Backup Response Workbook.

7. SPILL RESPONSE PROCEDURES *(Ref.* State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR), *ATTACHMENT D Element 6 page D-6)*

7.1 SEWER SPILL/BACKUP RESPONSE SUMMARY

The District will respond to spills as soon as feasible following notification of a spill/backup.

If it is not possible that the spill/backup is due to a failure in the District-owned/maintained sewer lines the Field Crew performs the following:

- Follows the instructions in the Sanitary Sewer Spill/Backup Response Workbook.
- If the customer is not home the Field Crew completes the Door Hanger and leaves it on the customer's door.
- If the customer is home the Field Crew:
    - Explains that the blockage is in the customer's lateral and the District does not have legal authority to maintain or perform work on privately owned laterals.
    - Recommends to the customer that they hire a licensed contractor to clear their line.
    - Gives the customer the Your Responsibilities as a Private Property Owner pages from the Sanitary Sewer Spill/Backup Response Workbook.

If it is possible that the spill/backup is due to a failure in the District-owned/maintained sewer lines the Field Crew:

- Follows the instructions in the Sanitary Sewer Spill/Backup Response Workbook.
- Notifies the Collection System Supervisor, Collection System O/M Superintendent, or the General Manager of the incident.
- Relieves blockage and cleans impacted areas.
- Forwards the completed Sanitary Sewer Spill/Backup Response Workbook to the Collection System O/M Superintendent.

The Collection System O/M Superintendent, General Manager-Chief Engineer, and the Assistant General Manager - District Engineer performs required regulatory reporting in accordance with the Sanitary Sewer Spill/Backup Response Workbook's Regulatory Reporting section.

If the overflow has impacted private property, the Field Crew:

- Follows the instructions in the Sanitary Sewer Spill/Backup Response Workbook.
- Provides the customer with forms and information as indicated in the Sanitary Sewer Spill/Backup Response Workbook.
- Forwards the completed Sanitary Sewer Spill/Backup Response Workbook to the Collection System O/M Superintendent.

The Collection System O/M Superintendent notifies the General Manager – Chief Engineer of incident.

The General Manager – Chief Engineer or designee:

- Reviews incident reports, claim form and other incident information and forwards, as appropriate, to Allied Public Risk Claims.
- Communicates with claimant as appropriate.
- Communicates with Allied Public Risk Claims to adjust and administer the claim to closure.
- Properly documents in writing all activities and communications before approving the final event file.

7.2 FIRST RESPONDER PRIORITIES

The first responder's priorities are:

- Prompt response to spills.
- To follow safe work practices.
- To respond promptly with the appropriate and necessary equipment.
- To reduce spill volume and contain the spill wherever feasible.
- To restore the flow as soon as practicable.
- To minimize public access to and/or contact with the spilled sewage.
- To promptly notify the Collection System Supervisor, Collection System O/M Superintendent, or the General Manager in event of a spill needing additional resources, and/or impacting environmentally sensitive areas.
- To return the spilled sewage to the sewer system.
- To restore the area to its original condition (or as close as possible). Collect information for the prevention of future spills.
- Properly document the spill and response activities on the forms provided in the Sanitary Sewer Spill/Backup Response Workbook, including photos and/or video where practicable.

7.3 SAFETY

The first responder is responsible for following safety procedures at all times. Special safety precautions must be observed when performing sewer work. There may be times when District personnel responding to a sewer

system event are not familiar with potential safety hazards peculiar to sewer work. In such cases it is appropriate to take the time to discuss safety issues, consider the order of work, and check safety equipment before beginning response activities.

If the first responders encounter access restrictions or unsafe conditions that prevent its compliance with spill response requirements or monitoring requirements in State Water Board Order No. WQ 2022-0103-DWQ (SSS-WDR), the District provides written documentation of access restrictions and/or safety hazards in the corresponding required report.

7.4 INITIAL RESPONSE

The first responder must respond to the site of the spill/backup and visually check for potential sewer stoppages. The first responder will:

- Note arrival time at the site of the spill/backup.
- Verify the existence of a public sewer system spill or backup.
- Identify and assess the affected area and extent of spill.
- Assess the spill location(s) and spread using photography, global positioning system (GPS), and other best available tools.
- Contact caller if time permits.
- Document the spill according to the requirements described in Section 10 of this SERP, including taking photos and/or videos of overflowing manhole(s)/cleanout(s).
- Take steps to contain, recover, and return the spill to the sanitary sewer as feasible. For procedures refer to the Sanitary Sewer Spill/Backup Response Workbook.
- Protect surface waters to the extent practicable. For procedures refer to the Sanitary Sewer Spill/Backup Response Workbook.
- Implement pre-planned coordination and collaboration with storm drain agencies and other utility agencies/departments prior, during, and after a spill event.

7.5 INITIATE SPILL CONTAINMENT MEASURES

The first responder will attempt to contain as much of the spilled sewage as possible using the following steps:

- Determine the immediate destination of the overflowing sewage.
- Plug storm drains using air plugs, sandbags, and/or plastic mats to contain the spill, whenever appropriate. If spilled sewage has made contact with the storm drainage system, attempt to contain the spilled sewage by plugging downstream storm drainage facilities.
- Contain/direct the spilled sewage using dike/dam or sandbags.
- Vacuum retrieve sewage whenever practicable.
- Pump around the blockage/pipe failure.

Containment efforts will be documented. For procedures refer to the Sanitary Sewer Spill/Backup Response Workbook.

7.6 RESTORE FLOW

Using the appropriate cleaning equipment, set up downstream of the blockage and hydro-clean upstream from a clear manhole. Attempt to remove the blockage from the system and observe the flows to ensure that the blockage does not reoccur downstream. If the blockage cannot be cleared within a reasonable time from arrival, or sewer requires construction repairs to restore flow, then initiate containment and/or bypass pumping. If other assistance is required, immediately contact the Collection System Supervisor, Collection System O/M Superintendent, or the General Manager. For procedures refer to the Sanitary Sewer Spill/Backup Response Workbook.

7.7 EQUIPMENT

This section provides a list of specialized equipment that may be used to support this Spill Emergency Response Plan.

- *Closed Circuit Television (CCTV) Inspection Unit* – A CCTV Inspection Unit is required to determine the root cause for all spills from gravity sewers.
- *Camera* -- A digital or disposable camera (photo, video or phone) is required to record the conditions upon arrival, during clean up, and upon departure.
- *Emergency Response Trucks* -- A utility body pickup truck, or open bed is required to store and transport the equipment needed to effectively respond to sewer emergencies. The equipment and tools will include containment and clean up materials.
- *Portable Generators, Portable Pumps, Piping, and Hoses* – Equipment used to bypass pump, divert, or power equipment to mitigate a spill.
- *Combination Sewer Cleaning Trucks* -- Combination high velocity sewer cleaning trucks with vacuum tanks are required to clear blockages in gravity sewers, vacuum spilled sewage, and wash down the impacted area following the spill event.
- *Rodding (snake) equipment for responding to lateral blockages.*
- *Air plugs, sandbags and plastic mats*
- *Spill Sampling Kits*
- *Portable Lights*

Standard operating procedures for equipment that may be necessary in the event of a sanitary sewer overflow or backup can be found in the District Server and hardcopies are kept in the Vehicle Storage Facility and On Call Truck.

8. RECOVERY AND CLEANUP *(Ref.* State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR), *Element 6, ATTACHMENT D, Page D-6)*

The recovery and cleanup phase begins immediately after the flow has been restored and the spilled sewage has been contained to the extent possible. The spill recovery and cleanup procedures are described in the following sections.

8.1 ESTIMATE THE FLOW AND VOLUME OF SPILLED SEWAGE

A variety of approaches exist for estimating the volume of a sanitary sewer spill. The Field Crew members should use the method most appropriate to the sewer overflow in question and reference the Sanitary Sewer Spill/Backup Response Workbook which provides four (4) methods:

- Eyeball Estimation Method
- Duration and Flow Rate Calculation Method
- Area/Volume Method
- Upstream Connections Method

In addition, the following will be documented on the Sewer Spill Report form:

1. Description, photographs, and GPS coordinates of the system location where the spill originated. If a single spill event results in multiple appearance points, provide GPS coordinates for the appearance point closest to the failure point and describe each additional appearance point in the spill appearance point explanation field;
2. Estimated total spill volume exiting the system;
3. Description and photographs of the extent of the spill and spill boundaries;
4. Did the spill reach a drainage conveyance system? If yes:
    - Description of the drainage conveyance system transporting the spill;
    - Photographs of the drainage conveyance system entry location(s);
    - Estimated spill volume that reached the drainage conveyance system;
    - Estimated spill volume fully recovered from the drainage conveyance system;
    - Estimated spill volume remaining within the drainage conveyance system
    - Estimated spill volume discharged to a groundwater infiltration basin or facility, if applicable;
    - Estimated spill travel time from the point of entry into the drainage conveyance system to the point of discharge into the receiving water.
5. Estimated total spill volume recovered.

8.2 RECOVERY OF SPILLED SEWAGE

Vacuum up and/or pump the spilled sewage and wash down water and discharge it back into the sanitary sewer system. Thoroughly recover and dispose of sewage and wash down water.

8.3 CLEAN-UP AND DISINFECTION

Clean up procedures will be implemented to reduce the potential for human health issues and adverse environmental impacts associated with a spill event. The procedures described are for dry weather conditions and will be modified as required for wet weather conditions. Where cleanup is beyond the capabilities of District staff, a cleanup contractor will be used.

Private Property

District crews are responsible for the cleanup when the property damage is minor in nature and is outside of private building dwellings, such as in front, side and backyards, easements, etc. In all other cases, affected property owners can call a water damage restoration contractor to complete the cleanup and restoration. If the overflow into property is the definite cause of District system failure, the property owner can call out a water damage restoration contractor to complete the cleanup and restoration. In both cases, property owners may submit a claim form.

Hard Surface Areas

Collect all signs of sewage solids and sewage-related material either by protected hand or with the use of rakes and brooms. Wash down the affected area with clean water and/or deozyme or similar non-toxic biodegradable surface disinfectant until the water runs clear. The flushing volume will be approximately three times the estimated volume of the spill. Take steps to contain and vacuum up the wastewater. Allow area to dry. Repeat the process if additional cleaning is required.

Landscaped and Unimproved Natural Vegetation

Collect all signs of sewage solids and sewage-related material either by protected hand or with the use of rakes and brooms. Wash down the affected area with clean water until the water runs clear. The flushing volume will be approximately three times the estimated volume of the spill. Either contain or vacuum up the wash water so that none is released. Allow the area to dry. Repeat the process if additional cleaning is required.

Natural Waterways

The Department of Fish and Wildlife will be notified by CalOES for spills greater than or equal to 1,000 gallons. For spills less than 1,000 gallons, contact Nevada County Environmental Health and the Placer County Environmental Health for direction.

Wet Weather Modifications

Collect all signs of sewage solids and sewage-related material either by protected hand or with the use of rakes and brooms. Omit flushing and sampling during heavy storm events (i.e., sheet of rainwater across paved surfaces) with heavy runoff where flushing is not required and sampling would not provide meaningful results.

8.4 PUBLIC NOTIFICATION

Signs will be posted and barricades put in place to keep vehicles and pedestrians away from contact with spilled sewage. Nevada County Environmental Health and Placer County Environmental Health instructions and directions regarding placement and language of public warnings will be followed. Additionally, the Collection System O/M Superintendent will use their best judgment regarding supplemental sign placement in order to protect the

public and local environment. Signs will not be removed until directed by Nevada County Environmental Health and Placer County Environmental Health.

Creeks, streams and beaches that have been contaminated as a result of a spill will be posted at visible access locations until the risk of contamination has subsided to acceptable background bacteria levels. Document the number and location of posted signs. The area and warning signs, once posted, will be checked every day to ensure that they are still in place. Photographs of sign placement will be taken.

In the event that an overflow occurs at night, the location will be inspected first thing the following day. The field crew will look for any signs of sewage solids and sewage-related material that may warrant additional cleanup activities.

When contact with the local media is deemed necessary, the General Manager – Chief Engineer or their designee will provide the media with all relevant information.

9. WATER QUALITY *(Ref.* State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR), *Element 6, Attachment A - DEFINITIONs page A-5, Attachment E1 2.3 through 2.4 pages E1-5 through E1-8)*

9.1 SURFACE WATERS OF CONCERN

The following waters of the State are in the District's service area:

- Truckee River
- Trout Creek
- Donner Creek
- Martis Creek
- Glenshire pond
- Alder Creek
- Cold Creek
- Gregory Creek
- Summit Creek
- Donner Lake
- Martis Lake
- Prosser Lake

9.2 WATER QUALITY SAMPLING AND TESTING

For sewage spills in which an estimated 50,000 gallons or greater are discharged into a surface water, the District will conduct the following water quality sampling as soon as possible but no later than **18 hours** after the District's knowledge of a potential discharge to a surface water. Collect one water sample, each day of the duration of the spill, at:

- The DCS-001 location as described in section 9.5 (Receiving Water Sampling Locations) below, if sewage discharges to a surface water via a drainage conveyance system; and/or
- Each of the three receiving water sampling locations in section 9.5 (Receiving Water Sampling Locations) below;

If the receiving water has no flow during the duration of the spill, the District must report "No Sampling Due To No Flow" for its receiving water sampling locations.

The District staff will collect water quality samples in accordance with State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR).

The District staff collecting the samples will complete the Chain of Custody prior to transferring ownership of the samples to the Western Environmental Testing (WET) Laboratory or Tahoo-Truckee Sanitation Agency (TTSA) Laboratory.

The Western Environmental Testing (WET) Laboratory or Tahoo-Truckee Sanitation Agency (TTSA) Laboratory.shall analyze the collected receiving water samples for the following constituents:

- Ammonia, and
- Fecal coliform

    - **Water Quality Objectives That Apply to All Surface Waters**
      The fecal coliform concentration during any 30-day period shall not exceed a log mean of 20/100 ml, nor shall more than 10 percent of all samples collected during any 30-day period exceed 40/100 ml. The log mean shall ideally be based on a minimum of not less than five samples collected as evenly spaced as practicable during any 30-day period. However, a log mean concentration exceeding 20/100 ml for any 30-day period shall indicate violation of this objective even if fewer than five samples were collected.
    - **Water Quality Objectives For Certain Water Bodies**
      Susanville Hydrologic Unit: The fecal coliform concentration based on a minimum of not less than five samples for any 30- day period, shall not exceed a log mean of 20/100 ml, nor shall more than 10 percent of total samples during any 30-day period exceed 75/100 ml.

Dependent on the receiving water(s), sampling of bacterial indicators shall be sufficient to determine post-spill (after the spill) compliance with the water quality objectives and bacterial standards of the California Ocean Plan or the California Inland Surface Water Enclosed Bays, and Estuaries Plan, including the frequency and/or number of post-spill receiving water samples as may be specified in the applicable plans.

The District shall collect and analyze additional samples as required by the applicable Regional Water Board Executive Officer or designee.

9.3 LAB SELECTION

Analytical Lab
Samples collected for spill response and background monitoring purposes will be analyzed at WET or TTSA Labs, which are accredited through the California State Water Resources Control Board Environmental Laboratory Accreditation Program (ELAP). ELAP provides evaluation and accreditation of environmental testing laboratories to ensure the quality of analytical data used for regulatory purposes to meet the requirements of the State's drinking water, wastewater, shellfish, food, and hazardous waste programs. The State agencies that monitor the environment use the analytical data from these accredited labs. The ELAP-accredited laboratories have demonstrated capability to analyze environmental samples using approved methods.

Getting Samples to the Lab
At all times, sample hold times identified below will be observed in accordance with the following:

Analytical Parameter	Maximum Holding Time	Required Container Type	Required Preservative	Mini-mum Amount
Ammonia (NH3 as N); SM 4500NH3 B/C or B/G	28 days	Plastic / Glass	H_2SO_4 pH <2 +0-6°C	200 mL
Coliform, Total / Fecal; SM 9221 B/E	8 hours – wastewater/storm-water 30 hours – drinking water	Plastic (sterile)	$Na_2S_2O_3$ + 0-10°C; No regulatory temp. req. for drinking water)	100 mL

Once samples are collected, they will be transported by the Field Crew to the lab to be processed.

9.4 WATER QUALITY ANALYSIS SPECIFICATIONS

Spill monitoring must be representative of the monitored activity (40 Code of Federal Regulations section 122.41(j)(1)).

Sufficiently Sensitive Methods

Sample analysis must be conducted according to sufficiently sensitive test methods approved under 40 Code of Federal Regulations Part 136 for the sample analysis of pollutants. For the purposes of State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR), a method is sufficiently sensitive when the minimum level of the analytical method approved under 40 Code of Federal Regulations Part 136 is at or below the receiving water pollutant criteria.

Environmental Laboratory Accreditation Program-Accredited Laboratories

The analysis of water quality samples required per State Water Board Order No. WQ 2022-0103-DWQ (SSS-WDR) must be performed by a laboratory that has accreditation pursuant to Article 3(commencing with section 100825) of Chapter 4 of Part 1 of Division 101 of the Health and Safety Code. (Water Code section 13176(a).) The State Water Board accredits laboratories through its Environmental Laboratory Accreditation Program (ELAP).

9.5 RECEIVING WATER SAMPLING LOCATIONS

Receiving water samples shall be collected at the following locations.

Sampling of Flow in Drainage Conveyance System (DCS) Prior to Discharge

Sampling Location	Sampling Location Description
DCS-001	A point in a drainage conveyance system before the drainage conveyance system flow discharges into a receiving water.

Receiving Surface Water Sampling (RSW)[1]

Sampling Location	Sampling Location Description
RSW-001: Point of Discharge	A point in the receiving water where sewage initially enters the receiving water.
RSW-001U: Upstream of Point of Discharge	A point in the receiving water, upstream of the point of sewage discharge, to capture ambient conditions absent of sewage discharge impacts.

Sampling Location	Sampling Location Description
RSW-001D: Downstream of Point of Discharge	A point in the receiving water, downstream of the point of sewage discharge, where the spill material is fully mixed with the receiving water.

9.6 STREAM VELOCITY MEASUREMENTS

If sampling is performed after the spill has stopped, the velocity of the impacted surface water must be determined to estimate spill travel time and select an accurate Downstream sample location. One way to measure the spill travel time is to use a velocity probe (such as a Global Water FP111-S Flow Probe) to determine the rate of flow in the water body. In cases where a water velocity probe is used, the manufacturer's instructions will be followed.

9.7 SAMPLE TYPES

Grab Samples

Grab samples are appropriate for the characterization of surface waters at a particular time and place, to provide information about minimum and maximum concentrations, and to allow for the collection of variable sample volume.

Grab samples may be collected directly into the sample container, or a clean decontaminated intermediate container may be used if a wading sample is not possible or safe. If an intermediate container is used, when in the field, double rinse the sampling device (bucket, automatic sampler) with sample water prior to collecting the sample and be sure to discard rinse water downstream of where sample will be collected. If samples are collected into a bucket and distributed into a consolidation collection container, swirl the contents of the bucket as it is being poured into the consolidation collection container to avoid settling of solids (and pour in back-and-forth pattern – *e.g.*, 1-2-3-3-2-1).

- Grab Sample: A grab sample is defined as an individual sample collected at a given time. Grab samples represent only the condition that exists at the time the sample is collected (US EPA 1977).
- Surface Grab Sample: A sample collected at the water surface (i.e., skimming) directly into the sample container or into an intermediate container such as a clean bucket. A single or discrete sample collected at a single location.

[1] The District must use its best professional judgment to determine the upstream and downstream distances based on receiving water flow, accessibility to upstream/downstream waterbody banks, and size of visible sewage plume.

Field Blanks

Field Blanks are used to evaluate the potential for contamination of a sample by site contaminants from a source not associated with the sample collected (e.g., airborne dust, etc.). Sterile, deionized water is taken into the field in a sealed container. This is the stock water. The stock water is then poured into the sample container. The containers and sample submission forms are labeled as "Field Blank." The same template selected for the test samples should be used. Field blanks are subject to the same holding time limitations as samples. The appropriate FIELD QC box on the sample Chain of Custody form should be checked.

9.8 SAMPLE LABELING AND CHAIN OF CUSTODY PROCEDURES

At a minimum, the following grab samples will be collected:

- Field Blank: See Section 9.7 for discussion.
- Upstream: A point in the receiving water, upstream of the point of sewage discharge, to capture ambient conditions absent of sewage discharge impacts.
- Source: A point in the receiving water where sewage initially enters the receiving water.
- See Section 9.6 for information on determining velocity of the surface water in order to determine the Source sample location.
- "Downstream" of spill: A point in the receiving water, downstream of the point of sewage discharge, where the spill material is fully mixed with the receiving water. This location will vary with the velocity of the surface water to be sampled (*see Section 9.6)*.

Sample labels shall be completed for each sample, using waterproof ink.

Photos or video of each sample location will be taken, properly labeled with date, time, and view direction and a map of the photo locations completed. Photos and videos shall include relevant landmarks to identify sampling locations and their surroundings.

Due to the evidentiary nature of samples collected during enforcement investigations, possession must be traceable from the time the samples are collected until they are analyzed. To maintain and document sample possession, a Surface Water Sample Chain of Custody Record (see Sewer Spill/Backup Response Workbook) must be completed. A sample is under custody if:

- It is in your possession, or
- It is in your view, after being in your possession, or
- It was in your possession and under your control to prevent tampering, or
- It is in a designated secure area.

As few people as possible should handle samples. The person taking the samples is personally responsible for the care and custody of the samples collected until they are transferred or dispatched properly.

Samples are accompanied by a chain of custody record. When transferring the possession of samples, the individuals relinquishing and receiving will sign, date, and note the time on the record. This record documents sample custody transfer from the sampler, often through another person, to the analyst at the laboratory. The samples are typically transferred to the sample-receiving custodian at the laboratory.

9.9 SAMPLING EQUIPMENT

The following are examples of sampling equipment used by the District:

- Sampling pole with fixed container
- Sampling pole with removable container
- Sampling pail and rope
- Stream velocity meter
- Grab-n-Go Sample Kit

9.10 GRAB-N-GO SAMPLING KIT

The District maintains a Grab-n-Go sampling kit located at Field Operations Building-Gold Room. The kit is inspected quarterly by the Monthly Facilities Supervisor's Checklist. Additionally, any District employee utilizing the kit is responsible for decontaminating sampling equipment and field monitoring devices and replenishing the kit.

Spill Sample Collection Kit Inventory:

- Cooler
- Surface Water Sampling SOP (in Sewer Spill/Backup Response Workbook)
- Ice Pack
- 5 Ammonia sample bottles
- 5 Bacti sample bottles
- Minimum of 20 blank sample bottle labels
- Digital camera or smart phone camera
- Latex gloves
- Safety glasses/goggles
- Waterproof Pen
- Surface Water Sampling Worksheet (in Sewer Spill/Backup Response Workbook)
- Chain of Custody form (in Sewer Spill/Backup Response Workbook)

9.11 DECONTAMINATION PROCEDURES

Removing or neutralizing contaminants from sampling equipment minimizes the likelihood of sample cross contamination, reduces or eliminates transfer of contaminants to clean areas, and prevents the mixing of incompatible substances.

Gross contamination can be removed by physical decontamination procedures. These abrasive and non-abrasive methods include the use of brushes, air and wet blasting, and high- and low- pressure water cleaning.

The decontamination procedures for the sample types and sampling equipment (other than sample bottles, which are provided to Field Crew in a "ready to be used" condition by the lab) used at the District may be summarized as follows:

1. Physical removal
2. Tap water rinse
3. Air dry

9.12 SAMPLING PROCEDURES

9.12.1 Sample Location and Identification Procedures

Samples will be collected by Field Crew. It is impossible to establish hard and fast rules concerning sampling locations. However, the following general guidelines should be applied whenever surface waters are sampled:

- The sampling location should be far enough upstream or downstream of confluences or point sources so that the surface water and spill volume is well mixed. Natural turbulence can be used to provide a good mixture.
- Samples should be collected at a location where the velocity is sufficient to prevent deposition of solids, and to the extent practical, should be in straight reach having uniform flow. All flow in the reach should be represented, so divided flow areas should be avoided and samples should be taken towards the middle of the reach where feasible.
- Sampler must always stand downstream of the collection vessel, and sample "into the current." Care must be taken to avoid introducing re-suspended sediment into the sample.

9.12.2 Surface Water Sampling Standard Operating Procedure (SOP)

The Surface Water Sampling SOP, Section G in the Sewer Spill/Backup Response Workbook, provides step-by-step procedures to collect samples and deliver them for analysis in accordance with State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR), Element 6.

9.12.3 Follow Up Sampling

Sampling will be repeated every 24 hours, or as directed by the RWQCB or the Nevada County Environmental Health and Placer County Environmental Health until such time as one of the following criteria have been met:

- The Nevada County Environmental Health and Placer County Environmental Health or the RWQCB indicates follow up sampling is no longer required, or
- Both the ammonia and bacteria levels downstream are approximately equal to or less than the upstream levels.

9.13 SAFETY AND ACCESS EXCEPTIONS

If the District encounters access restrictions or unsafe conditions that prevents its compliance with spill response requirements or monitoring requirements in State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR), the District shall provide documentation of access restrictions and/or safety hazards in the corresponding required report.

Personal safety of staff engaged in any fieldwork activity (e.g. in transit, walking or hiking, and any field activities while at the sample site) is of primary importance. Staff should never place themselves in dangerous or risky situations. Any hazards that are known by field personnel should be communicated to other members of the field crew.

Fieldwork should be postponed if there is indication that engagement in the field activity could cause bodily harm. Working during lightning storms, in heavy vegetation or poison oak, near aggressive wildlife or domestic animals, traversing steep or rugged terrain, unstable slopes or creek banks, near swiftly moving water or potential flash flood conditions, or during snowy weather is not considered "normal risk." If any member of the field crew is uncomfortable with a reasonable self-determined hazardous field condition, it is that person's responsibility to bring this to the attention of the onsite field supervisor or their supervisor. A "reasonable self-determined hazardous field condition" is defined as other than normal risk. Supervisors shall not dismiss any person's spoken concerns that field conditions are too hazardous to complete the work assignment.

The person taking the samples must have adequate protection, including protective clothing. They must wear gloves, as protection against chemical and/or bacteriological hazards, while they are sampling or handling samples that are known or suspected to be hazardous (e.g. visible solids or sheens, downstream from sewage spills, etc.), or if hands have open wounds. The type of gloves worn shall be determined by the sampling circumstance and type of pollutants expected – for instance longer gloves are needed when samples must be taken well below the surface.

When in a boat or wading in a stream and where the danger of drowning exists, a personal floatation device shall be worn at all times in addition to following the other requirements of Title 8 CCR 1602 Working Over or Near Water. Other protective measures shall be taken in accordance with District safety procedures.

Upon arrival at a sampling site, safety equipment such as signs, cones, lights, etc. shall be set out as appropriate. Vehicles shall be parked in locations and directions to minimize traffic disruption and avoid sample contamination. Photos should be ultimately taken of the placement of all safety equipment and signage.

The following guidelines apply to all fieldwork by District staff.

- No sample or measurement is worth the risk of injury.
- All staff shall use proper personnel protective gear as appropriate for the incident (e.g., life preservers, gloves, goggles, etc.)
- Field sampling crews should consist of at least two members unless otherwise approved by a supervisor.
- Be conscious of the whereabouts of rattlesnakes, mountain lions, and other dangerous animals.
- Open body wounds are entry sites for infection; take the necessary precautions for self-protection.
- If there is storm activity in the work area, wait for safer conditions to develop or postpone the sampling.
- Do not sample at night without approval from your supervisor.
- Do not trespass on private property or posted restricted public lands without prior permission and written approval from property owner or administrator.
- If strange or suspicious looking people are in the work area, either wait for them to leave or postpone the work to a later time. Do not force confrontations with strangers and back away from any confrontations with the public. Be courteous and understanding of public concerns of the situation.
- Take the necessary precautions against exposure to harmful weather conditions such as heat, wind, snow, cold, rain, etc.
- Carefully evaluate a given on-site situation to determine if the task can be performed safely.

- Streams will not be entered unless the responding employees have the necessary protective footwear (e.g. rubber boots, waders) and the footwear does not pose an additional risk to worker safety (e.g. waders filling with water if the employee slips in the stream).
- Streams will not be entered if deemed unsafe to so by the most senior employee on the responding crew and if entered, will only be done so in accordance with Title 8 CCR Section 1602 Work Over or Near Water.

9.14 SPILL TECHNICAL REPORT: Spill Technical Report for Individual Category 1 Spill in which 50,000 Gallons or Greater Discharged into a Surface Water

For any spill in which 50,000 gallons or greater discharged into a surface water, **within 45 calendar days** of the spill end date, the Collection System O/M Superintendent shall submit a Spill Technical Report to the online CIWQS Sanitary Sewer System Database. The Spill Technical Report, at minimum, must include the following information:

1. Spill causes and circumstances, including at minimum:
    - Complete and detailed explanation of how and when the spill was discovered;
    - Photographs illustrating the spill origin, the extent and reach of the spill, drainage conveyance system entrance and exit, receiving water, and post-cleanup site conditions;
    - Diagram showing the spill failure point, appearance point(s), the spill flow path, and ultimate destinations;
    - Detailed description of the methodology employed, and available data used to calculate the discharge volume and, if applicable, the recovered spill volume;
    - Detailed description of the spill cause(s);
    - Description of the pipe material, and estimated age of the pipe material, at the failure location;
    - Description of the impact of the spill;
    - Copy of original field crew records used to document the spill; and
    - Historical maintenance records for the failure location.
2. District's response to the spill:
    - Chronological narrative description of all actions taken by the District to terminate the spill;
    - Explanation of how the Sewer System Management Plan Spill Emergency Response Plan was implemented to respond to and mitigate the spill; and
    - Final corrective action(s) completed and a schedule for planned corrective actions, including:
        - Local regulatory enforcement action taken against an illicit discharge in response to this spill, as applicable,
        - Identifiable system modifications, and operation and maintenance program modifications needed to prevent repeated spill occurrences, and
        - Necessary modifications to the Emergency Spill Response Plan to incorporate lessons learned in responding to and mitigating the spill.
3. Water Quality Monitoring, including at minimum:
    - Description of all water quality sampling activities conducted;

- List of pollutant and parameters monitored, sampled and analyzed; as required in Section 9.2.
- Laboratory results, including laboratory reports;
- Detailed location map illustrating all water quality sampling points; and
- Other regulatory agencies receiving sample results (if applicable).

5. Evaluation of spill impact(s), including a description of short-term and long-term impact(s) to beneficial uses of the surface water.

9.15 TRAINING

Training will be provided in accordance with the table below:

Surface Water Sampling Training Program	
Who Is Trained to Collect Surface Water Samples?	Field Crew
Training Curriculum	At a minimum, training shall include: • The Truckee Sanitary District 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/Maintenance Log, Surface Water Sampling Report and Chain of Custody
Training Documentation	Attendees shall be required to sign-in to all training on the appropriate forms used by the District.
Refresher Training Frequency	Annual
Who is Responsible for Ensuring Training Occurs?	Collection System O/M Superintendent
Required Training Records	Employee training sign in log
Who is Responsible for Maintaining Records?	Collection System O/M Superintendent

10. NOTIFICATION, REPORTING, MONITORING AND RECORDKEEPING REQUIREMENTS

ref. ORDER WQ 2022-0103-DWQ Attachment E-1 and E-2

10.1 REPORTING REQUIREMENTS

All reporting required in State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR) must be submitted electronically to the online CIWQS Sanitary Sewer System Database (https://ciwqs.waterboards.ca.gov), unless specified otherwise in State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR). Electronic reporting may solely be conducted by a Legally Responsible Official or Data Submitter(s) previously designated by the Legally Responsible Official, as required in section 5.8 (Designation of Data Submitters) of the State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR).

The District shall report any information that is protected by the Homeland Security Act, by email to SanitarySewer@waterboards.ca.gov, with a brief explanation of the protection provided by the Homeland Security Act for the subject report to be protected from unauthorized disclosure and/or public access, and for official Water Board regulatory purposes only.

Refer to APPENDIX A for detailed reporting requirements by spill category.

10.2 REGULATOR REQUIRED NOTIFICATIONS

10.2.1 Spill Category 1: Spills to Surface Waters

Spill Requirement	Due	Method
Notification	**Within two (2) hours** of the District's knowledge of a Category 1 spill of 1,000 gallons or greater, discharging or threatening to discharge to surface waters notify the California Office of Emergency Services and obtain a notification control number.	California Office of Emergency Services at: (800) 852-7550 (Section 1 of Attachment E1 of the State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR))
Monitoring	• Conduct spill-specific monitoring; • Conduct water quality sampling of the receiving water within **18 hours** of initial knowledge of spill of 50,000 gallons or greater to surface waters.	(Section 2 of Attachment E1 of the State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR))
Reporting	• Submit Draft Spill Report **within three (3) business days** of the District's knowledge of the spill; • Submit Certified Spill Report **within 15 calendar days** of the spill end date; • Submit Technical Report **within 45 calendar days** after the spill end date for a Category 1 spill in which **50,000 gallons or greater** discharged to surface waters; and • Submit Amended Spill Report **within 90 calendar days** after the spill end date.	(Section 3.1 of Attachment E1 of the State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR))

10.2.2 Spill Category 2: Spills of 1,000 Gallons or Greater That Do Not Discharge to Surface Waters

Spill Requirements	Due	Method
Notification	**Within two (2) hours** of the District's knowledge of a Category 2 spill of 1,000 gallons or greater threatening to discharge to waters of the State: Notify California Office of Emergency Services and obtain a notification control number.	California Office of Emergency Services at: (800) 852-7550 (Section 1 of Attachment E1 of the State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR))

Monitoring	Conduct spill-specific monitoring.	(Section 2 of Attachment E1 of the State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR))
Reporting	• Submit Draft Spill Report **within three (3) business days** of the District's knowledge of the spill; • Submit Certified Spill Report **within 15 calendar days** of the spill end date; and • Submit Amended Spill Report **within 90 calendar days** after the spill end date.	(Section 3.2 of Attachment E1 of the State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR))

10.2.3 Spill Category 3: Spills of Equal or Greater than 50 Gallons and Less than 1,000 Gallons That Does Not Discharge to Surface Waters

Spill Requirements	Due	Method
Notification	Not Applicable	Not Applicable
Monitoring	Conduct spill-specific monitoring.	(Section 2 of Attachment E1 of the State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR))
Reporting	• Submit monthly Certified Spill Report to the online CIWQS Sanitary Sewer System Database within **30 calendars days** after the end of the month in which the spills occur; and • Submit Amended Spill Reports **within 90 calendar days** after the Certified Spill Report due date.	(Section 3.3 and 3.5 of Attachment E1 of the State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR))

10.2.4 Spill Category 4: Spills Less Than 50 Gallons That Do Not Discharge to Surface Waters

Spill Requirements	Due	Method
Notification	Not Applicable	Not Applicable
Monitoring	Conduct spill-specific monitoring.	(Section 2 of Attachment E1 of the State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR))

Reporting	• If, during any calendar month, Category 4 spills occur, certify monthly, the estimated total spill volume exiting the sanitary sewer system, and the total number of all Category 4 spills into the online CIWQS Sanitary Sewer System Database, within 30 days after the end of the calendar month in which the spills occurred. • Upload and certify a report, in an acceptable digital format, of all Category 4 spills to the online CIWQS Sanitary Sewer System Database, by February 1st after the end of the calendar year in which the spills occur.	(Section 3.4, 3.6, 3.7 and 4.4 of Attachment E1 of the State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR))

10.2.5 District Owned and/or Operated Lateral Spills That Do Not Discharge to Surface Waters

Spill Requirements	Due	Method
Notification	**Within two (2) hours** of the District's knowledge of a spill of 1,000 gallons or greater, from an District- owned and/or operated lateral, discharging or threatening to discharge to waters of the State: Notify California Office of Emergency Services and obtain a notification control number. Not applicable to a spill of less than 1,000 gallons.	California Office of Emergency Services at: (800) 852-7550 (Section 1 of Attachment E1 of the State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR))
Monitoring	Conduct visual monitoring.	(Section 2 of Attachment E1 of the State Water Board ORDER WQ 2022-0103-DWQ)
Reporting	• Upload and certify a report, in an acceptable digital format, of all lateral spills (that do not discharge to a surface water) to the online CIWQS Sanitary Sewer System Database, by February 1st after the end of the calendar year in which the spills occur. • Report a lateral spill of any volume that discharges to a surface water as a Category 1 spill.	(Sections 3.6, 3.7 and 4.4 of Attachment E1 of the State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR))

10.3 COMPLAINT RECORDS

The District maintains records of all complaints received whether or not they result in sanitary sewer overflows. These complaint records include, but are not limited to, records documenting how the District responded to notifications of spills. Each complaint record must, at a minimum, include the following information:

- Date, time, and method of notification,
- Date and time the complainant first noticed the spill, if available,
- Narrative description of the complaint, including any information the caller provided regarding whether the spill has reached surface waters or a drainage conveyance system, if available,
- Complainant's contact information, if available, and
- Final resolution of the complaint;

All complaint records will be maintained for a minimum of five years in Lucity, whether they result in a spill. Spill files (field notes, spill/Backup Response Workbook) hard copy files are stored in the District files.

11. POST-SPILL ASSESSMENTS OF SPILL RESPONSE ACTIVITIES

(ref. State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR), *Element 6, ATTACHMENT D, Page D-6)*

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

As soon as possible after spill events all the participants, from the person who received the call to the last person to leave the site, will meet to review the procedures used and to discuss what worked and where improvements could be made in responding to and mitigating future spill events. The results of the debriefing will be documented and tracked to ensure the action items are completed as scheduled.

11.1 FAILURE ANALYSIS INVESTIGATION

The objective of the failure analysis investigation is to determine the "root cause" of the spill and to identify corrective action(s) needed that will reduce or eliminate future potential for the spill to recur or for other spills to occur.

The investigation will include reviewing all relevant data to determine appropriate corrective action(s) for the line segment. The investigation may include:

- Reviewing and completing the Sanitary Sewer Spill Report and any other documents related to the incident
- Reviewing the incident timeline and other documentation regarding the incident
- Reviewing communications with the reporting party and witness
- Reviewing volume estimate, volume recovered estimate, volume estimation assumptions and associated drawings
- Reviewing available photographs
- Interviewing staff that responded to the spill

- Reviewing past maintenance records
- Reviewing past CCTV records,
- Conducting a CCTV inspection to determine the condition of all line segments immediately following the spill and reviewing the video and logs,
- Reviewing any Fats, Oils, Roots and Grease (FROG) related information or results
- Post spill debrief records
- Interviews with the public at the spill location

The product of the failure analysis investigation will be the determination of the root cause and the identification and scheduling of the corrective actions. The Collection System Failure Analysis Form (in Sanitary Sewer Spill/Backup Response Workbook) will be used to document the investigation.

12. SPILL RESPONSE TRAINING

(ref. State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR), *Element 6, Attachment D 4.3 page D-5 and Element 6 page D-6*

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

12.1 INITIAL AND ANNUAL REFRESHER TRAINING

All District personnel who may have a role in responding to, reporting, and/or mitigating a sewer system spill will receive training on the contents of this SERP. All new employees will receive training before they are placed in a position where they may have to respond. Current employees will receive annual refresher training on this SERP and the procedures to be followed. The District will document all training.

Affected employees will receive annual training on the following topics by knowledgeable trainers:

- The requirements of State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR), Element 6
- The District's Spill Emergency Response Plan procedures and practice drills
- Containment and cleanup methods
- Researching and documenting Sanitary Sewer Spill Start Times
- Skilled estimation of spill volume for field operators
- Impacted Surface Waters: Sample location selection, sampling, and documentation procedures
- Electronic CIWQS reporting procedures for staff submitting data
- State Water Resources Control Board Employee Knowledge Expectations

Through SWRCB Employee Knowledge Expectations training, the employee will be able to answer the following:

1. Please briefly describe your name and job title.

2. Please describe for us approximately when you started in this field and how long you have worked for your agency.

3. Please expand on your current position duties and role in responding in the field to any spill complaints.

4. Please describe your SOPs used to respond/mitigate spills when they occur.

5. Describe any training your agency provides or sends you to for conducting spill volume estimates.

6. We are interested in learning more about how your historical spill response activities have worked in the field. We understand from discussions with management earlier that you use the SERP from the SSMP. Please elaborate on how you implement and utilize the procedures in the plan.

7. Historically, before any recent changes, can you please walk us through how you would typically receive and respond to any spill complaints in the field?

8. Can you tell us who is responsible for estimating spill volumes discharged? If it is you, please describe how you go about estimating the spill volume that you record on the work order/service request forms?

9. What other information do you collect or record other than what is written on the work order form?

10. Describe if and when you ever talk with people that call in spills (either onsite or via telephone) to further check out when the spill might have occurred based on what they or others know? If you do this, can you tell us where this information is recorded?

11. We understand you may be instructed to take pictures of some sewer spills/backups into structures. Other than these spills, when else would you typically take any pictures of a spill?

12. Please walk us through anything else you'd like to add to help us better understand how your field crews respond and mitigate spill complaints.

12.2 SPILL RESPONSE DRILLS

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

12.3 SPILL TRAINING RECORD KEEPING

Records will be kept of all training that is provided in support of this SERP for 5 years. 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), names and titles of attendees, brief narrative description of the training, including training method(s) and training materials and/or equipment used.

12.4 CONTRACTORS WORKING ON DISTRICT SEWER FACILITIES

All contractors working on District sewer facilities will be required to follow the spill response instructions on the Sanitary Sewer Spill Response Instructions for Contractors (Appendix C). Additional training may be required depending on the nature of the work on any or all of the following:

- The requirements of State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR), Element 6
- Communication procedures to District in the event a spill is caused or witnessed
- The District's Spill Emergency Response Plan procedures and practice drills
- Skilled estimation of spill volume for field operators
- Electronic CIWQS reporting procedures for staff submitting data

13. SEWER BACKUP INTO/ONTO PRIVATE PROPERTY CLAIMS HANDLING POLICY

It is the policy of the District that a claims form shall be offered to anyone wishing to file a claim. The following procedures will be observed for all sewer overflows/backups into/onto private property:

- District staff will offer a District claim form irrespective of fault whenever it is possible that the sanitary sewer backup may have resulted from an apparent blockage in the District-owned sewer lines or whenever a District customer requests a claim form. The claim may later be rejected if subsequent investigations into the cause of the loss indicate the District was not at fault.
- It is the responsibility of the Field Crew to gather information regarding the incident and notify the Collection System O/M Superintendent or their designee.
- It is the responsibility of the General Manager – Chief Engineer or their designee to review all claims and to oversee the adjustment and administration of the claim to closure.

14. AUTHORITY

This SERP is written in accordance with the State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR).

15. APPENDICES

A. Reporting Requirements by Spill Category
B. Door Hanger
C. Sanitary Sewer Spill Response Instructions for Contractors
D. Sanitary Sewer Spill/Backup Response Workbook

APPENDIX A:

Reporting Requirements by Spill Category

REPORTING REQUIREMENTS FOR INDIVIDUAL CATEGORY 1 SPILL REPORTING

Draft Spill Report

Within three (3) business days of the District's knowledge of a Category 1 spill, the District shall submit a Draft Spill Report to the online CIWQS Sanitary Sewer System Database.

The Draft Spill Report must, at minimum, include the following items:

1. Contact information: Name and telephone number of District contact person to respond to spill-specific questions;
2. Spill location name;
3. Date and time the District was notified of, or self-discovered, the spill;
4. Operator arrival time;
5. Estimated spill start date and time;
6. Date and time the District notified the California Office of Emergency Services, and the assigned control number;
7. Description, photographs, and GPS coordinates of the system location where the spill originated; If a single spill event results in multiple appearance points, provide GPS coordinates for the appearance point closest to the failure point and describe each additional appearance point in the spill appearance point explanation field;
8. Estimated total spill volume exiting the system;
9. Description and photographs of the extent of the spill and spill boundaries;
10. Did the spill reach a drainage conveyance system? If Yes:
    a. Description of the drainage conveyance system transporting the spill;
    b. Photographs of the drainage conveyance system entry location(s);
    c. Estimated spill volume fully recovered from the drainage conveyance system;
    d. Estimated spill volume remaining within the drainage conveyance system;
    e. Description and photographs of all discharge point(s) into the surface water;
    f. Estimated spill volume that discharged to surface waters; and
    g. Estimated total spill volume recovered.

Certified Spill Report

Within 15 calendar days of the spill end date, the District shall submit a Certified Spill Report for Category 1 spills, to the online CIWQS Sanitary Sewer System Database.

Upon completion of the Certified Spill Report, the online CIWQS Sanitary Sewer System Database will issue a final spill event identification number.

(Category 1 continued)

The Certified Spill Report must, at minimum, include the following mandatory information in addition to all information in the Draft Spill Report:

1. Description of the spill event destination(s), including GPS coordinates if available, that represent the full spread and reach of the spill;
2. Spill end date and time;
3. Description of how the spill volume estimations were calculated, including at a minimum:
    a. The methodology, assumptions and type of data relied upon, such as supervisory control and data acquisition (SCADA) records, flow monitoring or other telemetry information used to estimate the volume of the spill discharged, and the volume of the spill recovered (if any volume of the spill was recovered), and
    b. The methodology(ies), assumptions and type of data relied upon for estimations of the spill start time and the spill end time;
4. Spill cause(s) (for example, root intrusion, grease deposition, etc.);
5. System failure location (for example, main, lateral, pump station, etc.);
6. Description of the pipe material, and estimated age of the pipe material, at the failure location;
7. Description of the impact of the spill;
8. Whether or not the spill was associated with a storm event;
9. Description of spill response activities including description of immediate spill containment and cleanup efforts;
10. Description of spill corrective action, including steps planned or taken to reduce, eliminate, and prevent reoccurrence of the spill, and a schedule of major milestones for those steps;
11. Spill response completion date;
12. Detailed narrative of investigation and investigation findings of cause of spill;
13. Reasons for an ongoing investigation (as applicable) and the expected date of completion;
14. Name and type of receiving water body(s);
15. Description of the water body(s), including but not limited to:
    a. Observed impacts on aquatic life,
    b. Public closure, restricted public access, temporary restricted use, and/or posted health warnings due to spill,
    c. Responsible entity for closing/restricting use of water body, and
    d. Number of days closed/restricted as a result of the spill.
16. Whether or not the spill was located within 1,000 feet of a municipal surface water intake; and
17. If water quality samples were collected, identify sample locations and the parameters the water quality samples were analyzed for. If no samples were taken, Not Applicable shall be selected.

(Category 1 continued)

Amended Certified Spill Reports

The District shall update or add additional information to a Certified Spill Report within **90 calendar days** of the spill end date by amending the report or by adding an attachment to the Spill Report in the online CIWQS Sanitary Sewer System Database. The District shall certify the amended report.

After **90 calendar days**, the District shall contact the State Water Board at SanitarySewer@waterboards.ca.gov to request to amend a Spill Report. The Legally Responsible Official shall submit justification for why the additional information was not reported within the Amended Spill Report due date.

REPORTING REQUIREMENTS FOR INDIVIDUAL CATEGORY 2 SPILL REPORTING

Draft Spill Report

Within three (3) business days of the District's knowledge of a Category 2 spill, the District shall submit a Draft Spill Report to the online CIWQS Sanitary Sewer System Database.

The Draft Spill Report must, at minimum, include the following items:

1. Contact information: Name and telephone number of District contact person to respond to spill-specific questions;
2. Spill location name;
3. Date and time the District was notified of, or self-discovered, the spill;
4. Operator arrival time;
5. Estimated spill start date and time;
6. Date and time the District notified the California Office of Emergency Services, and the assigned control number;
7. Description, photographs, and GPS coordinates of the system location where the spill originated; If a single spill event results in multiple appearance points, provide GPS coordinates for the appearance point closest to the failure point and describe each additional appearance point in the spill appearance point explanation field;
8. Estimated total spill volume exiting the system;
9. Description and photographs of the extent of the spill and spill boundaries;
10. Did the spill reach a drainage conveyance system? If Yes:
    - Description of the drainage conveyance system transporting the spill;
    - Photographs of the drainage conveyance system entry location(s);
    - Estimated spill volume fully recovered from the drainage conveyance system;
    - Estimated spill volume remaining within the drainage conveyance system;
11. Estimated spill volume discharged to a groundwater infiltration basin or facility, if applicable; and
12. Estimated total spill volume recovered.

Certified Spill Report

Within 15 calendar days of the spill end date, the District shall submit a Certified Spill Report for the Category 2 spill, to the online CIWQS Sanitary Sewer System Database (https://ciwqs.waterboards.ca.gov). Upon completion of the Certified Spill Report, the online CIWQS Sanitary Sewer System Database will issue a final spill event identification number.

The Certified Spill Report must, at minimum, include the following mandatory information in addition to all information in the Draft Spill Report:

1. Description of the spill event destination(s), including GPS coordinates if available, that represent the full spread and reach of the spill;

(Category 2 continued)

2. Spill end date and time;
3. Description of how the spill volume estimations were calculated, including at a minimum:
    - The methodology, assumptions and type of data relied upon, such as supervisory control and data acquisition (SCADA) records, flow monitoring or other telemetry information used to estimate the volume of the spill discharged, and the volume of the spill recovered (if any volume of the spill was recovered), and
    - The methodology(ies), assumptions and type of data relied upon for estimations of the spill start time and the spill end time;
4. Spill cause(s) (for example, root intrusion, grease deposition, etc.);
5. System failure location (for example, main, pump station, etc.);
6. Description of the pipe/infrastructure material, and estimated age of the pipe material, at the failure location;
7. Description of the impact of the spill;
8. Whether or not the spill was associated with a storm event;
9. Description of spill response activities including description of immediate spill containment and cleanup efforts;
10. Description of spill corrective action, including steps planned or taken to reduce, eliminate, and prevent reoccurrence of the spill, and a schedule of major milestones for those steps;
11. Spill response completion date;
12. Detailed narrative of investigation and investigation findings of cause of spill;
13. Reasons for an ongoing investigation (as applicable) and the expected date of completion; and
14. Whether or not the spill was located within 1,000 feet of a municipal surface water intake.

Amended Certified Spill Reports

The District shall update or add additional information to a Certified Spill Report within **90 calendar days** of the spill end date by amending the report or by adding an attachment to the Spill Report in the online CIWQS Sanitary Sewer System Database. The District shall certify the amended report.

After **90 calendar days**, the District shall contact the State Water Board at SanitarySewer@waterboards.ca.gov to request to amend a Spill Report. The Legally Responsible Official shall submit justification for why the additional information was not reported within the Amended Spill Report due date.

REPORTING REQUIREMENTS FOR INDIVIDUAL CATEGORY 3 SPILL REPORTING

Monthly Certified Spill Reporting

The District shall report and certify all Category 3 spills to the online CIWQS Sanitary Sewer System Database within 30 calendar days after the end of the month in which the spills occurred. (For example, all Category 3 spills occurring in the month of February shall be reported and certified by March 30th). After the Legally Responsible Official certifies the spills, the online CIWQS Sanitary Sewer System Database will issue a spill event identification number for each spill.

The monthly reporting of all Category 3 spills must include the following items for each spill:

1. Contact information: Name and telephone number of District contact person to respond to spill-specific questions;
2. Spill location name;
3. Date and time the District was notified of, or self-discovered, the spill;
4. Operator arrival time;
5. Estimated spill start date and time;
6. Description, photographs, and GPS coordinates where the spill originated. If a single spill event results in multiple appearance points, provide GPS coordinates for the appearance point closest to the failure point and describe each additional appearance point in the spill appearance point explanation field;
7. Estimated total spill volume exiting the system;
8. Description and photographs of the extent of the spill and spill boundaries;
9. Did the spill reach a drainage conveyance system? If Yes:
    a. Description of the drainage conveyance system transporting the spill;
    b. Photographs of the drainage conveyance system entry locations(s);
    c. Estimated spill volume fully recovered from the drainage conveyance system; and
    d. Estimated spill volume discharged to a groundwater infiltration basin or facility, if applicable.
10. Estimated total spill volume recovered;
11. Description of the spill event destination(s), including GPS coordinates, if available, that represent the full spread and reaches of the spill;
12. Spill end date and time;
13. Description of how the spill volume estimations were calculated, including, at minimum:
    a. The methodology and type of data relied upon, including supervisory control and data acquisition (SCADA) records, flow monitoring or other telemetry information used to estimate the volume of the spill discharged, and the volume of the spill recovered (if any volume of the spill was recovered), and
    b. The methodology and type of data relied upon to estimate the spill start time, on-going spill rate at time of arrival (if applicable), and the spill end time;
14. Spill cause(s) (for example, root intrusion, grease deposition, etc.);

(Category 3 Continued)

15. System failure location (for example, main, pump station, etc.);
16. Description of the pipe/infrastructure material, and estimated age of the pipe/infrastructure material, at the failure location;
17. Description of the impact of the spill;
18. Whether or not the spill was associated with a storm event;
19. Description of spill response activities including description of immediate spill containment and cleanup efforts;
20. Description of spill corrective actions, including steps planned or taken to reduce, eliminate, and prevent reoccurrence of the spill, and a schedule of the major milestones for those steps; including, at minimum:
    a. Local regulatory enforcement action taken against an illicit discharge in response to this spill, as applicable, and
    b. Identifiable system modifications, and operation and maintenance program modifications needed to prevent repeated spill occurrences at the same spill event location, including:
        - Adjusted schedule/method of preventive maintenance,
        - Planned rehabilitation or replacement of sanitary sewer asset,
        - Inspected, repaired asset(s), or replaced defective asset(s),
        - Capital improvements,
        - Documentation verifying immediately implemented system modifications and operating/maintenance modifications,
        - Description of spill response activities,
        - Spill response completion date, and
        - Ongoing investigation efforts, and expected completion date of investigation to determine the full cause of spill;
21. Detailed narrative of investigation and investigation findings of cause of spill.

Amended Certified Spill Reports

Within 90 calendar days of the certified Spill Report due date, the District may update or add additional information to a certified Spill Report by amending the report or by adding an attachment to the Spill Report in the online CIWQS Sanitary Sewer System Database. The District shall certify the amended report.

After 90 calendar days, the Legally Responsible Official shall contact the State Water Board at SanitarySewer@waterboards.ca.gov to request to amend a certified Spill Report. The Legally Responsible Official shall submit justification for why the additional information was not reported within the 90-day timeframe for amending the certified Spill Report, as provided above.

REPORTING REQUIREMENTS FOR INDIVIDUAL CATEGORY 4 SPILL REPORTING

Monthly Certified Spill Reporting

The District shall report and certify the estimated total spill volume exiting the sanitary sewer system, and the total number of all Category 4 spills to the online CIWQS Sanitary Sewer System Database, within 30 calendar days after the end of the month in which the spills occurred.

Annual Certified Spill Reporting of Category 4 and/or Lateral Spills

For all Category 4 spills and spills from its owned and/or operated laterals that are caused by a failure or blockage in the lateral and that do not discharge to a surface water, the District shall:

- Maintain records per section 4.4. of Attachment E1 (Notification, Monitoring, Reporting and Record-keeping Requirements) of State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR). The District shall provide records upon request by State Water Board or Regional Water Board staff.

- Annually upload and certify a report, in an appropriate digital format, of all recordkeeping of spills to the online CIWQS Sanitary Sewer System Database, by February 1st after the end of the calendar year in which the spills occurred.

A spill from an District-owned and/or operated lateral that discharges to a surface water is a Category 1 spill; the District shall report all Category 1 spills per section 3.1 of Attachment E1 (Notification, Monitoring, Reporting and Recordkeeping Requirements) of State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR).

Monthly Certification of "No-Spills" Or "Category 4 Spills" and/or "Non-Category 1 Lateral Spills"

If either (1) no spills occur during a calendar month or (2) only Category 4, and/or District-owned and/or operated lateral spills (that do not discharge to a surface water) occur during a calendar month, the District shall certify, within 30 calendar days after the end of each calendar month, either a "No-Spill" certification statement, or a "Category 4 Spills" and/or "Non-Category 1 Lateral Spills" certification statement, in the online CIWQS Sanitary Sewer System Database, certifying that there were either no spills, or Category 4 and/or Non-Category 1 Lateral Spills that will be reported annually (per section 3.6 of Attachment E1 (Notification, Monitoring, Reporting and Recordkeeping Requirements) of State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR)) for the designated month.

If a spill starts in one calendar month and ends in a subsequent calendar month, and the District has no further spills of any category, in the subsequent calendar month, the District shall certify "no-spills" for the subsequent calendar month.

If the District has no spills from its systems during a calendar month, but the District voluntarily reported a spill from a private lateral or a private system, the District shall certify "no-spills" for that calendar month.

If the Districts has spills from its owned and/or operated laterals during a calendar month, the District shall not certify "no spills" for that calendar month.

APPENDIX B:

Sewer Service Request Form

SEWER SERVICE REQUEST FORM

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 as needed via e-mail.
  - The General Manager, Superintendent, Senior Engineer or Assistant General

APPENDIX C:

Door Hanger

Truckee Sanitary District

(date) _____

ocation) _____

we responded to a reported blockage of the sanitary sewer service to your property.

We discovered a blockage in:

- ☐ The sanitary sewer main and cleared the line
- ☐ Your sanitary sewer lateral, which is your responsibility to maintain.

If you require assistance to clear your portion of the lateral you can search the internet for "Sewer Contractors" or "Plumbing Drains & Sewer Cleaning." If you plan to hire a contractor, we recommend getting estimates from more than one company.

rict representative notes: _____

_____

_____

District representative name:

_____

or questions or comments, please call

Truckee Sanitary District
(530) 587-3804

Truckee Sanitary District

On (date) _____

at (location) _____

we responded to a reported blockage of the sanitary sewer service to your property.

We discovered a blockage in:

- ☐ The sanitary sewer main and cleared the line
- ☐ Your sanitary sewer lateral, which is your responsibility to maintain.

If you require assistance to clear your portion of the lateral you can search the internet for "Sewer Contractors" or "Plumbing Drains & Sewer Cleaning." If you plan to hire a contractor, we recommend getting estimates from more than one company.

District representative notes: _____

_____

_____

District representative name:

_____

For questions or comments, please call

Truckee Sanitary District
(530) 587-3804

APPENDIX D:

Sewer Spill Response Instructions for Contractors

Sewer Spill Response Instructions for Contractors

For contractors working on the sanitary sewer system the District expects them to have, at all worksites, spill response materials necessary to block drainage conveyance system entry points near the work area and surface waters.

Additionally, contractor must be trained on spill response materials and equipment.

The following procedures are to be followed in the event that a contractor/plumber causes or witnesses a sanitary sewer spill. If the contractor/plumber causes or witnesses a spill they should:

1. Immediately notify the District at (530) 587-3804 and provide the following information if available:
   - Date, time contractor first noticed the spill
   - Description of the contractor's observation, including any information regarding whether the spill has reached surface waters or a drainage conveyance system
   - Contractor's contact information

2. Protect storm drains.

3. Protect the public.

4. Direct ALL media and public relations requests to the General Manager – Chief Engineer at (530) 587-3804.

APPENDIX E:

Sewer Spill/Backup Response Workbook

Truckee Sanitary District

Sewer Spill/Backup Response Workbook

INSERT TAB:
Tab A: Start Here

Sanitary Sewer Spill/Backup Response Workbook

See the following page for contact information as needed.

☐ Make immediate notifications:

- If this spill is discharging or threatening to discharge greater than or equal to 1,000 gallons to waters of the State, immediately contact CalOES at (800) 852-7550 within 2 hours and obtain a control number. Record this number on the following pages: A-4, B-2, and D-1 Page 1.
- If there is a backup into a residence/business that may be due to a problem in the District's sewer, notify the Collection System Supervisor at Collection System Supervisor at (530) 587-3804, Collection System O/M Superintendent at O: (530) 550-3111/ C: (530) 913-0001, or the after-hours on-call General Manager at (530) 587-3804.
- For media inquiries/requests contact the General Manager – Chief Engineer at (530) 587-3804.

☐ Refer to the Regulatory Reporting Guide in this Workbook for additional reporting requirements.

FIELD CREW:	CHAIN OF CUSTODY
☐ Refer to the Spill Event Checklist (A-4), follow the instructions on the Spill/Backup Response Flowchart (C-1), and complete forms in this Workbook as indicated	Print Name:
	Initial:
☐ Complete the chain of custody record (to the right) and deliver this workbook to the Collection System O/M Superintendent.	Date:

COLLECTION SYSTEM O/M SUPERINTENDENT:	CHAIN OF CUSTODY
☐ Review the Spill Event Checklist (A-4) and the forms in this Workbook. Contact the Field Crew for additional information if necessary.	Print Name:
☐ Confirm that all required regulatory notifications have been made (B-1).	
☐ If this was a Sewer Backup, follow instructions on the Backup Forms Checklist (F-1).	Initial:
☐ Complete the Post Spill Assessment (H-1) and Collection System Failure Analysis Form (H-2).	
☐ Complete the Chain of Custody record (right) and forward Workbook to Data Submitter	Date:

DATA SUBMITTER:	CHAIN OF CUSTODY
☐ Refer to Spill Event Checklist (A-4) Data Submitter Responsibilities	Print Name:
☐ Complete the chain of custody record (to the right) and deliver this workbook to a Legally Responsible Official (see A-2 for LROs).	Initial:
	Date:

LEGALLY RESPONSIBLE OFFICIAL:	CHAIN OF CUSTODY
☐ Refer to Spill Event Checklist (A-4) Data Submitter Responsibilities	Print Name:
☐ Complete the chain of custody record (to the right) and file this Workbook with the spill file.	Initial:
	Date:

Contact	Description	Telephone/Email/Address
Allied Public Risk Claims	Assistance with sewer backup customers	(877) 533-1211
CAL/OES	California Office of Emergency Services	(800) 852-7550
California Department of Fish and Wildlife		Northern Central Regional Office (916) 358-2900 After Hours: (916) 445-0411 or (916) 653-7664
Collection System O/M Superintendent General Manager Assistant General Manager	CalOES 2-hour notification and other regulatory notifications Outside Assistance / Mutual Aid	O: (530) 550-3111 C: (530) 913-0001 (530) 587-3804 O: (530) 550-3135 C: (530) 913-0006
General Manager- Chief Engineer	Media inquiries/requests	(530) 587-3804
HR/Risk Management Administrator		(530) 550-3104
Lahontan Regional Water Quality Control Board		(530) 542-5400 (530) 542-5467 Robert Tucker RTucker@waterboards.ca.gov
Nevada County Environmental Health Placer County Environmental Health	○ Notifications ○ Sign placement guidance	(530) 582-7884 (530) 265-1778 Emergency # (530) 581-6240 (530) 581-6305 Emergency #
Restoration/Remediation	Cleaning Services	Belfor (800) 856-3333 Service Master Reno (775) 242-6497 Environmental Clean-Up Clean Harbors (800) 645-8265
State Water Resources Control Board	Walter Mobley	(916) 323-0878 Walter.Mobley@waterboards.ca.gov

Western Environmental Testing (WET) Laboratory	Water quality sample analysis	(775) 355-0202 475 East Greg St #119 Sparks NV 89431
Tahoe-Truckee Sanitation Agency (TTSA) Laboratory		(530) 587-2525 13720 Butterfield Drive Truckee, CA 96161

Authorized Personnel:

The following are authorized to perform regulatory reporting of spills:

Job Title	Telephone	Check if LRO
Collection System O/M Superintendent	O: (530) 550-3111/ C: (530) 913-0001	✓
General Manager-Chief Engineer	(530) 587-3804	✓
Assistant General Manager - District Engineer	O: (530) 550-3135/ C: (530) 913-0006	✓

The District's Legally Responsible Official (LRO) are authorized to electronically sign and certify spill reports in CIWQS.

NOTE: All references to "SSWDR" refer to State Water Board Order No. WQ 2022-0103-DWQ.

DRAINAGE CONVEYANCE SYSTEM: A drainage conveyance system is a publicly- or privately-owned separate storm sewer system, including but not limited to drainage canals, channels, pipelines, pump stations, detention basins, infiltration basins/facilities, or other facilities constructed to transport stormwater and non-stormwater flows.

SPILL: A spill is a discharge of sewage from any portion of a sanitary sewer system due to a sanitary sewer system overflow, operational failure, and/or infrastructure failure. Exfiltration of sewage is not considered to be a spill under SSWDR if the exfiltrated sewage remains in the subsurface and does not reach a surface water of the State.

- **Category 1 Spill:**

  A Category 1 spill is a spill of any volume of sewage from or caused by a sanitary sewer system regulated under SSWDR that results in a discharge to:

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

  Any spill volume not recovered from a drainage conveyance system is considered a discharge to surface water, unless the drainage conveyance system discharges to a dedicated stormwater infiltration basin or facility.

  A spill from an District-owned and/or operated lateral that discharges to a surface water is a Category 1 spill; the District shall report all Category 1 spills per section 3.1 of Attachment E1 (Notification, Monitoring, Reporting and Recordkeeping Requirements) of SSWDR.

- **Category 2 Spill**

  A Category 2 spill is a spill of 1,000 gallons or greater, from or caused by a sanitary sewer system regulated under SSWDR that does not discharge to a surface water. A spill of 1,000 gallons or greater that spills out of a lateral and is caused by a failure or blockage in the sanitary sewer system, is a Category 2 spill.

- **Category 3 Spill**

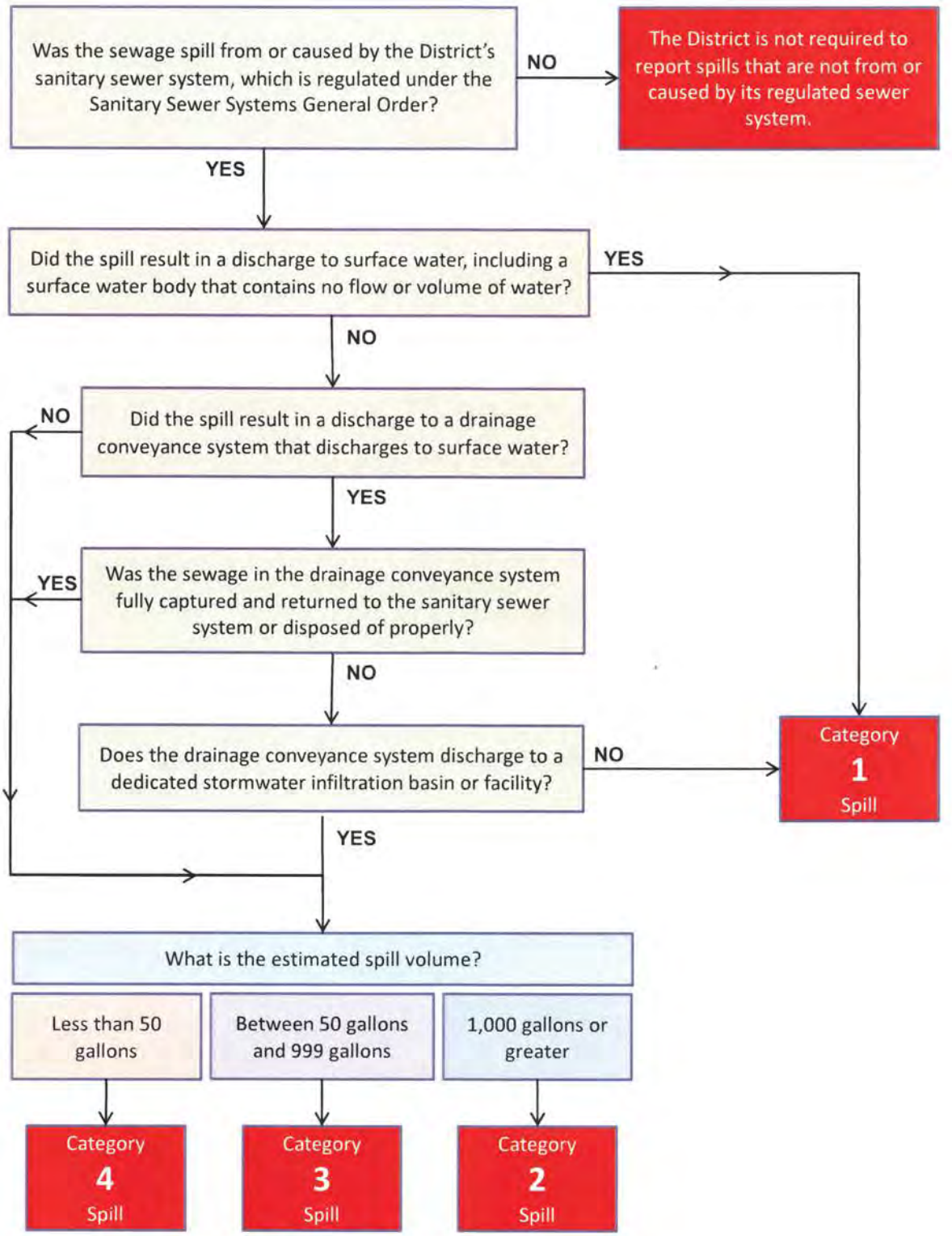
  A Category 3 spill is a spill of equal to or greater than 50 gallons and less than 1,000 gallons, from or caused by a sanitary sewer system regulated under SSWDR that does not discharge to a surface water. A spill of equal to or greater than 50 gallons and less than 1,000 gallons, that spills out of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

- **Category 4 Spill**

  A Category 4 spill is a spill of less than 50 gallons, from or caused by a sanitary sewer system regulated under SSWDR that does not discharge to a surface water. A spill of less than 50 gallons that spills out of a lateral and is caused by a failure or blockage in the sanitary sewer system is a Category 4 spill.

WATERS OF THE STATE: Waters of the State are surface waters or groundwater within boundaries of the state as defined in Water Code section 13050(e), in which the State and Regional Water Boards have authority to protect beneficial uses. Waters of the State include, but are not limited to, groundwater aquifers, surface waters, saline waters, natural washes and pools, wetlands, sloughs, and estuaries, regardless of flow or whether water exists during dry conditions. Waters of the State include waters of the United States.

INSTRUCTIONS: Answer each question in order and stop at the red box once you have determined the category.



Spill Event Checklist

Date of Spill: _____ Spill Location/Name: _____

CIWQS Event ID #: _____ Category? ☐ 1 ☐ 2 ☐3 ☐4 OES#: _____

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

FIELD CREW RESPONSIBILITIES

- ☐ Effort made to contain and return a portion/all to the sanitary sewer
- ☐ Pictures/video taken of spill
- ☐ Pictures taken of affected/unaffected area
- ☐ If property damage, start that process
- ☐ Pictures taken of containment efforts
- ☐ If spill is Cat 1 > 1000 gallons or Cat 2 > 1000 gal threatening to discharge to waters of the State: OES Control #_____
- ☐ Were surface waters impacted?
- ☐ Impacted waters identified?
- ☐ Assess and document spill location and spread including photos
- ☐ Spill Report Form Complete (includes fields for all required fields in CIWQS, and a sketch of spill)
- ☐ Volume Estimation Worksheet(s) done
- ☐ Start Time Determination Form done
- ☐ Follow Water Quality Monitoring and Sampling procedures

COLLECITON SYSTEM O/M SUPERINTENDENT RESPONSIBILITIES

- ☐ Map of where samples were taken, if applicable
- ☐ For Cat 1 Spills 50,000 gallons or larger, obtain sampling results
- ☐ Ensure Technical Report is written
- ☐ Initial review of forms is complete (ensure consistency of dates, times, volumes, and other data)
- ☐ Review of photos and videos (label/date)
- ☐ Conduct Post Spill Assessment & complete form (H-1)
- ☐ Failure Analysis
  - TV to determine cause
  - Review Asset History
- ☐ Determine next steps to prevent recurrence
- ☐ Document findings and next steps on Spill Report
- ☐ Start folder for all documentation for this spill event. Put everything in it (Spill Report, Field Reports, Worksheets/Forms, follow-up work orders, notes, photos, drawings, CIWQS print outs, emails, etc.)

DATA SUBMITTER RESPONSIBILITIES

- ☐ Submit Draft in CIWQS w/in 3 business days (for Categories 1 and 2 only)
- ☐ Print CIWQS Draft hard copy and email
- ☐ Review CIWQS, spill 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
- ☐ Attach Technical Report to CIWQS, if applicable
- ☐ Submit Ready to Certify in CIWQS (with sufficient time for LRO review)
- ☐ Print CIWQS Ready to Certify and email
- ☐ Hand Workbook to LRO and complete Chain of Custody form

LRO RESPONSIBILITIES

- ☐ LRO review Workbook 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 & 4)
- ☐ Print Certified CIWQS and email
- ☐ Any changes? Change in CIWQS and hard copies and explain changes, print our current version
- ☐ Move completed Workbook and spill folder to spill files
- ☐ If any changes are made to SSMP
  - Update SSMP and link on CIWQS to SSMP
  - Add change to SSMP Change Log
  - Consider need to re-certify SSMP

INSERT TAB:
Tab B: Regulatory Reporting

Regulatory Reporting Guide

The District's Legally Responsible Officials (LROs) are authorized to electronically sign and certify spill reports in CIWQS. See contact information for LROs on page A-2.

Deadline	Category 1 Spill	Category 2 Spill	Category 3 Spill	Category 4 Spill
2 hours after awareness of spill	Within two (2) hours of the District's knowledge of a Category 1 spill of 1,000 gallons or greater, discharging or threatening to discharge to Waters of the State, notify CalOES and obtain a notification control number.	Within two (2) hours of the District's knowledge of a Category 2 spill of 1,000 gallons or greater threatening to discharge to Waters of the State, notify CalOES and obtain a notification control number.	-	-
Within 18 hours of awareness of spill	Conduct water quality sampling of the receiving water within 18 hours of initial knowledge of spill of 50,000 gallons or greater to surface waters.	-	-	-
3 Business Days after awareness of spill	Submit Draft Spill Report in the CIWQS database.	Submit Draft Spill Report in the CIWQS database.	-	-
15 Days after the spill end date	Submit Certified Spill Report within 15 calendar days of the spill end date. (Submit Amended Spill Report, as needed, within 90 calendar days after the spill end date.)	Submit Certified Spill Report within 15 calendar days of the spill end date. (Submit Amended Spill Report, as needed, within 90 calendar days after the spill end date.)	-	-
Within **30 calendars days** after the end of the calendar month in which the spill occurs	-	-	Submit monthly Certified Spill Report to the online CIWQS Sanitary Sewer System Database (Submit Amended Spill Report, as needed, within 90 calendar days after the Certified Spill Report due date.)	Certify monthly, the estimated total spill volume exiting the sanitary sewer system, and the total number of all Category 4 spills into the online CIWQS Sanitary Sewer System Database.
45 days after spill end date	Submit Technical Report within 45 calendar days after the spill end date for a Category 1 spill in which 50,000 gallons or greater discharged to surface waters; and	-	-	-
By February 1st after the end of the calendar year in which the spills occur.	-	-	-	Upload and certify a report, in an acceptable digital format, of all Category 4 spills to the online CIWQS Sanitary Sewer System Database.

* A spill from an Enrollee-owned and/or operated lateral that discharges to a surface water is a Category 1 spill.

++ See following page for notes

++ Agency owned lateral spills (Cat 2-4) to be reported by Feb 1 of the following year.

- **Monthly Spill Reporting of Non-Category 1 Lateral Spills:** If either (1) no spills occur during a calendar month or (2) only Category 4, and/or Enrollee-owned and/or operated lateral spills (that do not discharge to a surface water) occur during a calendar month, the Enrollee shall certify, within 30 calendar days after the end of each calendar month, either a "No-Spill" certification statement, or a "Category 4 Spills" and/or "Non-Category 1 Lateral Spills" certification statement, in the online CIWQS Sanitary Sewer System Database, certifying that there were either no spills, or Category 4 and/or Non-Category 1 Lateral Spills that will be reported annually for the designated month.

- **Annual Certified Spill Reporting of Category 4 and/or Lateral Spills:** For all Category 4 spills and spills from its owned and/or operated laterals that are caused by a failure or blockage in the lateral and that do not discharge to a surface water, the Enrollee shall annually upload and certify a report, in an appropriate digital format, of all recordkeeping of spills to the online CIWQS Sanitary Sewer System Database, by February 1st after the end of the calendar year in which the spills occurred.

Regulatory Reporting/Notifications Log

Agency/Firm Contacted	Individual Spoken to:	Date	Time	Notes
CalOES				Control Number:

INSERT TAB:
Tab C: Flowchart

Spill/Backup Response Flowchart

START HERE

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

NO

This is a Private Spill

1. Photograph the extent of the discharge and the discharge boundaries if possible.
2. 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.
3. Give customer the "Your Responsibilities as a Private Property Owner" pages from this Workbook (F-6).
4. Recommend to customer they hire a contractor to clear their line.
5. If customer is not home:
   - Complete Door Hanger and leave on customer's door.
   - Leave a message on the customer's voicemail.
6. If the property owner is unable or unwilling to address the cause of the Spill, immediately contact your supervisor and discuss whether Code Enforcement, the County Department of Environmental Health or Regional Water Quality Control Board should be notified.
7. If you are directed to to break the stoppage and clean up the private spill. Be sure to document District staff time and equipment used for potential billing purposes and take pictures.

1. **Document the service call according to District procedures.**
2. **STOP. Do not continue to 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 spill greater than or equal to 1,000 gallons or a Category 2 spill that is threatening to discharge to waters of the State, immediately make the 2-hour notification to Cal-OES and obtain a control number. Record this number on the following pages: A-4, B-2, and D-1 Page 1.

1. Record manhole number or cleanout location of the spill appearance point closest to the failure point, and describe each additional appearance point on the Spill Report (D-1).
2. Take photographs of all spill appearance points, the extent of the spill, and spill boundaries.

Go to PAGE 2

Spill/Backup Response Flowchart

Continue from PAGE 1

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 SPILL & RETURN TO SYSTEM, IF POSSIBLE:**

   a. As practical, plug or block drainage conveyance system entry locations or use rubber mats to cover basin inlet and divert flow to a downstream sanitary sewer manhole (*barricade manhole if left open and monitor after barricade)* or area suitable to capture the spill for later collection.

      If any amount has already reached the drainage conveyance system, trace it downstream to a dry manhole and block it from entering surface waters. i.e., plugs, sandbags, or vacuum truck.

   b. If you are confident that you can capture the spill in the drainage conveyance system, trace it downstream to a dry manhole and then divert the spill to the drainage conveyance system for later recovery and return to the sanitary sewer.

   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 each drainage conveyance system entry location.**

ADDRESS CAUSE OF SPILL/BACKUP ASAP

1. For spill/backups not related to a pump station, relieve the stoppage. Note the distance of the obstruction from the manhole and catch/remove debris that could cause another stoppage. After flow has returned to normal, clean the pipe thoroughly. Consider televising (CCTV) the affected line.
2. For pump station related spill/backups refer to that station's Emergency Response Plan.
3. Photograph staff activities while clearing the blockage.

Go to PAGE 3

Spill/Backup Response Flowchart

Continue from PAGE 2

Has the spill reached surface waters?

YES

1. Sample surface waters the spill has reached if safe and if the property owner allows (if the surface water access point is on private property):
   - If preliminary volume estimates of the spill are 50,000 gallons or greater, begin collecting as soon as possible but no later than 18 hours after becoming aware of the spill.
   - If people are fishing or swimming in the waters, collect samples regardless of the volume of the spill.
2. Refer to and follow the sampling standard operating procedure (Tab G in this Workbook).

NO

Is it feasible/practical to contain/recover any of the spill from the surface waters?

NO

YES

Contain/recover/clean up as much of the spill in the waters and shoreline as possible. Contact Collection System Supervisor, Collection System O/M Superintendent, or General Manager to request outside assistance, as appropriate.

Was drainage conveyance system impacted?

YES

DRAINAGE CONVEYANCE SYSTEM CLEANING SOP

1. Seal or berm the drainage conveyance system immediately downstream of point the spill reached.
2. Photograph impacted drainage conveyance system before cleaning.
3. Vacuum any visible sewage – *Record the volume of sewage recovered. Record volume on the spill report.*
4. Flush impacted sections of the drainage conveyance system with 3X amount of spill, if possible, and contain. Record volume of flush water used and volume of flush water returned to the sanitary sewer on Spill Report.
5. Ensure all visible signs of sewage have been removed.
6. Photograph drainage conveyance system after cleaning is completed.

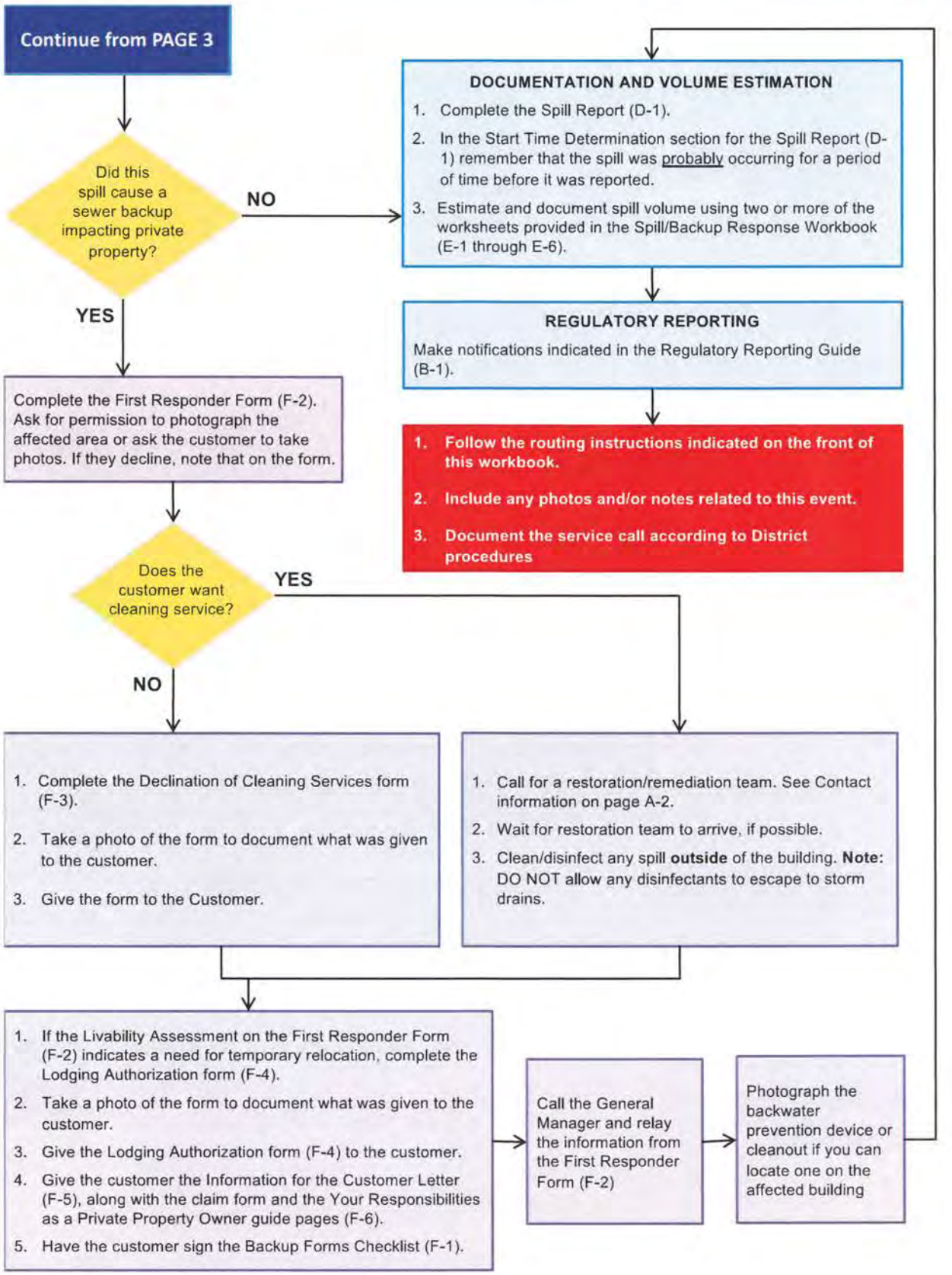
NO

IMPACTED AREA CLEANUP, AS NECESSARY

1. **Assign staff to begin cleanup.** If you might use the area measured volume method to estimate the volume, draw a sketch of the spill footprint and capture dimensions before washing it down.
2. **Remove all signs of gross pollution** with a shovel, broom, rake, and bucket. (toilet paper, solids, grease, etc.)
3. **Flush impacted area** with 3X amount of spill, if possible, and contain. Record volume of flush water used and volume of flush water returned to the sanitary sewer on the Spill Report (D-1).
4. Setup berm/other means to contain all water so it can be returned to sewer
5. Don't use disinfectants if they may enter storm drain system and not be fully recovered or if they may enter surface waters.
6. **Address saturated soil** with removal and/or in-place treatment, depending on the extent of the contamination, the location, and land use. Take measures to prevent accidental contact by the public. NOTE: addressing saturated soil may involve returning to the site one or more days after the spill event.
7. **Photograph the area when cleanup operations are complete**

Go to PAGE 4

Spill/Backup Response Flowchart



INSERT TAB:
Tab D: Spill Report

Sanitary Sewer Spill Field Report

Check spill category (see A-3 for definitions): ☐CATEGORY 1 ☐CATEGORY 2 ☐CATEGORY 3 ☐CATEGORY 4

CalOES NOTIFICATION*		
Date:	Time:	Assigned Control Number:

Names of the Persons Completing this Report	Contact Information

PHYSICAL LOCATION DETAILS	
Spill location name:	
Location description:	
Address of spill:	
City:	Cross Street:
Regional Water Quality Control Board: **Lahontan**	County: **Nevada County**

DATE/TIME
Date and time the District was notified of, or self-discovered, the spill: _____
Operator arrival time: _____

PHOTOGRAPHS
Photos must be taken during the spill event. At a minimum, the following photos must be taken: ○ Appearance point closest to the failure point ○ Extent of the spill and spill boundaries ○ Entry location of each drainage conveyance system the sewage entered ○ All discharge points into surface waters ○ Location(s) of clean up
Where are photographs stored?

* Within two (2) hours of the District's knowledge of a Category 1 or Category 2 spill of 1,000 gallons or greater, discharging or threatening to discharge to waters of the State, notify CalOES and obtain a notification control number.

SPILL ORIGINATION	
Description and GPS coordinates of the system location where the spill originated*: *Include manhole number or cleanout location of the spill appearance point closest to the failure point as applicable.*	
Latitude:	Longitude:
Number of additional appearance points:	
Spill appearance points: (Check all that apply) ☐ Backflow Prevention Device ☐ Combined Sewer Drain Inlet (Combined Collection System Only) ☐ Force Main ☐ Gravity Mainline ☐ Inside Building/Structure ☐ Lateral Clean Out (Private) ☐ Lateral Clean Out (Public) ☐ Lower Lateral (Private) ☐ Lower Lateral (Public) ☐ Manhole ☐ Other Sewer System Structure ☐ Pump Station ☐ Upper Lateral (Private) ☐ Upper Lateral (Public) ☐ Other, describe:	
Describe each spill appearance point:	
Check to confirm photos were taken of all appearance points: ☐	

* Note: If a single spill event results in multiple appearance points, provide GPS coordinates for the appearance point closest to the failure point and describe each additional appearance point in the "Describe each spill appearance point" description section above. Take photos of spill appearance point(s).

SPILL DESTINATION (Check all that apply)	
Final spill destination(s): ☐ Drainage Conveyance System That Discharges to Surface Water ☐ Surface Water ☐ Building or Structure ☐ Drainage Conveyance System ☐ Groundwater Infiltration Basic or Facility ☐ Paved Surface ☐ Street/Curb and Gutter ☐ Unpaved Surface ☐ Other, describe:	
Description of the spill event destination(s) including GPS coordinates if available that represent the full spread and reach of the spill.	
Latitude:	Longitude:
Latitude (if needed):	Longitude (if needed):
Latitude (if needed):	Longitude (if needed):
Latitude (if needed):	Longitude (if needed):
Check to confirm photos were taken of spill destination/boundaries: ☐	

SPILL VOLUME

Estimated total spill volume exiting the system: _____ gallons

Did the spill reach a drainage conveyance system? ☐ YES ☐ NO If yes:

- Estimated time the spill reached the drainage conveyance system: _____
- Distance from drainage conveyance system to entry point to surface waters: _____ feet
- Method to determine travel time from point of entry to drainage conveyance system to receiving waters:
  _____
  _____
  _____
- Describe the drainage conveyance system transporting the spill: _____
  _____
  _____

Estimated spill volume fully recovered from the drainage conveyance system: _____ gallons

Estimated spill volume remaining within the drainage conveyance system: _____ gallons

Check to confirm photos taken of entry location of drainage conveyance system the sewage entered: ☐

Did the spill reach surface water? ☐ YES ☐ NO

If yes:

- Estimated time the spill entered the surface water: _____
- Distance from spill appearance point to entry point to surface water: _____ feet
- Method to determine travel time to receiving waters: _____
  _____
  _____
- Describe all discharge points: _____
  _____
  _____

Estimated spill volume that discharged to surface waters: _____ gallons

Estimated total spill volume recovered: _____ gallons

Check to confirm photos were taken of the following, as applicable: all discharge points into surface waters, waterbody bank erosion, floating matter, water surface sheen, discoloration of receiving water, any notable impacts to the receiving water: ☐

Did the spill discharge to a groundwater infiltration basin or facility? ☐ YES ☐ NO

If yes,

- Estimated time the spill entered the groundwater infiltration basin or facility: _____
- Estimated spill volume discharged to the groundwater infiltration basin or facility: _____ gallons

Estimated spill volume that did NOT reach drainage conveyance system, surface water, or groundwater infiltration basin or facility: _____ gallons

Estimated Total Spill Volume Recovered: _____ gallons

SPILL VOLUME (continued)
Method and explanation of volume estimation methods used: (Check all that apply) ☐ Eyeball Estimate (worksheet included in Spill/Backup Response Workbook) ☐ Counting Upstream Connections (worksheet included in Spill/Backup Response Workbook) ☐ Duration and Flow Rate (worksheet included in Spill/Backup Response Workbook) ☐ Measured Volume (worksheet included in Spill/Backup Response Workbook) ☐ Other (provide worksheet/calculations)
Description of how the spill volume estimations were calculated, including at a minimum, the methodology, assumptions and types of data relied upon, such as supervisory control and data acquisition (SCADA) records, flow monitoring or other telemetry information, used to estimate the volume of the spill discharged, and the volume of the spill recovered (if any volume of the spill was recovered):

SPILL START TIME and END TIME DETERMINATION

Were there witnesses to the spill? ☐ YES ☐ NO If yes, provide Spill Witness Statements below:

Witness 1 Name:	Witness 1 Contact Information:

Where did they see sewage spill from? ☐ Manhole ☐ Inside Building ☐ Vent/Clean Out ☐ Catch Basin ☐ Wet Well/Lift Station ☐ Other (describe):

When did the witness notice the sewage spilling? _____ AM / PM Date ____/____/____

Witness description of spill and affected area:

Is it currently spilling? ☐ YES ☐ NO

When did the witness last observe **NO Spill** occurring? _____ AM / PM Date ____/____/____

Did the witness notice if the spill had reached the storm drain or surface waters?

Comments:

Witness 2 Name:	Witness 2 Contact Information:

Where did they see sewage spill from? ☐ Manhole ☐ Inside Building ☐ Vent/Clean Out ☐ Catch Basin ☐ Wet Well/Lift Station ☐ Other (describe):

When did the witness notice the sewage spilling? _____ AM / PM Date ____/____/____

Witness description of spill and affected area:

Is it currently spilling? ☐ YES ☐ NO

When did the witness last observe **NO Spill** occurring? _____ AM / PM Date ____/____/____

Did the witness notice if the spill had reached the storm drain or surface waters?

Comments:

Witness 3 Name:	Witness 3 Contact Information:

Where did they see sewage spill from? ☐ Manhole ☐ Inside Building ☐ Vent/Clean Out ☐ Catch Basin ☐ Wet Well/Lift Station ☐ Other (describe):

When did the witness notice the sewage spilling? _____ AM / PM Date ____/____/____

Witness description of spill and affected area:

Is it currently spilling? ☐ YES ☐ NO

When did the witness last observe **NO Spill** occurring? _____ AM / PM Date ____/____/____

Did the witness notice if the spill had reached the storm drain or surface waters?

Comments:

SPILL START TIME and END TIME DETERMINATION (continued)

Are the volume of the spill and rate of flow known? ☐ YES ☐ NO

If yes, divide volume by rate of flow to get duration of spill event:

_____ Gallons ÷ _____ GPM = _____ Minutes
Spill Volume Flow Rate Spill Duration

Subtract the duration from the spill end date/time to establish the spill start date/time:

_____ — _____ = _____
Spill End Date/Time Duration Spill Start Time

Method to determine flow rate:

Solids Present? ☐ None or small amount (indicates recent start)
☐ Significant amount of buildup

Staining? ☐ None (indicates recent start)
☐ Minor
☐ Significant

Distance sewage has traveled from spill point:

Spill Start Time:

Spill End Date and Time:

How was end time determined?
☐ Broke stoppage
☐ Turned pump station back on
☐ Other, explain:

Description of the methodology(ies), assumptions and type of data relied upon for estimations of the spill start time and the spill end time.

SPILL CAUSE (check all that apply)
☐ Air Relief Valve (ARV)/Blow Off Valve (BOV)/Backwater Valve Failure
☐ Construction Diversion Failure
☐ Collection System Maintenance Failure (Specify Below)
☐ Damage by Others Not Related to CS Construction/Maintenance (Specify Below)
☐ Debris from Construction
☐ Debris from Lateral
☐ Debris-General
☐ Debris-Rags
☐ Debris-wipes/Non-disposables
☐ Flow Exceeded Capacity (Separate CS Only)
☐ Fats, Oils and Grease (FOG)
☐ Inappropriate Discharge to CS
☐ Natural Disaster (Specify Below)
☐ Operator Error (Specify Below)
☐ Pipe Structural Problem/Failure – Installation
☐ Pipe Structural Problem/Failure – Controls
☐ Pump Station Failure – Power
☐ Pump Station Failure – Mechanical
☐ Pump Station Failure – Controls
☐ Rainfall Exceeded Design, I and I (Separate CS Only)
☐ Root Intrusion
☐ Siphon Failure
☐ Surcharged Pipe (Combines CS Only)
☐ Vandalism (Specify Below)
☐ Other, specify:

SYSTEM FAILURE LOCATION	
System failure location: ☐ Air Relief Valve (ARV)/Blow Off Valve (BOV) Failure ☐ Force Main ☐ Gravity Mainline ☐ Lower Lateral ☐ Manhole ☐ Pump Station Failure – Controls ☐ Pump Station Failure – Mechanical ☐ Pump Station Failure – Power ☐ Siphon ☐ Upper Lateral (Specify Below) ☐ Other, specify:	
Description of the pipe material at the failure location: ☐ Copper ☐ Galvanized Steel ☐ Polyvinyl Chloride (PVC) ☐ Acrylonitrile Butadiene Styrene (ABS) ☐ Cross-Linked Polyethylene (PEX) ☐ Cast Iron ☐ Vitrified Clay ☐ Concrete ☐ Ductile Iron ☐ Fiberglass ☐ Other, specify:	
Estimated age of sewer asset at the point of blockage or failure (if applicable):	years
Diameter of sewer pipe at the point of blockage or failure:	inches

SPILL IMPACT
Description of the impact of the spill:

STORM EVENT
Was spill associated with a storm event? ☐ YES ☐ NO

SPILL RESPONSE ACTIVITIES (check all that apply)
☐ Cleaned Up (Specify Below) ☐ Mitigated Effects of Spill (Specify Below) ☐ Contained All or Portion of Spill ☐ Restored Flow ☐ Returned All Spill to Sanitary Sewer System ☐ Returned Portion of Spill to Sanitary Sewer System ☐ Property Owner Notified ☐ Other Enforcement Agency Notified ☐ Other, specify:
Description of spill response activities including description of immediate spill containment and cleanup efforts:

SPILL CORRECTIVE ACTION (check all that apply)
☐ Added Sewer to Preventive Maintenance Program ☐ Adjusted Schedule/Method of Preventive Maintenance ☐ Enforcement Action Against FOG Source ☐ Inspected Sewer Using CCTV to Determine Cause ☐ Plan Rehabilitation or Replacement of Sewer ☐ Repaired Facilities or Replaced Defect ☐ Other, specify:
Refer to Collection System Failure Analysis Report for details about: • Spill corrective action, including steps planned or taken to reduce, eliminate, and prevent reoccurrence of the spill, and a schedule of major milestones for those steps. • Schedule of major milestones Check to confirm completion of each report: ☐ Post-Spill Assessment ☐ Collection System Failure Analysis
Spill response completion date:

INVESTIGATION
Detailed narrative of investigation and investigation findings of cause of spill:
Is the District conducting an ongoing investigation? ☐ YES ☐ NO If yes, reasons for an ongoing investigation: If yes, expected date of completion of investigation: _____

SURFACE WATERS (Complete for Category 1 Spills Only)		
Name of receiving water body	Type of receiving water body: Stream, Ocean, Wetland, Slough, Estuary, River, Lake, Reservoir, Vernal Pool, Wash, or Other (specify)	Description of the water body(s), including but not limited to: ○ Observed impacts on aquatic life, ○ Public access impact(s): public closure, restricted public access, temporary restricted use, and/or other (specify below) ○ Responsible entity for closing/restricting use of water body, and ○ Number of days closed/restricted as a result of the spill.

MUNICIPAL INTAKE (Complete for Category 1 and 2 Spills Only)		
Was the spill located within 1,000 feet of a municipal surface water intake?	☐ YES	☐ NO
Describe:		

WATER SAMPLING
Were water quality samples collected? ☐ YES ☐ NO ☐ N/A If yes, identify sample locations:
Identify parameters the water quality samples were analyzed for: (Check all that apply) ☐ Total Coliform Bacteria ☐ Fecal coliform bacteria ☐ E-coli ☐ Ammonia ☐ Other, specify:

INSERT TAB:
Tab E: Volume Estimation

Miscellaneous Computations & Examples

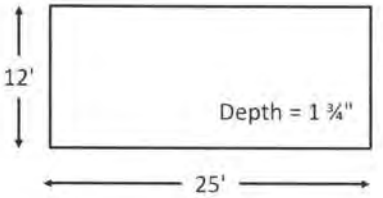
To convert inches to feet (NOTE: for the purposes of this worksheet, the unit of measurement will be in feet for formula examples)	Divide the inches by 12 or use the chart on the right. **Example 1:** 27" ÷ 12 = 2.25' **Example 2:** 1¾" = ?' 1" (0.08') + ¾" (0.06') = 0.14'
Volume of one cubic foot	7.48 gallons of liquid
Area: Two-dimensional measurement represented in square feet (SQ/FT or ft^2)	Square/rectangle: Area = Length x Width Circle: Area = $\pi \times r^2$ (where $\pi \approx 3.14$ 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 = $\pi \times r^2$ x Depth (where $\pi \approx 3.14$ 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.

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**



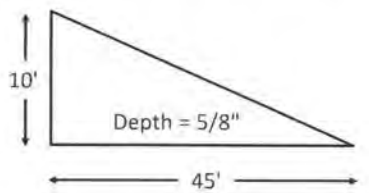
25' (Length) X 12' (Width) X 0.14' (Depth) = **42 Cubic Feet** (Volume)

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

42 ft³ (Volume) X 7.48 (gal/ft³) = **314.16 gallons** (Volume)

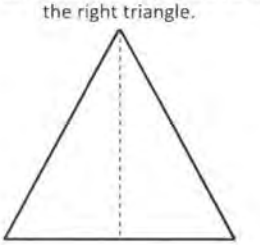
Area/Volume of a Right Triangle

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



0.5 X 45' (Base) X 10' (Height) X 0.05' (Depth) x 7.48 (gal/ft³) = 84.15 gallons (Volume)

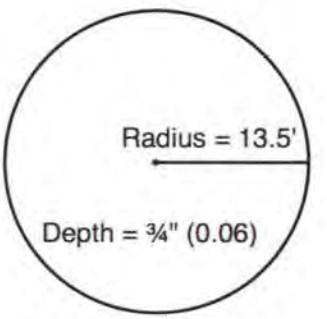
For isosceles triangles (two sides are equal lengths), break it down into two right triangles and compute area as you would for the right triangle.



Area/Volume of a Circle

Formula: π x r² x Depth = Volume in **cubic feet**

The radius is ½ the diameter, which is a straight line passing from side to side through the center of a circle.



13.5' (Radius) X 13.5' (Radius) X 3.14 (π) X 0.06' (Depth) x 7.48 (gal/ft³) = 256.8 gallons (Volume)

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

Spill Date: _____ Location: _____

This method is invalid if surface conditions are wet (due to rainfall, irrigation, etc.) DO NOT use this method under these circumstances.

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

STEP 2: Imagine one or more buckets or barrels of water tipped over. Depending on the size of the spill, 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)/barrel(s)	How many of this size?	Multiplier	Estimated Spill Volume
		x 1 gallon	
		x 5 gallons	
		x 32 gallons	
		x 55 gallons	
		x ___ gallons	
		Estimated Total Spill Volume:	

STEP 5: List assumptions made to arrive at the total estimated spill volume:

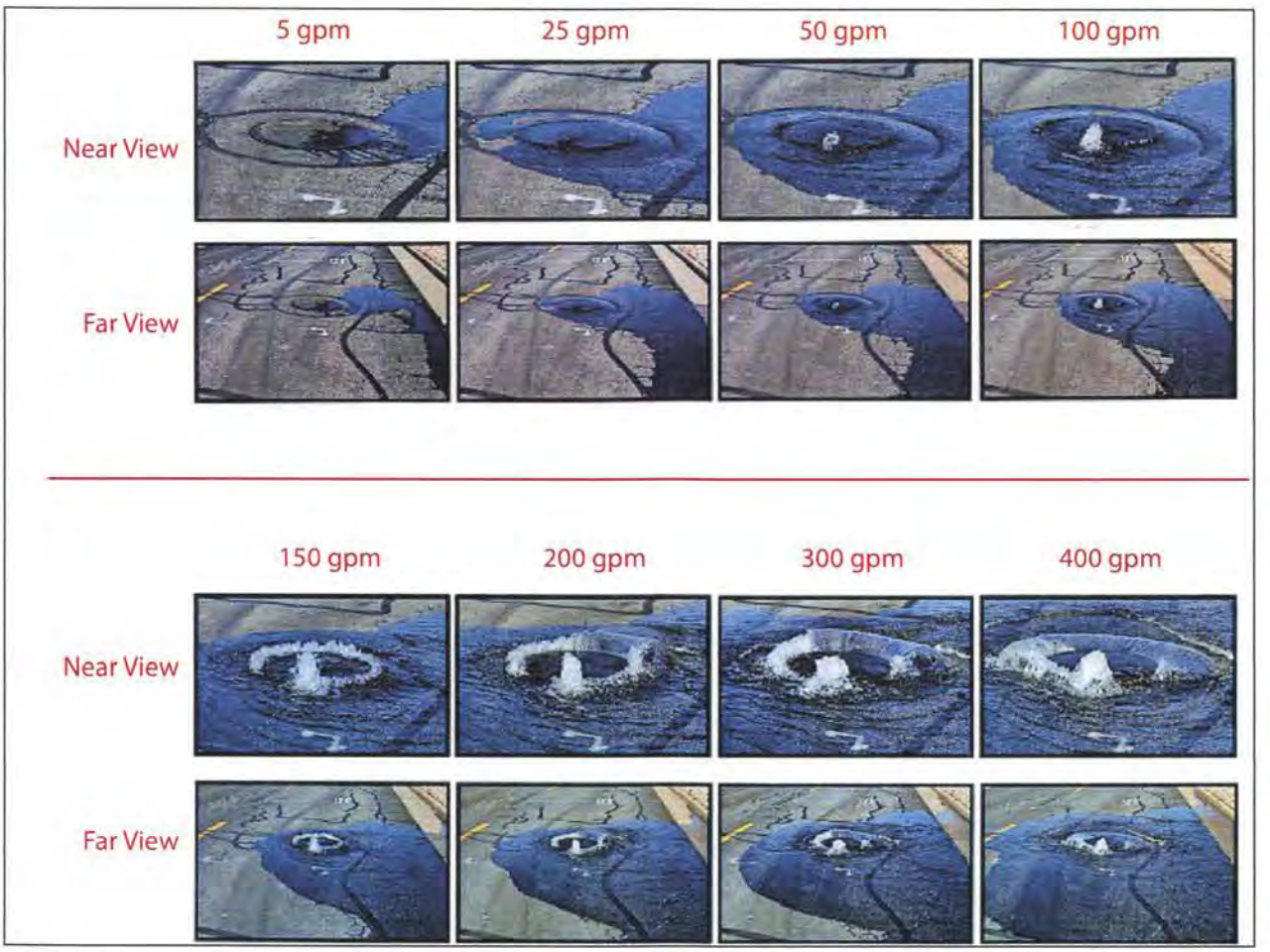
STEP 6: Take photographs. Where are photographs stored?

The following photos must be taken: appearance point closest to the failure point, extent of the spill and spill boundaries, the entry location of each drainage conveyance system the sewage entered, all discharge points into surface waters (Category 1 spill only), and location(s) of clean up.

Volume Estimation: Duration and Flow Rate Comparison Method

Spill Date: _____ Location: _____

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



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

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

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

(Continued on next page)

Volume Estimation: Duration and Flow Rate Comparison Method

Start Date and Time	1.
End Date and Time	2.
Spill 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.

List assumptions made to arrive at the total estimated spill volume:

Take photographs. Where are photographs stored?

The following photos must be taken: appearance point closest to the failure point, extent of the spill and spill boundaries, the entry location of each drainage conveyance system the sewage entered, all discharge points into surface waters (Category 1 spill only), and location(s) of clean up.

Volume Estimation: Area/Volume Method

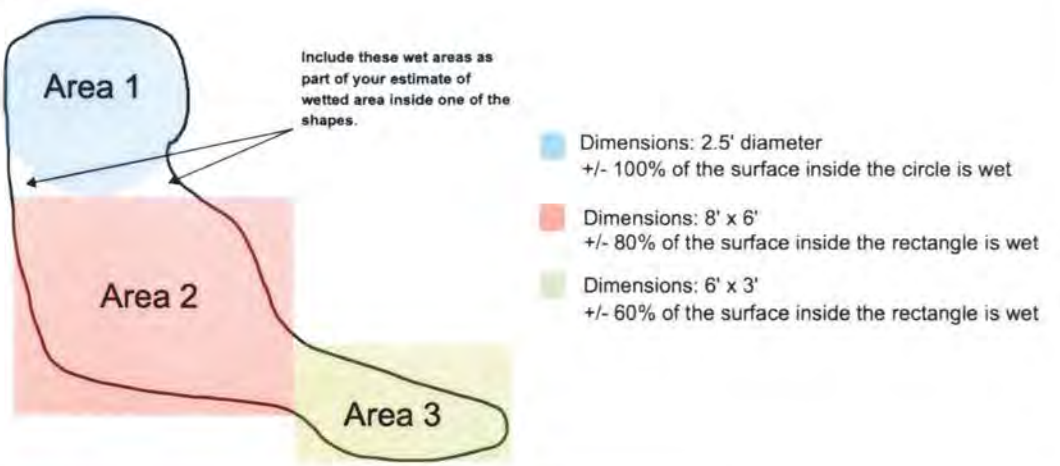
Spill Date: _____ Location: _____

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. Label/identify each sketch outline area (Area 1, Area 2, etc.) See example below.

EXAMPLE:



STEP 3: Calculate the area of the footprint by completing the table below for each area in Step 2. Measure actual depth of standing sewage whenever possible. When depth varies, measure several representative sample points and determine the average. 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")

Rectangles:

Area # (from labeled drawing)		Length	X	Width	X	% Wet	=	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

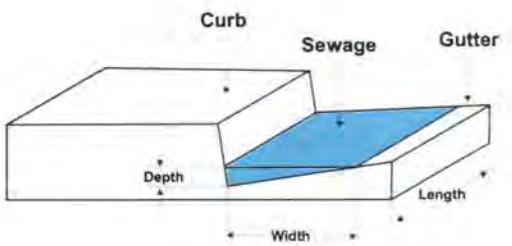
Circles:

Area # (from labeled drawing)		π	X	Radius	X	Radius	X	% Wet	=	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

STEP 4: If part of the spill is in a gutter, use the formula below to calculate the volume:

_____ X _____ X _____ X 0.5 = _____ ft^3

Length Depth Width **Volume**



STEP 5: Calculate Total Spill Volume (sum of all of the volume calculations above): _____ ft^3

STEP 6: 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**

STEP 7: List assumptions made to arrive at the total estimated spill volume. Adjust estimation up for moderate to severe cracking and/or roughness of surface (General Rule 20% to 40%):

STEP 8: Take photographs. Where are photographs stored?

The following photos must be taken: appearance point closest to the failure point, extent of the spill and spill boundaries, the entry location of each drainage conveyance system the sewage entered, all discharge points into surface waters (Category 1 spill only), and location(s) of clean up.

Volume Estimation: Upstream Connections Method

Spill Date: _____ Location: _____

Attach and/or reference system map and identify location of spill and buildings contributing to spill.

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

STEP 2: This volume estimation method utilizes the District's daily usage data. Column A shows how an average daily usage of 230 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 spill 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 spill Volume per EDU.

	Flow Rate Per EDU				Spill	
	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 spill was active during period	D × E = Gallons spilled per period
6am-noon	90	6	15	0.25		
noon-6pm	46	6	7.6	0.12		
6pm-midnight	69	6	9.9	0.17		
midnight-6am	23	6	3.8	0.06		
				Total Estimated Spill Volume per EDU:		

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

_____ gallons X _____ = _____ gallons
Volume per EDU # of EDUs Estimated spill Volume

STEP 4: Adjust spill 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 spill estimate (attach a separate page if necessary).

Total Estimated spill Volume: _____ gallons

STEP 7: List assumptions made to arrive at the total estimated spill volume:

STEP 8: Take photographs. Where are photographs stored?

The following photos must be taken: appearance point closest to the failure point, extent of the spill and spill boundaries, the entry location of each drainage conveyance system the sewage entered, all discharge points into surface waters (Category 1 spill only), and location(s) of clean up.

INSERT TAB:
Tab F: Backup Forms

Backup Forms Checklist (Backup 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 listed below out of this workbook and hand to customer. *Leave the First Responder Form in this workbook, do not give to Customer.*
3. Check each item that was provided to the customer.
4. Have customer sign below.

Forms/Documents:

- ☐ Form F-3: Declination of Cleaning Services
- ☐ Form F-4: Lodging Authorization
- ☐ Form F-5: Customer Information Letter
- ☐ Form F-6: Your Responsibilities as a Private Property Owner
- ☐ Form F-7: Claim Form

Forms Provided to:

_____
Customer Name

_____
Customer Signature

_____
Date

Check here if customer declines to sign: ☐

Formularios / Documentos:

- ☐ F-3: Declinación de los Servicios de Limpieza
- ☐ F-4: Autorización de Alojamiento
- ☐ F-5: Carta de Información del Cliente
- ☐ F-6: Sus Responsabilidades Como Propietario de Una Propiedad Privad
- ☐ F-7: Formulario de Reclamación

Formularios Proporcionados a:

_____
Nombre del cliente

_____
Firma del cliente

_____
Fecha

Marque aquí si el cliente se niega a firmar: ☐

Forms Provided by: _____ _____ _____
Employee Name Initial Date

Instructions to Collection System O/M Superintendent:

Send photos, including the photos of the documents given to the customer, and a copy of the First Responder form to the General Manager.

First Responder Form (Backup Only)

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

Fill out this form as completely as possible.
Ask customer if you may enter the home. If so, take photos of all damaged and undamaged areas.

PERSON COMPLETING THIS FORM: Name: _____ Title: _____	PHONE: DATE: TIME:
TIME STAFF ARRIVED ON-SITE:	
DOES THE CUSTOMER WANT THE District TO CALL FOR CLEANING SERVICE? ☐ Yes ☐ No If no, give the customer the Cleaning Declination Form and have them sign here: _____ If customer called a cleaning contractor, provide name and contact number:	
RESIDENT NAME: ☐ Owner ☐ Renter ADDRESS: PHONE:	IF RENT, PROPERTY MANAGER(S): OWNER: ADDRESS: PHONE:
# OF PEOPLE LIVING AT RESIDENCE:	

Approximate Age of Home:	# of Bathrooms:	# of Rooms Affected:
Numbers of Photographs or Videos Taken: ☐ Photographs _____ ☐ Video _____ ☐ Customer did not provide or allow photographs	Where are photos/video stored?	

Is nearest upstream manhole visibly higher than the drain/fixture that spilled? ☐ Yes ☐ No
Does property have a Property Line Cleanout or BPD? ☐ Cleanout ☐ BPD ☐ Neither ☐ Unknown
If yes, was the Property Line Cleanout/BPD operational at the time of the spill? ☐ Yes ☐ No ☐ Unknown
Have there ever been any previous spills at this location? ☐ Yes ☐ No ☐ Unknown
Has the resident had any plumbing work done recently? ☐ Yes ☐ No ☐ Unknown *If YES, please describe:*

GO TO PAGE 2

LIVABILITY ASESSMENT

- Is there insufficient non-contaminated living space for residents to stay during cleaning including a functioning and non-contaminated bathroom? ☐ Yes ☐ No
- Are there any residents that are pregnant, are children, have severe allergies/asthma, have respiratory problems, and/or have a compromised immune system? ☐ Yes ☐ No
- Is the area a childcare or extended care facility? ☐ Yes ☐ No
- Is the food preparation area contaminated? ☐ Yes ☐ No
- Is it currently after 8pm, or if it is currently before 8pm will the cleaning and disinfection be completed after 10pm? ☐ Yes ☐ No

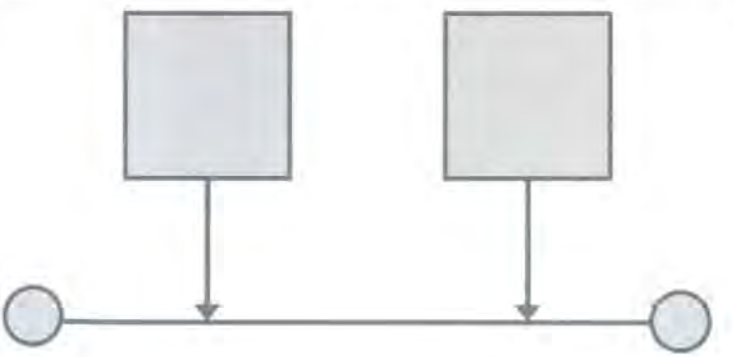
If the answer to any of the questions above is YES, complete the Lodging Authorization form.

If temporary lodging was offered by the District check one: ☐ Accepted ☐ Rejected

SANITARY SEWER LINE BLOCKAGE LOCATION

PLEASE CHECK THE BOXES THAT DESCRIBE YOUR OBSERVATIONS:	
Building Cleanout Was:	Property Line Cleanout was
☐ Non-Existent	☐ Non-Existent
☐ Full	☐ Full
☐ Empty	☐ Empty

On the diagram below, place an X where in the mainline or lateral you believe the problem occurred.



Did sewage go under buildings? ☐ Yes ☐ No ☐ Unsure

Recommended Follow-Up Action(s):

Declination of Cleaning Services (Backup Only)

Customer Information		
NAME:	ADDRESS:	TELEPHONE:

ON (date)	AT (time)	Approximately (quantity)	GALLONS OF: ☐ Sewage ☐ Grey Water ☐ Toilet Bowl Water ☐ Odor ☐ Other (describe):

Spilled from (or odor emanating from)
☐ Toilet ☐ Shower/Tub ☐ Washer ☐ Other (describe):

The spill affected the following areas *(check one)*:
☐ Bathroom ☐ Bedroom ☐ Hallway ☐ Garage
☐ Kitchen ☐ Crawlspace ☐ Other (specify):

The spill affected the following flooring:
☐ Tile ☐ Wood Flooring
☐ Linoleum ☐ Carpet
☐ Other (specify):

and/or additional materials:
☐ Area Rugs ☐ Towels
☐ Clothing ☐ Other (specify):

This Form Completed By: Name: _____ **Date:** _____
(Write legibly) Title: **Time:**

CUSTOMER, please read the following and sign below. I/We acknowledge that Truckee Sanitary District (District) has offered to provide professional cleaning and decontamination services to remediate the sewage backup and/or spill described above and that we declined the offer. We further understand and acknowledge that because we have declined, any necessary remediation activities will be conducted without District assistance, and that the District will not accept responsibility for work performed by persons other than those engaged by the District. The District will also not accept responsibility for any charges related to this incident that are not usual and customary. Refer to "Your Responsibilities as a Private Property Owner" (Page F-6) for recommendations regarding spill cleanup.

CLIENTE, por favor lea lo siguiente y firme a continuación. Yo/Nosotros reconocemos que Truckee Sanitary District (distrito) se ha ofrecido a proporcionar servicios profesionales de limpieza y descontaminación para remediar la reserva de aguas residuales y/o derrame descrita anteriormente y que rechazamos la oferta. Además, entendemos y reconocemos que debido a que hemos rechazado, cualquier actividad de remediación necesaria se llevará a cabo sin la asistencia de distrito, y que distrito no aceptará responsabilidad por el trabajo realizado por personas que no sean las contratadas por distrito. La distrito tampoco aceptará responsabilidad por ningún cargo relacionado con este incidente que no sea habitual y habitual. Consulte "Sus Responsabilidades Como Propietario De Una Propiedad Privada" (Página F-6) para obtener recomendaciones sobre la limpieza de derrames.

Customer Signature / Firma del cliente *:		**Date:**
The information above was explained to the customer by the following employee:	**Name:**	**Title:**
	Signature:	**Date:**

**Note to responders: if customer declines to sign this form, then have a co-worker sign here as a witness:*

Name: _____ *Signature:* _____ *Date:* _____

Lodging Authorization (Backup Only)

INSTRUCTIONS TO EMPLOYEE:

1. Complete this form if the Livability Assessment on the First Responder Form indicates a need for temporary relocation and the customer accepts the offer.
2. Notify the Collection System O/M Superintendent or designee who will make arrangements via telephone and pay for the hotel with a credit card.
3. Complete the voucher as instructed by the Collection System O/M Superintendent or designee.
4. Take a photo of the form for records and then give it to the customer.
5. Indicate if they accept or reject the offer of temporary relocation on the First Responder Form (F-2).

INSTRUCTIONS TO RESIDENT:

Truckee Sanitary District recommends that you temporarily relocate to one of the hotels listed below for your safety and convenience while your residence is being cleaned. Please note that this emergency authorization is granted under the following conditions:

1. This authorization provides for one (1) night's lodging at one of the hotels listed below.
2. The authorization is good for **room and tax ONLY**. Phone, food, mini-bar and other incidental charges will be your responsibility.
3. Additional nights and/or other allowances/incidentals may be discussed by contacting the Collection System O/M Superintendent or designee at (530) 550-3111.

INSTRUCCIONES PARA EL RESIDENTE:

Truckee Sanitary District recomienda que se traslade temporalmente a uno de los hoteles enumerados a continuación por su seguridad y comodidad mientras se limpia su residencia. Tenga en cuenta que esta autorización de emergencia se concede bajo las siguientes condiciones:

1. Esta autorización prevé una (1) noche de alojamiento en uno de los hoteles que se enumeran a continuación.
2. La autorización es válida para habitación e impuestos SOLAMENTE. Teléfono, comida, minibar y otros cargos incidentales serán su responsabilidad.
3. Las noches adicionales y / u otras asignaciones / imprevistos pueden discutirse comunicándose con el Collection System O/M Superintendent al (530) 550-3111.

VOUCHER

Good for one (1) night's stay on (date): _____ Number of Affected Residents: _____

Customer's Name: _____

Field Supervisor's Name: _____ Phone Number: _____

Hampton Inn and Suites (530) 587-1197
11951 CA-267, Truckee, CA 96161

Best Western Plus (530) 587-4525
11331 Brockway Rd, Truckee CA 96161

Customer Information Letter (Backup Only) F-5 (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. Nevertheless, occasionally tree roots or other debris in the sewer lines causes a backup into homes immediately upstream of the blockage. At this time the District is investigating the cause of this incident.

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 provided 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.

Depending on the extent of the backup our Field Crew may advise you to consider relocating temporarily while the living area is cleaned. In that case, the District will arrange for lodging for you for one night. Please see the Lodging Authorization form for details.

To discuss this matter, or to submit a claim, contact the General Manager at (530) 587-3804.

Sincerely,
The Truckee Sanitary District

Estimado Propietario:

Reconocemos que los incidentes de la red de alcantarillado pueden ser estresantes y requieren una respuesta inmediata, mientras que todos los hechos relacionados con la forma en que ocurrió el incidente aún son desconocidos. Tenga la seguridad de que haremos todo lo posible para evitar que este tipo de evento ocurra en primer lugar. Sin embargo, ocasionalmente las raíces de los árboles u otros residuos en las líneas de alcantarillado causan una copia de seguridad en los hogares inmediatamente antes del bloqueo. En este momento el distrito está investigando la causa de este incidente.

Si se determina que el distrito es responsable del incidente, nos comprometemos a limpiar y restaurar su propiedad, ya proteger la salud de las personas afectadas durante el proceso de remediación.

El contratista de limpieza proporcionado 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 se consideren no habituales y habituales.

Dependiendo de la extensión de la copia de seguridad, nuestro Field Crew puede aconsejarle que considere reubicarse temporalmente mientras se limpia la sala de estar. En ese caso, el District organizará el alojamiento para usted por una noche. Consulte el formulario de autorización de alojamiento para obtener más detalles.

Para discutir este asunto o presentar un reclamo, comuníquese con el Gerente General al (530) 587-3804.

Sinceramente,
The Truckee Sanitary District

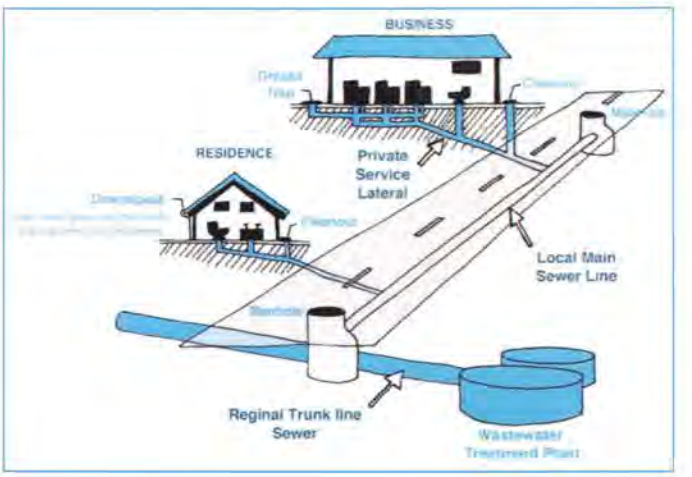
Your Responsibilities as a Private Property Owner (Backup Only)

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 public sewer. Depending on your location, a portion of the lateral is 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 spills 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.



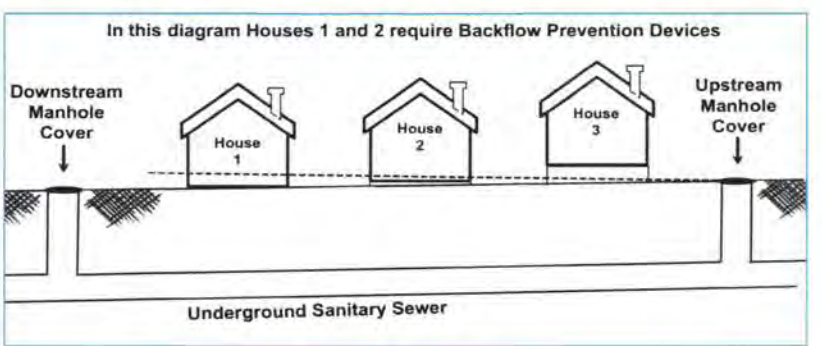
Prevent most sewage backups with a Backflow Prevention Device

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 spills 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)

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.

Other Tips:

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

- 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:

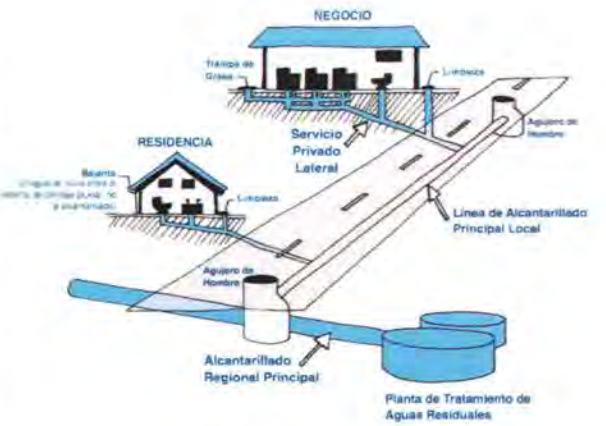
- Keep children and pets out of the affected area until cleanup has been completed.
- Wear rubber boots, rubber gloves, and goggles during cleanup of affected area.
- Clean up sewage solids (fecal material) and place in properly functioning toilet or double bag and place in garbage container.
- On hard 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.



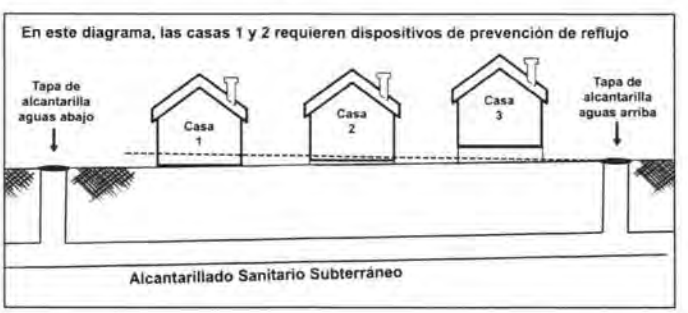
Prevenga la mayoría de las copias de seguridad de aguas residuales con un dispositivo de prevención de reflujo

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.

BLAKE R. TRESAN, P.E.
General Manager
Chief Engineer

TRUCKEE SANITARY DISTRICT
A PUBLIC AGENCY

12304 Joerger Dr. • Truckee, California 96161-3312
Telephone (530) 587-3804 • Fax (530) 587-1340

CLAIM FORM

TO: The Truckee Sanitary District **Date:** _____

The undersigned hereby presents the following claim against the Truckee Sanitary District in accordance with the provisions of Government Code Section 910.

1. Name of Claimant: _____

Address of Claimant: _____

Claimant Telephone: Home _____ **(Optional)** **Business** _____ **(Optional)**

2. Name of person to whom notices should be sent (if other than claimant):

_____

3. Address to which notices from the District should be sent:

_____

_____

4. Date of Incident: _____

Location of Incident: _____

5. Description of the incident including your reason for believing that the District is liable for your damages:

6. Description of all damages which you believe you have incurred as a result of the incident: (Optional)

_____

7. The name or names of any District employees causing the damages that you are claiming:

_____

8. What sum do you claim? Include the estimated amount of any prospective loss insofar as it may be known at the time of the presentation of this claim, together with the basis for computation of the amount claimed. (Attach estimates or bills, if possible)

(a) If the amount claimed is less than $10,000:

_____

_____ $ _____

_____ $ _____

Total Amount Claimed $ _____

(b) If the amount is $10,000 or more, then filling out Section 8(a) is requested, but is optional.

I HAVE READ THE FOREGOING CLAIM AND KNOW THE CONTENTS THEREOF; AND CERTIFY THAT THE SAME IS TRUE OF MY OWN KNOWLEDGE EXCEPT AS TO THOSE MATTERS WHICH ARE HEREIN STATED UPON MY INFORMATION AND BELIEF; AND AS TO THOSE MATTERS I BELIEVE THEM TO BE TRUE.

I CERTIFY (OR DECLARE) UNDER PENALTY OF PERJURY THAT THE FOREGOING IS TRUE AND CORRECT.

SIGNATURE OF CLAIMANT OR AGENT	TYPE OR PRINT NAME	DATE

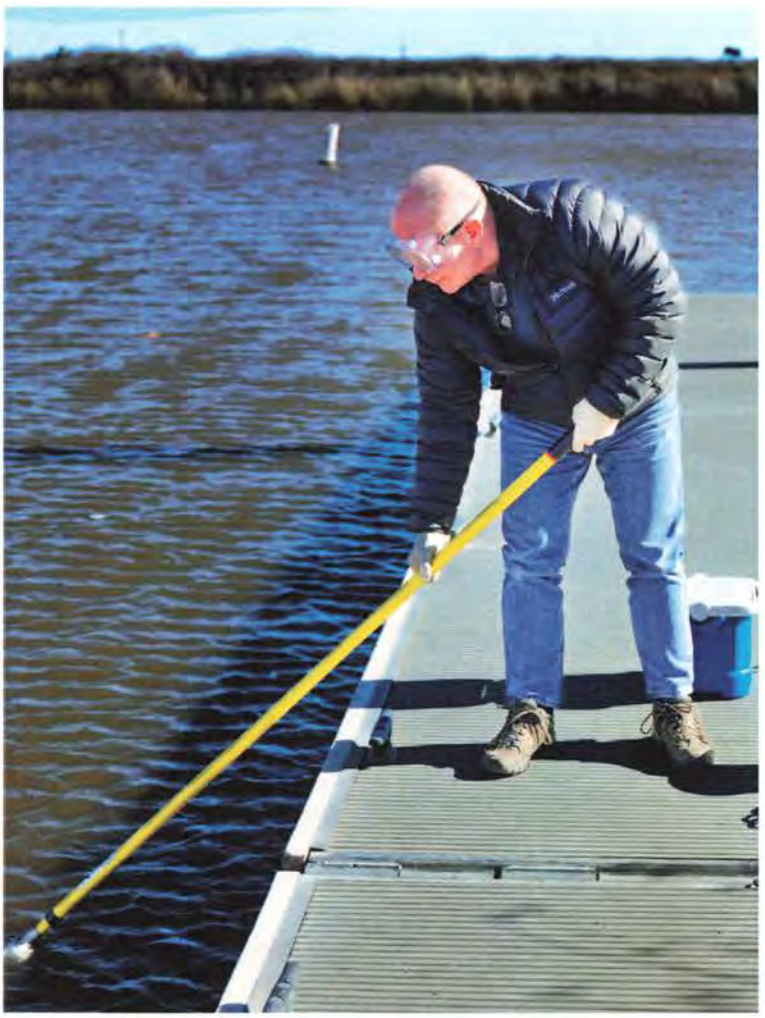
RELATIONSHIP TO CLAIMANT

Note: Please return this claim to the District's Human Resources/Risk Management Administrator for further processing.

email: hr@truckeesan.org or
mail to: Truckee Sanitary District

Attn: HR/Risk Management Administrator
12304 Joerger Drive
Truckee, CA 96161

INSERT TAB:
Tab G: SAMPLING SOP



Process:	***Surface Water Sampling***
Personnel Required:	• 1
Personal Protective Equipment:	• Safety Glasses • Rubber Gloves
License Required:	• None required
Common Hazards:	• Drowning or submersion • Slip, trip, and fall • Exposure • Insect/Wildlife • Weather • Boat/Watercraft • Physical Strain or Injury
Safe Operation Guidelines:	• Wear proper PPE • Be aware of currents, depth, and unstable banks • Do not eat, drink or smoke while sampling • Avoid cross-contamination • Label all samples clearly

Lab Contact Information	WET Labs (775) 355-0202 475 East Greg St #119 Sparks NV 89431 TTSA Labs (530) 587-2525 13720 Butterfield Drive Truckee, CA 96161

Surface water sampling helps to ensure water quality by identifying areas of concern and potential failure mechanisms that may impact surface waters or stormwater infrastructure in the service area.

Minimize Impacts

Surface water sampling allows for the proper evaluation of potential contamination following a sanitary sewer spill.

Having a thorough understanding of the service area and its various challenges can help responders be better prepared to minimize the impacts of a spill on local surface waters and stormwater infrastructure.

Before beginning the sampling process there are several important steps that must be taken to ensure that the samples collected are representative of the water quality in the area being monitored.

These steps include:

1. **Gathering the necessary equipment:**
    - The surface water sampling worksheet, chain of custody, sampling pole, sample containers, and PPE are essential tools that must be prepared and organized before sampling can begin.
2. **Donning appropriate personal protective equipment:**
    - To protect against exposure to potentially harmful contaminants and the sulfuric acid preservative in the Ammonia sample bottles, workers must wear gloves, eye protection, and other personal protective equipment, as needed.
3. **Determining the point of spill entry into the waterway:**
    - It's important to locate the point at which any spill entered the waterway in order to collect the required samples: point of entry into the surface water, downstream, and upstream.

The approximate stream velocity and time since the spill flow to the surface water stopped should be determined to calculate the appropriate distance to move downstream to collect:

1. **The downstream sample,**
2. **Move upstream to collect the spill entry point sample,**
3. **And move further upstream to collect the upstream or reference sample.**

Personal Protective Equipment

Personal Protective Equipment (PPE) should be used when conducting surface water sampling. The PPE that is required includes:

- Gloves
- Eye Protection

Sampling Equipment

In addition to PPE, other sampling equipment is necessary:

- Sample Bottles & Containers
- Cooler with Ice, or Ice packs
- Sampling Pole, or
- Rope & Bucket

The use of PPE and proper sampling equipment is important for the safety of the sampler and for ensuring accurate and reliable sampling results.

Test Type	Sample Locations			
	Spill Area	Downstream of Spill	Upstream of Spill	Drainage Conveyance System (as applicable)
Ammonia/ Nitrogen	1 pint with H2SO4	1 pint with H2SO4	1 pint with H2SO4	1 pint with H2SO4
Fecal Coliforms	1 bacti bottle	1 bacti bottle	1 bacti bottle	1 bacti bottle

Water samples must be collected in different bottles for various tests and then transported in a cooler with ice packs.

For each of the three sampling sites (plus drainage conveyance system as applicable), one bottle is needed for ammonia/nitrogen testing, and one bacti bottle is required for each type of bacteria being tested.

Additionally, one field blank sample is required for each constituent. Field blank sample bottles are filled with sterilized water during sampling to serve as quality control on the sampler's sampling methods.

Since the sample bottles contain sterilized water, bacteria and ammonia should not be present in the water. If the lab analysis shows the presence of bacteria or ammonia, it indicates that the sampler's method may not have been correct, and the other bacti samples may have been contaminated.

Surface Water Sampling – Preparation

Step 1 of 4

Prepare the cooler for sample storage by adding an instant ice pack, ice pack, or ice to keep the samples cold during transport to the lab.

Step 2 of 4

Identify the point of the spill where the wastewater entered the waterway and take a photograph of this location with a reference point in the picture.

Step 3 of 4

Begin completing the ***Surface Water Sampling Worksheet*** to record the relevant information about the sampling location and collected samples.

Step 4 of 4

To determine which direction is upstream and downstream for sample collection, you should observe the direction of water movement from the point of discharge.

The purpose of this procedure is to provide a standard for collecting surface water samples to assess water quality, avoid contamination, and ensure that samples can be accurately labeled and transported to the lab for processing.

Notes:

Start by collecting downstream samples first.

In order to determine where the downstream sample is located in a stream, creek, or river, you will need to determine the velocity of the surface water. This can be accomplished through the use of a stream velocity meter or by measuring off a distance along the bank and timing how long it takes for a floating object to travel that distance.

Use the formula on the *Surface Water Sampling Worksheet* to calculate the stream velocity. Once known, determine the time that the spill **has not been** entering the surface water.

This, along with the stream velocity, will inform you how far downstream you need to travel to collect the downstream sample.

Step 1 of 9

Don the appropriate PPE from your sampling kit. This should include latex or rubber gloves and safety glasses.

Step 2 of 9

Label all samples with their location (refer to table on G-8), your name, and the date and time they are collected. Record this information on the surface water sampling worksheet.

Step 3 of 9

Take photos of each sample location and ensure a reference point is visible in each photo. In the photo (left), the dock and sign serve as excellent reference points.

Step 4 of 9

Remove the seal from the Ammonia sample container just prior to collecting your sample, as applicable.

To reduce the likelihood of contamination, remove the cap immediately before collecting each sample.

Step 5 of 9

To prevent sample contamination, do not allow the inside of the cap to touch anything while you are obtaining the sample.

Step 6 of 9

When filling the ammonia nitrogen sample bottle, don't overfill it because it contains sulfuric acid. Sweep the bottle or dipper upstream and out of the water without disturbing the bottom sediment. Remember to leave the sulfuric acid in the bottle and avoid skin contact.

Step 7 of 9

Fill the Ammonia sample bottle to the fill line, and immediately replace the cap. If there is no clear fill line, fill it to the "neck" of the bottle.

Step 8 of 9

Open the Bacteria sample container and allow water to gently flow into the bottle just to the fill line.

Repeat the sampling process for all sample points, and **provide a "field blank"** sample using sterile water, which verifies the quality of the samples.

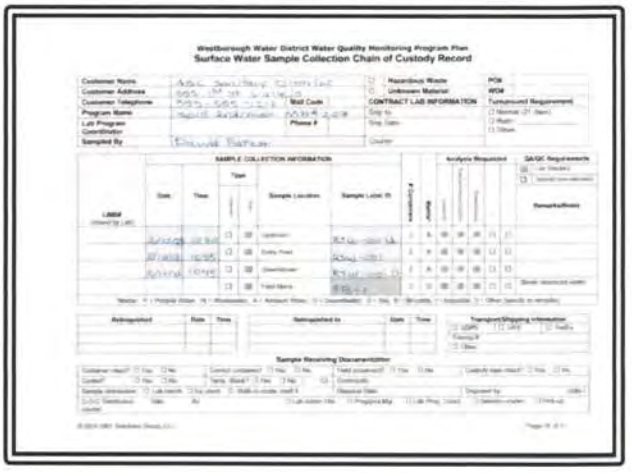
Step 9 of 9

Place all samples in the cooler on the ice pack. To ensure accurate analysis, the Bacti samples must be transported to the lab within 6 hours of the time of collection.

Step 1 of 4: Documentation

All samples must be labeled with their location, your name, and the date and time they were collected. Refer to the state requirements found on the last page of this document. Record this information on the chain of custody form and the surface water sampling worksheet.

Chain of Custody Record



Surface Water Sampling Worksheet

Step 2 of 4: Contact the Lab

Inform the lab that the following samples require processing: ammonia-nitrogen, and/or total/fecal coliform. Provide any additional information the lab may require.

Step 3 of 4: Transport Samples

Place the samples in the cooler on the ice pack and transport them to the lab within 6 hours of collection time. Complete the chain of custody form and ensure all samples are properly secured during transport.

Step 4 of 4: Post Warning Signs

If directed by your supervisor or the county environmental health division, post warning signs in the affected area. Keep track of sign locations and remove warning signs and lift restrictions only when authorized to do so.

The Enrollee shall collect receiving water samples at the following locations:

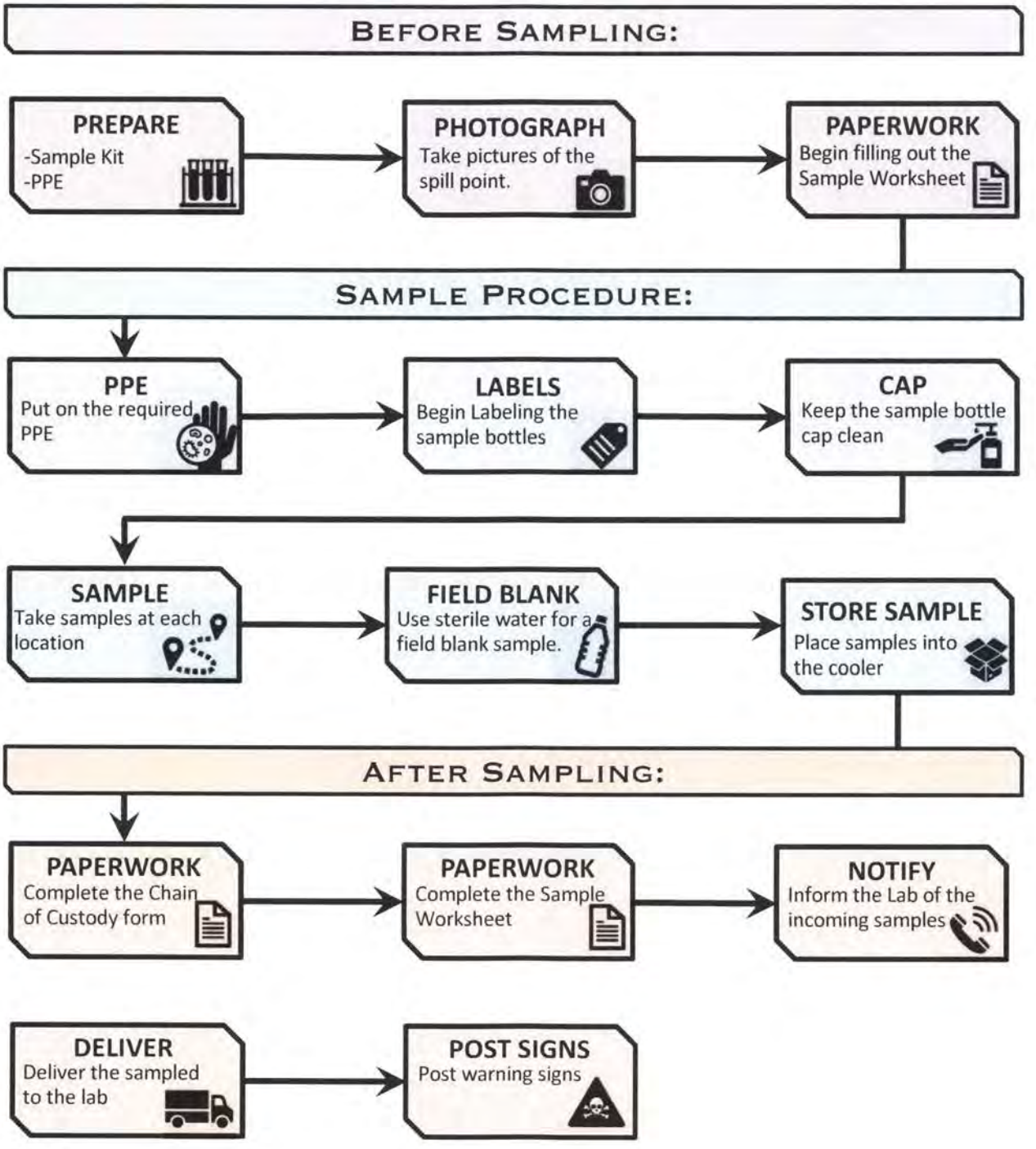
Sampling of Flow in Drainage Conveyance System (DCS) Prior to Discharge

Sampling Location	Sampling Location Description
DCS-001	A point in a drainage conveyance system before the drainage conveyance system flow discharges into a receiving water.

Receiving Surface Water Sampling (RSW[1])

Sampling Location	Sampling Location Description
RSW-001 Point of Discharge	A point in the receiving water where sewage initially enters the receiving water.
RSW-001U Upstream of Point of Discharge	A point in the receiving water, upstream of the point of sewage discharge, to capture ambient conditions absent of sewage discharge impacts.
RSW-001D Downstream of Point of Discharge	A point in the receiving water, downstream of the point of sewage discharge, where the spill material is fully mixed with the receiving water.

[1]The Enrollee must use its best professional judgment to determine the upstream and downstream distances based on receiving water flow, accessibility to upstream/downstream waterbody banks, and size of visible sewage plume.



Surface Water Sampling Worksheet

Sample Date:	Sample Time: ☐AM ☐PM	Sample Location:
Sampler(s)' Name(s):		
Sampler(s)' Signature(s):		

What is being sampled?

☐Stream ☐Pond ☐Lake ☐River ☐Other:

Weather at time of sampling:

☐Sunny ☐Overcast ☐Sprinkling ☐Raining

Was the spill actively entering the surface water during Sampling?

☐YES ☐NO If no, complete A-D in the gray box to the right.

If the spill was not actively entering the surface water during sampling:

A. Stream Velocity: _____CFS

B. How Long Has the spill ***NOT*** Been Entering the Surface Water?

_____ minutes X 60sec/min = _ seconds

C. How Far Downstream Did You Travel To Collect The SOURCE Sample?

(A X C = Feet): _____ feet

D. Explain why you travelled a different distance, if you did, to collect the source sample:

Sample Location	Sample Label	# of Samples*	Photo ID# of Sample Location	Visual Observations and/or Interferences
Drainage Conveyance	DCS-001	2		
Source*	RSW-001	2		
Upstream*	RSW-001U	2		
Downstream*	RSW-001D	2		
Field Blank*	Field Blank	2		

FINISH CHECKLIST	NOTES / OBSERVATIONS
☐ **All Samples Labeled with:** ☐ Date: a six-digit number indicating the year, month, day of collection ☐ Time: a four-digit number indicating military time of collection. e.g. 0954 ☐ Sample Location: Drainage Conveyance, Source, Upstream, or Downstream ☐ Samplers: each sampler is identified ☐ Parameter/preservative: analysis to be conducted for sample/sample preservation ☐ **Chain of Custody Completed** ☐ **Samples on Ice in Cooler** ☐ **Pictures Taken of Each Sample Location and the Photo ID/# Noted Above** ☐ **All Sampling Equipment Collected**	

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

INSERT TAB:
Tab H: POST-SPILL

SPILL LOCATION
Spill location name:
Address of spill:

NOTIFICATION AND COMMUNICATION PROCEDURES	
Were notification procedures adhered to?	☐ Yes ☐ No
Were notification procedures effective?	☐ Yes ☐ No
RESPONSE PROCEDURES	
Were response time goals met?	☐ Yes ☐ No
Were safety procedures adhered to?	☐ Yes ☐ No
Were safety procedures effective?	☐ Yes ☐ No
Were initial response procedures adhered to?	☐ Yes ☐ No
Were initial response procedures effective?	☐ Yes ☐ No
Were containment procedures adhered to?	☐ Yes ☐ No

RESPONSE PROCEDURES (continued)	
Were containment procedures effective?	☐ Yes ☐ No
Were clean up and recovery procedures adhered to?	☐ Yes ☐ No
Were clean up and recovery procedures effective?	☐ Yes ☐ No
Were sewer back up procedures adhered to?	☐ Yes ☐ No
Were sewer back up procedures effective?	☐ Yes ☐ No
Were chain of custody procedures adhered to?	☐ Yes ☐ No
Was failure analysis investigation performed and documented?	☐ Yes ☐ No
REPORTING AND NOTIFICATION PROCEDURES	
Were reporting and notification timeline requirements met?	☐ Yes ☐ No

DOCUMENTATION	
Was spill file created?	☐ Yes ☐ No
Was QA/QC performed to ensure field data matched CIWQS data?	☐ Yes ☐ No

RECOMMENDED CHANGES
☐ N/A

ATTENDEES	

FACILITATED BY	
	Date:

OFFICE USE ONLY

Incident Report #		Prepared By	
Spill/Backup Information			
Cause			
Summary of Historical Spills/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 File Reviewed By		CCTV Review Date	
Observations			

Go to Page 2

Recommendations					
✓	Type	Specific Actions	Who is Responsible?	Completion Deadline	Who Will Verify Completion?
	No Changes or Repairs Required	n/a	n/a	n/a	n/a
	Added sewer to preventive maintenance program				
	Adjusted schedule/method of preventive maintenance				
	Enforcement action against FOG source				
	Plan rehabilitation or replacement of sewer				
	Repaired facilities or replaced defect				
	Change(s) to Spill Response Procedures				
	Training				
	Misc.				
Comments/Notes:					
Reviewed By:				Review Date:	

Appendix E: Water Quality Monitoring Program (WQMP)

Sewer System Management Plan - Appendix E
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
- 3 – 120 mL sterile glass containers for coliform analysis
- 3 – 500 mL poly containers 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.

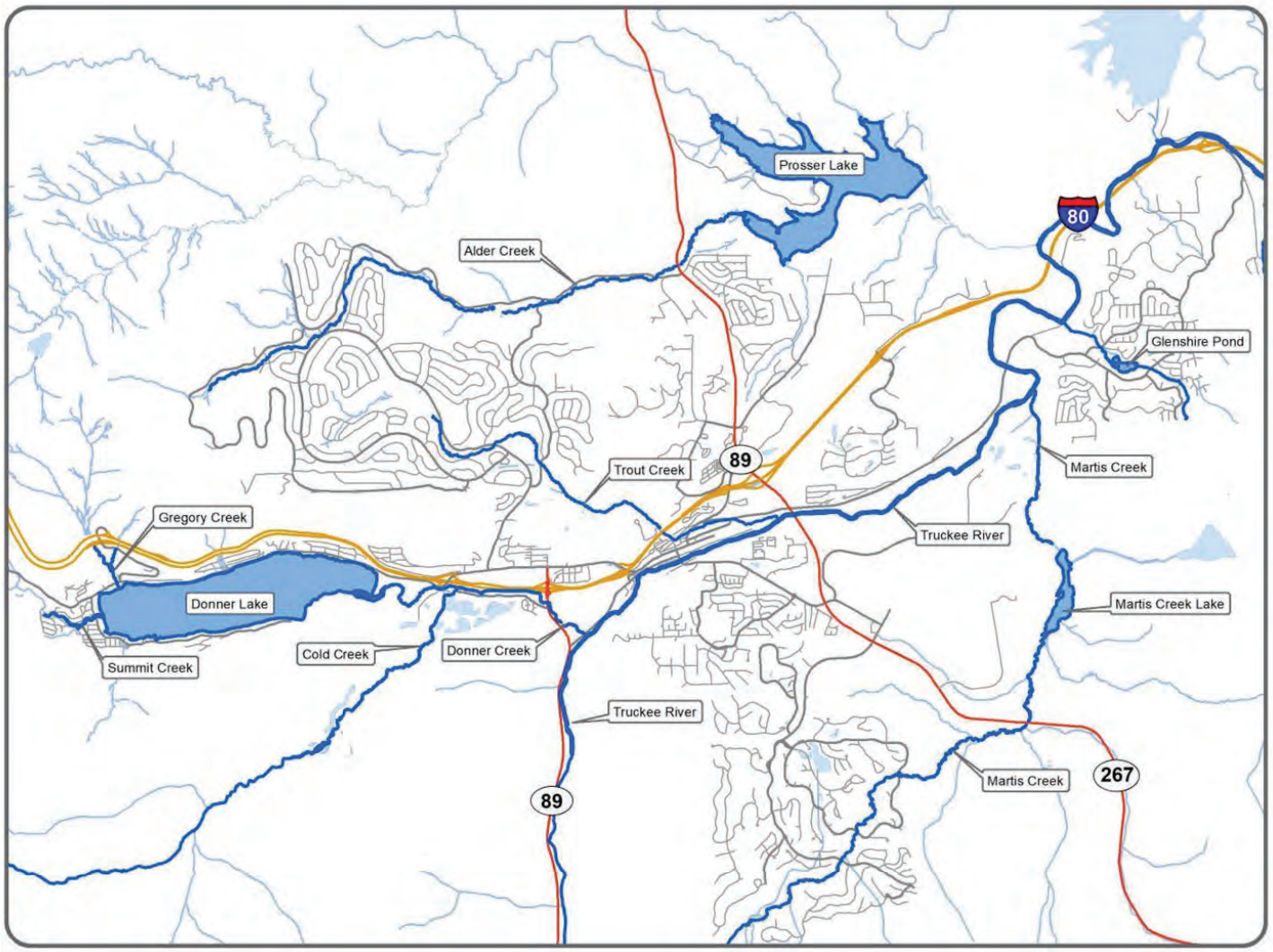
TRAINING AND FIELD EXERCISE PROGRAM

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:	

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

Data Validation Level: III or IV

EDD / EDF? YES ___ *NO* ___

Global ID # _____

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