

**HI-DESERT WATER DISTRICT**  
**SEWER SYSTEM MANAGEMENT PLAN**

Prepared for:  
**Hi-Desert Water District**  
55439 29 Palms Highway  
Yucca Valley, CA 92284



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## LIST OF ATTACHMENTS

The following documents are available on the internet at  
<https://www.hdwd.com/337/Sewer-System-Management-Plan-SSMP>

ID	Title	SMP Element
A1	Documentation of Board of Directors (Governing Board) Approval	Element 1 – Goal and Overview
A2	State Water Resources Control Board, Statewide General Waste Discharge Requirements for Sanitary Sewer Systems	Element 1 – Goal and Overview
A3	Order Number WQ 2013-0058-ECEC	Element 1 – Goal and Overview
B1	Directory of Positions Responsible for Collection System Management	Element 2 – Organization
B2	SSMP Implementation Organization Chart	Element 2 – Organization
C1	District Code Title 8- Wastewater	Element 3 – Legal Authority
F1	Response and Reporting Procedures for SSOs and Sewer or Stormwater Contamination	Element 6 – Overflow Emergency Response Plan
F2	Barron Lift Station Emergency Response Plan	Element 6 – Overflow Emergency Response Plan
F3	Paxton Lift Station Emergency Response Plan	Element 6 – Overflow Emergency Response Plan
F4	Kickapoo Lift Station Emergency Response Plan	Element 6 – Overflow Emergency Response Plan
G1	Referral and Enforcement Response Procedures for FOG Discharges Resulting in a Sanitary Sewer Overflow	Element 7 – FOG Control Program
G2	Standard Operating Procedures for FOG Inspections	Element 7 – FOG Control Program
G3	FOG Resolution 21-09	Element 7 – FOG Control Program

## **INTRODUCTION**

This is the Hi-Desert Water District's (HDWD, District) first Sewer System Management Plan (SSMP). Prior to late 2019, sewage treatment was not handled by the District.

This Sewer System Management Plan (SSMP) has been prepared in compliance with requirements of the State Water Resource Control Board (SWRCB) pursuant to Order No. 2006-0003, Statewide General Waste Discharge Requirements (WDR) for Sanitary Sewer Systems included in Appendix A, and Order Number WQ 2013-0058-EXEC included in Appendix B. The WDR requires development and implementation of a written SSMP and defines eleven mandatory SSMP elements. The WDR also defines associated monitoring, record keeping, reporting, and public notification requirements.

This SSMP is intended to be a living document and will be updated as needed to reflect changes to the SSMP elements. The intent of this SSMP is to meet the requirements of the Statewide WDR. This document presents eleven elements in the order presented in the WDR:

1. Goals;
2. Organization;
3. Legal Authority;
4. Operation and Maintenance Program;
5. Design and Performance Provisions;
6. Overflow Emergency Response Plan;
7. Fats, Oils, and Grease (FOG) Control Program;
8. System Evaluation and Capacity Assurance Plan;
9. Monitoring, Measurement, and Program Modifications;
10. SSMP Program Audits; and
11. Communication Plan.

As described in the District's Waste Discharge Requirements (WDR) contained in Order R7-2015-0043, the District owns, operates, and maintains a municipal wastewater reclamation plant and associated collection system and disposal facilities. The Hi-Desert Water District (HDWD) provides water service to approximately 25,000 residents and businesses in the Town of Yucca Valley (Town) and portions of San Bernardino County, California as a "Special District" operating pursuant to the provisions of County Water District Law, California Water Code, sections 30,000 et. seq. The District currently has over 10,000 active water service connections. With a total service area of 57-square miles, the District operates 16 storage tanks, 13 wells, and maintains over 297 miles of water distribution pipeline, approximately 78 miles of wastewater collection system, and a 1.06 MGD wastewater reclamation facility.

### **ELEMENT 1: GOALS**

The intent of this section is to identify the goals that the District has established for its SSMP. These goals are intended to provide focus for District staff to continue proactive management of its wastewater collection system.

## **1.1 Regulatory Requirements for the Goals Element**

The WDR requires that the SSMP goals focus on proper management, operation, and maintenance of all parts of the sanitary sewer system. This will help reduce and prevent Sanitary Sewer Overflows (SSOs), as well as mitigate any SSOs that do occur.

## **1.2 SSMP Goals**

The goals of the District's SSMP include:

- Maintaining or improving the condition of the collection system infrastructure in order to provide reliable services now and into the future;
- Cost-effectively minimizing infiltration/inflow (I/I) and provide adequate sewer capacity to accommodate design storm flows;
- Minimizing the number and impact of sanitary SSOs that occur;
- Preventing unnecessary damage to public and private property;
- Working cooperatively with local, state, and federal agencies to investigate the causes of, minimize, and mitigate the impacts of SSOs;
- Meeting all applicable regulatory notification and reporting requirements;
- Being available and responsive to the needs of the public to prevent and restore interruptions in service, and to minimize public health and property impacts related to SSOs;
- Implementing regular, proactive maintenance of the system to remove and control roots, debris, and fats, oils and grease (FOG) that may cause SSOs;
- Prioritizing renewal and replacement of wastewater collection system facilities to maximize their useful life and optimize capital expenditures; and
- Maintaining the SSMP, which will serve as a reference for the District's sanitary sewer system management practices.

## **ELEMENT 2: ORGANIZATION**

The intent of this section of the SSMP is to identify the District staff members responsible for implementing this SSMP, responding to SSO events, and meeting the SSO reporting requirements. This section also includes the designation of the Legally Responsible Official (LRO) or authorized representative to meet SWRCB requirements for completing and certifying spill reports.

## **2.1 Regulatory Requirements for the Organization Element**

The WDR requires that the Organization element of the SSMP provide the following:

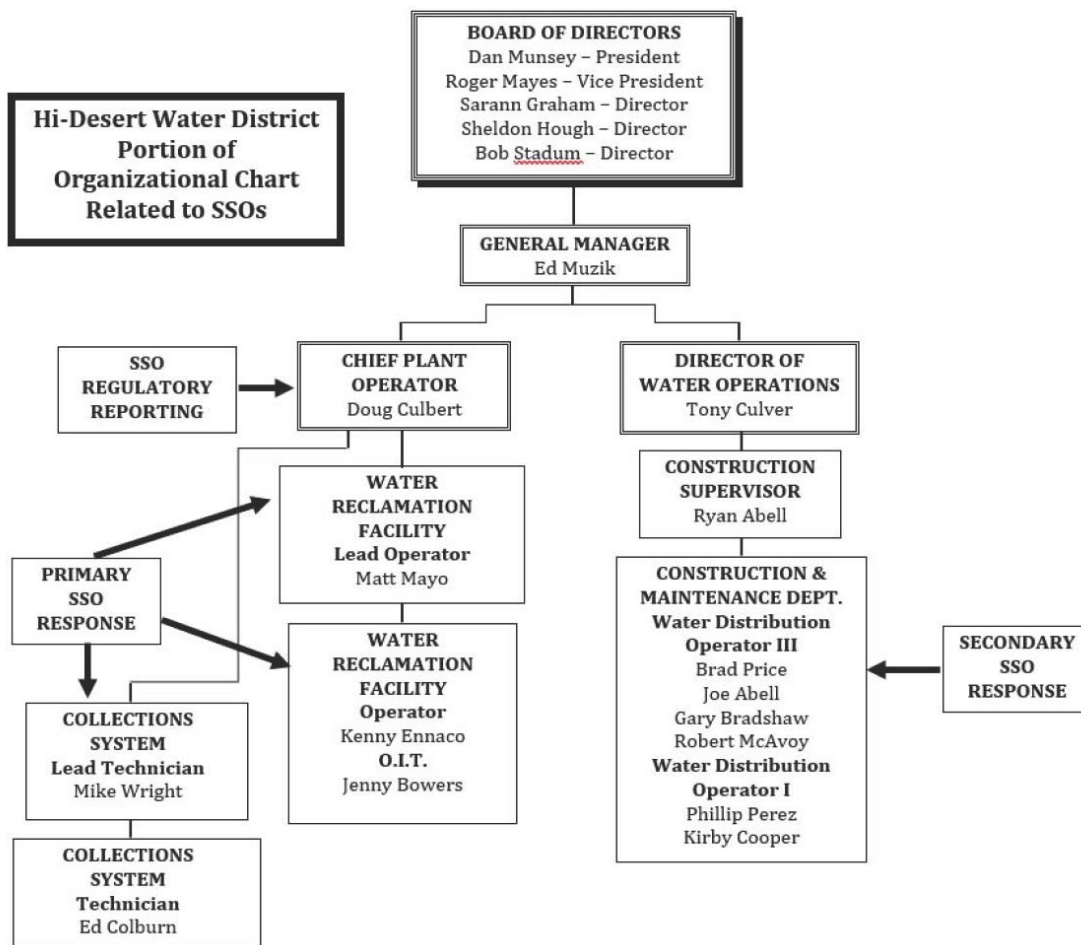
- The name of the responsible or authorized representative;
- The names and telephone numbers for management, administrative, and maintenance positions responsible for implementing specific measures in the SSMP program. Include lines of authority as shown in an organization chart or similar document with a narrative explanation; and
- The chain of communication for reporting SSOs, from receipt of a complaint or other information, including the person responsible for reporting SSOs to the State and Regional Water Boards and other agencies if applicable.

## 2.2 Organization

The portion of the District organization chart related to SSO response and reporting is shown in the figure below. The organization chart below illustrates the positions and lines of authority through which the wastewater program is administered.

The lines of authority are clearly diagrammed from the Board of Directors through the General Manager through the Chief Plant Operator and Director of Water Operations, to each individual position. Each position within the District's organization has specific and clearly defined responsibilities and authorities that are designed to meet the District's goals for the wastewater program and collectively cover all the SSMP elements. This ensures that each element of the program is properly addressed and accomplished.

The District's organizational goal is to clearly define responsibility and authority for accomplishing each program work element. This is accomplished through organization charts, work assignments, and position descriptions.



Each position is responsible for its own work assignments. Principal positions within the District that have responsibility for the wastewater collection system are shown in the following table. Accountability is assured by monitoring and reporting by the various positions at weekly staff meetings. The CPO oversees these meetings and monitors the progress of various functions and activities within the SSMP.



Position	Responsibility
Chief Plant Operator (CPO)	The Chief Plant Operator is the duly authorized representative whom oversees all facets of the District's wastewater and storm water collection system. Duties include, but are not limited to, design, construction review, planning of capital improvement projects, overseeing GIS mapping, operation and maintenance, and reporting SSO information to the CRBWB and SWRCB.
Water Reclamation Facility Lead Operator	Oversees operation and maintenance the District's wastewater treatment plant. Participates in SSO responses. Complete SSO field forms documenting volume released and mitigation actions.
Water Reclamation Facility Operators	Participates in the operation and maintenance of the District's water reclamation facilities, and monitoring of the lift stations, and collection system and participates in SSO responses.
Collection Technicians	Operates and maintains the lift stations and collection system and assists in the preventative maintenance of the water reclamation facility. Complete SSO field forms documenting volume released and mitigation actions.
Water Construction and Maintenance Staff	Maintains the District's water distribution system. Secondary responders to SSOs on an as needed basis.

### 2.3 Authorized Representative

The Chief Plant Operator (CPO), Doug Culbert, is the Legally Responsible Official (LRO) or duly authorized representative to prepare, certify and submit electronic spill reports to the CRBWB and SWRCB and to notify other government agencies.

### 2.4 SSO Reporting Chain of Communication

Sanitary system overflow (SSO) detection, notification, response and reporting processes will be described in Element 6 – Overflow Emergency Response Plan. The sanitary system overflow (SSO) detection, notification, and response process is discussed below.

Operation and maintenance crews continually monitor the condition and performance of the system with the goal of identifying and fixing any potential problem before it becomes an SSO. Once a spill is reported or observed, it immediately becomes the highest priority.

Citizens can report any problems with the wastewater collection system 24 hours per day, 7 days per week. During normal business hours calls regarding SSOs are received by the Hi-Desert Water District Office (760) 365-8333. Office personnel will contact the Chief Plant Operator CPO who will dispatch responders. In cases when the CPO is not available, the Lead Collections Technician will be contacted who will dispatch responders.

After normal working hours calls regarding SSOs are received by Centratel, the HDWD after-hours answering service and they will contact on-call Wastewater Staff using the On-Call phone number (Not a

publicized number). The on-call Wastewater Staff will notify the CPO and will be the initial responder to SSOs along with the CPO. If the situation warrants, additional personnel will be contacted to respond. In complex SSOs the Construction & Maintenance Afterhours staff will be contacted for additional support and guidance.

Information from the SSO and SSO response will be provided by the responders to CPO who will make the necessary regulatory reports.

All overflow incidences are immediately reported to the CPO who will then notify the General Manager. A crew is assembled, the problem is evaluated, a solution is found, and implemented.

The District emphasizes timely and accurate notification and reporting. The chain of communication for reporting SSOs has been effective. The District strives for a minimum time in responding to an SSO and meets its legal obligation and social responsibility for notification and reporting.

The CPO makes sure the proper agencies are contacted starting with the General Manager. The decision is then made, depending on the SSO, to contact additional resources as needed (the order will also be determined by the nature of the event):

- (800) 852-7550            Manager, Office of Emergency Services (OES),

Depending on the circumstances, OES may contact some, or all, of the agencies below:

- (800) 442-2283            San Bernardino County Environmental Health
- (760) 346-7491            Regional Water Quality Control Board, Colorado River
- (760) 228-1991            San Bernardino County Fire Department Station 42 - Yucca Valley
- (760) 366-4175            Yucca Valley Police Department
- (909) 387-8313            San Bernardino County (Yucca Valley)

### **ELEMENT 3: LEGAL AUTHORITY**

This element of the SSMP discusses the District's Legal Authority, including its ordinance and agreements with other agencies. This section fulfills the Legal Authority requirement for the WDR (Element 3).

#### **3.1 Regulatory Requirements for the Legal Authority Element**

The requirements for the Legal Authority element of the SSMP are summarized below. The District must demonstrate, through collection system use ordinances, service agreements, or other legally binding procedures, that it possesses the necessary legal authority to:

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

#### **3.2 Hi-Desert Water District Legal Authority**

The legal authority required for the SSMP is contained within Districts Title 8 "Wastewater" in Appendix C. The sections that fulfill the requirements of the SSMP are indicated below:

- 1. Prevent illicit discharges into its wastewater collection system (examples may include**

**infiltration and inflow (I/I), storm water, chemical dumping, unauthorized debris and cut roots, etc.);**

The following sections of the District Code prevent illicit discharges:

- 8.15.020(A) (1), General Prohibitions
- 8.15.020(A) (2), Specific Prohibitions

**2. Require that sewers and connections be properly designed and constructed;**

Currently design standards are contained within a document titled "Wastewater Collection System Phase I Bid Package D" in the Section 330513.

**3. Ensure access for maintenance, inspection, or repairs for portions of the lateral owned or maintained by the Public Agency;**

The following sections of the District Ordinance contain provisions for access to all portions of the sewer and all connections:

- 18.15.070, Compliance Monitoring, (A). Right of Entry:
- 18.15.100 (H) (4), Administrative Enforcement Remedies (Provides authority for termination of discharge for "Refusal of reasonable access to the person's premises for the purpose of inspection, monitoring, or sampling").

**4. Limit the discharge of fats, oils, and grease and other debris that may cause blockages;**

The following sections of the District Ordinance contain provisions to limit discharge of fats oils and greases and other debris:

- 18.15.020, General Sewer Use Requirements, Specific Prohibitions (A)(2)(c). Includes "Solid or viscous substances in amounts which will cause obstruction of the flow in the POTW resulting in interference"; and.
- 18.15.020, General Sewer Use Requirements, Specific Prohibitions (A)(2)(q). "Fats, oils, or greases of animal or vegetable origin in concentrations greater than one hundred (100) mg/l; "

**5. Enforce any violation of its sewer policies;**

The legal authority for enforcement of sewer standards is provided in the following sections of the Districts Title 8 "Wastewater"

- 8.15.100, Administrative Enforcement Remedies.
- 8.15.110, Judicial Enforcement Remedies.
- 8.15.120, Supplemental Enforcement Action.

### **3.3 Agreements with Other Agencies**

The District has no satellite collection systems or agreements to receive wastewater from any other jurisdiction.

## **ELEMENT 4: OPERATION AND MAINTENANCE PROGRAM**

### **4.1 Regulatory Requirements for the Operations and Maintenance Program Element**

The WDR states that the District shall develop and implement an Operations and Maintenance (O & M) Program which should include the following:

- The District must maintain an up-to-date map of the sanitary sewer system, showing all gravity line segments, manholes, pumping facilities, pressure pipes, valves, and applicable storm water conveyance facilities;

- The District must describe routine preventive operation and maintenance activities by staff and contractors; including a system for scheduling regular maintenance and cleaning of the sanitary sewer system with more frequent cleaning and maintenance targeted at known problem areas. The Preventive Maintenance program should have a system to document scheduled and conducted activities, such as work orders;
- The District must develop a rehabilitation and replacement plan to identify and prioritize system deficiencies and implement short-term and long-term rehabilitation actions to address each deficiency. The program should include regular visual and TV inspections of manholes and sewer pipes, and a system for ranking the condition of sewer pipes and scheduling rehabilitation. Rehabilitation and replacement should focus on sewer pipes that are at risk of collapse or prone to more frequent blockages due to pipe defects. Finally, the rehabilitation and replacement plan should include a capital improvement plan that addresses proper management and protection of the infrastructure assets. The plan shall include a time schedule for implementing the short-term and long-term plans plus a schedule for developing the funds needed for the capital improvement plan;
- The District must provide equipment and replacement part inventories, including identification of critical replacement parts; and
- The District must provide training on a regular basis for staff in sanitary sewer system operations, maintenance, and require contractors to be appropriately trained.

## 4.2 Maps

The District is developing a comprehensive set of sewer maps that show all the features of the District's collection system. These maps are being developed and maintained in a modern state-of-the-art GIS System. The District's GIS system will have the entire collection system as well as other informational layers, developed with information from the District's maintenance and operations database. The District's goal is to actively use the GIS in system management, decision-making, and prioritization of work. The GIS will be routinely updated to include system expansion, rehabilitation, and building lateral sewer changes. The GIS system will include:

- Sewer pipe network
- Pipe sizes
- Manholes
- Manhole depths
- Pump stations
- Streets
- Parcels
- Sewer Flushing Locations
- Sewer Checking Locations

## 4.3 Preventive Operations and Maintenance Program

The wastewater collection system is still under construction and will be built in stages. Stage 1-3 is scheduled to be completed in late 2019 with stages 4-10 anticipated completion by 2023. The District has filled the critical positions and will evaluate the level of personnel at a later date. Preventive Operations and Maintenance programs are under development. Problem areas of the collection system have not been identified. A schedule for routine preventive operation and maintenance activities is under development, using a work-order system to document scheduled and conducted activities.

Sewer Collection System maintenance may include: CCTV inspections, pipe repair, smoke testing, and some pipe cleaning.

The Preventive Sewer System Maintenance Schedule will be organized around specific locations and frequencies of service. The District will likely maintain a sewer flushing log identifying specific locations that are hydro-flushed monthly, quarterly, and semi-annually. The frequency and type of preventive maintenance will be developed based on experience.

The length of sewers that needs to be actively flushed, either monthly, quarterly, or semi-annually, is yet to be determined.

The District has a vacuum truck, for cleaning and clearing lines.

The sewer flush log will show the different maintained sewer segments listing specific characteristics which require instructions unique to each site.

In addition to regularly scheduled maintenance of specific sewer segments, the District will develop a list of sites across the system that are visually inspected every week as indicators of system-wide condition. Inspections will consist of pulling the lids off manholes and inspecting the sewer flow. Observations forms will be logged.

#### **Pumping Station Maintenance**

Within the District's service area, there are wastewater pumps and lift stations. Regular inspection and maintenance schedules will be developed as they become operational.

#### **Root Control**

Given the condition of the collection system (new in 2019), the District has not had any problems with roots in the collection system. In the future, if closed circuit television (CCTV) determines roots are an issue in a line, the District will use various mechanical techniques to remove blockages caused by roots.

#### **Odor Control**

Given the condition of the collection system (new in 2019), the District has received no odor complaints. Any odor complaints will be addressed quickly by the District.

#### **Non-Routine Maintenance**

The District may utilize contract services for emergency cleaning or a combination of contract and in-house services for cleaning of yet to be identified trouble spots. Non-routine maintenance activities may include investigation and response to any complaints regarding a manhole overflow, missing or shifted manhole covers, manhole covers that are excessively noisy, residential plumbing problems, lift station malfunction, unexpected sewer odor, etc. Sewer complaints are investigated, and appropriate actions are taken to resolve the source of the problem.

#### **Emergency Maintenance**

Given the condition of the collection system (new in 2019), the District's collection system facilities have not experienced blockages and/or SSOs that require unplanned maintenance under emergency conditions. The District has developed emergency maintenance procedures contained within their *Sanitary Sewer Overflow and Backup Response Plan*, for more information refer to Element 6.

#### **Information Systems/Data Collection**

The District currently tracks maintenance activities by using work order system. The work orders are used for scheduling activities. The completed forms are kept on file as a record of completed maintenance activities.

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

The installed of the wastewater collection system is not yet complete as of the date of this plan. Given that it is a new collection system a rehabilitation and replacement program to identify and prioritized system deficiencies and implemented short-term and long-term rehabilitation actions to address each deficiency is not necessary at this time. In the future the District will perform surveys of its sewer system, to identify sewer pipeline replacement projects that will increase hydraulic capacity and further reduce the potential for SSOs and I/I.

#### **4.5 Capital Improvements Plan**

The Districts wastewater collection system is new (not completed as of the date of this plan) and currently the District is not planning any system improvements.

#### **4.6 Training**

Crews are trained in the proper operation and maintenance of all new major mobile equipment and facilities. Written operation and maintenance manuals are used as resource material for initial start-up training as well as new staff training.

Safety training is an integral part of the District's program. Every staff member receives formal safety training. Crews are trained in confined space entry as well hazardous materials management, as required by regulations.

The District currently requires contractors to have all State and Federal required trainings and certifications and to comply with contractor safety requirements.

#### **4.7 Contingency Equipment and Replacement Parts Inventory**

District crews maintain the pumping stations and perform repair or replacement of all sewer pipelines in the District. The District maintains an inventory of equipment, replacement parts, and supplies. A structured process is followed to ensure an up-to-date accounting and complete inventory of equipment and replacement parts for their specific duties. Each lift station is equipped with two pumps for redundancy and the District has all the necessary parts to rebuild any of the lift station pumps.

The District maintains equipment such as sump pumps, portable generators, traffic control and night lighting systems in a ready state for immediate deployment in an emergency.

The District has adequate funding, staff, facilities, and equipment to quickly respond to routine or emergency maintenance needs. The District has a fleet of trucks and equipment used in the operation and maintenance of the public sewers, and three pumping stations, and can quickly minimize impacts and mitigate emergency conditions.

The maintenance yard is fully equipped with modern equipment and spare parts. The District tracks the use and maintenance history of each vehicle and piece of equipment and replaces them based on a schedule of service time and use. General services and scheduled maintenance on fleet vehicles as well as replacement is based on operating records of the equipment.

### **ELEMENT 5: DESIGN AND PERFORMANCE PROVISIONS**

The intent of this section of the SSMP is to document the District's design and performance provisions.

## 5.1 Regulatory Requirements for the Design and Performance Provisions

The WDR requires that the Design and Performance element of the SSMP provide the following:

- The District must have design and construction standards and specifications for the installation of new sewer systems, lift stations and other appurtenances; and for the rehabilitation and repair of existing sewer systems; and
- The District must have procedures and standards for inspecting and testing the installation of new sewers, pumps, and other appurtenances and for rehabilitation and repair projects.

## 5.2 Standards for Installation, Rehabilitation and Repair

The District developed and implemented Standard Plans and Specifications for the Construction of Sanitary Sewers for the initial construction of the wastewater collection system contained within construction bid/specification documents (2018 Bid Package including SECTION 330130.13 – SEWER AND MANHOLE TESTING and SECTION 330513 – MANHOLES AND STRUCTURES). These standards will be incorporated into appropriate District rules and regulations under development

These standards ensure the sewer lines and connections are properly designed and constructed. The design standards dictate engineering design and construction criteria for installing, repairing and connecting laterals to the system. They also provide procedures and standards for inspecting and testing the installation of new sewers, pumps, and other appurtenances; and for rehabilitation and repair projects.

Inspection of all construction is performed by either a District employee or a professional construction inspection contractor.

### Design:

All gravity sewer line systems within the District are designed to meet standards for the State of California. Pipe sizes are determined by the ultimate service area and available slope. All gravity sewer line plans are designed by registered civil engineers and reviewed and approved by the District prior to construction.

### Construction:

Qualified contractors, who must have a Class 'A' general contractor's license when working within the District road right-of-way, construct all gravity sewer line systems. The contractors work is inspected by the District Construction Department and tested for trench compaction and pipeline integrity in compliance with the State of California recommendations. Connections to the gravity sewer system are not permitted until final approval by the District, and record drawings have been filed.

## 5.3 Standards for Inspection and Testing of New, Rehabilitated, and Repaired Facilities

The District developed and implemented standards for inspection and testing Sanitary Sewers for the initial construction of the wastewater collection system contained within construction bid/specification documents.

## ELEMENT 6: OVERFLOW EMERGENCY RESPONSE PLAN

The intent of this section of the SSMP is to document the District's Overflow Emergency Response Plan (OERP).

### 6.1 Regulatory Requirements for the Overflow Emergency Response Plan

The District shall develop and implement an OERP that identifies measures to protect public health and the environment. At a minimum, this plan must include the following:

- Proper notification procedures so that the primary responders and regulatory agencies are informed of all SSOs in a timely manner;
- A program to ensure appropriate response to all overflows;
- Procedures to ensure prompt notification to appropriate regulatory agencies and other potentially affected entities (e.g. health agencies, regional water boards, water suppliers, etc.) of all SSOs that potentially affect public health or reach the waters of the State in accordance with the Adopted Amended Monitoring and Reporting Requirements State Water Resources Control Board Order Number WQ 2013-0058-EXEC. All SSOs shall be reported in accordance with this Order, the California Water Code, other State Law, and other applicable Regional Water Board WDR or National Pollution Discharge Elimination System (NPDES) permit requirements. The SSMP should identify the officials who will receive immediate notification;
- Procedures to ensure that appropriate staff and contractor personnel are aware of and follow the Emergency Response Plan and are appropriately trained;
- Procedures to address emergency operations, such as traffic and crowd control and other necessary response activities; and
- A program to ensure that all reasonable steps are taken to contain untreated wastewater and prevent discharge of untreated wastewater to waters of the United States and minimize or correct any adverse impact on the environment resulting from the SSOs, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the discharge.

The District's Overflow Emergency Response Plan is contained as Appendix D and complies with the above requirements.

## **ELEMENT 7: FATS, OILS AND GREASE (FOG) CONTROL PROGRAM**

The intent of this section of the SSMP is to document the District's FOG Program (Appendix E) and identify program additions.

### **7.1 Regulatory Requirements for the FOG Program**

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

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



- Development and implementation of source control measures, for all sources of FOG discharged to the sewer system, for each sewer system section identified above.

The District has a FOG Control Policy contained within their Fog Control Program (Appendix E). The District has inventoried FOG generators in the collection system and will perform inspections and public outreach / education, and permitting.

## **7.2 Public Education and Outreach Program**

Public education and outreach occur at the time of the FOG inspections. During the initial FOG inspection process, the District representative will provide operators with copies of the District's FOG Control Policy and Ordinance. The District representative will discuss the importance of FOG control and answer questions.

## **7.3 FOG Source Control**

The Hi-Desert Water District's Fats, Oils, and Grease Control Program (Appendix E) is an important component of the District's overall source control strategy. The program addresses the discharges of the District's dominant group of non-domestic users, the food service establishments. The Fats, Oils, and Grease Control Program was implemented in 2019, and is an active element in preventing sanitary sewer overflows within the District. The core aspects of the program are twofold: 1) the program establishes and enforces grease trap/interceptor installation requirements as part of the permitting process for new food service establishments; and 2) the program implements and monitors annual inspections of all grease traps/interceptors permitted within the District limits. These annual inspections are intended to confirm that food service establishment owners and staff are properly maintaining their grease traps/interceptors.

The District's Fats, Oil and Grease Control Program ensures that all food service establishments within the District have a grease trap or grease interceptor to capture fats, oils, and grease, which would otherwise be directed into the District's wastewater collection system.

The Fats, Oils, and Grease Control Program provides for annual inspections of food service establishments to ensure that all grease traps and interceptors are functional and maintained properly, and that waste fats, oils, and grease are disposed of properly. In addition, information will be distributed to inform food service establishments that there are alternatives to grease

## **7.4 Disposal of FOG**

FOG discharge to the sewer is prohibited. Users are required to properly dispose of pretreatment wastes (brown grease) and cooking grease (yellow grease). The District does not accept trucked or hauled waste at this time, therefore does not have a registration system for FOG waste haulers.

The District does not own or operate a FOG disposal facility. Licensed FOG hauling contractors are required to dispose of grease to a certified disposal facility. The frequency of cleaning a FSE's grease control device will be on a case-by-case basis and therefore a schedule for FOG disposal will also be on a case by case basis.

## **7.5 Legal Authority for FOG Program**

The legal authority for the District's FOG Program will be contained within the Districts Municipal Ordinances.

The Hi-Desert Water District Code prevents illicit discharges into its wastewater collection system by using general prohibitions, and narrative local limits, in the following sections:

**18.15.020 (A)(1) Types of Wastes Prohibited.** No user shall introduce or cause to be introduced into the POTW any pollutant or wastewater which causes pass through or interference. These general prohibitions apply to all users of the POTW whether or not they are subject to categorical pretreatment standards or any other National, State, or local pretreatment standards or requirements

The District Code limits the discharge of fats, oils, and grease and other debris that may cause blockages;

**8.15.020 (A) (2) (c) and (q), Specific Wastes Prohibited:**

- Solid or viscous substances in amounts which will cause obstruction of the flow in the POTW resulting in interference but in no case solids greater than one quarter inch (1/4") or 0.635 centimeters in any dimension; and
- "Any water or waste which may contain more than 100 parts per million (100 mg/L) of FOG".

The District has the authority to take enforcement actions against violations of discharge prohibitions and other sewer policies through following sections of Code;

- 8.15.100 Administrative enforcement remedies
- 8.15.110 Judicial enforcement remedies
- 8.15.120 Supplemental enforcement action
- 8.15.120 (K) Remedies nonexclusive

**7.6 Requirements to Install Grease Removal Devices**

The authority for requiring installation of grease removal devices is contained in the following section of Municipal Code:

**8.15.030 (B)(3),** Grease, oil and sand interceptors must be provided when, in the opinion of the General Manager, they are necessary for the proper handling of wastewater containing excessive amounts of grease and oil, or sand; except that such interceptors are not required for residential users.

**7.7 Authority to Inspect Grease Producing Facilities**

The legal authority for the District to inspect grease producing facilities is contained within:

**Hi-Desert Water District Ordinance 8.15.070 (A)** The General Manager shall have the right to enter the premises of any User to determine whether the User is complying with all requirements of this ordinance and any individual wastewater discharge permit or general permit or order issued hereunder. Users shall allow the General Manager ready access to all parts of the premises for the purposes of inspection, sampling, records examination and copying, and the performance of any additional duties.

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

Given the age of the collection system (new 2019) there are no identified grease problem areas. Based on field observations and inspection data, the District may create a list of locations within the collection system that are prone to accumulation of FOG.

**ELEMENT 8: SYSTEM EVALUATION AND CAPACITY ASSURANCE PLAN**

This section of the SSMP discusses the District's capacity management measures, and recommended capacity improvement projects.

## 8.1 Regulatory Requirements for the System Evaluation and Capacity Assurance Plan

The WDR requirements for the System Evaluation and Capacity Assurance element of the SSMP are summarized below:

- **Evaluation:** The District must identify actions needed to evaluate those portions of the sewer system that are experiencing or contributing to an SSO discharge caused by hydraulic deficiency.
- **Design Criteria:** Where design criteria do not exist or are deficient, the agency should undertake the evaluation identified in the Evaluation section above to establish appropriate design criteria.
- **Capacity Enhancement Measures:** The agency must identify the steps needed to establish a short- and long-term Capital Improvement Plan (CIP) to address identified hydraulic deficiencies including prioritization, alternatives analysis, and schedules. The CIP may include increases in pipe size, I/I reduction programs, increases and redundancy in pumping capacity, and storage facilities. The CIP shall include an implementation schedule and shall identify sources of funding.
- **Schedule:** The agency shall develop a schedule of completion dates for all portions of the CIP developed. The evaluation must provide estimates of peak flows, estimates of the capacity of key system components, hydraulic deficiencies, and the major sources that contribute to the peak flows associated with overflow events. In the Evaluation, Design Criteria and Capacity Enhancement Measures sections above. This schedule shall be reviewed and updated at least every five years.

## 8.2 Capacity Evaluation

Since the collection system is new (2019) there have been no SSOs. If SSOs occur a result of a hydraulic deficiency, the District will evaluate those portions of the sewer system that are experiencing or contributing to an SSO.

## 8.3 Design Criteria

The design criteria for wastewater projects are contained within the 2018 Bid Package.

## 8.4 Recommended Capacity Projects

The collection system was recently designed and constructed (2019). Currently there are no capacity projects planned.

## ELEMENT 9: MONITORING, MEASUREMENTS, AND PROGRAM MODIFICATIONS

This section of the SSMP discusses parameters the District tracks to monitor the success of the SSMP and how the District plans to keep the SSMP current.

### 9.1 Regulatory Requirements for the Monitoring, Measurements, and Program Modifications

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

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

## 9.2 Monitoring Information

The District will maintain information that can be used in SSMP performance monitoring through the CIWQS database administered by the State and Regional Water Quality Control Boards to track information under the statewide general SSO order. All CIWQS information is available through the Public Reports portal at:

[http://www.waterboards.ca.gov/water\\_issues/programs/ciwqs/publicreports.html](http://www.waterboards.ca.gov/water_issues/programs/ciwqs/publicreports.html)

## 9.3 Performance Measures

The indicators that the District will use to measure the performance of its wastewater collection system and the effectiveness of its SSMP are:

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

These parameters were selected because they are straightforward, quantitative, and focused on results. These parameters are also available to both District staff and the public at all times through the CIWQS system.

## 9.4 Performance Monitoring and Program Changes

The SSMP should be updated periodically to maintain current information, and programs need to be enhanced or modified if they are determined to be less effective than needed. The District will annually evaluate the performance of the wastewater collection system using the performance measures listed in Section 9.3. The District will review the successes and needed improvements of the SSMP as part of the SSMP biannual audit, described in Element 10.

District staff will update critical information, such as contact numbers and the SSO response chain-of-communication, as needed. A comprehensive SSMP update will occur every 5 years, as required by the SWRCB.

## ELEMENT 10: SSMP PROGRAM AUDITS

The intent of this section of the SSMP is to document the District's auditing program.

### 10.1 Regulatory Requirements for the SSMP Program Audits

The WDR requirements for the SSMP Program Audits element of the SSMP are summarized below:

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

### 10.2 SSMP Audits Discussion

The District will audit its SSMP every two years. The first audit will be completed prior to January 1, 2022 and will cover calendar years 2019, 2020, and 2021. The audit will determine whether the SSMP meets the current requirements of the WDR, whether the SSMP reflects the District's current practices, and whether the District is following the SSMP.

The audit will be conducted by a team consisting of the District's staff. The audit team may also include members from other areas of the District, outside agencies, and/or contractors. The scope of the audit will cover each of the sections of the SSMP.

The results of the audit will be included in the Audit Report. The Audit Report may contain information about successes in implementing the most recent version of the SSMP and identify revisions that may be needed for a more effective program. Information collected as part of Element 9 Monitoring, Measurement, and Program Modifications will be used in preparing the audit. Tables, figures, and/or charts may be used to summarize information about these indicators.

The District will update its SSMP at least every five years. The first update will be completed on or before January 1, 2025.

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

The District's staff will seek the approval from the Board of Directors for any significant changes to the SSMP. The authority for approval of minor changes such as employee names, contact information, or limited procedural changes is delegated to the General Manager.

## **ELEMENT 11: COMMUNICATION PLAN**

The intent of this section of the SSMP is to identify a plan to communicate information regarding the District's SSMP activities to the public. The plan includes a process for the public to receive SSMP information as well as provide input to the District on the SSMP.

### **11.1 Regulatory Requirements for the Communication Plan**

The WDR requirements for the Communication Plan element of the SSMP are summarized below:

- The District shall communicate on a regular basis with the public on the development, implementation, and performance of its SSMP;
- The communication system shall provide the public the opportunity to provide input to the District as the program is developed and implemented; and
- The District shall create a plan of communication with systems that are tributary and/or satellite to the District's sanitary sewer system.

### **11.2 Communication Plan**

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

- **District Website** – The District will evaluate the use of a webpage on the District's existing website to facilitate the transfer of information to the public regarding the SSMP. This webpage could include the entire SSMP, audit performance information, and associated information. The webpage would also serve as a venue for soliciting input from the public on the SSMP.
- **Monthly Water and Sewer Billing** – An annual notice regarding the sanitary sewer system performance can be included in monthly water and sewer billings. The notice would contain general SSMP information. The notice could also refer the customers to the District website for additional details, if an SSMP webpage is implemented. The notice would be printed in both English and Spanish.

- **Notices in Public Spaces** – Notices of the SSMP project could be posted and handouts made available in public spaces such as the District Offices and library. Information would be presented in English and Spanish and have references to the District's website with additional information, if an SSMP webpage is implemented.
- **District Board Meetings** – District Board meetings are public meetings. General SSMP information and updates on sanitary sewer system performance could be added as a discussion item on the Board agenda.