

# **South Placer Municipal Utility District**

## Sewer System Management Plan

### AUDITS

2011  
2013  
2015  
2017  
2019

# South Placer Municipal Utility District

## Sewer System Management Plan

# SSMP

### **Introduction**

On May 6, 2006 the State Water Resources Control Board (SWRCB) issued statewide General Waste Discharge Requirements (GWDRs) for all publicly owned sanitary sewer systems greater than one mile in length. Guidelines and requirements for GWDRs are described in the SWRCB Order No. 2006-0003 Statewide General Waste Discharge Requirements for Sanitary Sewer Systems. A significant requirement outlined in the order is the completion of a Sewer System Management Plan (SSMP).

### **Purpose**

The goal of the SSMP is to reduce SSO's, protect public health and environment and improve the overall maintenance and management of sewer systems. The SSMP must include provisions to provide proper funding, efficient management, operation, and maintenance of the sanitary sewer system, while taking into consideration risk management and cost benefit analysis.

### **Overview**

District staff, along with engineering consultants, developed this SSMP specific to the District's sanitary sewer system. This SSMP provides a summary of the policies, procedures and activities that are used in the planning, management, operation and maintenance of the District's sanitary sewer system. It incorporates, by reference, the District's Strategic Plan, Master Plan, Five Year Financial Plan and Standard Specifications. It also includes, by reference, all other pertinent documents required to carry out the goals of the SSMP.

### **Organization**

This SSMP is organized into the elements and requirements that are outlined in the GWDR and summarized in Table A.

TABLE - A

SSMP Elements	Requirements
1. Goals	<ul style="list-style-type: none"> <li>• Establish goals to properly manage operate and maintain sanitary sewer system.</li> </ul>
2. Organization	<ul style="list-style-type: none"> <li>• Identify District staff responsible for SSMP.</li> <li>• Identify chain of communication for responding to and reporting SSOs.</li> </ul>
3. Legal Authority	<ul style="list-style-type: none"> <li>• Prevent illicit discharges.</li> <li>• Require sewers and connections be properly designed and constructed.</li> <li>• Ensure access to publicly-owned laterals for inspection, maintenance and repairs.</li> <li>• Impose source control requirements.</li> <li>• Enforce violations of its ordinances.</li> </ul>
4. Operation & Maintenance Program	<ul style="list-style-type: none"> <li>• Maintain up-to-date maps of sewer system.</li> <li>• Describe preventative maintenance activities.</li> <li>• Develop a prioritized rehabilitation &amp; replacement plan.</li> <li>• Provide staff training on regular basis.</li> <li>• Provide equipment and replacement parts inventory.</li> </ul>
5. Design & Construction Standards	<ul style="list-style-type: none"> <li>• Establish design and construction standards for new and repaired facilities.</li> <li>• Establish inspection and testing standards for new and repaired facilities.</li> </ul>
6. Overflow Emergency Response Plan	<ul style="list-style-type: none"> <li>• Provide SSO notification procedures.</li> <li>• Develop plan to properly respond to SSOs.</li> <li>• Develop SSO reporting procedures.</li> <li>• Ensure staff is properly trained to respond to and mitigate SSOs.</li> <li>• Develop procedures to contain SSOs and protect the environment.</li> </ul>

TABLE – A (continued)

SSMP Elements	Requirements
7. FOG Control Program	<ul style="list-style-type: none"> <li>• Develop and implement public education and outreach program.</li> <li>• Establish the legal authority to prohibit discharges into the sanitary system.</li> <li>• Establish authority to inspect grease producing facilities.</li> <li>• Identify areas of system where FOG accumulates.</li> <li>• Develop and implement source control measure, if needed.</li> </ul>
8. System Evaluation & Capacity Assurance	<ul style="list-style-type: none"> <li>• Establish an evaluation process to assess current and future capacity needs.</li> <li>• Develop short- and long-term capital improvement plans to ensure adequate capacity.</li> <li>• Develop a schedule for completion of capital improvement projects and identify funding.</li> </ul>
9. Monitoring, Measurement and Program Modifications	<ul style="list-style-type: none"> <li>• Measure effectiveness of each element of the SSMP.</li> <li>• Monitor SSMP elements and modify/update as necessary.</li> </ul>
10. SSMP Program Audits	<ul style="list-style-type: none"> <li>• Conduct Periodic Audits, including any deficiencies and corrective actions.</li> </ul>
11. Communication Program	<ul style="list-style-type: none"> <li>• Communicate regularly with the public on development, implementation and performance of the SSMP.</li> </ul>

## Acronyms

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BMP	Best Management Practices
CCTV	Closed Circuit Television
CIP	Capital Improvement Program
CMMS	Computerized Maintenance Management System
EPA	Environmental Protection Agency
FOG	Fats, Oils and Grease
FSE	Food Service Establishment
GIS	Geographic Information Systems
GPS	Global Positioning Satellite
GWDR	General Wastewater Discharge Requirements
HCFLS	High Cleaning Frequency Line Segments
I & I	Inflow and Infiltration
LRO	Legally Responsible Official
MGals	Million Gallons
MRP	Monitoring and Reporting Program
NPDES	National Pollutant Discharge Elimination System
OERP	Overflow Emergency Response Plan
RWQCB	Regional Water Quality Control Board
SWQCB	State Water Quality Control Board
SSMP	Sewer System Management Plan
SSO	Sanitary Sewer Overflow
SSO-ERP	Sanitary Sewer Overflow – Emergency Response Plan
WWMS	Waste Water Management System (CMMS Database)

# South Placer Municipal Utility District

## Sewer System Management Plan

# SSMP

## SECTION 1: GOALS

### *GWDR Requirement*

*The goal of the SSMP is to provide a plan and schedule to properly manage, operate and maintain all parts of the sanitary sewer system. This will help reduce and prevent SSOs, as well as mitigate any SSOs that occur.*

### Goals

The Key Areas of Focus included in the District's 2013 Strategic Plan contain goals and objectives. The objectives serve as the goals for this SSMP. The 2013 Strategic Plan is available for review at the South Placer M.U.D. Headquarters located at 5807 Springview Drive, Rocklin CA 95677.

Key Areas of Focus and desired outcomes are:

#### **1. Customer Service**

- Provide efficient and effective level of service to meet customer and stakeholder expectations.

#### **2. Sustainability**

- By taking advantage of opportunities to invest in energy efficiency, renewable energy, water and wastewater management and other sustainable practices to improve the District's fiscal health and economic prosperity of the residents and businesses that are served by the District.

#### **3. Infrastructure Management**

- Provide Professional, technical, construction and engineering services that ensure the best possible facilities for the District now and in the future.

#### **4. Sewer System Maintenance**

- Maintain and improve the District's infrastructure in a cost-effective manner to ensure delivery of reliable, sustainable level of service now and in the future. Meet or surpass water quality, environmental, regulatory and public health standards, while maintaining the public trust.

**5. Financial Stability**

- Manage the District’s finances to support District needs and maintain reasonable wastewater rates.

**6. Workforce Planning and Development**

- Provide collaborative team orientated workforce that is fully trained, fairly compensated, and accountable with clearly defined career paths for the evolving work environment.

**7. Operational Optimization**

- Improve functions that support the District’s administrative, financial, technical and field activities and provide the best service to the customer.



**Key Performance Indicator(s):**

- 1-1. Are the goals of the Strategic Plan being met as measured by the Strategic Plan Report Card?
  - a. Measured by:
    - i. Review of the bi-annual Strategic Plan “Report Card.”

## **SECTION 2: Organization**

### *GWDR Requirement*

*The SSMP must identify:*

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

### Organization

- A. The District's authorized representative in all wastewater collection system matters is the General Manager. The Superintendent is designated as the District's Legally Responsible Official (LRO) who is authorized to certify electronic spill reports submitted to the SWRCB. The Field Supervisor are authorized Data Submitters.

The District Engineer serves as LRO in the Superintendent's absence.

The District's current Organization Chart can be found in the Appendix A, page 32, of this document.

- B. Table 2.1 (below) lists the responsible persons as regards the implementation of the District's SSMP.

Table 2.1

### SSMP “Responsible Person’s” List

<u>TITLE</u>	<u>NAME</u>	<u>PHONE NUMBER</u>
<b>General Manager</b> <i>Administers all District activities, services and employment; Responsible to the Board of Directors.</i>	<b>Herb Niederberger</b>	<b>(916) 786-8555</b>
<b>Superintendent</b> <i>Assists the General Manager and oversees all field personnel involved in the operation, maintenance and construction of the District’s sewer collection system. Responsible to the General Manager. Serves as LRO.</i>	<b>Sam Rose</b>	<b>(916) 786-8555 ext. 210</b>
<b>District Engineer</b> <i>Assists the General Manager in overseeing and supervising all Technical Services functions and personnel involved in engineering, inspection, contracting and information technology. Responsible to the General Manager. Serves as LRO.</i>	<b>Eric Nielsen</b>	<b>(916) 786-8555 Ext. 310</b>

Specific SSMP Implementation Responsibilities are listed in the Table 2.2, below.

Element	Element Description	Responsible Party
1	<b>Goal</b> – <i>The goal of the SSMP is to provide a plan and schedule to properly manage, operate and maintain all parts of the sanitary sewer system. This will help reduce and prevent SSOs, as well as mitigate any SSOs that occur.</i>	Herb Niederberger
2	<b>Organization</b>	
	A. <i>The name of the agency’s responsible or authorized representative;</i>	Herb Niederberger
	B. <i>The names and telephone numbers for management, administrative, and maintenance positions responsible for implementing specific measures in the SSMP program. The SSMP must identify lines of authority through an organization chart or similar document with a narrative explanation; and</i>	Herb Niederberger
	C. <i>The chain of communication for reporting SSOs, from receipt of a complaint or other information, including the person responsible for reporting SSOs to the State and Regional Water Board and other agencies if applicable (such as County Health Officer, County Environmental Health Agency, Regional Water Board, and/or State Office of Emergency (OES)).</i>	Sam Rose
3	<b>Legal Authority</b>	
	A. <i>Prevent illicit discharges into its sanitary sewer system, including I/I from satellite wastewater collection systems and laterals, storm water, unauthorized debris, etc.;</i>	Herb Niederberger
	B. <i>Require proper design and construction of sewers and connections;</i>	Herb Niederberger
	C. <i>Ensure access for maintenance, inspection and repairs to publicly owned portions of laterals;</i>	Herb Niederberger
	D. <i>Limit the discharge of FOG and other debris that may cause blockages; and</i>	Herb Niederberger
	E. <i>Enforce violations of its sewer ordinances.</i>	Herb Niederberger

Table 2.2 (continued)

Element	Element Description	Responsible Party
<b>4</b>	<b>Operation and Maintenance Program</b>	
A.	<i>Each wastewater collection system agency shall maintain up-to-date maps of its wastewater collection system facilities, showing all gravity line segments and manholes, pumping facilities, pressure pipes and valves, and applicable storm water pumping and piping facilities;</i>	Eric Nielsen
B.	<i>Describe routine preventive operation and maintenance activities by staff and contractors, including a system for scheduling regular maintenance and cleaning of the sanitary sewer system with more frequent cleaning and maintenance targeted at known problem areas. The Preventive Maintenance (PM) program should have a system to document scheduled and conducted activities, such as works orders;</i>	Sam Rose
C.	<i>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 system for ranking the conditions of sewer pipes and scheduling rehabilitation. Rehabilitation and replacement should focus on sewer pipes that are at risk of collapse or prone to more frequent blockages due to pipe defects. Finally, the rehabilitation and replacement plan should include a capital improvement plan that addresses proper management and protection of the infrastructure assets. The plan shall include a time schedule for implement the short- and long-term plans plus a schedule for developing the funds needed for the capital improvement plan;</i>	Eric Nielsen
D.	<i>Provide training on a regular basis for staff in sanitary sewer system operations and maintenance, and require contractors to be appropriately trained; and</i>	Sam Rose
E.	<i>Provide equipment and replacement part inventories, including identification of critical replacement parts.</i>	Sam Rose
<b>5</b>	<b>Design and Performance Provisions</b>	
A.	<i>Design and Construction Standards and specifications for the installation of new sanitary sewer systems, pump stations and other appurtenances and for the rehabilitation and repair of existing sanitary sewer system; and</i>	Herb Niederberger
B.	<i>Procedures and standards for inspecting and testing the installation of new sewers, pumps, and other appurtenances and for rehabilitation and repair projects.</i>	Eric Nielsen

Table 2.2 (continued)

Element	Element Description	Responsible Party
<b>6</b>	<b>Overflow Emergency Response Plan</b>	
	<i>A. Proper notification procedures so that the primary responders and regulatory agencies are informed of all SSOs in a timely manner;</i>	Sam Rose
	<i>B. A program to ensure appropriate response to all overflows;</i>	Sam Rose
	<i>C. Procedures to ensure prompt notification to appropriate regulatory agencies and other potentially affected entities (e.g. health agencies, regional water boards, water suppliers, etc.) of all SSOs that potentially affect public health or reach the water of the State in accordance with the Monitoring and Reporting Program (MRP). All SSOs shall be reported in accordance with this MRP, the California Water Code, other State Law, and other applicable Regional Water Board Waste Discharge Requirements or National Pollutant Discharge Elimination Systems (NPDES) permit requirements. The Sewer System Management Plan should identify the officials who will receive immediate notification;</i>	Sam Rose
	<i>D. Procedures to ensure that appropriate staff and contractor personnel are aware of and follow the Emergency Response Plan and are appropriately trained;</i>	Sam Rose
	<i>E. Procedures to address emergency operations, such as traffic and crown control and other necessary response activities; and</i>	Sam Rose
	<i>F. A program to ensure that all reasonable steps are taken to contain untreated wastewater and prevent discharge of untreated wastewater to the 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.</i>	Sam Rose
<b>7</b>	<b>FOG Control Program</b>	
	<i>A. An Implementation plan and schedule for public education and outreach program that promotes proper disposal of FOG;</i>	Eric Nielsen
	<i>B. A plan and schedule for the disposal of FOG generated within the sanitary sewer system service area. This may include a list of acceptable disposal facilities and/or additional facilities needed to adequately dispose of FOG generated within the sanitary sewer system;</i>	Eric Nielsen
	<i>C. The Legal Authority to prohibit discharges to the system and identify measures to prevent SSOs and blockages caused by FOG.</i>	Eric Nielsen
	<i>D. Requirements to install grease removal devices (such as traps or interceptors), best management practices (BMP) requirements, record keeping and reporting requirements;</i>	Eric Nielsen

Table 2.2 (continued)

Element	Element Description	Responsible Party
<b>7</b>	<b>FOG Control Program (continued)</b>	
	<p><i>E. An identification of sewer system sections subject to FOG blockages and the establishment of a cleaning maintenance schedule for each section; and</i></p>	Sam Rose
	<p><i>F. Development and implementation of source control measures, for all sources of FOG discharged to the sewer system, for each sewer system section identified in (F) above.</i></p>	Eric Nielsen
<b>8</b>	<b>System Evaluation and Capacity Assurance Plan</b>	
	<p><i>A. Evaluation: Actions needed to evaluate those portions of the sanitary sewer system that are experiencing or contributing to an SSO discharge caused by hydraulic deficiency. The evaluation must provide estimates of peak flows (including flows from SSOs that escape from the system) associated with conditions similar to those causing overflow events, estimates of the capacity of key system components, hydraulic deficiencies (including components of the system with limiting capacity) and major sources that contribute to the peak flows associated with overflow events;</i></p>	Eric Nielsen
	<p><i>B. Design Criteria: Where design criteria do not exist or are deficient, undertake the evaluation identified in (A) above to establish appropriate design criteria;</i></p>	Herb Niederberger
	<p><i>C. Capacity Enhance Measures: The steps needed to establish a short and long-term CIP to address identified hydraulic deficiencies, including prioritization, alternatives analysis, and schedules. The CIP may include increases in pipe size, inflow and infiltration (I&amp;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; and</i></p>	Eric Nielsen
	<p><i>D. Schedule: The District shall develop a schedule of completion dates for all portions of the capital improvement program developed in (A), (C) above. This schedule shall be reviewed and updated consistent with the SSMP review and update requirements as described in Section D. 14 Of the GWDR.</i></p>	Eric Nielsen

Table 2.2 (continued)		
<b>9</b>	<b>Monitoring, Measurement and Program Modifications</b>	
	<i>A. Maintain relevant information that can be used to establish and prioritize appropriate SSMP activities;</i>	Sam Rose
	<i>B. Monitor the implementation and, where appropriate, measure the effectiveness of each element of the SSMP;</i>	Eric Nielsen
	<i>C. Assess the success of the preventative maintenance program;</i>	Eric Nielsen
	<i>D. Update program elements, as appropriate, based on monitoring or performance evaluations; and</i>	Sam Rose
	<i>E. Identify and illustrate SSO trends, including frequency, location and volume.</i>	Sam Rose
<b>10</b>	<b>SSMP Program Audits</b>	
	<i>Conduct periodic internal audits and maintain audit reports.</i>	Eric Nielsen
<b>11</b>	<b>Communication Program</b>	
	<i>Communicate, on regular basis, with the public on development, implementation and performance of SSMP.</i>	Eric Nielsen

- C. The chain of communication for reporting SSOs from receipt of complaint to proper notification of regulatory personnel is as follows:

#### Receipt of complaint

Customers served by the District are directed to call the District headquarters (24-hour emergency) phone number to report any disruption of sewer service. During normal business hours, this phone number is monitored continuously by Administrative Services staff. Any reported disruption of service is reported to the designated on-call supervisor (default position is Field Supervisor) who, in turn, notifies the appropriate on-call responder to attend to the emergency.

Currently, there are 6 personnel trained and authorized as On-Call Supervisors and 15 personnel trained (includes On-Call Supervisors) and authorized as On-Call Responders.

The positions designated and trained as On-Call Supervisors and On-Call Responders are listed in Table 2.3 below.

<i>Table 2.3</i>	
<b>Position Designated and Trained as On-Call Supervisors</b>	<b>Position Designated and Trained as On-Call Responders</b>
Field Supervisor Lead Worker Maintenance Worker/Inspector	Field Supervisor Lead Worker  Maintenance Worker II Maintenance Worker II Maintenance Worker I Maintenance Worker/Inspector

After business hours and on weekends/holidays, calls made to the District headquarters (24-hour emergency) phone number are transferred to an automated phone system that directs the caller to leave pertinent information. Upon completion of the call, the automated system begins a sequence of call outs (texts and e-mails) to a pager and cell phone that is carried at all times by both the On-Call person and to the designated On-Call Supervisor.

All Lift Stations are equipped with an auto-dialer alarm system that make (redundant) call outs to designated phone numbers, including the on-call numbers and the emergency phone numbers described above, until the alarm has been acknowledged. The recipient of the call dials the auto-dialer and retrieves the alarm message and the appropriate personnel are notified to respond to the emergency. Operating concurrently with the auto-dialer alarms is a SCADA system and related alarms that contact emergency response personnel in essentially the same manner. It is intended to discontinue the auto-dialers once the SCADA system has proven reliable.

Notification of Supervisor

District emergency response procedures require that, upon discovery/determination of any SSO, the On-Call First Responder shall immediately notify the designated On-Call Supervisor. If the SSO is a Category 1 SSO, if it is possible it is a Category 1 SSO or if the On-Call Responder is uncertain it is a Category 1 SSO, the On-Call Supervisor shall respond to the site.

In the event of a Category 1 or Category 2 SSO, or any SSO event that the supervisor attends, the on-call supervisor leads and coordinates the efforts to remove the blockage, mitigate the spill, document the event and is responsible for notifications of regulatory agencies, utility owners and the public in accordance with the District's SSO - Emergency Response Plan. The District's SSO – Emergency Response Plan is

available for review at the District's Headquarters located at 5807 Springview Drive, Rocklin, CA 95677.

### CIWQS Reporting

The District's Superintendent is the designated LRO and is responsible for CIWQS reporting. The position of District Engineer is authorized to act as the LRO in the Superintendent's absence. The Position of Field Supervisor (x2) are designated Data Submitters.



### **Key Performance Indicators**

- 2-1. Are the names and telephone numbers for (authorized) management, administrative, and maintenance positions responsible for implementing specific measures in the SSMP program current?
  - a. Measured by:
    - i. Review of Tables 2.0, and 2.1 for accuracy and completeness
  
- 2-2. Is the organization chart current?
  - a. Measured by:
    - i. Updating the SSMP with the Organizational Chart that is included in the Annual Budget
  
- 2-3. Is the chain of communication for reporting SSOs adequate and adhered to during responses to SSO events?
  - a. Measured by:
    - i. Review of the SSO Response Debriefing Form

### Section 3: Legal Authority

#### *GWDR Requirement*

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

- A. *Prevent illicit discharges into its sanitary sewer system, including I/I from satellite wastewater collection systems and laterals, storm water, unauthorized debris, etc.;*
- B. *Require proper design and construction of sewers and connections;*
- C. *Ensure access for maintenance, inspection and repairs to publicly owned portions of laterals;*
- D. *Limit the discharge of FOG and other debris that may cause blockages; and*
- E. *Enforce violations of its sewer ordinances.*

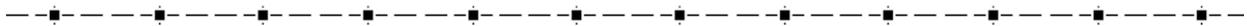
#### LEGAL AUTHORITY

The District's legal authority is established through the following:

- Municipal Utility District Act of State of California (MUD Act). Public Utilities Code of the State of California, Division 6. The State law that creates and establishes the powers of a Municipal Utility District.
  - Ordinance 09-01: an Ordinance Establishing Requirements Regarding Fats, Oils and Grease
  - Ordinance 09-02: an Ordinance Regulating the use of Public and Private Sewers.
  - Ordinance 17-01: an ordinance revising the Sewer Use Ordinance 09-02 to conform with SN 1069 and establish ownership of lower laterals.
  - Ordinance 88-3: an ordinance adopting Chapter 14.26 of the Roseville Municipal Code related to Industrial Wastewater.
- A. Ordinance 09-02 – provides the legal authority to prevent illicit discharges into sanitary sewer system.
  - B. The MUD Act and Ordinance 09-02 provide the legal authority to require the proper design and construction of sewers and connections.

- C. Ordinance 09-02 provides the legal authority that ensures access for maintenance, inspection and repairs to publicly owned portions of laterals and clearly defines District responsibility and policy.
- D. Ordinance 09-01 provides the legal authority to limit the discharge of FOG, as well as access to facilities required to have grease control devices; and
- E. The MUD Act provides the legal authority to enforce violations of the District's sewer ordinances.

Complete copies of ordinances listed above are on file at the District's Headquarters Building located at 5807 Springview Drive in Rocklin California, 95677. In addition, electronic (PDF) versions of the ordinances can be downloaded from the District website at [www.spmud.ca.gov](http://www.spmud.ca.gov). The MUD Act is available within the Public Utilities Code of the State of California, Division 6 (Municipal Utility District Act State of California), Sections 11501 through 14403.5. Chapter 14.26 of the Roseville Municipal Code can also be found at <http://qcode.us/codes/roseville>.



**Key Performance Indicators:**

- 3-1. Have all pertinent ordinances been reviewed to ensure they possess the necessary legal authority to meet the GWDR requirement?
  - a. Measured by review of:
    - i. The GWDR for changes.
    - ii. Ordinance 09-01
    - iii. Ordinance 09-02
    - iv. Ordinance 17-01
    - v. The M.U.D. Act

## Section 4: Operation and Maintenance Program

### *GWDR Requirement*

*The SSMP must include the elements listed below that are appropriate and applicable the Enrollee's system:*

- A. *Each wastewater collection system agency shall maintain up-to-date maps of its wastewater collection system facilities, showing all gravity line segments and manholes, pumping facilities, pressure pipes and valves, and applicable storm water pumping and piping facilities;*
- B. *Describe routine preventive operation and maintenance activities by staff and contractors, including a system for scheduling regular maintenance and cleaning of the sanitary sewer system with more frequent cleaning and maintenance targeted at known problem areas. The Preventive Maintenance (PM) program should have a system to document scheduled and conducted activities, such as works orders;*
- C. *Develop a rehabilitation and replacement plan to identify and prioritize system deficiencies and implement short-term and long-term rehabilitation actions to address each deficiency. The program should include regular visual and TV inspections of manholes and sewer pipes, and system for ranking the conditions of sewer pipes and scheduling rehabilitation. Rehabilitation and replacement should focus on sewer pipes that are at risk of collapse or prone to more frequent blockages due to pipe defects. Finally, the rehabilitation and replacement plan should include a capital improvement plan that addresses proper management and protection of the infrastructure assets. The plan shall include a time schedule for implementing the short- and long-term plans plus a schedule for developing the funds needed for the capital improvement plan;*
- D. *Provide training on a regular basis for staff in sanitary sewer system operations and maintenance, and require contractors to be appropriately trained; and*
- E. *Provide equipment and replacement part inventories, including identification of critical replacement parts.*

## Operation and Maintenance Program

1. The District has a Geographical Information System (GIS) mapping system that includes information for its wastewater collection system assets that includes:

### **BOUNDARY:**

- District Boundary
- Projects in District
- Gated Access Points
- Maintenance Zones
- Map Grid
- Record Drawing Areas
- Redline Service
- Refund Boundaries
- Sphere of Influence

### **FACILITY:**

- Sewer Easements
- Sewer Access Easements
- PUEs
- Easement Roads
- Lift Station Sites
- Flow Recorder Sites
- Sewer Easements

### **PLACER COUNTY DATA:**

- Address Points
- County Parcels
- County Roads

### **SEWER:**

- Control Valves
- FOG Extractors
- FOG Facilities
- Gravity Lines
- Force Main Lines
- Flow Recorder Locations
- Lift Station Locations
- Service Laterals
- Service Connections (PLCO)
- Manholes
- Flushing Branches
- Stub/Caps

### **OTHER :**

- Private Easements
- Private Pump Stations
- Private Gravity Lines
- Private Force Mains
- Rocklin City Limit
- Loomis Town Limit
- Creeks and Streams
- Ward Boundaries within the District

### **SEWER:**

- Control Valves
- FOG Extractors
- FOG Facilities
- Gravity Lines
- Force Main Lines
- Flow Recorder Locations
- Lift Station Locations
- Service Laterals
  
- Service Connections (PLCO)
- Manholes
- Flushing Branches
- Stub/Caps

The GIS mapping and associated attribute information is available to all staff through web maps available on desktops and tablets and in paper map books. Available to all employees are hard copy grid maps that are produced using the GIS.

Map corrections are noted by field crews, in accordance with established SOP, and submitted to the District Engineer for corrections to the GIS. Updates to the mapping system are immediately available to users who utilize the web maps. Updates are made to the hard copy grid maps once a month.

2. Routine preventative operation and maintenance activities.

The District has the following Work Plans in place.

Reference Nbr.	Work Plan Description
1	Mainline Cleaning Program (Includes "Hot Spots")
2	Mainline CCTV Program
3	Condition Assessment Program
4	Lower Lateral Inspection & Cleaning Plan
5	Property Line Clean Out (PLCO) Installation Program
6	Purposely Blank
7	Manhole Inspection Program
8	Flow Monitoring Program
9	Easement Maintenance Program, including Creek Crossing Assessment
10	Chemical Root Treatment Program
11	Pipe Repair Program
12	Lift Station Maintenance Program (Includes grease and order control)
13	Purposely Blank
14	Manhole Repair/Rehabilitation Program

Descriptions of these Maintenance Programs are on file at the District Headquarter building located at 5807 Springview Drive, Rocklin, CA 95677.

The District uses the Lucity database program and IT Pipes data collection software for condition assessment, predictive maintenance, and prioritization of work..

3. Rehabilitation and Replacement Plan to identify and prioritize system deficiencies and implement short-term and long-term rehabilitation actions to address each deficiency.

The District regularly inspects its manholes, sewer pipes and lift stations and has a system for ranking defects and performing condition assessment. The information gathered is used, generally, as the basis for short-term (budget-by-budget) rehabilitation, repair and replacement programs. All of the observations collected through CCTV surveys are reviewed each month and action plans are generated based on the results of that review.

Repairs are completed based on priority. Repairs are performed by District and contracted forces.

5-year CIP - The District plans yearly projects for rehabilitation and replacement. Condition assessment is a continuous process as is the development of future rehabilitation and replacement (R&R) projects.

The District has completed a hydraulic model of its system and its Master Plan was revised in January of 2009. An update of the hydraulic model was completed and the District's System Evaluation and Capacity Assurance Plan was finalized in April 2015. Capital Improvement Projects are identified in the District's current System Evaluation and Capacity Assurance Plan (SECAP).

The District collects depreciation off of service charges adequate to fund rehabilitation, replacement and repairs of its current system. In addition, the Local portion of Participation (Connection) fees is collected from new development to fund upsizing of pipes that become capacity deficient due to new development connections. These two sources of revenue are described in the District's current Five-Year Financial Plan. Should Fund 300 mentioned here?

4. Provide Regular Training for staff in sanitary sewer systems operations and maintenance and require contractors to be properly trained.

The District requires all field staff, and Technical Services positions to maintain California Water Environment Association Collection Systems certification relevant to their job classification. All field staff are certified at or above the District-required level.

The District cross-trains all of the field staff to become proficient at both maintenance and construction work processes for Collection System operations. Field personnel periodically rotate between maintenance and repair crews, which allows for on-the-job training on a consistent basis. Based on the size of our system, and the ratio of dedicated field positions, cross-trained staff is imperative to achieve consistent success on the maintenance programs listed in section 4 B.

The District conducts annual emergency by-pass pump and emergency generator training for lift station failures. Emergency response training, in accordance with the District's Overflow Emergency Response Plan (OERP) is conducted on an annual basis.

Training for new equipment or for newly established procedures is provided prior to the equipment being put into service and/or procedures being implemented.

The Safety and Training Schedule and program description is contained in Appendix D, page 41.

All contracted labor is required to provide evidence of competent person training, shoring training, traffic control and other safety training appropriate to the work being

performed. Contracted forces perform only repair work. All line cleaning and CCTV inspection is performed by District forces. The District inspectors oversee all of our contracted labor to ensure compliance.

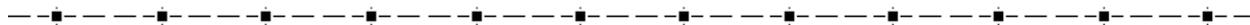
5. Provide equipment replacement part inventories, including identification of critical replacement parts.

The District maintains critical replacement parts for all of its lift stations. Included, but not limited to, items such as replacement pumps; force main pipe and mechanical repair couplings for each size/type of pipe; control floats and transducers; relays; and fuses. All are clearly labeled for the appropriate application. Audits of critical parts are periodically performed.

All Lift Stations are equipped with either a standby generator with automatic transfer switch or a receptacle (with manual transfer switch) for the District's (3) portable d generators. In addition, larger volume stations are equipped with a bypass manifold, which allows for de-watering of the wet well, using portable pumps, in the event the pumps and/or controls are inoperable. Low volume stations can be de-watered using one of the District's (2) combination hydro-vacuum units.

The District participates with its Partner Agencies: City of Roseville, Placer County, and Placer County Water Agency in informal agreements for emergency equipment and machinery, man-power, and critical parts replacements. The District owns and maintains at least two of each piece of equipment that is deemed necessary for emergency or critical operations.

The District contracts with Aqua Sierra Controls Inc, of Auburn, CA to provide 24 hour service for Lift Station control and electrical problems that District staff cannot immediately resolve.



### **Key Performance Indicators:**

- 4-1. Are system maps current in accordance with the requirements of this SSMP?
  - a. Measured by:
    - i. Have all of the corrections/edits discovered by field personnel and brought to the attention of engineering through the standard procedure been addressed?
    - ii. Have the assets from all new (approved) construction projects been added to the GIS mapping system and paper maps distributed to staff?
- 4-2. Is there a system in place to document scheduled and conducted activities?

- a. Measured by review of work orders generated and completed.
    - i. Are District maintenance, operations and engineering activities being properly documented in the District's work order system?
  
- 4-3. Is there an adequate Rehabilitation and Replacement Plan in place that identifies and prioritizes system deficiencies?
  - a. Measured by;
    - i. Are all system defects identified, rated?
    - ii. Are the most severe defects assessed to determine method of repair?
      - 1. Are work orders generated and scheduled?
  
- 4-4. Are Work Plans for Operation and Maintenance activities documented?
  - a. Measured by:
    - i. Annual review of written work plans for effectiveness by Superintendent.
  
- 4-5. Does the Capital Improvement Plan address proper management of the infrastructure and include a time schedule?
  - a. Measured by:
    - i. Is capacity for each pipe segment evaluated for capacity deficiencies based on projected growth?
    - ii. Are system assets evaluated for status of remaining useful life?
  
- 4-6. Are staff and contractors being provided proper training on operation and maintenance of the sewer system?
  - a. Measured by:
    - i. Have all maintenance personnel received training and demonstrated ability in the following activities?
      - 1. High Pressure line cleaning
      - 2. CCTV Inspection
      - 3. Lift Station maintenance and troubleshooting
      - 4. SSO Emergency Response

Are Contractors supervised by staff while performing work on District Facilities?
  
- 4-7. Are equipment and replacement parts, including critical spare parts, inventories being maintained and properly identified?
  - a. Measured By:
    - i. Review of periodic Critical Parts Audits

## Section 5: Design and Performance Provisions

### *GWDR Requirement*

*The SSMP must include the elements listed below that are appropriate and applicable the Enrollee's system:*

- A. *Design and Construction standards and specifications for the installation of new sanitary sewer systems, pump stations and other appurtenances; and for the rehabilitation and repair of existing sanitary sewer systems; and*
- B. *Procedures and standards for inspecting and testing the installation of new sewers, pumps, and other appurtenances for rehabilitation and repair projects.*

### Design and Performance Standards

- A. The District's Standard Specifications and Improvement Standards for Sanitary Sewers provides design and construction standards for the installation of new sewers facilities and for the repair/rehabilitation of existing sewer facilities. When processes and/or methods are utilized that are not entirely or directly addressed by these specifications, the manufacturers specifications would typically apply.
- B. The District's Standard Specifications and Improvement Standards for Sanitary Sewers provide Inspection and testing standards for sewer facilities and for the repair/rehabilitation of existing sewers. When processes and/or methods are utilized that are not entirely or directly addressed by these specifications, the manufacturers specifications for testing would apply.

The Standard Specifications and Improvement Standards for Sanitary Sewers are reviewed and updated as needed to keep current with industry standards and to ensure that evolving best practices are being applied. The District utilizes the Plan Check process to implement any new or changed standards that have not yet been incorporated into the standard specifications. A copy of the current edition of the Standard Specifications is available for review at the District's Headquarters located at 5807 Springview Drive, Rocklin, CA 95677.

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### **Key Performance Indicators:**

- 5-1. Are Design and Construction Standards, Specifications and Inspection Procedures appropriate for the District's collection system?
  - a. Measured By:
    - i. Review of Warranty CCTV inspections of new development projects

## **Section 6: Overflow Emergency Response Plan**

### *GWDR Requirement*

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

- A. Proper notification procedures so that the primary responders and regulatory agencies are informed of all SSOs in a timely manner;*
- B. A program to ensure an appropriate response to overflows;*
- C. Procedures to ensure prompt notification to appropriate regulatory agencies and other potentially affected entities (e.g. health agencies, Regional Water Boards, water suppliers, etc.) of all SSOs that that potentially affect public health or reach the waters of the State in accordance with the MRP. All SSOs shall be reported in accordance with this MRP, the California Water Code, other State Law, and other applicable Regional Water Board WDR's or NPDES permit requirements. The SSMP should identify the officials who will receive immediate notification;*
- D. Procedures to ensure that appropriate staff and contractor personnel are aware of and follow the Emergency Response Plan and are appropriately trained;*
- E. Procedures to address emergency operations, such as traffic and crowd control and other necessary response activities; and*
- F. A program to ensure that all reasonable steps are taken to contain and prevent the discharge of untreated and partially treated wastewater to the waters of the United States and to minimize or correct any adverse impact on the environment resulting from the SSOs, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the discharge.*

### *Overflow Emergency Response Plan*

The District's SSO – Emergency Response Plan (SSO-ERP) is continuously revised to accommodate the State Water Resources Control Board Order No.2006-0003, and order #2008-002-EXEC. This document is current as of April, 2014. A copy of the SSO - Emergency Response Plan is available for viewing at the District's Headquarters located at 5807 Springview Drive, Rocklin, CA 95677.

- A. The District's Emergency Response Plan contains notification procedures from contact of on-call/first responder personnel to proper and timely notification of regulatory agencies, other utility owners and the public.*

- B. The District's Emergency Response Plan provides procedures explaining actions to be taken for appropriate response to sewage overflows.
- C. The District's Emergency Response Plan contains measures 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 that potentially affect public health or reach the Waters of the State and identify persons responsible for notification.
- D. The District conducts annual training, for all relevant personnel, on emergency response procedures – in accordance with the District's SSO - Emergency Response Plan. All field personnel are required to demonstrate their ability to responsibly and effectively perform emergency response duties prior to being designated as On-Call Responders and being placed into the On-Call rotation.
- E. Procedures to address emergency operations, such as traffic and crowd control and other necessary response activities are contained in the District's SSO - Emergency Response Plan.
- F. Containment and mitigation procedures, to prevent or minimize the impact of an SSO on the environment are provided in the District's Emergency Response Plan. Spill containment kits are maintained in designated District vehicles and at the corporation yard.

In addition to the South Placer M.U.D. SSO - Emergency Response Plan the District has established working agreements with our Partner agencies: The City of Roseville, and Placer County. The Partner agencies meet three times per to stay abreast of any equipment additions or changes, as we have informal agreements to respond to requests for emergency assistance.

The District has a formal Memorandum of Understanding with Placer County Water Agency for a similar agreement for emergency support of men and equipment.

The District is a member of Cal WARN (California Water/Wastewater Agency Response Network)

A copy of the District's Emergency Response Procedures is available for viewing at the District's Headquarters Building located at 5807 Springview Drive in Rocklin California, 95677. In addition, electronic (PDF) versions of the ERP can be downloaded from the District website at [www.spmud.ca.gov](http://www.spmud.ca.gov).

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**Key Performance Indicator:**

- 6-1. Were the notification procedures outlined in the District's SSO – ERP adhered to for each event?
  - a. Measured by:
    - i. Review of Spill Response Review Form for each event
  
- 6-2. Were the procedures contained in the SSO – ERP adhered to and adequate to ensure appropriate responses, especially as it relates to protecting the environment and public health?
  - a. Measured by:
    - i. Review of Spill Response Debriefing Form for each event
  
- 6-3. Was prompt notification to appropriate parties achieved for each SSO event?
  - a. Measured by:
    - i. Review of Spill Response Debriefing Form for each event
  
- 6-4. Was SSO – ERP training performed as prescribed in the SSMP?
  - a. Measured By:
    - i. Review of SSO-related training records

## **Section 7: FOG Control Program.**

### *GWDR Requirement*

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

- A. An implementation plan and schedule for a public education outreach program that promotes proper disposal of FOG;*
- B. A plan and schedule for 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 sanitary sewer system service area;*
- C. The legal authority to prohibit discharges to the system and identify measures to prevent SSOs and blockages caused by FOG;*
- D. Requirements to install grease removal devices (such as traps or interceptors), design standards for removal devices, maintenance requirements, BMP requirements, record keeping and reporting requirements;*
- E. Authority to inspect grease producing facilities, enforcement authorities, and whether the Enrollee has sufficient staff to inspect and enforce the FOG ordinance;*
- F. An identification of sanitary sewer system sections subject to FOG blockages and establishment of a cleaning maintenance schedule for each section; and*
- G. Development and implementation of source control measures for all sources of FOG discharged to the sanitary sewer system for each section identified in (F) above.*

### *FOG Control Program*

- A. The District has implemented a public education outreach program directed at residential customers. The District began distributing a Residential FOG Program flyer to customers in spring of 2013 and intends to distribute the flyers to all District customers during the next five years. In addition, a reference to FOG is on placards (stickers) on District vehicles. The District promotes the residential FOG program during community events.*

- B. FOG generated within the sanitary service area is currently removed by District crews during the course of routine maintenance of pipes and lift stations. Grease removed from the system is disposed of at the City of Roseville WWTP located on Booth Road in Roseville CA. To contact the treatment plant: (916) 746-1800.
- C. The District's Ordinance 09-01, an ordinance establishing requirements regarding Fats, Oils and Grease, was established to facilitate the maximum beneficial use of the District's sewer services and facilities while preventing blockages of sewer lines resulting from discharges of FOG into the public sewer by Food Service Establishments. This Ordinance and the MUD Act. (Municipal Utility District Act – State of California) provide the legal authority to prohibit discharges to the system and identify measures to prevent SSOs and blockages caused by FOG. In addition, the authority to inspect grease producing facilities, enforcement authorities, and establishment of sufficient staffing to inspect and enforce are established.
- D. The District's Ordinance 09-01, an ordinance establishing requirements regarding Fats, Oils and Grease, and the District's Standard Specifications together require the installation of grease removal devices (such as traps or interceptors), design standards for removal devices, maintenance requirements, BMP requirements, record keeping and reporting requirements.
- E. The District's Ordinance 09-01, an ordinance establishing requirements regarding Fats, Oils and Grease, provides the authority to inspect grease producing facilities and enforcement authorities. Inspection and enforcement are provided by the Technical Services Department, with one full-time position dedicated specifically to inspection and enforcement of the FOG program.
- F. The District has identified specific portions of the collection system where excessive amounts of fats, oils and grease accumulate. All of these "High Cleaning Frequency Line Segments" have been evaluated, prioritized, assigned a cleaning frequency and are cleaned using high pressure hydro-vacuum units. This is currently the primary means to control grease accumulations within the collection system.

The District has established and implemented a High Cleaning Frequency Line Segments (Hot Spots) Elimination program focused on eliminating completely or extending the cleaning interval of all its known Hot Spots. The program was implemented in 2006.

Biological bacteria and enzymes are used at three (3) lift station sites to reduce the amount of accumulated grease and lessen the impact grease has on the operation of the lift stations. This method has been utilized since 2001.

- G. The District has a commercial FOG control program that began in 2012 and is being phased in over a five-year period. This program will be directed (primarily) at Food Service Establishments (FSEs) in the service area.

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**Key Performance Indicator:**

7-1. Is the program being implemented and administered as planned?

a. Measured by:

Are we meeting the goals set for the program?

Has the District experienced any Grease related SSO's during the monitoring period?

b. Measured by:

Review of all service call work orders

## Section 8: System Evaluation and Capacity Assurance Plan

### *GWDR Requirement*

*The Enrollee shall prepare and implement a Capital Improvement Plan (CIP) that will provide hydraulic capacity of key sanitary sewer system elements for dry weather peak flow conditions, as well as the appropriate design storm or wet weather event. At a minimum, the plan must include:*

- A. *Evaluation: Actions needed to evaluate those portions of the sanitary sewer system that are experiencing or contributing to an SSO discharge caused by hydraulic deficiency. The evaluation must provide estimates of peak flows (including flows from SSO's that escape the system) associated with conditions similar to those causing overflow events, estimates of the capacity of key system components, hydraulic deficiencies (including components of the system with limiting capacity) and the major sources that contribute to peak flows associated with overflow events;*
- B. *Design Criteria: Where design criteria do not exist or are deficient, undertake the evaluation identified in (A) above to establish appropriate design criteria;*
- C. *Capacity Enhancement Measures: The steps needed to establish a short- and long-term CIP to address identified hydraulic deficiencies, including prioritization, alternatives analysis, and schedules. The CIP may include increases in pipe size, I/I reduction programs, increases and redundancy in pumping capacity, and storage facilities. The CIP shall include an implementation schedule and shall identify sources of funding; and*
- D. *Schedule: The Enrollee shall develop a schedule of completion dates for all portions of the capital improvement program developed in (A) and (C) above. This schedule shall be reviewed and updated consistent with SSMP review and update requirements as described in Section D. 14.*

### System Evaluation and Capacity Assurance Plan

- A. The District completed a hydraulic model of its system in January 2009 and updated in December 2013. This hydraulic model provides estimates of peak flows, dry weather and wet weather (including flows from SSO's that escape the system), associated with conditions similar to those causing overflow events, estimates of the capacity of key system components, hydraulic deficiencies (including components of the system with limiting capacity) and the major sources that contribute to peak flows associated with overflow events.

- B. The hydraulic Model identified proper pipe sizing throughout the system to properly convey flows through the current system as well as future flows at complete system build out. The design criteria are established in the District's Standard Specifications and Improvement Standards for Sanitary Sewers, latest edition.
- C. Short- and long-term CIP were identified to address hydraulic deficiencies, including prioritization, alternatives analysis, and schedules. Pipe size, I & I reduction, pumping capacity, and storage facilities were addressed.

The District's Five Year Financial Plan adjusted the Local Participation Charge (Connection Fee) in accordance with the recommendations of the Master Plan. The local portion of the Participation Fee is collected to fund projects identified in the SECAP.

- D. A schedule of completion for all portions of the capital improvement program developed in (A) and (C) above is included in the District's Master Plan. The Master Plan, starting in fall of 2014 when it will be revised, will be referred to as the System Evaluation and Capacity Assurance Plan (SECAP).

The Five Year Financial Plan and the SECAP are available for review at the District Headquarters located at 5807 Springview Drive, Rocklin, CA 95677.



**Key Performance Indicator:**

- 8-1. Has the District experienced any capacity related spills during the monitoring period?
  - a. Measured by:
    - i. Review of work orders for all SSO's

- Has the District identified capacity deficiencies or potential capacity issues in its collection system?
  - b. Measured by:
    - i. Review of hydraulic model
    - ii. Review of development trends
    - iii. Review of land use agencies general plan zoning designations

## **Section 9: Monitoring, Measurement, and Program Modification.**

### *GWDR Requirement*

#### *The Enrollee Shall:*

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

### *Monitoring, Measurement, and Program Modification.*

- A. The District maintains accurate information on all components of the Collection System in CMMS (Lucity) database. The database contains information on the District's collection system assets, work-orders, maintenance and repair histories, and has extensive reporting capabilities available in the field as well as the office. The District's GIS program is currently under development, with the intent of linking it to the maintenance and financial databases, providing a more comprehensive approach to maintaining pertinent data related to the maintenance and operation of the District's collection system.
- B. The District monitors, where appropriate, and measures the effectiveness of each element of this SSMP based on the key performance indicator for each element.
- C. Each Objective in the District's Strategic Plan has a work plan. Annual Action Plans are established by each department head for the current fiscal year. The Strategic Plan is available for review at the District's Headquarters located at 5807 Springview Drive, Rocklin, CA 95677.
- D. SSMP Program Elements are updated, as necessary based on the monitoring and evaluation criteria established by the District. SSMP program elements are reviewed on an annual basis at a minimum.
- E. The District has been tracking all callouts, including SSOs for many years. The District uses the average of the past five years to establish a benchmark to measure the current year.

SSO Data from past 5 Years to establish benchmark for current year:

*Mainline SSO Benchmark Table for fiscal year 2008/2009*

							5 Year Ave	Current Year
Year →	Fiscal	03/04	04/05	05/06	06/07	07/08		08/09
# Mainline SSOs		4	2	2	4	1	<b>2.6</b>	0
Miles of Pipe		220	228	237	243	244	234	245
SSO's/100 Miles of Pipe		2.27	0.88	0.84	1.65	0.41	1.11	0.00
Gallons Spilled		858	505	15	500	50	386	0
M-Gals. Transported		1912	1972	2057	1891	1922	1951	1914

*Mainline SSO Benchmark Table for fiscal year 2009/2010*

							5 Year Ave	Current Year
Year →	Fiscal	04/05	05/06	06/07	07/08	08/09		09/10
# Mainline SSOs		2	2	4	1	1	<b>2.0</b>	1
Miles of Pipe		228	237	243	244	245	239	248
SSO's/100 Miles of Pipe		0.88	0.84	1.65	0.41	0.00	0.75	0.40
Gallons Spilled		505	15	500	50	0	214	150
M-Gals. Transported		1972	2057	1891	1922	1914	1951	1697

*Mainline SSO Benchmark Table for fiscal year 2010/2011*

							5 Year Ave	Current Year
<b>Year →</b>	<b>Fiscal</b>	<b>05/06</b>	<b>06/07</b>	<b>07/08</b>	<b>08/09</b>	<b>09/10</b>		<b>10/11</b>
<hr/>								
# Mainline SSOs		2	4	1	1	1	<b>1.8</b>	0
<hr/>								
Miles of Pipe		237	243	244	245	246	<b>243</b>	249
SSO's/100 Miles of Pipe		0.84	1.65	0.41	0.00	0.41	<b>0.74</b>	0
Gallons Spilled		15	500	50	0	150	<b>145</b>	0
M-Gals. Transported		2057	1891	1922	1914	1697	<b>1896</b>	1691
<hr/>								

*Mainline SSO Benchmark Table for fiscal year 2011/2012*

							5 Year Ave	Current Year
<b>Year →</b>	<b>Fiscal</b>	<b>06/07</b>	<b>07/08</b>	<b>08/09</b>	<b>09/10</b>	<b>10/11</b>		<b>11/12</b>
<hr/>								
# Mainline SSOs		4	1	1	1	0	<b>1.4</b>	3
<hr/>								
Miles of Pipe		243	244	245	246	246	<b>245</b>	253
SSO's/100 Miles of Pipe		1.65	0.41	0.00	0.40	0	<b>0.57</b>	1.2
Gallons Spilled		500	50	0	150	0	<b>140</b>	380
M-Gals. Transported		1891	1922	1914	1697	1691	<b>1823</b>	1564
<hr/>								

Mainline SSO Benchmark Table for fiscal year 2012/2013

							5 Year Ave	Current Year
Fiscal Year →	07/08	08/09	09/10	10/11	11/12		12/13	
# Mainline SSOs	1	1	1	0	3	1.2	1	
Miles of Pipe	244	245	246	246	253	247	253	
SSO's/100 Miles of Pipe	0.41	0.00	0.40	0	1.2	0.48	0.04	
Gallons Spilled	50	0	150	0	380	116	19,824	
M-Gals. Transported	1922	1914	1697	1691	1564	1758	1570	

Mainline SSO Benchmark Table for fiscal year 2013/2014

							5 Year Ave	Current Year
Fiscal Year →	08/09	09/10	10/11	11/12	12/13		13/14	
# Mainline SSOs	1	1	0	3	1	1.2	3	
Miles of Pipe	245	246	246	253	253	249	255	
SSO's/100 Miles of Pipe	0.41	0.40	0	1.2	0.40	0.48	1.2	
Gallons Spilled	0	150	0	380	19,824	4,071	6,631	
M-Gals. Transported	1914	1697	1691	1564	1570	1687	1661	

*Mainline SSO Benchmark Table for fiscal year 2014/2015*

						5 Year Ave	Current Year
<b>Fiscal Year →</b>	<b>09/10</b>	<b>10/11</b>	<b>11/12</b>	<b>12/13</b>	<b>13/14</b>		<b>14/15</b>
# Mainline SSOs	1	0	3	1	3	<b>1.6</b>	3*
Miles of Pipe	246	246	253	253	255	<b>251</b>	263
SSO's/100 Miles of Pipe	0.40	0	1.2	0.40	1.2	<b>0.48</b>	1.1
Gallons Spilled	150	0	380	19,824	6,631	<b>5397</b>	669
M-Gals. Transported	1697	1691	1564	1570	1661	<b>1637</b>	1433

\* All SSO's originated in lower laterals

Excerpts of SSO Trend Data are contained in Appendix C

*Mainline SSO Benchmark Table for fiscal year 2015/2014*

						5 Year Ave	Current Year
<b>Fiscal Year →</b>	<b>10/11</b>	<b>11/12</b>	<b>12/13</b>	<b>13/14</b>	<b>14/15</b>		<b>15/16</b>
# Mainline SSOs	0	3	1	3	3	<b>2.0</b>	7*
Miles of Pipe	246	253	253	255	263	<b>254</b>	267
SSO's/100 Miles of Pipe	0	1.2	0.40	1.2	1.1	<b>0.78</b>	2.62
Gallons Spilled	0	380	19,824	6,631	669	<b>5501</b>	6742
M-Gals. Transported	1691	1564	1570	1661	1433	<b>1584</b>	1314

\* Four (4) SSO's were on lines that were not on computerized PM schedules as they should have been – this has been corrected. Two (2) SSO's were caused by the same FSE that pushed grease and debris into the District's system while attempting to remove blockages from their private system – this was corrected with an NOV, which required extensive improvements to the FSE's plumbing system.

*Mainline SSO Benchmark Table for fiscal year 2016/2017*

						5 Year Ave	Current Year
Fiscal Year →	11/12	12/13	13/14	14/15	15/16		16/17
# Mainline SSOs	3	1	3	3	7*	3.4	3
# Low Lat SSOs	N/A	N/A	N/A	N/A	N/A	N/A	7 **
Miles of Pipe	253	253	255	263	267	258	270
SSO's/100 Miles of Pipe	1.2	0.40	1.2	1.1	2.62	1.32	0.9
Gallons Spilled	380	19,824	6,631	669	6742	6849	43455
M-Gals. Transported	1564	1570	1661	1433	1314	1508	

\* Four (4) SSO's were on lines that were not on computerized PM schedules as they should have been – this has been corrected. Two (2) SSO's were caused by the same FSE that pushed grease and debris into the District's system while attempting to remove blockages from their private system – this was corrected with an NOV, which required extensive improvements to the FSE's plumbing system

Only one gravity main spill was due to a maintenance issue. The others were (1) capacity and (2) contractors/plumbers plugs lost in the system.

\*\* The District assumed ownership of the Lower Lateral on March 1, 2017. The District owns approximately 190 miles of lower laterals. Since this was a partial year, I included the 9 lateral spills as a note in the above table

*Mainline SSO Benchmark Table for fiscal year 2017/2018*

						5 Year Ave	Current Year
Fiscal Year →	12/13	13/14	14/15	15/16	16/17		17/18
# Mainline SSOs	1	3	3	7*	3	3.4	4
# Low Lat SSOs	N/A	N/A	N/A	N/A	7 **	7	31
Miles of Pipe	253	255	263	267	270	262	384*
SSO's/100 Miles of Pipe	0.40	1.2	1.1	2.62	0.9	1.24	9.11
Gallons Spilled	19,824	6,631	669	6742	43455	15464	2161
M-Gals. Transported	1570	1661	1433	1314	1734	1542	1578

\* The miles of pipe include gravity sewer mains, force mains, and lower laterals.

Mainline SSO Benchmark Table for fiscal year 2018/2019

						5 Year Ave	Current Year
Fiscal Year →	13/14	14/15	15/16	16/17	17/18		18/19
# Mainline SSOs	3	3	7*	3	4	4.0	0
# Low Lat SSOs	N/A	N/A	N/A	7 **	31	19	11
Miles of Pipe	255	263	267	270	384	287	388
SSO's/100 Miles of Pipe	1.2	1.1	2.62	0.9	9.11	2.99	2.83
Gallons Spilled	6,631	669	6742	43455	2161	11932	190
M-Gals. Transported	1661	1433	1314	1734	1578	1544	1740



**Key Performance Indicator(s):**

- 9-1. Were KPI's reviewed and evaluated for each element of this SSMP?
  - a. Measured By:
    - i. Review of annual SSMP evaluation results
  
- 9-2. Were corrections or improvements made to any element where deficiencies or areas that could be improved were identified?
  - a. Measured By:
    - Review of Bi-annual SSMP evaluation results

## Section 10: SSMP Program Audits

### *GWDR Requirement*

*As part of the SSMP, the Enrollee shall conduct periodic internal audits, appropriate to the size of the system and number of SSOs. At a minimum, these audits must occur every two years and a report must be prepared and kept on file. This audit shall focus on evaluating the effectiveness of the SSMP and the Enrollee's compliance with the SSMP requirements identified in this subsection (D. 13), including identification of any deficiencies in the SSMP and steps to correct them.*

### SSMP Program Audits

The District will audit implementation and compliance with the provisions of this SSMP every two years. More frequently if deemed necessary.

The audit will be conducted by District staff selected from Operations and Maintenance, Technical Services and Administration departments. The scope of the audit will cover each of the major sections of the SSMP, based on the requirements of the GWDR.

The results of the audit, including the identification of any deficiencies and correction measures will be included in an Audit Report. The Audit report will be presented to the District's Board of Directors for review and kept on file at the District's Headquarters.



### **Key Performance Indicator(s):**

- 10-1. Were program audits completed as required?
  - a. Measured By:
    - i. Review of audit dates to determine if audit was performed on or before required date.
  
- 10-2. Did the audit evaluate the effectiveness of the SSMP?
  - a. Measured By:
    - i. Review of Audit results
  
- 10-3. Did the audit evaluate the SSMP in regards to compliance with the general order?
  - a. Measured By:
    - i. Review of Audit Results
    - ii. Were deficiencies, if any, addressed/corrected?

## **Section 11: Communication Program**

### *GWDR Requirement*

*The Enrollee shall communicate on a regular Basis with the public on the development, implementation and performance of its SSMP. The communication system shall provide the public the opportunity to provide input to the Enrollee as the program is developed and implemented; and*

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

### Communication Program

District staff announced during the March 1, 2007 board meeting that it was developing an SSMP. Progress updates have been posted on the California Integrated Water Quality System (CIWQS) website, as appropriate.

The District reports SSOs electronically to the California Integrated Water Quality System (CIWQS). The electronic SSO data, as well as information regarding regulatory actions, is available at:

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

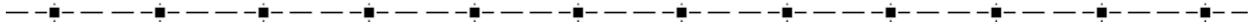
The District will report the performance of its sanitary sewer system to its Board of Directors annually at a regularly scheduled meeting. The performance information will include the performance indicators listed in Section 9 of the SSMP; Monitoring, Measurement, and Program Modifications. The information on the performance of the sanitary sewer system will be available for review at 5807 Springview Drive, Rocklin, CA 95677, during normal business hours. Interested parties can contact Sam Rose at (916) 786-8555 or [srose@spmud.ca.gov](mailto:srose@spmud.ca.gov) for additional information.

The District communicates with the public via its website, quarterly Billing statements, message placards on vehicles and directly through the course of day-to-day operations.

The website has a Customer Survey that offers customers the opportunity to provide feedback regarding their experience(s) with District service, or any comment they wish to make. In addition, the website will be used to educate the public about the nature of a collection system, what is involved in operating and maintaining it and how the public can help.

References to the District's website, the customer survey and some of the ways the public can help are printed on the quarterly billing statements and displayed on District vehicles.

There is one satellite agency (Placer County) that discharge into the District's collection system.



**Key Performance Indicator(s):**

11-1. Was the public afforded the opportunity to provide input to the Enrollee as the program is being implemented?

a. Measured By:

- i. Is the SSMP posted on the District's website?
- ii. Review of comments posted in the Contact Us form on the website?