



SANITARY SEWER MANAGEMENT PLAN 2025

Volume I

Revised:
AUGUST 2025

TABLE OF CONTENTS

Element 1: Goals and Introduction.....	6
1.1 Introduction.....	6
1.2 Regulatory Context	6
1.3 SSMP Purpose, Organization, and Update Schedule	7
1.4 Sewer System Asset Overview	8
1.5 Collection System Connection Data	13
1.6 Collection System Challenges	14
1.7 Roles and Responsibilities	14
1.8 Effectiveness, Improvement, and Key Performance Indicators	14
Element 2: Organization.....	15
2.1 Introduction.....	15
2.2 Legally Responsible Official.....	15
2.3 Authorized Representatives	15
2.4 Administrative and Maintenance Personnel	16
2.5 Reporting Chain of Communication.....	21
2.6 Effectiveness, Improvement, and Key Performance Indicators.....	22
Element 3: Legal Authority.....	24
3.1 Introduction.....	24
3.2 Compliance Summary	24
3.3 Compliance Documents.....	25
3.4 Roles and Responsibilities.....	26
3.5 Effectiveness, Improvement, and Key Performance Indicators.....	26
Element 4: Operation and Maintenance Program	28
4.1 Map of the Collection System	28
4.2 Preventative Operations and Maintenance	29
4.3 Rehabilitation and Replacement Plan for System Assets	32
4.4 Training	33
4.5 Equipment and Parts Inventory	34
4.6 Roles and Responsibilities.....	35
4.7 Effectiveness, Improvement, and Key Performance Indicators	35
Element 5: Design and Performance Provisions	38
5.1 Compliance Summary and Activities.....	38
5.2 Compliance Documents	38

- 5.3 Roles and Responsibilities 40
- 5.4 Effectiveness, Improvement, and Key Performance Indicators 40
- Element 6: Spill Emergency Response Plan 41
 - 6.1 Compliance Summary and Activities 41
 - 6.2 Compliance Documents 42
 - 6.3 Roles and Responsibilities 43
 - 6.4 Notification and Response Procedures 43
 - 6.5 Training 45
 - 6.6 Effectiveness, Improvement, and Key Performance Indicators 46
- Element 7: Sewer Pipe Blockage Control Program 47
 - 7.1 Compliance Summary and Activities 47
 - 7.2 Compliance Documents 48
 - 7.3 Roles and Responsibilities 49
 - 7.4 Public Education and Outreach Program 49
 - 7.5 FOG Disposal Facilities 49
 - 7.6 FOG Program Requirements and Design Standards 49
 - 7.7 FOG Inspections and Enforcement 49
 - 7.8 FOG Preventative Maintenance 50
 - 7.9 Source Control Measures 50
 - 7.10 Effectiveness, Improvement, and Key Performance Indicators 50
- Element 8: System Evaluation, Capacity Assurance and Capital Improvements 51
 - 8.1 Compliance Summary and Activities 52
 - 8.2 Compliance Documents 52
 - 8.3 Roles and Responsibilities 52
 - 8.4 System Evaluation and Condition Assessment 52
 - 8.5 Capacity Assessment and Design Criteria 53
 - 8.6 Capital Improvement Plan 53
 - 8.7 Prioritization of Corrective Actions 53
 - 8.8 Effectiveness, Improvement, and Key Performance Indicators 53
- Element 9: Monitoring, Measurement, and Program Modifications 54
 - 9.1 Compliance Summary and Activities 54
 - 9.2 Compliance Documents 54
 - 9.3 Roles and Responsibilities 54
 - 9.4 Maintain Information 54
 - 9.5 Monitoring Implementation and Effectiveness of SSMP 55

9.6	Assessment of Preventative Maintenance Program	60
9.7	Spill Trends	60
9.8	Effectiveness, Improvement, and Key Performance Indicators	61
Element 10: SSMP Program Audits		62
10.1	Compliance Summary and Activities	62
10.2	Compliance Documents	62
10.3	Roles and Responsibilities	62
10.4	SSMP Audits and Updates Schedule.....	62
10.5	Roles and Responsibilities	63
10.6	Effectiveness, Improvement, and Key Performance Indicators	63
Element 11: Communication Program.....		64
11.1	Compliance Summary and Activities	64
11.2	Roles and Responsibilities	64
11.3	Procedures to Communicate with Public for Spills and Discharges	64
11.4	Procedures for Communication with Owners/Operators	65
11.5	Effectiveness, Improvement, and Key Performance Indicators.....	65

TABLES

Table 1 – SSMP Update and Audit Schedule	8
Table 2 – EOCWD Sewer Service Area Population Estimates	11
Table 3 – EOCWD Collection System Facilities Summary.....	13
Table 4 – EOCWD Sewer Service Area Connection Data.....	13
Table 5 – District Roles, Responsibilities, and Contact Information.....	17
Table 6 – EOCWD Responsible Staff for SSMP Elements	19
Table 7 – Existing Equipment Inventory.....	34
Table 8 - Key Performance Indicators	36
Table 9 – EOCWD Responsible Staff for SSMP Elements	56
Table 10 – SSMP Update and Audit Schedule.....	62

FIGURES

Figure 1 – EOCWD Sewer Study Area	10
Figure 2 – EOCWD Spill Response Plan	23
Figure 3 – Sample Gravity Main Maintenance Weekly Report.....	30
Figure 4 – Sample Manhole Maintenance Weekly Report.....	31
Figure 5 – Existing Collection System Rehabilitation and Repair Plan.....	33
Figure 6 – Standard Drawings.....	39
Figure 7 – EOCWD Spill Response Plan.....	44

APPENDICES

Appendix A – System Map

Appendix B – Organization Chart

Appendix C – Spill Emergency Response Plan (SERP)

Appendix D – Ordinance No. 2016-1

Appendix E – Ordinance No. 2016-2

Appendix F – Standard Specifications and Drawings for Sanitary Sewers

Appendix G – Standard Operations and Maintenance Procedures For Hydro Cleaning, Combination Cleaning Truck, and Manhole Inspections

Appendix H – 2025 EOCWD Sewer Master Plan Update

Appendix I – EOCWD’s Sewer Use Ordinance 16-01

Appendix J – FOG Ordinance 16-02

Appendix K – Public-education outreach materials and program (website, print and social media) promoting proper disposal of FOG

Appendix L – Requirements for Food Service Establishments: installation of Grease Control Devices (traps or interceptors) with design standards, owner-performed maintenance, BMPs, record-keeping and reporting

Appendix M – Handout materials for each Food Service Establishment to educate staff and ensure compliance.

Appendix N – Corrective-action procedures for FSEs and residential facilities in the event of a FOG-related SSO.

Appendix O – FOG Control Regulations Applicable to Food Service Establishments (FSE)

Appendix P – Ordinance Establishing Wastewater Discharge Regulations.

Appendix Q – Local Sanitary Sewer Service Charges

Appendix R – FOG Management Program

Appendix S – FOG Binder containing guidance and resources for FSEs

Appendix T – Agreement for Provision of Environmental Health Services between the County of Orange and Orange County Sanitation District

Appendix U – Materials developed to educate the public about proper FOG and debris disposal

Appendix V – SSMP Quarterly Meeting Log

Appendix W – SSMP Audit Log

Element 1: Goals and Introduction

The goal of the Sewer System Management Plan (SSMP) is to provide the plan and schedule to (1) properly manage, operate, and maintain all parts of the sanitary sewer system owned by the East Orange County Water District (District, EOCWD), (2) reduce and prevent spills, and (3) contain and mitigate spills that do occur.

This SSMP has been developed and is implemented with the intent of properly managing, operating, and maintaining all parts of the District's sanitary sewer system. The District has identified specific goals that it believes achievable through the implementation of the contents of this plan. With this regard, the SSMP establishes the following discrete goals:

- 1. Minimize the frequency of spills, and specifically maintain the number of spills at less than 2.1 spills per 100 miles annually*
- 2. Appropriately mitigate the impacts caused by spills by containing all spills within 3 hours of notification, and responding to all spills within 20 minutes of notification during District business hours and 60 minutes during off hours*
- 3. Provide notifications and reports to all required regulatory agencies in a timely manner*
- 4. Effectively manage, operate, maintain, and improve the sewer collection system*
- 5. Provide education and outreach to the general public to increase awareness of the sanitary sewer system, its function, and operation, and to promote the proper disposal of pipe-blocking substances*
- 6. Train collection system operators, employees, contractors, responders, or other agents to address any sewer spill events*
- 7. Work to ensure the District's collection system is properly designed, constructed, and funded to provide sufficient capacity to convey base and peak flows while meeting or exceeding applicable regulations, laws, and generally acceptable practices relative to sanitary sewer system O&M*

1.1 Introduction

This SSMP has been prepared in compliance with the requirements of the State Water Resources Control Board adopted Order No. 2022-0103-DWQ, Statewide General Waste Discharge Requirements (WDRs) for Sanitary Sewer Systems. This element includes a brief overview of the District's sanitary sewer system, a summary of the Order's regulatory context, and the purpose and organization of this SSMP.

1.2 Regulatory Context

Sewage is untreated or partially treated domestic, municipal, commercial and/or industrial waste (including sewage sludge), and any mixture of these wastes with inflow or infiltration of stormwater or groundwater, conveyed in a sanitary sewer system. A spill is a discharge of sewage from any portion of a sanitary sewer system due to a sanitary sewer system spill, operational failure, and/or infrastructure failure. Sewage and its associated wastewater spilled from a sanitary sewer system may threaten public health, beneficial uses of waters of the State, and the environment.

On May 2, 2006, the State Water Resources Control Board adopted Order No. 2006-003 DWQ (Order), the Statewide General Waste Discharge Requirements (WDRs) for Sanitary Sewer Systems, which required owners and operators of wastewater collection systems with more than one mile of pipeline to comply with all elements and provisions of the WDRs.

On August 6, 2013, the State Water Resources Control Board adopted Order No. WQ 2013-0058-EXEC, amending the Monitoring and Reporting Requirements (MRP) included in the original Order. The MRP in the original Order categorized spills as Category 1 and Category 2. The amended MRP implemented a Category 3 spill, facilitating the evaluation of high threat and low threat spills.

On December 6, 2022, and to further provide a consistent, statewide regulatory approach to address sanitary sewer spills, the State Water Board adopted revised Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, Water Quality Order No. 2022-0103-DWQ. The requirements of the revised order became effective on June 3, 2023.

The revised Sanitary Sewer Systems General Order (WDR) requires public agencies that own or operate sanitary sewer systems to develop and implement sewer system management plans and report all sanitary sewer spills to the State Water Board's online California Integrated Water Quality System (CIWQS) Sanitary Sewer System Database. The revised WDR added additional spill Category 4 to recognize the lowest-threat spills less than or equal to 50 gallons and added adaptive management principles to the SSMP development and implementation ethos.

The WDRs include directives for owners and operators of collection systems to demonstrate adequate and efficient management, operation, and maintenance of their collection systems. Generally, the WDRs require that:

- During a spill event all feasible steps are implemented to control the volume released and prevent any untreated wastewater from entering storm drains, waters of the state, and etc.,
- All spill events are reported to the State Water Resources Control Board via the California Integrated Water Quality System (CIWQS),
- An SSMP is prepared and approved by the board governing the owners or operators of a sanitary sewer system, and
- The SSMP is implemented using an adaptive management program. The adaptive management program periodically considers the effectiveness of the plan and the operations and maintenance program in preventing and mitigating spills, and revises it accordingly when deficiencies and/or improvements are identified.

1.3 SSMP Purpose, Organization, and Update Schedule

The purpose of the SSMP is to implement and document the requirements of the WDRs as appropriate to the District's collection system. To fulfill the requirements of the WDRs, this SSMP contains 11 elements which detail the management, operation, and maintenance of all parts of the District's sanitary sewer system. These elements are:

1. *Goals*
2. *Organization*
3. *Legal Authority*
4. *Operations and Maintenance Program*
5. *Design and Performance Provisions*
6. *Spill Emergency Response Plan*
7. *Sewer Pipe Blockage Control Program*
8. *System Evaluation and Capacity Assurance Plan*
9. *Monitoring, Measurement, and Program Modifications*
10. *SSMP Program Audits*
11. *Communication Program*

A summary of each of the elements, as defined in the WDRs, is included at the beginning of each section to inform readers of the section’s content and the basis of their inclusion in the SSMP. Following this introduction, each section contains the policies, practices, descriptions, and references used to address the element’s requirements.

The SSMP update and audit schedule is summarized below in Table 1. It should be noted that this SSMP Update incorporates the results of the audit completed in December 2024, covering the three-year audit period from August 2021 to August 2024.

Table 1 – SSMP Update and Audit Schedule

Action	Due Date	Notes
SSMP Update and Re-Certification	Aug 2025	Six-year recertification by District Board
SSMP Internal Audit Report	Dec 2027	Period Aug 2024 to Aug 2027
SSMP Internal Audit Report	Dec 2030	Period Aug 2037 to Aug 2030
SSMP Update and Re-Certification	Aug 2031	Six-year recertification by District Board
Adaptive management updates to SSMP	As Needed	SSMP to be updated as necessary based on monitoring and performance evaluations conducted throughout the SSMP implementation period.

1.4 Sewer System Asset Overview

This section describes the District’s existing wastewater collection, including the service area, population trends, and an overview of the collection system facilities.

Study Area

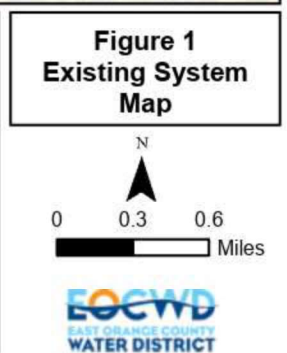
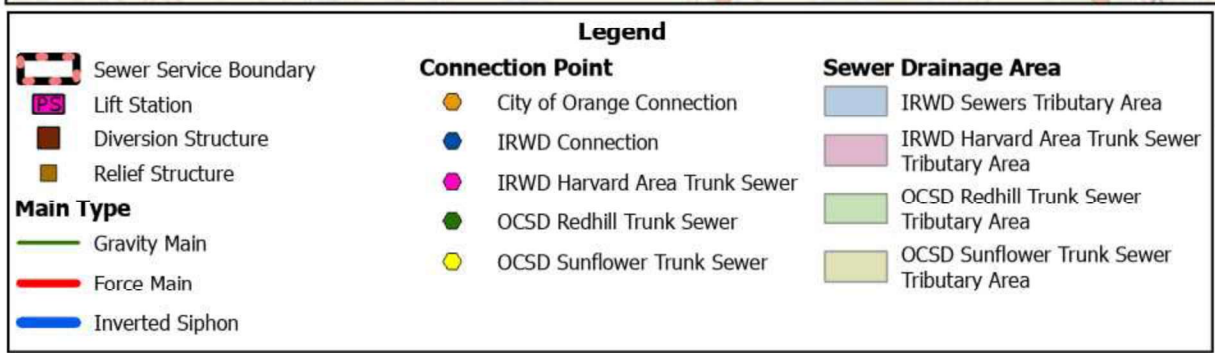
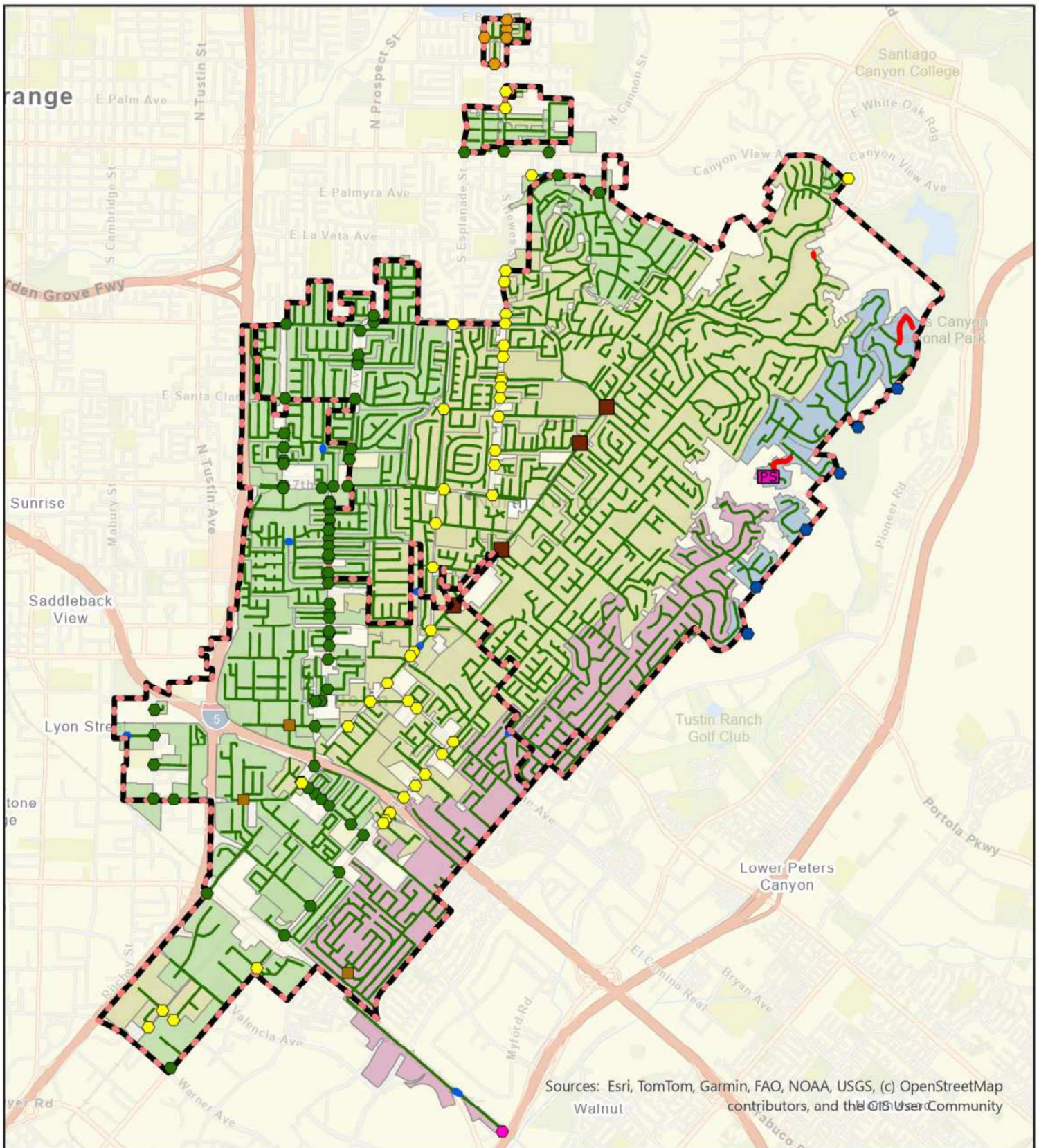
EOCWD is located in central Orange County, just north of the City of Irvine. The District's service area is described below.

Service Area Description

EOCWD wastewater collection is located in central Orange County and serves portions of the Cities of Tustin and Orange, as well as adjacent unincorporated areas of Orange County. The District covers approximately 7,800 acres (12.15 square miles) and serves a predominantly urbanized region.

The District's boundaries are approximately defined by the 55 Freeway to the northwest, Warner Avenue to the southwest, and generally lie between Red Hill Avenue and Tustin Ranch Road to the southeast. To the northeast, the boundary extends roughly a few miles southwest of Chapman Avenue. Major transportation corridors within the District include the I-5 Freeway and Irvine Boulevard, which traverse the area in a northwest-to-southeast direction, along with Newport Avenue, a primary cross street that runs perpendicular to the I-5 and Irvine Boulevard.

EOCWD's wastewater collection service area is largely made up of low density single-family residential neighborhoods, with additional commercial, light industrial, and agricultural land uses. The District also contains parks, open space, and public rights-of-way, which generally produce little to no wastewater flow. The EOCWD sewer service area is illustrated on Figure 1.



Population Trends

The population within the District’s sewer service area was 79,035 as of 2023. Table 2 summarizes the historical population trends within the area. As would be expected in a maturely developed area near buildout conditions, the compounded annual population growth rate is less than one percent annually between 2010 and 2023.

Table 2 – EOCWD Sewer Service Area Population Estimates

Year	Population ^{1,2}	Percent Change
2023	79,035	0.4%
2022	78,694	-1.1%
2021	79,561	-0.3%
2020	79,792	6.0%
2019	75,275	-1.0%
2018	76,024	0.4%
2017	75,687	-1.2%
2015	76,604	4.8%
2010	73,117	

1. Data obtained from Census.gov
2. Population estimates are based on percent area of census tract within EOCWD sewer service area

Topography and Climate

EOCWD, located near Tustin, CA, experiences a Mediterranean climate, characterized by hot, dry summers and cooler, cloudier winters. Foggy conditions can persist for several days during the colder months. Rainfall is generally sparse, with nearly 80% of annual precipitation occurring between October and March, typically totaling less than 10 inches per year.

Topographically, the EOCWD service area includes a mix of flatlands, rolling hills, and foothill terrain, influenced by its proximity to the Santa Ana Mountains. The elevation changes within the district impact stormwater drainage patterns and groundwater recharge zones, playing a crucial role in local water management strategies.

Overview of Collection System Facilities

The following section summarizes the District’s existing collection system. The EOCWD existing sewer system consists of approximately 173 miles of pipeline and 3,700 manholes serving about 16,500 customers. The District does not own or operate any wastewater treatment facilities; instead, wastewater generated within its service area is conveyed through one of the 137 connection points to sewer systems owned by the City of Orange, Orange County Sanitation District (OCSan), and Irvine Ranch Water District (IRWD). These connection points and upstream infrastructure are organized into twelve drainage basins, which are further grouped into four primary sewershed areas: IRWD’s Harvard Area Trunk Sewer (HATS), OCSan’s Redhill

Trunk Sewer, OCSan's Sunflower Trunk Sewer, and IRWD's North Tustin Area. Wastewater from the Orange and OCSan tributary areas is directed to OCSan's Reclamation Plant No. 1. Flows that connect to IRWD's system are conveyed to the Michelson Water Recycling Plant (MWRP).

EOCWD's existing collection system consists of approximately 173 miles of gravity mains, ranging in diameter from 6-inches to 27-inches. The most common pipe diameter is 8-inches, accounting for nearly 91-percent of the total length. The gravity mains in EOCWD's collection system were installed between 1955 and 2003. The bulk of the system – approximately 670,000 feet or 127 miles – was constructed between 1960 and 1969, representing about 73% of the total gravity mains. The majority of EOCWD's infrastructure is now over 50 years old, which may have implications for system maintenance, rehabilitation planning, and long-term capital improvement strategies. EOCWD utilizes six (4) different material types for gravity mains:

- Acrylonitrile-Butadiene-Styrene (ABS) (Not a currently approved material)
- Cast Iron, Ductile Iron
- Polyvinyl Chloride (PVC)
- Vitrified Clay Pipe (VCP)

The most common gravity main material in the EOCWD collection system is VCP, which makes up approximately 98-percent of the total gravity main length in the system.

EOCWD's service area contains one publicly owned lift station - the Lemon Heights Lift Station. Other lift stations within the District's boundaries are privately owned and are neither operated nor maintained by the District. In conjunction with the single lift station, the existing collection system includes approximately 2,074 ft, or 0.37 miles, of 4-inch diameter force main. There is also a privately owned 2-inch force main within the District's service area.

The District's existing collection system includes nine inverted siphons , each constructed to pass beneath major flood control channels or utilities. The system also contains four active diversion structures, all located along Newport Boulevard. In addition, the collection system encompasses three active relief structures. The diversion structures are designed with channels that currently direct 100% of the flow eastward, away from Newport Boulevard. If the flow exceeds a certain threshold, the diversion structures are configured to allow excess flow to spill over and be redirected westward toward Newport Boulevard. The relief structures are intended to provide relief prior to spilling if high flows surcharge gravity mains up into the system's manholes.

The District does not own any portion of the sewer laterals that connect individual customers to the gravity mains throughout the collection system. Also, the District does not have any diversion structures dedicated to diverting stormwater into the collection system. The District's collection system facilities are summarized in Table 3.

Table 3 – EOCWD Collection System Facilities Summary

Description	Value
Total Length – Gravity Mains (miles)	173
Total Length – Force Mains (miles)	0.4
Total Length – Laterals (miles)	0
Number of Lift Stations	1
Number of Siphons	9
Number of Diversion Structures	4
Number of Relief Structures	3
Number of Stormwater Diversion Structures	0

The above collection system information is maintained in a comprehensive Geographical Information System (GIS) that also forms the basis of a Computerized Maintenance Management System (CMMS) in the ESRI Enterprise Information System platform. Both the GIS and the CMMS are regularly and routinely updated based upon construction data and field data. An updated system map created from the GIS is provided in **Appendix A**. The GIS/CMMS and updating protocols are described in more detail in Element 4.

1.5 Collection System Connection Data

There are approximately 16,374 connections to the District’s collection system. The distribution of these connections among residential, commercial, and industrial customers, as well as within either the City of Tustin or Orange County, is shown in Table 4. As described in the Collection System Challenges section that follows, the number of connections is considered approximate because of complications in determining the number of septic tanks in the service area.

Table 4 – EOCWD Sewer Service Area Connection Data

Description	Within City of Tustin	Within Unincorporated Orange County	Total
Residential Connections	5,943	9,775	15,718
Commercial Connections	545	51	596
Industrial Connections	60	-	60
Total	6,548	9,826	16,374

1.6 Collection System Challenges

EOCWD staff have identified the following general challenges in operating and maintaining the District's collection system:

1. *The fact that the District does not own nor operate any trunk sewer within its service area results in the District's collection system comprising a high number of unconnected basins with small diameter gravity mains that require focused maintenance attention.*
2. *Because the District recently took over ownership and operation of the collection system (August 2016), historical information including record drawings is more limited than typically seen. District staff are still in the process of understanding system connectivity and configuration in some parts of the system.*
3. *The District's challenging service topography in the foothill portions of the service area have resulted in a large number of Onsite Wastewater Treatment Systems (OWTS), more commonly called septic tanks, being put in use in the service area. The location and operation of the septic tanks has been poorly documented in the past. As part of the ongoing Sewer Master Plan Update, the District is documenting the location of septic tanks and developing a plan for ongoing operation in these challenging areas.*
4. *The District has a number of private collection systems serving multi-family residential and shopping center areas that discharge flow into the District's collection system. These small private systems can have maintenance issues that impact the District's system, and the District wishes to have a more systematic method for communication with the operators of these systems.*
5. *Root intrusion appears to be the greatest challenge for collection system integrity as identified both by spill records and by interviews with staff. The District is actively implementing root intrusion control activities.*

1.7 Roles and Responsibilities

Because this element includes a high-level overview of collection system activities, the EOCWD Board of Directors, General Manager, Operations Manager, Engineering Manager, GIS Manager, and Operations Supervisor have responsibilities in maintaining this element.

1.8 Effectiveness, Improvement, and Key Performance Indicators

To monitor the effectiveness of this element of the SSMP, the following Key Performance Indicators (KPIs) are being monitored by EOCWD:

- Have the goals of the SSMP been reviewed at a Quarterly SSMP Review Meeting?

Element 2: Organization

The SSMP must identify:

- 1. The name of the Legally Responsible Official as required in section 5.1 of Order No. 2022-0103-DWQ – Statewide General WDR For Wastewater Collection Agencies.**
- 2. The position titles, telephone numbers, and email addresses for management, administrative, and maintenance positions responsible for implementing specific SSMP elements.**
- 3. Organizational lines of authority; and**
- 4. The chain of communication for reporting spills from receipt of a complaint or other information, including the person responsible for reporting spills to the State and Regional Water Board and other agencies if applicable (such as County Health Officer, County Environmental Health Agency, Regional Water Board, and/or State Office of Emergency Services (OES)).**

2.1 Introduction

The administration and implementation of the SSMP is directed through executive staff, engineering staff, and operations & maintenance staff of EOCWD. The offices of these staff are located at:

Administrative Office
185 N. McPherson Road,
Orange, CA 92869-3720
Phone: 714-538-5815
Fax: 714-538-0334

2.2 Legally Responsible Official

Legally Responsible Official: David Youngblood, P.E., General Manager

2.3 Authorized Representatives

The District has authorized certain individuals to serve as Authorized Representatives for all sanitary sewer related issues in the District. These representatives are authorized to submit all reports required by the WDRs and other information required by the State or Regional Water Board. The titles of these individuals are:

- Jerry Mendzer, Operations Manager
- Justin Davis, Operations Supervisor

The contact information for these individuals can be found in the tables that follow in this chapter.

2.4 Administrative and Maintenance Personnel

The District employs five individuals, comprising the Operations Supervisor and four (4) collection system staff, dedicated to managing, operating, maintaining, and improving the collection system. The Operations Supervisor reports to the Operations Manager, who reports directly to the General Manager. The four individuals who report to the Operations Supervisor are certified using California Water Environment Association (CWEA) standards.

Tables 5 and Table 6 below give the names and phone numbers of positions responsible for implementing the SSMP and the entire range of positions/departments having some responsibility for implementing specific elements of the SSMP, respectively. These tables are key components to the proper implementation of the SSMP and its effectiveness. A complete organizational chart identifying lines of authority for all District employees including those responsible for SSMP implementation can be found in **Appendix B**.

Table 5 – District Roles, Responsibilities, and Contact Information

Role	Responsibility	Contact Information
Board of Directors	Establishes policy.	Sprado@eocwd.com 714-538-5815
General Manager	Plans, organizes and directs the overall administrative activities and operations of the District. Advises and assists the Board, represents the District's interest with other governmental agencies, business interests, and the community. Certifies spill reports in CIWQS after a spill.	Dyoungblood@eocwd.com 714-538-5815
General Counsel/Board Secretary	Provides legal guidance and support for District Board of Directors, management and operation; also provides District Secretary services.	Sprado@eocwd.com 714-538-5815
Operations Manager	Provides direct oversight of the utility operations to ensure compliance with local, state and federal laws and regulations. Contacts regulatory agencies in the event of a spill. Can submit spill reports in CIWQS after a spill.	Jmendzer@eocwd.com 714-501-5596
Engineering Manager	Plans, coordinates, supervises, and participates in the performance of professional engineering activities of a complex nature involving engineering planning and design, construction project	Byoung@eocwd.com 714-538-5815
Finance Director/Treasurer	Plans, organizes and directs all financial aspects of District operations. Prepares operating and capital budgets, including financing plans for capital projects and monthly financial statements.	Sprado@eocwd.com 714-538-5815
Administrative Assistants	Perform general and technical office work in support of District administrative, engineering and operations divisions; oversees records management system.	Sprado@eocwd.com 714-538-5815
Bookkeeper	Assists Finance Director in day-to-day accounting tasks for District. Assists with purchasing and contract management tasks.	Sprado@eocwd.com 714-538-5815

Role	Responsibility	Contact Information
<p>Operations Supervisor</p>	<p>Manages, plans, directs, coordinates, and evaluates all aspects of the operation, maintenance, and construction of the Wastewater Division; coordinates assigned activities with other divisions and departments. Provides training to staff. Coordinates assigned activities including CCTV inspection work and reviewing PACP reports. Submits spill reports in CIWQS after a spill.</p>	<p>Jdavis@eocwd.com 714-497-8073</p>
<p>GIS Manager</p>	<p>Manages and maintains the District's GIS/CMMS system in Esri Enterprise Information System format. Manages collection system workorders and produces collection system reports tracking maintenance and cleaning. Reviews DigAlert ticket response and performance through Esri.</p>	<p>Rgallegos@eocwd.com 714-538-5815</p>
<p>Collection System Maintenance Field Crew</p>	<p>Performs semi-skilled and skilled labor in the construction, maintenance, repair, and inspections of wastewater collection systems. Cleans, unplugs, and repairs wastewater lines. Operates power equipment including hydraulic cleaning truck, sewer rodder, and closed circuit television system.</p>	<p>Jdavis@eocwd.com 714-497-8073</p>
<p>Water Distribution Operators/Stand-by Field Crew</p>	<p>Performs semi-skilled and skilled labor in the construction, maintenance, repair, and inspections of water utility systems. Responds to service requests outside of department normal work week hours. Secures site in the event of an overflow, and performs initial mitigation as needed. Operates power equipment including hydraulic cleaning truck, sewer rodder, backhoe, and other heavy equipment.</p>	<p>Jmendzer@eocwd.com 714-501-5596</p>
<p>Contract Cleaning Crew (If required)</p>	<p>If determined to be required by the Operations Manager or Operations Supervisor, performs semi-skilled and skilled labor in the maintenance, repair, and inspections of wastewater collection systems. Cleans, unplugs, and repairs wastewater lines. Operates power equipment including hydraulic cleaning truck, sewer rodder, and closed-circuit television system. Responds to service requests outside of departmental normal work hours and assists with sewer overflows if needed.</p>	<p>Obtained When Needed</p>

Table 6 – EOCWD Responsible Staff for SSMP Elements

Element	Responsible Staff
<p>I. Goals</p>	<ul style="list-style-type: none"> • Board of Directors • General Manager • Operations Manager • Engineering Manager • GIS Manager • Operations Supervisor
<p>II. Organization</p> <p>a. Name of the Responsible or authorized representative(s)</p> <p>b. Names and telephone numbers of management, administrative, and maintenance positions</p> <p>c. Chain of communication for reporting spills</p>	<ul style="list-style-type: none"> • General Manager • Operations Manager • Engineering Manager • Operations Supervisor
<p>III. Legal Authority</p> <p>a. Prevent illicit discharges to the collection system</p> <p>b. Require that sewers and laterals be properly designed and constructed</p> <p>c. Ensure access to the collection system</p> <p>d. Limit discharge of FOG and other debris that may cause blockages</p> <p>e. Enforcement of Ordinance</p>	<ul style="list-style-type: none"> • Board of Directors • General Manager • Operations Manager • Engineering Manager • Operations Supervisor • General Counsel/Board Secretary
<p>IV. Operation and Maintenance Program</p> <p>a. Maintain current map of collection system and storm drain system</p> <p>b. Describe routine and preventative operation and maintenance of collection system</p> <p>c. Develop a rehabilitation and replacement plan.</p> <p>d. Develop and implement a training program</p> <p>e. Provide equipment and training parts inventories</p>	<ul style="list-style-type: none"> • Operations Manager • Engineering Manager • Operations Supervisor • GIS Manager

Element	Responsible Staff
<p>V. Design and Performance Provisions</p> <ul style="list-style-type: none"> a. Design, construction and specification standards for installation and rehabilitation of new and existing sewers b. Procedures and standards for the inspection of new or rehabilitated sewers and appurtenances. 	<ul style="list-style-type: none"> • General Manager • Operations Manager • Engineering Manager
<p>VI. Spill Emergency Response Plan</p> <ul style="list-style-type: none"> a. Notification procedures for regulatory agencies b. Response and mitigation procedures c. Staff and contractor training d. Emergency operations e. Containment and monitoring plans 	<ul style="list-style-type: none"> • Operations Manager • Engineering Manager • Operations Supervisor
<p>VII. Sewer Pipe Blockage Control Program</p> <ul style="list-style-type: none"> a. Identification of "hot spot" areas of collection system b. Identification of food service businesses in "hot spot" areas of collection system c. Administrative controls (permits) for potential grease dischargers d. Requirement to install grease removal equipment e. Encouragement to use BMPs to reduce grease discharges f. Periodic inspections g. Enforcement actions h. Public Education 	<ul style="list-style-type: none"> • Operations Manager • Engineering Manager • GIS Manager • Operations Supervisor
<p>VIII. System Evaluation, Capacity Assurance, and Capital Improvements</p> <ul style="list-style-type: none"> a. Capacity evaluation b. Identification of capacity needs c. Project schedule 	<ul style="list-style-type: none"> • Operations Manager • Engineering Manager

Element	Responsible Staff
<p>IX. Monitoring, Measurement, and Program Modifications</p> <ul style="list-style-type: none"> a. Maintain records and data b. Monitor implementation of SSMP c. Assess the success of preventive maintenance program d. Update program elements e. Identify and track spill trends 	<ul style="list-style-type: none"> • General Manager • Operations Manager • Engineering Manager • Operations Supervisor • GIS Manager
<p>X. Internal Audits</p> <ul style="list-style-type: none"> a. Person responsible for the Audit b. Scope of the Audit c. Audit work product d. Schedule for the Audit, minimum every three years 	<ul style="list-style-type: none"> • Operations Manager • Engineering Manager • Operations Supervisor
<p>XI. Communication Program</p> <ul style="list-style-type: none"> a. Notification that an SSMP is being prepared. Website use is suggested 	<ul style="list-style-type: none"> • Operations Manager • Engineering Manager • Administrative Assistants

2.5 Reporting Chain of Communication

The District utilizes a systematic approach to spill response and notification from receipt of a complaint or observation to cleanup of a verified spill. Various positions are responsible for ensuring that proper procedures are followed in the event of a spill. A complete description of spill response is found in the Spill Emergency Response Plan (SERP) maintained by the District, and included as **Appendix C** of this document. In summary, during regular business hours, spill communication begins with a call to the District’s main office staff who document the call and obtain critical information. That information is forwarded to Operations Supervisor or Operations Manager, who coordinates the response by selecting the nearest operator to the spill location. After hours calls are answered directly by the on-call operator. Upon arrival, the operator will relay information back to the Operations Supervisor or Operations Manager, who then determines the need for additional support. Required notifications to various other agencies are made by the Operations Supervisor or Operations Manager as required depending on the nature of the spill. One of the Authorized Operators may perform other notifications for Category 1 spills. A graphic depiction of spill response and notification as outlined in the SERP is provided below on Figure 2, taken from the District’s SERP.

2.6 Effectiveness, Improvement, and Key Performance Indicators

To monitor the effectiveness of this element of the SSMP, the following Key Performance Indicators (KPIs) are being monitored by EOCWD:

- Have the organization of the utility and the application of that organization to the SSMP been reviewed at a Quarterly SSMP Review Meeting?

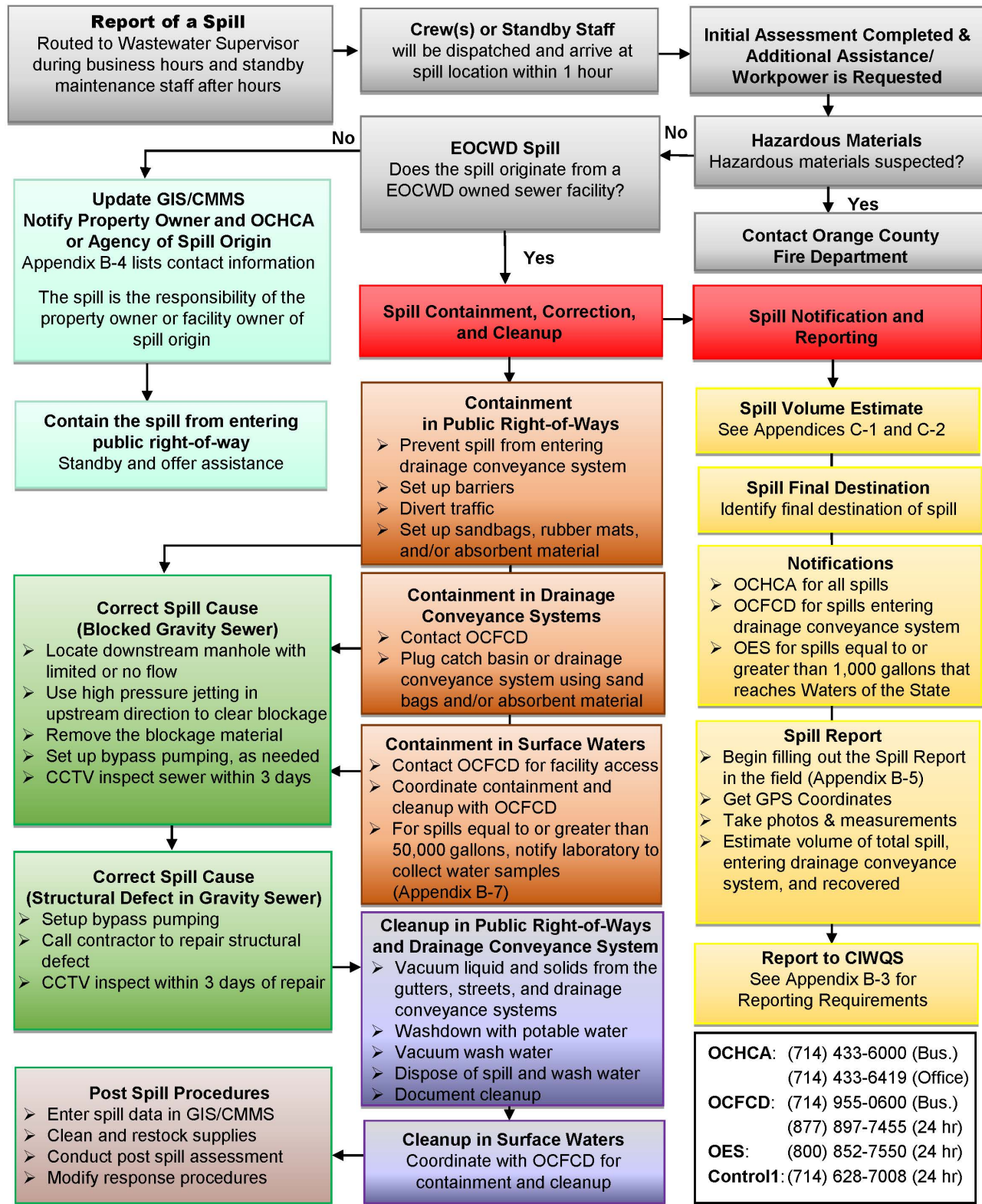


Figure 2 – EOCWD Spill Response Plan

Element 3: Legal Authority

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

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

3.1 Introduction

The District’s legal authority is comprised of several documents, codes, and ordinances that enable EOCWD to protect its sewer system from harmful discharges and activities. The following sections summarize the District’s legal authority with respect to the collection system. Many of the elements in these documents implement source control prohibitions required by OCSan.

3.2 Compliance Summary

The District maintains legal authority with respect to the collection system under the following enacted ordinances/resolutions or agency policies:

- **Water Code Section 31016**, granting a county water district the general power to enforce its ordinances, including entry (by consent or warrant) onto private property where necessary for investigation of violations.
- **Government Code Sections 54739 and 54740**, which provide industrial waste pretreatment ordinance authority for local agencies with treatment works or collection systems.
- **EOCWD Ordinance No. 2016-1 “Establishing Wastewater Discharge Regulations” effective September 15, 2016**. This has general prohibitions, limits and requirements for discharge which apply to all users of the sewer system.
- **EOCWD Ordinance No. 2016-02 “Adopting Fats, Oils, and Grease (FOG) Control Regulations applicable to Food Service Establishments”, effective Date, 2016**. This ordinance provides EOCWD with the legal authorities necessary to limit FOG and debris entering into the sewer system.
- **Standard Specifications and Drawings for Sanitary Sewers (September 2022)** These specifications and drawings require that sewers, connections, and appurtenances be properly designed and constructed in EOCWD.

3.3 Compliance Documents

The following subsections describe how the District’s documents meet the WDR requirements in the specific requirement categories.

Illicit Discharges

Illicit discharges are regulated by Ordinance No. 2016-1 (Article 2, Section 201, Prohibited Discharges) and Ordinance No. 2016-2 (Article 2, Section 2.2, Prohibitions). Ordinance No. 2016-1 is included with this document as **Appendix D**. Ordinance No. 2016-2 is included with this document as **Appendix E**.

Ordinance No. 2016-01, Article 2, Section 201 states that *“These prohibitions apply to all Users of EOCWD’s Sewerage Facilities whether or not they are subjected to Federal Categorical Pretreatment Standards or any other national state, or local Pretreatment Standards or requirements.”*

Ordinance No. 2016-01, Article 2, Section 201 lists general prohibitions, limits, and requirements for discharges, as well as specific prohibitions for substances that will adversely impact the collection system.

Ordinance No. 2016-02, Article 2, Section 2.1/Section 2.2 places limits on the discharges that may take place from Food Service Establishments (FSEs), including limitations on Fats, Oil, and Grease (FOG) discharge.

Collaboration with Storm Sewer Agencies

Collaboration with storm sewer agencies is most required when spills from the EOCWD collection system end up in the storm sewer system. The EOCWD Spill Emergency Response Plan was developed utilizing collaboration with the Orange County Flood Control District (OCFCD) so that collaboration with OCFCD is embedded in the Spill Emergency Response Plan. As stated in the plan, EOCWD personnel responding to a spill will utilize the OCFCD “Water Pollution” service request website for online reporting, found at this link:

<https://myoceservices.ocgov.com/ServiceRequest>

In addition to the online request, the EOCWD Operations Supervisor will contact OCFCD by phone if immediate assistance is needed (i.e. access to locked OCFCD facilities, additional guidance for response to large spills, etc.).

The District is a member agency of the Water Emergency Response Organization of Orange County (WEROC). In the event of a sanitary sewer spill, WEROC member agencies and other nearby agencies can be contacted for additional equipment and support.

Design Standards

EOCWD has legal authority to require the sewers and sewer laterals to be properly designed through the Standard Specifications and Drawings for Sanitary Sewers (dated September 2022). This document is included as **Appendix F**.

Access to Facilities

The District does not own any portion of the laterals within the collection system, and therefore requires no access to such.

Ordinance No. 2016-01, Article 5, Section 501.3 provides legal authority for EOCWD's Right of Entry to obtain "*reasonable access to all parts of the Wastewater generating and disposal facilities for the purposes of inspection and sampling.*"

Enforcement of Legal Authority

Ordinance No. 2016-1, Article 6 provides the legal authority for enforcement of the ordinance. The enforcement section of the ordinance discusses violations of the ordinance, enforcement procedures and fees, probation order, permit suspension, permit revocation, public notices, termination of service, civic penalties, and criminal penalties.

Water Code Section 31016 paragraph b provides the District the ability to enter any public property within the District's jurisdiction in regards to investigating possible violations of an ordinance of the District. Investigation into the violation on private property will be made with the consent of the owner or tenant of the property, otherwise a warrant can be issued under probable cause pursuant to the procedures set within Title 13 of Part 3 of the Code of Civil Procedure.

Easement Accessibility Agreements

Easement accessibility is specified in Section 1.2.6 of the Standard Specifications and Drawings for Sanitary Sewers (dated September 2022).

3.4 Roles and Responsibilities

Maintaining appropriate legal authority for a collection system requires that ordinances and other legal documents be updated and maintained. Therefore, in addition to the General Manager, Operations Manager, Engineering Manager, and Operations Supervisor, the EOCWD Board of Directors and General Counsel have a role in maintaining this element.

3.5 Effectiveness, Improvement, and Key Performance Indicators

To monitor the effectiveness of this element of the SSMP, the following Key Performance Indicators (KPIs) are being monitored by EOCWD:

- Have the documents associated with collection system legal authority been reviewed at a Quarterly SSMP Review Meeting?

In the preparation of this SSMP, EOCWD has identified the following improvements to legal authority documentation that will improve the effectiveness of the SSMP:

- Update Ordinance No. 2016-01 to specifically prohibit septic tank sludge, rainwater, stormwater, street drainage, and other contaminated water from the collection system – *Complete by the next internal audit in December 2027*

- Update Ordinance No. 2016-01 to provide explicit authority for EOCWD access to all facilities for maintenance, inspection and repairs– *Complete by the next internal audit in December 2027*

Element 4: Operation and Maintenance Program

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

- 1. Maintain an up-to-date map(s) of the sanitary sewer system, and procedures for maintaining and providing State and Regional Water Board staff access to the map(s). The map(s) must show all gravity line segments and manholes, pumping facilities, pressure pipes and valves, and applicable stormwater conveyance facilities within the sewer system service area boundary**
- 2. Describe routine preventive operation and maintenance activities by staff and contractors, including a scheduling system and a data collection system for preventative operation and maintenance activities. The scheduling system is to include inspection and maintenance activities, higher-frequency inspections and maintenance of known problem areas, including areas with tree-root problems, and regular CCTV inspections of manholes and sewer pipes. The data collection system is to include data from system inspection and maintenance activities, including system areas/components prone to root-intrusion potentially resulting in system backup and/or failure**
- 3. Provide in-house and external training on a regular basis for staff in sanitary sewer system operations, maintenance, and contractors. The training is to include the requirements of General Order 2022-0103-DWQ, the Enrollee's Spill Emergency Response Plan procedures and practice drills, skilled estimation of spill volume for field operators, and electronic CIWQS reporting procedures for all staff submitting data.**
- 4. Provide an inventory of sanitary sewer equipment, including identification of critical replacement and spare parts.**

4.1 Map of the Collection System

EOCWD utilizes the Esri Enterprise information management system to maintain the Sewer Geographical Information System (GIS) and an up-to-date map of the sewer system. EOCWD owns one lift station (Lemon Heights Lift Station) as described in Element 2. The storm water conveyance facilities are currently viewed online through the County of Orange web map services.

EOCWD keeps an up-to-date GIS database of its sewer facilities which includes the following:

- Manholes with ID numbers, diameter, material type (concrete, brick, composite), cover type, liner type, rim elevation, invert elevation, depth, link to as-built plan, smart cover install date (if any), link to smart cover reporting data, and pictures
- Manhole maintenance related information: date last inspected, rehabilitation date, and roach spraying
- Pipes with ID numbers, size, slope, reach length, material, liner material, link to as-built plan, CCTV inspections, pipe type (gravity or siphon)
- Pipe maintenance related information: cleaning frequency, cleaning group number, date of last cleaning, access notes, cleaning notes (observations made during cleaning – light roots, grit, grease), root foaming date, date of last closed circuit television (CCTV) inspection, link to CCTV video, date lined, and cleaning nozzle required

- Food service establishments (FSEs) with kitchen inventory, operation information, grease removal equipment status, facility pictures, and fats, oils, and grease (FOG) inspection data including FOG Program permitting and compliance information
- Historical spill locations, dates, causes, volume, recovered volume, time of initial notification, time of arrival, containment time, cleanup, link to CIWQS report, and whether it reached surface waters or storm drains

EOCWD's updated Spill Emergency Response Plan (SERP), June 2023 includes a map of the sewer system facilities, as well as local drainage conveyance system facilities and open channels/surface waters. The map included as Appendix A-1 of the 2023 SERP report .

4.2 Preventative Operations and Maintenance

The District has developed a robust and adaptive preventative operations and maintenance program for its collection system. The central organizing tool for the preventative operations and maintenance program is the District's Esri Enterprise Information Management System (Esri Enterprise System), which the District leverages as both a Geographical Information System (GIS) and a Computerized Maintenance Management System (CMMS).

The Esri Enterprise System is managed by the District's GIS Manager. This system is used to open and close work orders which guide the Operations Supervisor and four (4) collections system staff in their daily, weekly, monthly, quarterly, and yearly activities. The Operations Supervisor and collection system staff are equipped with electronic field access to the Esri Enterprise System, and therefore can record completed work and close work orders from the field, as well as identify necessary updates to the GIS data as observed in the field.

The use of the Esri Enterprise System and the collaboration between the GIS Manager, the Operations Supervisor, and other members of the EOCWD staff are detailed in the sections below.

Gravity Main Maintenance

Historically, the District's goal for routine gravity main maintenance was to clean every gravity main once per year , and to clean those mains that require more maintenance ("hotspots") at a frequency appropriate to prevent overflows from these gravity mains. This cleaning goal was effective in maintaining low spill rates in the collection system.

With Esri Enterprise System integrated into the preventative maintenance program, the District now has the ability to make more data-driven decisions, which will allow the District to better target its valuable resources. The District is currently in the process of transitioning to using CCTV results to decide on cleaning schedules for each gravity main. The goal of this transition to maintain the District's historically low spill rate while focusing resources on the facilities that need them, ideally freeing other resources to be used extending asset lives across the collection system. To facilitate the use of CCTV data during cleaning schedules, workorders are opened at the beginning of each month to identify that month's cleaning goals. The workorders integrate:

- The last time a gravity main was cleaned

- The results of the last CCTV inspection on that gravity main
- Hotspots that need to be completed that month to maintain the hotspot schedule

The workorders are generally grouped geographically to optimize crew time in the field. As the cleaning is completed, collection systems staff can close the workorders electronically while in the field. On a weekly basis, the GIS manager summarizes completed work and distributes a report to the Operations Manager, Engineering Manager and Operations Supervisor to monitor work progress and key performance indicators and to re-prioritize resources as required. An example of this report is shown as Figure 3.

Sewer Gravity Main Work										
Workflow	Monthly Target	Footage Completed	Workflows Completed							
CCTV Inspection	10,720	15,243	57							
Main Cleaning	80,000	88,886	357	<table border="1"> <tr> <td>% of Monthly Target Cleaned</td> <td>111%</td> </tr> <tr> <td>% of Year-to-month Annual Target Cleaned</td> <td>111%</td> </tr> <tr> <td>% of Annual Target Cleaned</td> <td>9%</td> </tr> </table>	% of Monthly Target Cleaned	111%	% of Year-to-month Annual Target Cleaned	111%	% of Annual Target Cleaned	9%
% of Monthly Target Cleaned	111%									
% of Year-to-month Annual Target Cleaned	111%									
% of Annual Target Cleaned	9%									
Main Lining	As Needed	0	0							
Main Repair	As Needed	0	0							
Main Replace	As Needed	0	0							
Managers Form	As Needed	0	0							
Pipe Layer Edit	As Needed	0	0							
Root Foaming	As Needed	0	0							
Total			414							

Figure 3 – Sample Gravity Main Maintenance Weekly Report

For each gravity main that is inspected, District collection systems staff record the grease condition, root condition, and grit/gravel condition of the gravity main to inform future activities. EOCWD staff holds regular meetings to review gravity main cleaning and inspection progress and adjust resources and priorities as necessary. It is a goal to have a more formal review of gravity main cleaning and inspection progress at each Quarterly SSMP Review Meeting (detailed in Element 9).

A particular challenge for gravity main preventative maintenance in the collection system is root intrusion into the gravity mains. Roots both block flow themselves and push pipe liners into the flow, thereby blocking flow. The challenge of root intrusion is confirmed both by the presence of roots as a cause of several historical spills from the collection system, and by collection system staff reports. To combat the challenge of root intrusion, the District has established a chemical root treatment budget that is expended each year. The success of the chemical root treatment program is demonstrated by the recent decline in spill attributed to root intrusion in the collection system.

Manhole Inspection/Maintenance Activities

The District’s goal is to inspect/maintain the proximate manholes as each gravity main section is cleaned. Manhole inspection/maintenance is tracked in the Esri Enterprise System, and weekly reports are sent on monthly progress as shown on Figure 4. Pictures of the manholes are captured during inspection and linked to the manhole in the Esri Enterprise System. The District’s goal is to be more consistent in recording manhole inspection results. At times, positive results that do not require District action are not fully noted.

Manhole Work		
Workflow	Monthly Target	Workflows Completed
Manhole Inspection	333	320
Manhole Layer Edit	As Needed	0
Manhole Rehab	As Needed	0
Manhole Repair	As Needed	0
Roach Spray	As Needed	1,607
SSO Report	As Needed	0
Total		1,927

Figure 4 – Sample Manhole Maintenance Weekly Report

CCTV Inspection Program and Condition Assessment

The goal of the District's CCTV inspection program is to inspect the entire gravity main inventory every seven years. This equates to inspecting approximately 14% (roughly 24 miles) of the gravity main inventory per year. To accomplish these inspections, EOCWD owns and operates its own CCTV inspection van. Inspections are performed by NAASCO-trained EOCWD staff to be compliant with PACP standards.

Each gravity main is evaluated for both structural issues and maintenance issues. Structural and maintenance scores are recorded in the Esri Enterprise System, and pictures and videos are also linked to the assets in the system to facilitate future detailed review. The numerical results and the pictures/videos are reviewed as necessary in a collaborative effort among the Operations Supervisor, the Operations Manager, and the Engineering Manager to determine where rehabilitation, repair, or replacement is required for any gravity main. This effort is outlined as follows:

1. Defect discovered by inspection or cleaning activities
2. Record in Esri Enterprise System
3. Develop action plan
4. Create repair, replacement, or rehabilitation work orders in Esri Enterprise System
5. Complete and record workorders
 - a. Esri Enterprise work orders are closed
 - b. Work history captured and reported in Esri Enterprise System

It is the District's goal to have a more formal review of these actions, and of the hotspot cleaning list, at the Quarterly SSMP Review Meetings. A further goal is to add the footage of CCTV inspections performed to the monthly reports distributed to District Board of Directors.

4.3 Rehabilitation and Replacement Plan for System Assets

The District developed a comprehensive rehabilitation and replacement plan as part of the 2018 Sewer Master Plan. The majority of the improvements identified as part of this plan have been completed by the District, as detailed in Figure 5.

No.	Year	Project Description	Contract Price	Contractor	Status
1	2017	REMOVE AND REPLACE 98 FEET OF 8" VCP DUE TO EITHER OFFSETS, SAGS, FRACTURES AND BREAKS AT WHITNEY DRIVE, FAIRHAVEN EXT, MANNING DRIVE. REMOVE AND REPLACE 110 FEET OF 10" VCP DUE TO SAGS, FRACTURES, AND BREAKS ALONG BROWNING AVE.	\$393,000	BEADOR CONSTRUCTION COMPANY, INC.	COMPLETED
2	2018	REMOVE AND REPLACE 50 FEET OF 8" VCP DUE TO SAG. REMOVE AND REPLACE 26 FEET OF ACP IN CONFLICT WITH SEWER.	\$182,800	WA RASIC CONSTRUCTION	COMPLETED
3	2018	CIPP WORK	\$100,000	SANCON	COMPLETED
4	2020	SEPTIC TO SEWER PROJECT - CAROL WAY / VISTA DEL LAGO SEWER EXTENSION PROJECT - 1000 FEET OF 8" VCP	\$439,416.70 PAID FOR BY RESIDENTS	DIRTONU	COMPLETED
5	2020	CIPP WORK	\$198,756	SANCON	COMPLETED
6	2021	CIPP WORK	\$137,374	SANCON	COMPLETED
7	2021	REMOVE AND REPLACE 150 FEET OF 4 INCH CAST IRON SEWER PIPE WITH 8 INCH PVC PIPE ON HOLIDAY LANE	\$46,488	WA RASIC CONSTRUCTION	COMPLETED
8	2021	REPLACED AND UPSIZED HOLIDAY LANE	\$50,000	WA RASIC CONSTRUCTION	COMPLETED
9	2022	CIPP WORK	\$205,199	SANCON	COMPLETED
10	2022	REPLACED AND UPSIZED 1,370 LF FROM 10" TO 15" FROM BENT TWIG TO BRYAN AND 2,242 LF FROM 12" TO 18" FROM BRYAN TO SIERRA VISTA	\$5,000,000	TE ROBERTS	COMPLETED
11	2023	REMOVED AND REPLACE 605 FEET OF 8 INCH VCP WITH 12 INCH SDR35 ON CRAWFORD CANYON RD. FROM BRAE GLEN TO STOLLER LANE	\$7,000,000	TE ROBERTS	COMPLETED
12	2023	CONSTRUCTED 774 FEET OF NEW 12 INCH SDR35 PIPE ON 6TH STREET.		TE ROBERTS	COMPLETED
13	2023	REMOVE AND REPLACE 1,000 FEET OF 12 INCH VCP WITH 18 INCH SDR35 ON BROWNING AVE FROM NISSON RD. TO MITCHELL AVE.		TE ROBERTS	COMPLETED
14	2023	CONSTRUCT 388 FEET OF NEW 18 INCH PVC PIPE INSIDE 36 INCH STEEL CASING ON BROWNING AVE FROM SIERRA VISTA TO NISSON RD.		TE ROBERTS	COMPLETED
15	2023	CONSTRUCT 341 FEET OF NEW 20 INCH SDR 35 PIPE INSIDE 36 INCH STEEL CASING FROM FALLEN LEAF TO ENDINGER AVE.		TE ROBERTS	NOT COMPLETED, PROJECT TO BE REPLACED
16	2023	CIPP WORK	\$74,964	SANCON	COMPLETED
17	2024	TOOK OWNERSHIP OF SHARON LANE LIFT STATION	N/A	N/A	COMPLETED

Figure 5 – Existing Collection System Rehabilitation and Repair Plan

The District is currently completing the EOCWD 2025 Sewer Master Plan Update, which will produce an updated Capital Improvement Plan that integrates capacity and condition improvements into a prioritized and funded rehabilitation and repair action plan.

4.4 Training

Staff training is conducted on the following elements:

- Federal and State wastewater laws
- California General Collection System Permit
- Standard Specifications and Design Standards for EOCWD sewers
- Safety training included confined space entry and rescue, personal protective equipment, traffic control, chemical storage and handling, fall protection

- Laboratory/Sampling procedures
- Collection systems management (asset management, O&M)
- Collection systems operations
- Collection systems math
- Asset management software and data collection
- SERP training including spill estimating and spill response
- Conferences, seminars and classes that provide training on SSMP, SSOs, FOG, sewer cleaning, pretreatment issues or related subjects

The District has developed standard operations and maintenance procedures for hydro cleaning, combination cleaning truck and manhole inspections. These procedures are included as **Appendix G** of this SSMP. The District wishes to add spill response and spill estimation training to the regular training schedule.

4.5 Equipment and Parts Inventory

The District’s current equipment inventory is detailed on Table 7.

Table 7 – Existing Equipment Inventory

Year	Make	Model	Description
Vehicles			
2017	Ford	F-250 1st Responder	Sewer Vehicle
2021	Ford	F-250 – Reg Cab with Tommylift (tandem)	Sewer Vehicle
2019	FRHT	VACCON Titan (Tandem)	Sewer Vehicle
2021	FRHT	Combo 2100i (Single rear)	Sewer Vehicle
2018	FRHT	Vactor Combo – Jetter (Single rear)	Sewer Vehicle
2022	Dodge	CCTV Van	Sewer Vehicle
2023	Chevrolet	Silverado 1500 with lift gate	Sewer Vehicle

Year	Make	Model	Description
Equipment			
2020	Doosan		Air compressor
2021	Ditch Witch		Ditch Witch
2016	Superior		Diesel Trailer
2021	Big Tex		Trailer
2020	Wanco		Arrow board
2020	Wanco		Arrow board
2020	Wanco		Arrow board
-	M.Mover		Bypass Trailer
2021	Hyster		Fork Lift
2014	J. Deere	310 SK	Backhoe
2022	Multi Quip		Trash Pump (600 ft discharge lay flat hose, 25 ft suction)

4.6 Roles and Responsibilities

The Operations Manager, Engineering Manager, Operations Supervisor, and GIS Manager collaborate to maintain and implement this element of the SSMP.

4.7 Effectiveness, Improvement, and Key Performance Indicators

To monitor the effectiveness of this element of the SSMP, the following Key Performance Indicators (KPIs) are being monitored by EOCWD:

- Has the Operations and Maintenance Program been reviewed at every Quarterly SSMP Review Meeting?
- Are spills occurring at a rate less than 2.1 per 100 miles of gravity main/year?
- Are the following tools being utilized at the appropriate frequency for operations and maintenance/asset management:

Table 8 - Key Performance Indicators

Dashboards/Reports	Purpose	Used By	Use Frequency
FOG Program FSE Inspection Dashboard	Monitor FOG inspection progress and non-compliance issues	GIS Manager, Admin Assistant	Bi-weekly
Sewer Condition Assessment Dashboard	Monitor manhole and sewer main work for identified issues	GIS Manager, Operations Supervisor, Collections Crew	Monthly
Sewer Hotspot Status Dashboard	Monitor hotspot cleaning progress	Operations Supervisor, Collections Crew	Weekly
Sewer Main Cleaning Dashboard	Monitor monthly and daily cleaning	Operations Supervisor, Collections Crew	Daily
Manhole Inspection Older Than 1 Year	Identifies manholes past due for inspection	Collections Crew	Daily
Main Cleaning Older Than 1 Year	Identifies sewer mains past due for cleaning	Collections Crew	Daily
Sewer Main Hotspots Need Cleaning	Identifies sewer main hotspots past due for cleaning	Collections Crew	Daily
Food Service Establishments, non-Compliance	Identifies FSEs not in compliance with FOG Program requirements	FOG Inspector	As needed
FSE inventory review	Ensure EOCWD's FSE inventory is up to date	GIS Manager	Quarterly
CCTV inspection data review	Ensure CCTV inspection program is capturing mains that need to be inspected and ensure the inspection was successful and properly documented	GIS Manager	Bi-annually (Semi-annually)
Sewer main cleaning postponement review	Monitor all sewer mains that have been inspected and deemed clean and can forego next scheduled cleaning	GIS Manager, Operations Supervisor	Monthly
Sewer main cleaning averages and targets	Compares cleaning footage month by month and year by year to compare current progress against historical performance. Also determines each month's cleaning target based on historical monthly cleaning average and month's available working days	GIS Manager	Monthly

Dashboards/Reports	Purpose	Used By	Use Frequency
Weekly Work Target Reports	Provide supervisors summary of field work completed and whether work targets are being met	Engineering Manager, Operations Manager, Operations Supervisor, Collections Crew	Weekly
Monthly Work Reports	Provide summary of field work completed in a month for Board meeting report	EOCWD Board	Monthly
Monthly Sewer Main Cleaning	Graph that compares year to year monthly cleaning	Operations Supervisor	Monthly

In the preparation of this SSMP, EOCWD has identified the following improvements to the operations and maintenance program that will improve the effectiveness of the SSMP:

- Develop detailed root control program to lower the impact of root intrusion on the collection system – *Complete by the next internal audit in December 2027*

Element 5: Design and Performance Provisions

The SSMP must include the following items as appropriate and applicable to the Enrollee’s system:

1. *Updated design criteria and construction standards and specifications for the construction, installation, repair, and rehabilitation of existing and proposed system infrastructure components, including but not limited to pipelines, pump stations and, other appurtenances*
2. *Procedures and standards for inspecting and testing the installation of newly constructed system pipelines, pumps, and other equipment and appurtenances.*

5.1 Compliance Summary and Activities

EOCWD has developed a Standard Specification and Drawings for Sanitary Sewers document that can be accessed on EOCWD’s website at:

https://www.eocwd.com/files/ugd/5317eb_8c21c735eedb41ecac606d9e7cd6d346.pdf

The Table of Contents of the latest version of this document (September 2022) can be found in **Appendix F**.

Hydraulic capacity performance criteria developed to ensure that collection system components are designed with sufficient dry weather and wet weather capacity will be established in the 2025 EOCWD Sewer Master Plan Update. The development of this master plan update is ongoing. Appendix H of this SSMP document is reserved for the 2025 EOCWD Sewer Master Plan Update when it is complete and adopted.

5.2 Compliance Documents

Design and Construction Standards and Specifications

Standards for design, construction and repair of sewer facilities are included in EOCWD’s Design, Construction and Repair Standards for Sanitary Sewer document. Design and construction topics covered in this document include, but are not limited to the following:

- Criteria for Average and Peak Flow
- Design Calculations
- Minimum Velocity
- Minimum Pipe Size
- Maximum Slope
- Pipe Depth to Diameter Ratio
- Manhole Criteria
- Siphon Criteria
- Radius of Curvature
- Water Main Separation Requirements
- Trench Backfill
- Jacked Casing or Open Trench Casing

- House Lateral Criteria
- Cured-in-Place Pipe and Manholes
- Pipe and Manhole Materials
- Testing of Gravity Sewers and Manholes
- Safety Operations

EOCWD's standard plans for design and construction of sewer facilities are listed in Figure 6.

Drawing Number	Description
S-1	PIPE INSTALLATION AND PAVEMENT REPLACEMENT
S-2	CONCRETE ENCASEMENT OF PIPE
S-3	VALVE BOX, SURVEY MONUMENT, OR SEWER CLEAN OUT COVER AND FRAME INSTALLATION
S-4	NOT USED
S-5	NOT USED
S-6	SEWER HOUSE LATERAL AT UTILITY INTERSECTIONS
S-7	ANCHOR BLOCK DETAIL
S-8	PIPE INSTALLATION IN CASING
S-9	FIELD CLOSURE FOR VCP PIPES
S-10	POLYMER CONCRETE MANHOLE AND CONCRETE BASE
S-11	COMPOSITE MANHOLE FRAME AND COVER (36" CLEAR OPENING)
S-12	NEW UN-LINED MANHOLE FOR SEWERS
S-13	NEW LINED MANHOLE OVER EXISTING SEWER
S-14	NEW LINED MANHOLE FOR NEW SEWERS
S-15	DROP MANHOLE CONNECTION TO STANDARD MANHOLE
S-16	48" MANHOLE FRAME AND COVER WITH CONCENTRIC 24" COVER
S-17	STANDARD MANHOLE FRAME AND COVER
S-18	BOLTED MANHOLE FRAME AND COVER
S-19	MANHOLE ADJUSTMENT TO GRADE
S-20	GAS FLAP INSTALLATION FOR LINED OR UNLINED MANHOLES
S-21	CORE DRILLED STUB AT EXISTING MANHOLE DETAIL
S-22	DIVERSION STRUCTURE WITH STOP GATE
S-23	REHABILITATION OF PVC LINED MANHOLES
S-24	CUT IN WYE CONNECTIONS
S-25	HOUSE LATERAL CONNECTION TYPICAL
S-26	EXISTING MANHOLE ABANDONMENT

Figure 6 – Standard Drawings

The 2025 EOCWD Sewer Master Plan Update currently under development will provide detailed sanitary sewer flow factors for use in accurately projecting future flows in the collection system.

These factors comprise both dry weather factors and wet weather factors that account for Rainfall Dependent Inflow & Infiltration (RDII) in the collection system.

The master plan will also provide detailed performance criteria for gravity mains, force mains, lift stations, and siphons. The 2025 EOCWD Sewer Master Plan Update will be in alignment with and support the Design, Construction and Repair Standards for Sanitary Sewers, providing technical detail for support of infrastructure design.

Inspection and Testing

Standards for inspection and testing of gravity sewers and manholes are included in Section 1.6.1 and Section 1.6.2 of the Standard Specification and Drawings for Sanitary Sewers document, respectively. This document is supplemented with the American Public Works Association Standard Specification and Drawings for Public Works Construction (“The Greenbook”) most current edition and American Society of Testing and Materials Specifications (ASTM).

5.3 Roles and Responsibilities

The General Manager, Operations Manager, and Engineering Manager are responsible for implementing and maintaining this element of the SSMP

5.4 Effectiveness, Improvement, and Key Performance Indicators

To monitor the effectiveness of this element of the SSMP, the following Key Performance Indicators (KPIs) are being monitored by EOCWD:

- Have the Design and Performance Provisions been reviewed at a Quarterly SSMP Review Meeting?

In the preparation of this SSMP, EOCWD has identified the following improvements to the design and performance provisions that will improve the effectiveness of the SSMP:

- Update standard plans to include details such as bedding, cleanouts, and grease interceptors. Update standards to include abandonment of assets. – *Complete by the next internal audit in December 2027*
- Develop standards and guidelines for the connection of private systems to the EOCWD collection system– *Complete by the next internal audit in December 2027*

Element 6: Spill Emergency Response Plan

Each Enrollee shall develop and implement an up-to-date spill emergency response plan to ensure prompt detection and response to spills to reduce spill volumes and collect information for prevention for future spills. At a minimum, this plan must include procedures to:

- 1. Notify primary responders, appropriate local officials, and appropriate regulatory agencies of a spill in a timely manner**
- 2. Notify other potentially affected entities (e.g. health agencies, water suppliers, etc.) of spills that potentially affect public health or reach waters of the State**
- 3. Comply with the notification, monitoring and reporting requirements of the General Order 2022-0103-DWQ, State law and regulations, and applicable Regional Water Board Orders**
- 4. Ensure that appropriate staff and contractors implement the Spill Emergency Response Plan and are appropriately trained**
- 5. Address emergency system operations, traffic control and other necessary response activities**
- 6. Contain a spill and prevent/minimize discharge to waters of the State or any drainage conveyance system**
- 7. Minimize and remediate public health impacts and adverse impacts on beneficial uses of waters of the State**
- 8. Remove sewage from the drainage conveyance system**
- 9. Clean the spill area and drainage conveyance system in a manner that does not inadvertently impact beneficial uses in the receiving waters**
- 10. Implement technologies, practices, equipment, and interagency coordination to expedite spill containment and recovery**
- 11. Implement pre-planned coordination and collaboration with storm drain agencies and other utility agencies/departments prior, during, and after a spill event**
- 12. Conduct post-spill assessments of spill response activities**
- 13. Document and report spill events as required by General Order 2022-0103-DWQ**
- 14. And annually review and assess the effectiveness of the Spill Emergency Response Plan, and update as needed.**

6.1 Compliance Summary and Activities

Section 5.12 of Order 2022-0103-DWQ required all agencies to update and implement their Spill Emergency Response Plan (SERP) within six months after the adoption of the General Order. The Order was adopted December 5, 2022, so the SERP had to be updated by June 5, 2023.

EOCWD staff updated the former Sewer System Overflow Response Plan to create the SERP and comply with the new requirements of Order 2022-0103-DWQ, including the SSMP requirements (Attachment D) and the Notification, Monitoring, Reporting, and Recordkeeping Requirements (Attachment E1 and E2).

6.2 Compliance Documents

The District's SERP is included with this SSMP as **Appendix C**. The SERP is organized as follows:

- Section 1 Authority
- Section 2 Overview
- Section 3 Initial Response Procedures
- Section 4 Notifications Procedures
- Section 5 Spill Response Procedures
- Section 6 Monitoring and Reporting Procedures
- Section 7 Training and Evaluation

The fourteen items listed in Section 5.12 of Order 2022-0103-DWQ were addressed in the updated SERP document. The following list notes where each item is addressed in the SERP document:

1. Notify primary responders, appropriate local officials, and appropriate regulatory agencies of a spill in a timely manner;
 - a. Section 3 Initial Response Procedures, Section 4 Notification Procedures, Appendix B-1 Spill Emergency Response Flowchart
2. Notify other potentially affected entities (for example, health agencies, water suppliers, etc.) of spills that potentially affect public health or reach waters of the State
 - a. Section 4 Notification Procedures, Appendix B-3 Spill Notification and Reporting Requirements, Appendix B-4 Resource Phone List
3. Comply with the notification, monitoring and reporting requirements of this General Order, State law and regulations, and applicable Regional Water Board Orders
 - a. Section 4 Notification Procedures, Section 6 Monitoring and Reporting Procedures, Appendix B-3 Spill Notification and Reporting Requirements, Appendix B-4 Resource Phone List, Appendix B-5 Spill Report, Appendix B-6 Monitoring and Reporting Data by Spill Category Summary, Appendix B-7 Water Sampling Requirements
4. Ensure that appropriate staff and contractors implement the Spill Emergency Response Plan and are appropriately trained
 - a. Section 7 Training and Evaluation
5. Address emergency system operations, traffic control and other necessary response activities
 - a. Section 5 Spill Response Procedures
6. Contain a spill and prevent/minimize discharge to waters of the State or any drainage conveyance system
 - a. Section 5-4 Containment Procedures
7. Minimize and remediate public health impacts and adverse impacts on beneficial uses of waters of the State
 - a. Section 5-5 Correction Procedures
8. Remove sewage from the drainage conveyance system
 - a. Section 5-5 Correction Procedures

9. Clean the spill area and drainage conveyance system in a manner that does not inadvertently impact beneficial uses in the receiving waters
 - a. Section 5-6 Cleanup Procedures
10. Implement technologies, practices, equipment, and interagency coordination to expedite spill containment and recovery;
11. Implement pre-planned coordination and collaboration with storm drain agencies and other utility agencies/departments prior, during, and after a spill event
 - a. Section 2-6 Coordination and Collaborations, Appendix D Agency Coordination Documents
12. Conduct post-spill assessments of spill response activities
 - a. Section 7-3.2 Spill Event Response Evaluation, Appendix F-1 Spill Response Evaluation
13. Document and report spill events as required in this General Order;
14. Annually, review and assess effectiveness of the Spill Emergency Response Plan, and update the Plan as needed.
 - a. Section 7-3.3 Annual Spill Emergency Response Plan Document Evaluation; Appendix F-2 Annual Spill Response Evaluation

6.3 Roles and Responsibilities

The Operations Manager, Engineering Manager, and Operations Supervisor are responsible for maintaining and implementing this portion of the SSMP.

6.4 Notification and Response Procedures

Notification and response procedures are summarized in the EOCWD Spill Response Plan shown in Figure 4. Details are provided in Section 3, Section 4, and Section 5 of the SERP.

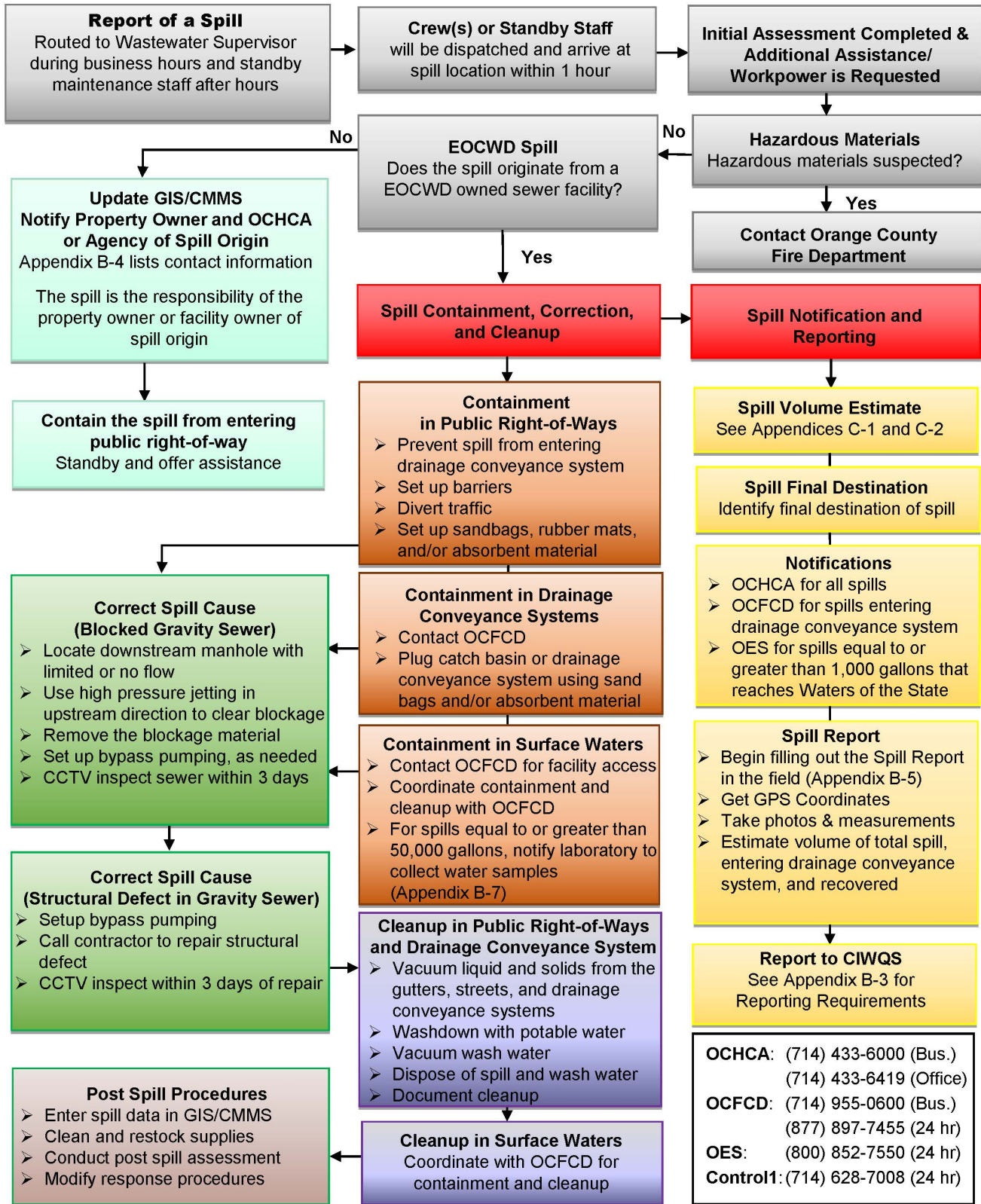


Figure 7 – EOCWD Spill Response Plan

6.5 Training

The maintenance staff receives training through the California Water Environment Association's (CWEA) Training Program, which is the current industry standard for training and certifying sewer collection system maintenance staff. In addition, annual spill emergency response training occurs in the office and in the field. In general, the Operations Manager is responsible for scheduling and documenting training sessions for EOCWD staff. The Operations Supervisor is responsible for conducting training sessions.

Office Training

Initial Spill Receipt training is conducted by the Operations Manager. Training includes review of the correct procedures for receiving calls, recording the information on the Sanitary Sewer Overflow Initial Receipt Form (Appendix B-2), and notification of the maintenance staff.

Office training of maintenance staff is conducted by the Operations Supervisor. This involves complete review of the following documents and/or procedures:

1. The SERP plan document review
2. The SERP flowchart (SERP Appendix B-1)
3. Regulatory agency notification and reporting requirements (SERP Appendix B-3)
4. Filling out the Spill Report (SERP Appendix B-5)
5. Recording spill data and information into Esri Enterprise System
6. Sewers, Drainage Conveyance Systems, and Surface Waters Map (SERP Appendix A-1)
7. Spill volume calculation methodologies (SERP Appendix C-1 and C-2)
Post-Spill Response evaluation procedures

Office training is completed monthly.

Field Training

Field training of the maintenance staff is conducted by the Operations Supervisor. The following training topics are reviewed in the field once per year, at a minimum:

1. Safety Procedures
2. Operation of EOCWD's combination trucks
3. Field spill volume estimation, with training simulations
4. Review of all available equipment on the combination truck
5. Review of all spare parts available at EOCWD yard
6. Containment and clean up procedures
7. Gravity sewer correction procedures
8. Bypass pumping procedures

Any new staff that have not participated in the annual training will be separately trained by the Operations Supervisor during their first week of employment.

Other Training Opportunities

EOCWD will look for and participate in other training opportunities made available from nearby agencies including but not limited to:

- Orange County Sanitation District (OCSan)
- SoCal Waste Discharge Requirements Group
- California Water Environment Association (CWEA)
- Water Emergency Response Organization of Orange County (WEROC)

Training Logs

The Operations Manager keeps records of all SERP-related training. Sign-in sheets include the training topic, date, time, and list of all attendees. All sign-in sheets, agendas, handout material, quizzes, etc will be maintained electronically.

6.6 Effectiveness, Improvement, and Key Performance Indicators

To monitor the effectiveness of this element of the SSMP, the following Key Performance Indicators (KPIs) are being monitored by EOCWD:

- Has the SERP been reviewed at a Quarterly SSMP Review Meeting?
- Is SERP training taking place at a quarterly basis?
- Are training records and resources being maintained electronically?

Element 7: Sewer Pipe Blockage Control Program

The SSMP must include procedures for the evaluation of the Enrollee’s service area to determine whether a sewer pipe blockage control program is needed to control fats, oils, grease, rags, and debris. If an Enrollee determines that a program is not needed, the Enrollee must provide justification for why it is not needed. The procedures must include, at minimum:

- 1. An implementation plan and schedule for a public education outreach program that promotes proper disposal of pipe-blocking substances;**
- 2. A plan and schedule for the disposal of pipe-blocking substances generated within the sanitary sewer system service area. This may include a list of acceptable disposal facilities and/or additional facilities needed to adequately dispose of substances generated within a sanitary sewer system service area;**
- 3. The legal authority to prohibit discharges to the system and identify measures to prevent spills and blockages;**
- 4. Requirements to install grease removal devices (such as traps or interceptors), design standards for the removal devices, maintenance requirements, BMP requirements, record keeping and reporting requirements;**
- 5. Authority to inspect grease producing facilities, enforcement authorities, and whether the Enrollee has sufficient staff to inspect and enforce the fats, oils, and grease (FOG) ordinance;**
- 6. An identification of sanitary sewer system sections subject to FOG blockages and establishment of a cleaning maintenance schedule for each section;**
- 7. Implementation of source control measures for all sources of FOG reaching the sanitary sewer system for each section identified in each section above.**

7.1 Compliance Summary and Activities

In order to limit the discharge of FOG, rags, and other debris that causes increased maintenance and pipe blockages that can cause SSOs, EOCWD has prepared and is implementing the following elements into our FOG Control Program effort:

- EOCWD’s Sewer Use Ordinance 16-01 was adopted on September 15, 2016 containing the necessary Legal Authority to prohibit discharges to the system and identify measures to prevent SSOs and blockages caused by FOG (**Appendix I**);
- Adopted the FOG Ordinance 16-02 providing the authority to inspect FOG producing facilities 1, and providing enforcement powers to ensure compliance as needed (**Appendix J**);
- Developed and implemented a FOG training and FSE inspection program for Collection Systems staff through contractor EEC Environmental;
- Developed materials and began implementation of a public education outreach program, also using our website and print/social media to promote proper disposal of FOG (**Appendix K**);

- For FSEs, requirements to install Grease Control Devices (GCD's) in facilities (such as traps or interceptors) design standards for the GCDs, maintenance requirements to be performed by the facility owner, BMP requirements, record keeping and reporting requirements (**Appendix L**);
- Developed and implemented source control measures, for all sources of FOG discharged to the sanitary sewer system, for each section identified above;
- Reviewed hot spot sewer cleaning maintenance schedules for line segments including inverted siphons that are subject to FOG;
- Developed handout materials for each FSE to help educate and ensure compliance. (**Appendix M**)
- Developed a process of corrective measures needed by FSE's and residential facilities if a FOG related SSO does occur (**Appendix N**);
- Developed FOG Reduction Program training for EOCWD staff charged with Program implementation;
- Implemented a risk based FSE and GCD inspection program;
- Developed a process for residential outreach which will target parcels upstream of trouble-spots associated with FOG and debris (wipes) where upstream FSE's may not be present.

To address the WDR Order, EOCWD adopted FOG Control Regulations Applicable to Food Service Establishments (FSE) to also establish the legal authority to prohibit FSEs from discharging FOG to the sewer system. The Ordinance Establishing Wastewater Discharge Regulations provides the uniform requirements for users of EOCWD's facilities which are tributary to OCSan's regional treatment and reuse facilities. FOG Program fees were adopted under Resolution 799 at the June 15, 2017 Board Meeting. These fees have since been removed in favor of a charge added to the property taxes levied by the District.

7.2 Compliance Documents

EOCWD relies on the following documents for compliance:

- FOG Control Regulations Applicable to Food Service Establishments (FSE) (**Appendix O**)
- Ordinance Establishing Wastewater Discharge Regulations (**Appendix P**)
- EOCWD's Local Sanitary Sewer Service Charges (**Appendix Q**)
- FOG Management Program (**Appendix R**)
- FOG Binder with information for FSEs (**Appendix S**)
- Agreement for Provision of Environmental Health Services Between County of Orange and Orange County Sanitation District. Includes EOCWD as a subscribing agency (**Appendix T**)
- Materials developed to educate the public about FOG and debris disposal (**Appendix U**)

7.3 Roles and Responsibilities

EOCWD's Operations Manager, working with and through consultant EEC Environmental and EOCWD's Collections System staff, has a program to identify sections of the collection system subject to blockages, and a schedule for trouble-spot cleaning as part of the preventive maintenance program. The review of existing FOG trouble-spot conditions is a continuous process conducted as part of the cleaning program. New trouble-spots that can be attributed to FOG that are discovered by staff or contractors, are reported to Operations Manager for investigation and mitigation. Based on the as-found conditions at the scheduled time of cleaning, a recommended change in the maintenance frequency of an existing site will be reviewed and discussed and made if warranted.

EOCWD's Operations Manager is responsible for reviewing and recommending updates to the FOG Program for the General Manager's review and approval before a Program change affecting this SSMP can be made. An SSMP Chapter or Appendix revision will then be made.

7.4 Public Education and Outreach Program

EOCWD has developed materials and is implementing a public education outreach program using websites and print/social media to promote proper disposal of FOG. Public education on FOG control can be found here:

<https://www.eocwd.com/fog-control-program>

7.5 FOG Disposal Facilities

EOCWD maintains a list of FOG hauling and disposal services for customers within the EOCWD service area. This list can be found under Districts Fog Control Program website, and at the following direct link:

https://www.eocwd.com/files/ugd/5317eb_ob83c0432ec24b45892920e1d802a41d.pdf

7.6 FOG Program Requirements and Design Standards

FOG Program requirements can be found in the FOG Management Program. Design Standards for FOG control and mitigation in the collection system are found in the design standards described in Element 5 of this SSMP.

7.7 FOG Inspections and Enforcement

FOG inspections and enforcement for FSEs within the EOCWD service area are required by the FOG Control Regulations Applicable to Food Service Establishments (FSE) and are conducted by EOCWD staff and contractor EEC Environmental. EOCWD has developed requirements to install Grease Control Devices (GCD's) in facilities (such as traps or interceptors) design standards for the GCDs, maintenance requirements to be performed by the facility owner, BMP requirements, record keeping and reporting requirements.

7.8 FOG Preventative Maintenance

Preventative maintenance for FOG and debris within the collection system is integrated into the preventative maintenance program described in Element 4 of this SSMP.

7.9 Source Control Measures

Source control activities with regard to the collection system are carried out by the County of Orange and OCSan under agreement. This agreement, Agreement for Provision of Environmental Health Services Between County of Orange and Orange County Sanitation District, includes EOCWD as a subscribing agency.

7.10 Effectiveness, Improvement, and Key Performance Indicators

To monitor the effectiveness of this element of the SSMP, the following Key Performance Indicators (KPIs) are being monitored by EOCWD:

- Has the Pipe Blockage Control Program been reviewed at a Quarterly SSMP Review Meeting?
- Are monthly FSE inspection targets being met?
- Are FSE, FOG Program violations being followed up on and corrected?
- Are the sewer mains cleaning and inspection targets being met?

Element 8: System Evaluation, Capacity Assurance and Capital Improvements

The SSMP must include procedures for the evaluation of capacity and condition of the Enrollee's collection system. At a minimum:

- 1. The SSMP must include procedures and activities for routine evaluation and assessment of system conditions, capacity assessment and design criteria, prioritization of corrective actions, and a capital improvement plan (CIP).**
- 2. System Evaluation and Condition Assessment (SECAP):**
 - a. Evaluate the sanitary sewer system assets utilizing the best practices and technologies available.**
 - b. Identify and justify the amount of its system for its condition to be assessed each year.**
 - c. Prioritize the condition assessment of system areas that hold a high level of environmental consequences if vulnerable to collapse, failure, blockage, or other system deficiencies, are located within the vicinity of surface waters, steep terrain, high groundwater elevations, and environmentally sensitive areas, and are within the vicinity of a receiving water with a bacterial-related impairment on the most current Clean Water Act section 303(d) List.**
 - d. Assess the system conditions using visual observations, video surveillance and/or other comparable system inspection methods. Utilize observations/evidence of system conditions that may contribute to exiting of sewage from the system which can reasonably be expected to discharge into a Water of the State.**
 - e. Maintain documents and recordkeeping of system evaluation and condition assessment inspections and activities, and identify system assets vulnerable to direct and indirect impacts of climate change, including but not limited to flooding and/or erosion due to increased storm volumes, frequency, intensity, wildfires, power disruptions, etc.**
- 3. Capacity Assessment and Design Criteria:**
 - a. The SSMP must include procedures to identify system components that are experiencing or contributing to spills caused by hydraulic deficiency and/or limited capacity, including procedures to identify the appropriate hydraulic capacity of key system elements for: dry-weather peak flow conditions that cause or contribute to spill events, the appropriate design storm(s) or wet weather events that causes or contributes to spill events, the capacity of key system components, and the identification of major sources that contribute to the peak flows associated with sewer spills.**
 - b. The capacity assessment must consider: data from existing system condition assessments, system inspections, system audits, spill history, and other available information, capacity of flood-prone systems subject to increased infiltration and inflow, under normal local and regional storm conditions, capacity of systems subject to increased infiltration and inflow due to larger and/or higher-intensity storm events as a result of climate change, increases in erosive forces in canyons and streams near underground and above-ground system components due to larger and/or**

higher-intensity storm events, capacity of major system elements to accommodate dry-weather peak flow conditions and updated design storm and wet weather events, and necessary redundancy in pumping and storage capacities

- 4. Prioritization of Corrective Action: The findings of the condition assessments and capacity assessments must be used to prioritize corrective actions. Prioritization must consider the severity of the consequences of potential spills***
- 5. Capital Improvement Plan: The CIP must include project schedules including the completion dates for all portions of the CIP, internal and external project funding sources for each project, and joint coordination between operation and maintenance staff, and engineering staff/consultants during planning, design, and construction of capital improvement projects, and interagency coordination with other impacted utility agencies.***

8.1 Compliance Summary and Activities

The District is in the process of completing the 2025 EOCWD Sewer Master Plan Update. This document will be a comprehensive evaluation of collection system capacity and condition, and it will provide a risk-based prioritization of collection system improvements with a detailed schedule. Appendix I of this SSMP document is reserved for the 2025 EOCWD Sewer Master Plan Update when it is complete and adopted.

8.2 Compliance Documents

EOCWD relies on the following documents for compliance:

- EOCWD 2025 Sewer Master Plan Update (Under ongoing development) (**Appendix I when completed and adopted.**)

8.3 Roles and Responsibilities

EOCWD's Engineering Manager is responsible for maintaining, updating, and implementing the CIP and recommendations from the 2025 Sewer Master Plan Update. The Engineering Manager works with the Operations Manager to make sure that the condition of the collection system is updated and integrated into the CIP recommendations and projects.

8.4 System Evaluation and Condition Assessment

For the 2025 Sewer Master Plan Update, a comprehensive capacity evaluation will be performed, using Aquanuity's AquaTwin Sewer hydraulic modeling platform. The following flow conditions will be evaluated:

- Peak Dry Weather Flow (PDWF)
- Peak Wet Weather Flow (PWWF) using adopted design storm criteria to simulate Rainfall Dependent Inflow and Infiltration (RDII) in the collection system.

The following service area scenarios will be included in the evaluation:

- Existing conditions
- Near-term development conditions
- Future build-out conditions
- Sensitivity Analysis: Septic Tank Conversion
- Sensitivity Analysis: Accessory Dwelling Unit (ADU) development
- Sensitivity Analysis: Climate change impacts on RDII in the collection system

Inspection records for collection system assets will be integrated into the hydraulic evaluation.

8.5 Capacity Assessment and Design Criteria

Design and performance criteria for the collection system have been developed and will be integrated into the 2025 Sewer Master Plan Update. Performance criteria will include:

- Depth to diameter ratio and velocity criteria for gravity mains
- Velocity criteria for force mains
- Velocity and surcharge criteria for hydraulic siphons
- Firm pump capacity for lift stations

8.6 Capital Improvement Plan

A Capital Improvement Plan (CIP) will be included in the 2025 Sewer Master Plan Update. The CIP will include improvement projects, anticipated project timing, project triggers to facilitate timing updates in the future, and projected conceptual costs of the improvements. The CIP will include improvements required for both capacity enhancement and condition improvement. For each improvement, funding sources and inter-agency coordination required for completion of the improvement are identified.

8.7 Prioritization of Corrective Actions

The CIP provided in the 2025 Sewer Master Plan Update will be prioritized based upon estimated risk identified for each improvement. Risk scores will be calculated based upon both Likelihood of Failure (LoF) and Consequence of Failure (CoF) criteria. CoF criteria will include environmental criteria such as proximity to Waters of the State.

8.8 Effectiveness, Improvement, and Key Performance Indicators

To monitor the effectiveness of this element of the SSMP, the following Key Performance Indicators (KPIs) are being monitored by EOCWD:

- Has the 2025 Sewer Master Plan Update been completed?
- Has the CIP been reviewed at a Quarterly SSMP Review Meeting?
- Has the CIP schedule been updated to account for new priorities

Element 9: Monitoring, Measurement, and Program Modifications

The SSMP must include an Adaptive Management section that addresses its implementation effectiveness and the steps necessary for SSMP improvement:

- 1. Maintain relevant information, including audit findings, that can be used to establish and prioritize appropriate SSMP activities;*
- 2. Monitor the implementation and, where appropriate, measure the effectiveness of each element of the SSMP*
- 3. Assess the success of the preventative operation and maintenance activities*
- 4. Update SSMP procedures and activities, as appropriate, based on monitoring or performance evaluations; and*
- 5. Identify and illustrate spill trends, including: frequency, location, and estimated volumes.*

9.1 Compliance Summary and Activities

This SSMP and the programs described herein has been developed to be continually reviewed to monitor and measure the performance of the sewer collection system. As related for each element above, Key Performance Indicators have been developed for each element to facilitate evaluation of the element's effectiveness in the collection system. This ongoing review, in conjunction with the SSMP Program Audits element, is used to identify the strengths and weaknesses of current programs and modify them as deemed necessary.

9.2 Compliance Documents

The compliance document for this element is the SSMP quarterly meeting log included as **Appendix V** of this SSMP.

9.3 Roles and Responsibilities

The General Manager has the responsibility for hiring a third-party environmental auditor to conduct the audits. Deficiencies identified as a result of the audit are brought to the attention of each responsible EOCWD stakeholder. Deficiencies and suggested corrective actions are identified, verified, and documented by the third-party auditor using EOCWD's Audit Finding Form. The General Manager is responsible for following up with EOCWD stakeholders to close-out the findings and document for Board and public awareness.

9.4 Maintain Information

To monitor and measure the SSMP's effectiveness, the District manages and maintains detailed records of the sewer system's condition, capacity, and operation and maintenance activities. The Sewer Division utilizes an Esri Enterprise work and asset management system as its computerized maintenance management system (CMMS). The CMMS database serves as the comprehensive repository for collection system assets and enables maintenance work to be requested, planned, prioritized and recorded. The Sewer Division utilizes the Esri Enterprise to track and visualize asset, facility, completion of work, spills, hot spot, repair, and spill locations. Records of line cleaning, televising, spills, and other pertinent information provide the necessary data required to identify areas of concern. Among the data tracked are:

- Miles of sewer line cleaned
- Miles of sewer line inspected
- Number of service requests completed
- Number of spills
- Causes of spills
- Locations of spills
- Quantity spilled
- Repair replacement of sewer lines
- Public education events/activities

Detailed information relevant to specific sewer lines, manholes, or other assets is also maintained. Databases enable quick access to detailed information, including CCTV videos, spill details, and dates of specific line cleanings.

9.5 Monitoring Implementation and Effectiveness of SSMP

The District's robust GIS database is used as the primary tool by which each element of the SSMP is measured for its effectiveness in fulfilling the goals of the SSMP. Four meetings are held by EOCWD stakeholders each year (Quarterly SSMP Review Meeting #1, Quarterly SSMP Review Meeting #2, Quarterly SSMP Review Meeting #3, and Quarterly SSMP Review Meeting #4). The Operations Manager is responsible for scheduling and documenting the Quarterly SSMP meetings.

The Quarterly SSMP Review Meetings are held in conjunction with the formal audit which covers a period of three years. During these audits, the District reviews the SSMP's elements as well as various other key statistics related to its collection system to monitor and assess the effectiveness of the implementation of its SSMP and management of its collection system.

Table 9 summarizes the performance indicators the District utilizes to assess the effectiveness of each of its SSMP elements, the quarterly meeting schedule for each element, and the identified improvement actions that have been identified for each element.

Table 9 – EOCWD Responsible Staff for SSMP Elements

Element	KPIs	Quarterly Meeting Schedule	Identified Improvement Actions as of SSMP Adoption
<p>I. Goals</p>	<p>1. Have the goals of the SSMP been reviewed at a Quarterly SSMP Review Meeting?</p>	<p>1st Quarter</p>	
<p>II. Organization</p> <p>a. Name of the Responsible or authorized representative(s)</p> <p>b. Names and telephone numbers of management, administrative, and maintenance positions</p> <p>c. Chain of communication for reporting spills</p>	<p>1. Have the organization of the utility and the application of that organization to the SSMP been reviewed at a Quarterly SSMP Review Meeting?</p>	<p>1st Quarter</p>	
<p>III. Legal Authority</p> <p>a. Prevent illicit discharges to the collection system</p> <p>b. Require that sewers and laterals be properly designed and constructed</p> <p>c. Ensure access to the collection system</p> <p>d. Limit discharge of FOG and other debris that may cause blockages</p> <p>e. Enforcement of Ordinance</p>	<p>1. Have the documents associated with collection system legal authority been reviewed at a Quarterly SSMP Review Meeting?</p>	<p>1st Quarter</p>	<p>1. Update Ordinance No. 2016-01 to specifically prohibit septic tank sludge, rainwater, stormwater, street drainage, and other contaminated water from the collection system – <i>Complete by the next internal audit in December 2027</i></p> <p>2. Update Ordinance No. 2016-01 to provide explicit authority for EOCWD access to all facilities for maintenance, inspection and repairs– <i>Complete by the next internal audit in December 2027</i></p>

Element	KPIs	Quarterly Meeting Schedule	Identified Improvement Actions as of SSMP Adoption
<p>IV. Operation and Maintenance Program</p> <ul style="list-style-type: none"> a. Maintain current map of collection system and storm drain system b. Describe routine and preventative operation and maintenance of collection system c. Develop a rehabilitation and replacement plan. d. Develop and implement a training program e. Provide equipment and training parts inventories 	<ul style="list-style-type: none"> 1. Has the Operations and Maintenance Program been reviewed at every Quarterly SSMP Review Meeting? 2. Are spills occurring at a rate less than 2.1 per 100 miles of gravity main/year? 3. Are the ESRI Enterprise tools being utilized at the appropriate frequency for operations and maintenance/asset management? 	<p>1st Quarter 2nd Quarter 3rd Quarter 4th Quarter</p>	
<p>V. Design and Performance Provisions</p> <ul style="list-style-type: none"> a. Design, construction and specification standards for installation and rehabilitation of new and existing sewers b. Procedures and standards for the inspection of new or rehabilitated sewers and appurtenances. 	<ul style="list-style-type: none"> 1. Have the Design and Performance Provisions been reviewed at a Quarterly SSMP Review Meeting? 	<p>2nd Quarter</p>	<ul style="list-style-type: none"> 1. Update standard plans to include details such as bedding, cleanouts, and grease interceptors. Update standards to include abandonment of assets. – <i>Complete by the next internal audit in December 2027</i> 2. Develop standards and guidelines for the connection of private systems to the EOCWD collection system– <i>Complete by the next internal audit in December 2027</i>

Element	KPIs	Quarterly Meeting Schedule	Identified Improvement Actions as of SSMP Adoption
<p>VI. Spill Emergency Response Plan</p> <ul style="list-style-type: none"> a. Notification procedures for regulatory agencies b. Response and mitigation procedures c. Staff and contractor training d. Emergency operations e. Containment and monitoring plans 	<ul style="list-style-type: none"> 1. Has the SERP been reviewed at a Quarterly SSMP Review Meeting? 2. Is SERP training taking place at a quarterly basis? 3. Are training records and resources being maintained electronically? 	<p>2nd Quarter</p>	
<p>VII. Sewer Pipe Blockage Control Program</p> <ul style="list-style-type: none"> a. Identification of "hot spot" areas of collection system b. Identification of food service businesses in "hot spot" areas of collection system c. Administrative controls (permits) for potential grease dischargers d. Requirement to install grease removal equipment e. Encouragement to use BMPs to reduce grease discharges f. Periodic inspections g. Enforcement actions h. Public Education 	<ul style="list-style-type: none"> 1. Has the Pipe Blockage Control Program been reviewed at a Quarterly SSMP Review Meeting? 2. Are monthly FSE inspection targets being met? 3. Are FSE, FOG Program violations being followed up on and corrected? 4. Are the sewer mains cleaning and inspection targets being met? 	<p>3rd Quarter</p>	

Element	KPIs	Quarterly Meeting Schedule	Identified Improvement Actions as of SSMP Adoption
<p>VIII. System Evaluation, Capacity Assurance, and Capital Improvements</p> <ul style="list-style-type: none"> a. Capacity evaluation b. Identification of capacity needs c. Project schedule 	<ul style="list-style-type: none"> 1. Has the 2025 Sewer Master Plan Update been completed? 2. Has the CIP been reviewed at a Quarterly SSMP Review Meeting? 3. Has the CIP schedule been updated to account for new priorities? 	<p>3rd Quarter</p>	
<p>IX. Monitoring, Measurement, and Program Modifications</p> <ul style="list-style-type: none"> a. Maintain records and data b. Monitor implementation of SSMP c. Assess the success of preventive maintenance program d. Update program elements e. Identify and track spill trends 	<ul style="list-style-type: none"> 1. Are the Quarterly SSMP Review Meetings being held on schedule? 2. Are records of these meetings being maintained? 3. Are corrections identified in the meetings being recorded and implemented in the field? 	<p>4th Quarter</p>	
<p>X. Internal Audits</p> <ul style="list-style-type: none"> a. Person responsible for the Audit b. Scope of the Audit c. Audit work product d. Schedule for the Audit, minimum every three years 	<ul style="list-style-type: none"> 1. Are the audits being completed and recorded on a timely basis? 	<p>4th Quarter</p>	

Element	KPIs	Quarterly Meeting Schedule	Identified Improvement Actions as of SSMP Adoption
<p>XI. Communication Program</p> <p>a. Notification that an SSMP is being prepared. Website use is suggested</p>	<ol style="list-style-type: none"> 1. Have public communications been reviewed at a Quarterly SSMP Review Meeting? 2. Have private systems communications been reviewed at a Quarterly SSMP Review Meeting? 	<p>4th Quarter</p>	<ol style="list-style-type: none"> 1. Develop a regular schedule for communication with all private systems that discharge into the EOCWD collection system – <i>Complete by the next internal audit in December 2027</i>

9.6 Assessment of Preventative Maintenance Program

EOCWD prioritizes the assessment of the Preventative Maintenance Program so that the District’s resources are continually deployed in the most effective manner. The assessment of the preventative maintenance program takes place four times per year at a minimum, at each quarterly meeting. Impromptu meetings and assessments are performed when results from the field require such.

9.7 Spill Trends

The District uses the CIWQS database in conjunction with records captured in its own GIS to track and illustrate spill trends and to compare these trends to state and regionwide spill trends. The District’s database includes detailed information about spills including their location, volume, cause, response time, notifications, etc. Through analysis of the database as well as analysis using GIS mapping software, spill trends can be identified that can uncover unknown issues with the sewer system. Much of this analysis is described and detailed in the Program Audits Element. When trends are found, changes in practices including revisions to the operations and maintenance schedule can be made to reduce future spills.

As indicated by the Audit Report for the last audit period, the District has maintained the number of spills at less than 2.1 spills per 100 miles/year for the years 2022, 2023, and 2024. This value is below state and regional values.

9.8 Effectiveness, Improvement, and Key Performance Indicators

To monitor the effectiveness of this element of the SSMP, the following Key Performance Indicators (KPIs) are being monitored by EOCWD:

- Are the Quarterly SSMP Review Meetings being held on schedule?
- Are records of these meetings being maintained?
- Are corrections identified in the meetings being recorded and implemented in the field?

Element 10: SSMP Program Audits

As part of the SSMP, the Enrollee shall conduct periodic internal audits, appropriate to the size of the system and the number of spills. At a minimum, these audits must occur every three 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 the General Order 2022-0103-DWQ Attachment D, including identification of any deficiencies in the SSMP and steps to correct them.

10.1 Compliance Summary and Activities

In accordance with the WDRs, the District conducts all internal audits of its SSMP every three years. The purpose of the audits is to assess the performance of the SSMP and determine if any improvements or changes must be made. The District uses the data gathered as part of the KPIs for each element to: 1) evaluate the effectiveness of the City’s SSMP; 2) ensure compliance with the WDRs; 3) identify any SSMP deficiencies; and 4) correct any SSMP deficiencies identified by implementing the necessary modifications.

The final work product derived from the audit process is a summary of organization changes, operations and maintenance activities, sewer pipe blockage inspections, CIP projects, public education events, and other pertinent activities and systematic changes that the District will implement. This summary consists of narrative, graphical, and cartographic descriptions and information as well as recommendations on further progress.

10.2 Compliance Documents

The audit document for the latest audit period is included in **Appendix W**.

10.3 Roles and Responsibilities

The District’s Operations Manager is responsible for engaging the appropriate collection system stakeholders to perform the audit at the end of each three year period.

10.4 SSMP Audits and Updates Schedule

The SSMP audit and update schedule is shown in Table 10.

Table 10 – SSMP Update and Audit Schedule

Action	Due Date	Notes
SSMP Update and Re-Certification	Aug 2025	Six-year recertification by District Board
SSMP Internal Audit Report	Dec 2027	Period Aug 2024 to Aug 2027
SSMP Internal Audit Report	Dec 2030	Period Aug 2037 to Aug 2030

Action	Due Date	Notes
SSMP Update and Re-Certification	Aug 2031	Six-year recertification by District Board
Adaptive management updates to SSMP	As Needed	SSMP to be updated as necessary based on monitoring and performance evaluations conducted throughout the SSMP implementation period.

10.5 Roles and Responsibilities

The Operations Manager, Engineering Manager, and Operations Supervisor are responsible for maintaining and implementing this element.

10.6 Effectiveness, Improvement, and Key Performance Indicators

To monitor the effectiveness of this element of the SSMP, the following Key Performance Indicators (KPIs) are being monitored by EOCWD:

- Are the audits being completed and recorded on a timely basis?

Element 11: Communication Program

The Enrollee shall communicate on a regular basis with:

- 1. The public: for spills and discharges resulting in closures of public areas, or that enter a source of drinking water and 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.***
- 2. Owners/operators of systems that connect into the Enrollee's system, including satellite systems, for: system operation, maintenance, and capital improvement-related activities.***

11.1 Compliance Summary and Activities

The District uses a mixture of communication through its website and social media, communication through printed materials that are distributed, and communication through meetings and workshops to communicate with both the public and with owners/operators of connecting collection systems. This communication is provided in more detail below.

11.2 Roles and Responsibilities

The General Manager, Operations Manager, and Engineering Engineer share responsibility for communication of the SSMP

11.3 Procedures to Communicate with Public for Spills and Discharges

East Orange County Water District (EOCWD) complies with the Communication requirements through the following procedures:

- EOCWD uses the following documents and tools:
 - Posting the Sewer System Management Plan (SSMP) on the EOCWD website
 - Hard copy of SSMP is available in EOCWD office for public review
 - FOG Program outreach
 - Public and Education Outreach
 - District newsletters
 - Spill Emergency Response Plan
 - District Board Meetings (public comment periods, agendized items and meetings)
 - Social Media
- EOCWD also has a public comment period before the initial adoption of an SSMP and for significant updates that require the Board's approval.
- EOCWD keeps the Board of Directors informed of the SSMP progress through the monthly General Manager's Report as well as semi-annual briefings provided through the Strategic Plan reporting process.
- EOCWD staff reviews the SSMP program on a semi-annual basis through a dedicated meeting with the General Manager, Operations Manager, and Engineering Manager.

5. EOCWD has an outreach consultant, Communications LAB, to perform specific sewer outreach tasks including the development of educational website content, and print/social media marketing content.
6. Per EOCWD's Spill Emergency Response Plan (SERP) document, EOCWD will provide any signage and/or other public notification to educate the public of a spill, as required by the Office of Emergency Services (OES) or the Orange County Health Care Agency (OCHCA).
7. The OCHCA in coordination with EOCWD staff, will determine if and when the media will be informed of a spill incident.
8. In the event of a large spill, EOCWD has a contract with Communications Lab and they will assist with the communication of the spill to the public.

11.4 Procedures for Communication with Owners/Operators

EOCWD communicates with private entities as well as adjacent agencies by conducting the following activities:

1. EOCWD has a communications consultant (Communications Lab) and uses its website and doorhangers to communicate with customers on a large scale.
2. EOCWD uses the direct contact information of the Home Owners Associations' (HOAs') representatives and apartment managers to communicate with satellite systems that tie into EOCWD's sewer system.
 - a. Apartment complexes have been prone to onsite spills due to lack of maintenance to their sewer system and so EOCWD regularly coordinates with the apartment managers for cleaning and inspection work.
3. EOCWD communicates to outside agencies such as the Cities of Tustin and Orange, Orange County Sanitation District (OCSan), and County of Orange by either email or telephone.
 - a. EOCWD occasionally works with the Tustin code enforcement to deal with private spills.
 - b. EOCWD is in regular contact with OCSan for cleaning and inspection work.
 - c. The City of Orange is an agency that is physically connected to EOCWD and has its own local sewer system. Cooperation with the City of Orange is on an as needed basis.
4. EOCWD attends OCSan-hosted meetings and events with its other satellite dischargers.
5. EOCWD works directly with OCSan as needed on WDR/SSMP items affecting both agencies.

11.5 Effectiveness, Improvement, and Key Performance Indicators

To monitor the effectiveness of this element of the SSMP, the following Key Performance Indicators (KPIs) are being monitored by EOCWD:

- Have public communications been reviewed at a Quarterly SSMP Review Meeting?
- Have private systems communications been reviewed at a Quarterly SSMP Review Meeting?

In the preparation of this SSMP, EOCWD has identified the following improvements to SSMP communication provisions that will improve the effectiveness of the SSMP:

- Develop a regular schedule for communication with all private systems that discharge into the EOCWD collection system – *Complete by the next internal audit in December 2027*