Sewer System Management Plan

2025 Update

Sanitary Sewer Collection System (WDID #8SSO10570 and #9SSO10570)



REVIEWED AND APPROVED BY:

Dennis P. Cafferty, General Manager

Legally Responsible Official El Toro Water District

Sanitary Sewer Collection System

(includes Element Development Plans & Schedules)

PREPARED BY:



OCTOBER 10, 2025

Date Signed



Revision Date	SSMP Section	Approval Date	Description of Change/Revision Made	Initials

Revision Date	SSMP Section	Approval Date	Description of Change/Revision Made	Initials



El Toro Water District Attn: Scott Hopkins, Operations Superint. Legally Responsible Official 24251 Los Alisos Blvd Lake Forest, CA 92630

Dear Scott,

We are pleased to present the new 2025 Sewer System Management Plan (SSMP) Update developed in partnership with District management. The 2025 Update meets and exceeds compliance with the Reissued WDR (State Water Board, Water Quality Order No. 2022-0103-DWQ, Attachment D-10 and Specifications 5.4). The 2025 SSMP has been completely revised to harmonize with industry standard guidelines and incorporates the latest SSMP Audit findings.

The 2025 SSMP is a declaration of what the District is doing to demonstrate full compliance with the Reissued WDR. Attachment A of the Reissued WDR (page A-4), states "A sewer system management plan is a living document an Enrollee develops and implements to effectively manage its sanitary sewer system (s) in accordance with this General Order". This requires the District to periodically review and update the SSMP as necessary until its next 6-year SSMP Update is completed.

To support these ongoing review and update requirements, this document includes a sample change log that may be used as a reference if a system is not already in place. We encourage you to share this example with all relevant team members responsible for implementing or documenting SSMP revisions, to help ensure consistency, transparency, and continued compliance.

We look forward to assisting the District wherever necessary to fully implement the new 2025 SSMP Update.

Sincerely,

James Fischer, P.E.

Jim Fischer

Principal, Fischer Compliance LLC

Credentialed U.S. EPA NPDES Compliance Inspector

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Introduction

This Sewer System Management Plan (SSMP) or "Plan" has been prepared for the El Toro Water District (District) with technical assistance from Fischer Compliance LLC with the goal of meeting and exceeding compliance with the State Water Resources Control Board 2022 General Waste Discharge Requirements, Order WQ 2022-0103-DWQ for Sanitary Sewer Systems (referred to throughout this document as the WDR).

The District provided all details, information, and institutional insights for preparation of the SSMP. The document has been developed as required by the WDR to meet the size, scale, and complexity of the District's sewer systems, serving as a "living document" and help readers improve understanding about the District's systems, work programs, and efforts to reduce sewage spills.

The District is required to update this SSMP, at a minimum, every six years. The schedule for these updates is based on the WDR enrollment date deadlines for each sewer system established for populations served by the sewer system.

The District Board must approve the SSMP prior to 8/2/25 and upload it to the CIWQS database. The 2024 Sewer System Management Plan Guidance Manual published by the Bay Area Clean Water Agencies (BACWA) was utilized as a model for development of the Master document to harmonize formatting/content and incorporate recommended suggested guidance wherever possible.

SSMP Organization

This SSMP is organized into 11 core elements following Attachment D of the WDR, with inclusion of applicable Specifications requirements.

Each individual element in the SSMP includes the following technical contents.

- 1. Requirements Provides the actual description of applicable requirements in the WDR.
- 2. Compliance Describes the District's approach to complying with the WDR requirements.
- 3. Effectiveness As measured by Key Performance Indicators (KPIs.)
- 4. Implementation Demonstrates how the District will ensure the SSMP will be carried out as described.
- 5. Resilience Demonstrates the resilience that is addressed in the SSMP and built-in to the District's collection system and procedures.
- 6. Appendix Inclusions List the items included in the Appendix for each SSMP Element, if any.

District Historic Spill Performance

Figure 1 below provides key District spill metrics, (5/1/2015 to 5/1/2025) including data comparing the District's spill record with state and regional system data. The District consistently performs better than both statewide and regional spill rate indices and net spill volumes for all categories of spills from its sanitary sewer collection system.

COLLECTION SYSTEM OPERATIONAL REPORT

Please see the Glossary of Terms for explanations of the search results column headings. More information about the report is found at the bottom of this page.

Click to Print This Page (Select Printer as Adobe PDF)

SEARCH CRITERIA: [REFINE SEARCH] [NEW SEARCH] [GLOSSARY]

Agency (el toro)

Date Range: Start_Date (01/01/2010) End_Date (07/29/2025)

 $\begin{array}{ll} \textbf{DRILLDOWN HISTORY:} & [\mbox{GO BACK TO LISTING OF COLLECTION SYSTEMS} \\ \mbox{El Toro Water District R8 CS} \\ \end{array}$

Agency: El Toro Water District

General Information

- +

Region Place ID Place Name CS Category Place Address **Place County** 256423 El Toro Water District R8 CS Municipal(Public) 23542 Moulton Parkway Laguna Woods CA Orange

-

Collection System Spill Summary

Operational Indices: El Toro Water District R8 CS

Spill Rate Indice (spills/100mi/yr)								
	Category 1			Categ	gory 2	Category 3		
	Main System	Laterals	Other	Main System	Other	Main System	Other	
El Toro Water District R8 CS	0.43	0.17	0.16	0.0	0.04	0.27	0.04	
<u>State</u> Municipal(Public) Average	1.43	2.32	0.42	0.53	0.46	2.69	0.52	
<u>Region</u> Municipal Average	0.33	0.21	0.08	0.21	0.14	0.67	0.18	

Net Volume Spills Indice (gallons/1000 Capita/yr)									
	Category 1			Cate	gory 2	Category 3			
	Main System	Laterals	Other	Main System	Other	Main System	Other		
El Toro Water District R8 CS	15.43	0.6	35.08	0.0	3.19	0.65	1.21		
State Municipal(Public) Average	<u>1514.82</u>	23.18	3116.09	227.84	2938.02	26.68	7.78		
Region Municipal Average	<u>74.4</u>	0.88	1338.18	42.81	<u>8.5</u>	0.83	0.13		

Figure 1 – District Spill Metrics (2010-2025)

Abbreviations and Acronyms

BMP Best Management Practices

CCTV Closed Circuit Television

CF Collections Foreman

CIP Capital Improvement Program

CIWQS California Integrated Water Quality System (State Water Board Online Spill Database)

CMMS Computerized Maintenance Management System

Engr. District Engineering Department

FOG Fats, Oils and Grease

FSE Food Service Establishment

GCD Grease Control Device

GIS Geographic Information System

I & I Inflow and Infiltration

LRO Legally Responsible Official

RWQCB Regional Water Quality Control Board

SCADA Supervisory Control and Data Acquisition

SERP Spill Emergency Response Plan

SOP Standard Operating Procedure

SSMP Sewer System Management Plan

Spill Sanitary Sewer Spill

Superint. Operations Superintendent

WDR Sanitary Sewer Systems General Wastewater Discharge Requirements Order issued

by the State Water Board (Order No. 2022-0103-DWQ)

SWRCB State Water Resources Control Board

WDID Waste Discharge ID Number (CIWQS)

Table 1 – Abbreviations and Acronyms

1. Goal and Introduction

WDR REQUIREMENTS

Attachment D-1 (pg. D-2)

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

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

1.1. Regulatory Context

WDR REQUIREMENTS

Attachment D-1.1 (pg. D-2)

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

COMPLIANCE

The District is committed to fully implementing the WDR¹ which includes addressing all requirements by integrating a wide range of programs specifically designed for ensuring the integrity and efficiency of the District's sanitary sewer collection system. Moreover, the District is dedicated to maintaining its collection system in a systematic manner by implementing various work programs, with a focus on critical areas, to prevent spills, allowing for a comprehensive approach to maintenance. Work programs include CCTV inspections, pipe cleaning, manhole inspections, lift station maintenance, root control, source control, FOG control and pipe repair, just to name a few. Work programs are described in more detail in Specifications 5.19- Operation and Maintenance, of this SSMP.

By prioritizing proactive measures and taking a comprehensive approach, the District is well-equipped with a proven track record of effectively operating its sanitary sewer collection system with the highest levels of service, complying with the WDR, and reducing/eliminating sewage spills.

EFFECTIVENESS

N/A

IMPLEMENTATION PLAN/SCHEDULE

N/A

¹ State Water Resources Control Board, Statewide Waster Discharge requirements, General Order for Sanitary Sewer Systems

1.2. SSMP Update Schedule

WDR REQUIREMENTS

Attachment D-1.2 (pg. D-3)

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

COMPLIANCE

The District utilizes the State Water Board's <u>Sewer System Management Plan & Audit Required Due Dates</u> <u>Online Tool</u> to ensure compliance with all required due dates for updating its SSMP and completing its required SSMP Audits.

ter your Waste Disch	arge Identification (WI			•	r					
		DID) number in the sear	ch field to retrieve t	the required Sewer Sy	stem Manager	ment Pl	an (SSMP) Update a	nd Audit due	dates fo	or your system.
9SSO10570										
Show Update/Audit I	Dates									
		Sewer Syster	n Management	t Plan & Subsequ	ent Update	e Due	Dates			
System Name	WDID Number	Original Plan Re Date	quired Due	Required Plan Up Date	ired Plan Update Due Required Plan Update Due Date		te Due	Required Plan Update Due Date*		
El Toro Water District R9 CS	9SSO10570	8/2/200	09	8/2/2014	8/2/2014 8/2/2019		8/2		/2/2025	
			Au	dit Due Dates						
System Name	WDID Number	Original Required Plan Audit Due Date	Required Plan Audit Due Date	Required Plan Audit Due Date	Required Audit Di Date		Required Plan Audit Due Date	Required Audit D Date	ue	End of Required 3-Year Audi Period**

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

Figure 2 – Sewer System Management Plan Update and Audit Due Dates

EFFECTIVENESS

The District utilizes the following Key Performance Indicators for measuring effectiveness of this Element:

- Are SSMP Audits and SSMP Updates being performed as scheduled?
- Has the SSMP been approved by the governing board on the required schedule (i.e., every six years)?
- Are specific internally established sewer program milestones being monitored?

IMPLEMENTATION PLAN/SCHEDULE

No.	Plan	Schedule	Responsible Party			
			LRO	Superint.	CF	
1.2.1	Prepare for next SSMP Audit	Begin 8/2/2027	Х	Х	Х	
1.2.2	Complete and Upload next SSMP Audit	By 2/2/2028	X	X		
1.2.3	Incorporate Audit Findings, update Change Log and Update SSMP	Begin after completion of SSMP Audit		X		
1.2.4	Prepare for next SSMP Audit	Begin 8/2/2030	х	X	Х	
1.2.5	Complete and Upload next SSMP Audit	By 2/2/2031	Х	X		
1.2.6	Incorporate Audit Findings, update Change Log and Update SSMP	Begin after completion of SSMP Audit		X		
1.2.7	Prepare for next SSMP Update	Begin 2/2/2031	Х	X		
1.2.8	Board Approval deadline for SSMP Update	By 8/2/2031	Х	x		

1.3. Sewer System Asset Overview

WDR REQUIREMENTS

Attachment D-1.3 (pg. D-3)

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

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

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

COMPLIANCE

The District provides wastewater collection services to the residents and businesses in portions of southern Orange County. The District system currently consists of roughly 118 miles of gravity sewers and 6 miles of force main sewers. There are 10 siphons in the collection system, and no stormwater diversion structures in the system. The District owns 6,978 sewer laterals and is responsible for maintaining the lower portion only.

The District does not have any significant boundary area challenges currently. The District maintains up to date sewer system maps (see Element 4.1 - Updated Map of Sanitary Sewer System for more details).

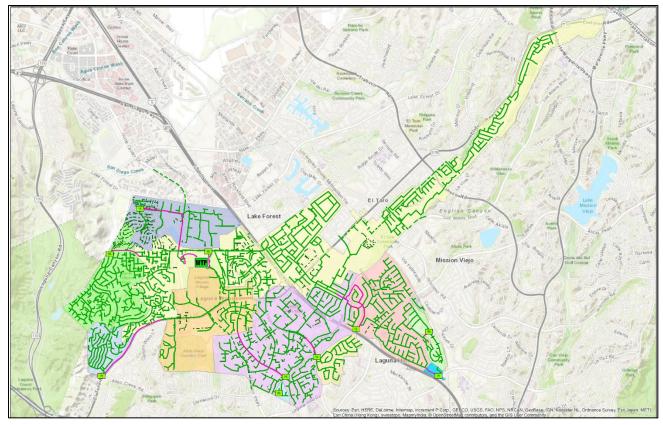


Figure 3 – District Sewer Service Area

EFFECTIVENESS

The District utilizes the following Key Performance Indicators for measuring effectiveness of this Element:

- Are asset statistics periodically reviewed and updated as necessary?
- Are omissions or errors addressed in a timely manner?
- Are system maps up to date?

IMPLEMENTATION PLAN/SCHEDULE

No.	Plan	Schedule	Responsible Party			
			LRO	Superint.	CF	
1.3.1	Review District-owned asset statistics and element description; update as necessary	At the beginning of the audit cycle and when significant changes have been made.		X	X	
1.3.2	Verify Maps Updates have been completed	Monthly		x		

RESILIENCE

Resilience is addressed in Element 1 by:

- Redundancy: More than one member of staff is trained and able to retrieve and manage the data.
- Implementing a QA/QC process to help ensure information is accurate.
- Using Calendar Reminders to ensure compliance deadlines are met.

APPENDIX 1 INCLUSIONS

None

Specifications 5.2 – SSMP Development and Implementation

WDR REQUIREMENTS

Specification. 5.2 (pg. 18)

"To facilitate adequate local funding and management of its sanitary sewer system(s), the District shall develop and implement an updated Sewer System Management Plan. The scale and complexity of the Sewer System Management Plan, and specific elements of the SSMP, must match the size, scale, and complexity of the Enrollee's sanitary sewer system(s). The Sewer System Management Plan must address, at minimum, the required Plan elements in Attachment D (Sewer System Management Plan — Required Elements) of this General Order. To be effective, the Sewer System Management Plan must include procedures for the management, operation, and maintenance of the sanitary sewer system(s). The procedures must: (1) incorporate the prioritization of system repairs and maintenance to proactively prevent spills, and (2) address the implementation of current standard industry practices through available equipment, technologies, and strategies."

COMPLIANCE

This SSMP has been completely updated to meet the requirements of Order WQ 2022-0103-DWQ and addresses all required Elements and Specifications. The SSMP addresses management, operations and maintenance procedures specific to the District's collection system. The District maintains a proactive O&M program to operate its system and identify defects, which are then prioritized for repair, replacement, rehabilitation, or placed on modified maintenance schedules. (See Elements 4 and 8 and Specifications 5.19 of this SSMP for more detail).

The District keeps up with current industry standards, technology and best practices by reviewing industry periodicals, networking and attending industry conferences, consulting training, vendor demonstrations, and collection system-related workshops. This includes continuously evaluating emerging practices, equipment, and technologies for consideration in enhancing system operations.

Specifications 5.7 – Allocation of Resources

WDR REQUIREMENTS

Specifications 5.7 (pg. 22)

"The District shall comply with the following requirements:

- Establish and maintain a means to manage all necessary revenues and expenditures related to the sanitary sewer system; and
- Allocate the necessary resources to its sewer system management program for: (a) compliance with this General Order, (b) full implementation of its updated SSMP, (c) system operation, maintenance, and repair, and (d) spill responses."

COMPLIANCE

The District maintains various revenue sources to maintain financial stability, meet its operational needs and manage all necessary expenditures to operate its sewer system. Sources of revenue include:

Sewer User Fees

The District owns the necessary equipment and employs the appropriate number of staff to properly manage the collections system.

Provisions 6.1 – Enforcement Provisions

WDR REQUIREMENTS

Provisions 6.1 (pg. 27)

"The following enforcement provisions are based on existing federal and state regulations, laws and policies, including the federal Clean Water Act, the state Water Code and the State Water Board Enforcement Policy."

COMPLIANCE

The District is aware of the consequences for noncompliance including associated penalties for violations. The District maintains a proactive stance with full implementation of its SSMP.

Noncompliance with requirements of this General Order or discharging sewage without enrolling in this General Order constitutes a violation of the Water Code and a potential violation of the Clean Water Act and is grounds for an enforcement action by the State Water Board or the applicable Regional Water Board. Failure to comply with the notification, monitoring, inspection, entry, reporting, and recordkeeping requirements may subject the Enrollee to administrative civil liabilities of up to \$10,000 a day per violation pursuant to Water Code section 13385; up to \$1,000 a day per violation pursuant to Water Code section 13268; or referral to the Attorney General for judicial civil enforcement. Discharging waste not in compliance with the requirements of this General Order or the Clean Water Act may subject the Enrollee to administrative civil liabilities up to \$10,000 a day per violation and additional liability up to \$10 per gallon of discharge not cleaned up after the first 1,000 gallons of discharge; up to \$5,000 a day per violation pursuant to Water Code section 13350 or up to \$20 per gallon of waste discharged; or referral to the Attorney General for judicial civil enforcement.

Provisions 6.3 – Sewer System Management Plan Availability

WDR REQUIREMENTS

Provisions 6.3 (pg. 31)

"The Enrollee's updated Sewer System Management Plan must be maintained for public inspection at the Enrollee's offices and facilities and must be available to the public through CIWQS and/or on the Enrollee's website, in accordance with section 3.8 (Sewer System Management Plan Reporting Requirements) of Attachment E1 (Notification, Monitoring, Reporting and Recordkeeping Requirements) of this General Order."

COMPLIANCE

The District has uploaded this SSMP to the CIWQS database and published it on its website. In addition, the SSMP is available for public review at District offices, by appointment, during regular business hours.

2. Organization

WDR REQUIREMENTS

Attachment D-2 (pg. D-3)

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

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

COMPLIANCE

The above items are addressed in order below:

District's Legally Responsible Officials (LRO) are listed below:

- Dennis Cafferty, General Manager
- Scott Hopkins, Operations Superint.

The District's LRO meets the minimum requirements set forth in Specifications 5.1 of the WDR.

IMPLEMENTATION RESPONSIBILITIES

Sewer System Management Plan Elements	Responsible Position
1. SSMP Plan, Goal, and Introduction	General Manager/Operations Superint.
1.1. Regulatory Context	General Manager/Operations Superint.
1.2. SSMP Update Schedule	Compliance Program Coordinator
1.3. Sewer System Asset Overview	General Manager/Operations Superint.
2. Organization	General Manager/Operations Superint.
3. Legal Authority	General Manager/Operations Superint.
4. Operations and Maintenance Program	Collections Foreman
4.1. Updated maps of Sanitary Sewer System	Director of Engineering
4.2. Preventive Operation & Maintenance	Collections Foreman
4.3. Training	Compliance Program Coordinator
4.4. Equipment Inventory	Collections Foreman
5. Design/Performance	Director of Engineering
5.1. Updated Design Criteria & Construction Standards	Director of Engineering
5.2. Procedures and Standards	General Manager/Operations Superint.
6. Spill Emergency Response Plan	General Manager/Operations Superint.
7. Sewer Pipe Blockage Program	Collections Foreman
8. System Eval, Capacity Assurance, Capital Imp.	Director of Engineering
8.1. System Evaluation and Condition Assessment	Operations Superint. /Collections Foreman
8.2. Capacity Assessment and Design Criteria	Director of Engineering
8.3. Prioritization of Corrective Action	Operations Superint. /Collections Foreman
8.4. Capital Improvement Plan	Director of Engineering
9. Monitoring, Measurement & Program Modifications	Collections Foreman
10. Internal Audits	Compliance Program Coordinator
11. Communication Program	Compliance Program Coordinator

Table 2 – Implementation Responsibilities

RESPONSIBLE POSITION CONTACT INFORMATION

Responsible Position	Name	Phone	Email
General Manager	Dennis Cafferty	(949) 837-7050, ext. 223	dcafferty@etwd.com
Operations Superint.	Scott Hopkins	(949) 837-7050, ext. 217	shopkins@etwd.com
Chief Plant Operator	Michael Snow	(949) 837-7050, ext. 112	msnow@etwd.com
Collections Foreman	Ed Peterson	(949) 837-7050, ext. 115	epeterson@etwd.com
Collections Crew Chief	Chris Goodchild	(949) 837-7050	cgoodchild@etwd.com
Industrial Waste Inspector	Edward Peterson	(949) 837-7050, ext. 115	epeterson@etwd.com
Foreman – Pump Stations	Garth Botha	(949) 837-7050, ext. 243	gbotha@etwd.com
Foreman – Operations	Jeff Webster	(949) 837-7050, ext. 213	jwebster@etwd.com
Director of Engineering	Hannah Ford	(949) 837-7050, ext. 247	hford@etwd.com
Compliance Program Coordinator	Vincent Coppola	(949) 837-7050, ext. 228	vcoppola@etwd.com

Table 3 – Responsible Position Contact Information

2.1. District Organization Chart

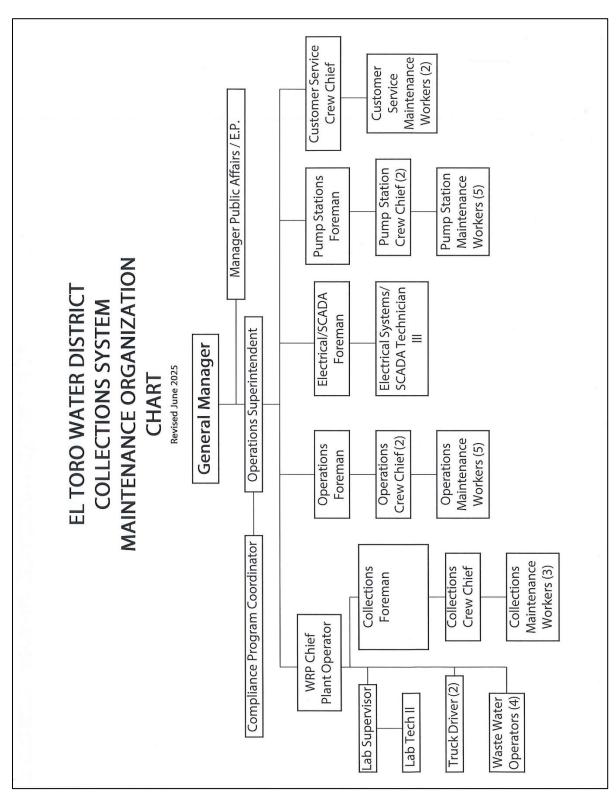


Figure 4 – District Organization Chart

2.2. Organizational Staffing Responsibilities

Board of Directors

ETWD is governed by a Board of Directors consisting of five board members. The directors are elected by registered voters within the District boundaries. The Board of Director's establish policy and make decisions based on the district's mission, goals, and operations. The Board's policies are administered and implemented by the General Manager, who is appointed by the Board. Public elections are held every two years and Directors serve four-year terms. Terms are staggered to ensure continuity.

General Manager

Under the direction of the Board of Directors, the General Manager serves as agent of the Board of Directors in planning, directing, managing and overseeing the services, activities, and operations of the District; serves as chief executive officer of the District ensuring that services and operations are delivered in an efficient and effective manner; implements policy decisions made by the Board of Directors; facilitates the development and implementation of District goals and objectives.

Operations Superintendent

Under the direction of the General Manager, the Operations Superintendent plans, organizes, manages, and directs all District field staff in the construction, maintenance, repair and operation of the District water, wastewater and recycled water system. The incumbent exercises significant authority and independence in implementing a broad range of services and programs in coordination with other District executives and managers.

Compliance Program Coordinator

Under the direction of the Operations Superintendent, the Compliance Program Coordinator is responsible for keeping abreast of applicable legislative and regulatory requirements and coordinating District-wide administrative and operational compliance with local, County, State and Federal rules and industry standards related to water quality, air quality, OCFA/CUPA hazardous material handling/reporting, OSHA safety programs, and the DOT Class A license program. Responsible for organizing District-wide health and safety training programs necessary to ensure that the District is in compliance with applicable Federal, State and local regulations and standards.

Collections Foreman

Under the direction of the Operations Superintendent, plan, assign, coordinate and review the work of sewer line maintenance crews; enforce safety rules and regulations. Requisition supplies and materials as authorized; interpret work plans and equipment requirements; coordinate work with other utilities; prepare reports of work in progress. Inspect industrial customers to ensure permit compliance, set up sampling and measuring devices, facilitate the collection and testing of wastewater samples and serve as liaison between the District and its customers concerning sewage problems. Maintain and enforce the ETWD Pretreatment program, the ETWD Fats, Oils and Grease (FOG) program and ETWD standards.

Collections Crew Chief

Under the direction of the Collections Foreman, maintain, clean and repair sewage collection lines, manholes, lift stations and other sewage facilities and equipment. Operate television inspection vehicle and

equipment, sewer vactor and hydro-cleaner vehicles. Function as lead person, supervising and directing the work of the collection system maintenance crew.

Collections Maintenance Worker

Under the direction of the Collections Crew Chief, maintain, clean and repair sewage collection lines, manholes, lift stations and other sewage facilities and equipment. Operate television inspection vehicle, sewer vactor and hydro-cleaner vehicles.

2.3. Chain of Communication for Reporting Spills



<u>District Receives Call for Service</u>

<u>Service Calls during business hours</u> are received by the District's Customer Service department (949) 837-7050. The Customer Service department will contact the Collection's Department to respond.

<u>Service Calls received after business</u> hours are received by the District's on-call personnel.

<u>SCADA Alarm Calls</u> are received by the District's on-call personnel who then contacts the on-Call secondary, who provides direction.





District's Response to Spill Event

Response staff respond to all calls, assess the spill event, and take appropriate actions to mitigate the spill. All spill events are responded to in accordance with the District's Spill Emergency Response Plan (SERP) and are documented in adherence to the WDR Notification, Monitoring, Reporting and Recordkeeping requirements. The secondary on-call person or compliance program coordinator makes the Cal-OES notifications, when applicable.







The responding field staff submit the field report(s) to the secondary on call person, who reviews for completeness and accuracy and then confers with the District's Compliance Program Coordinator as a layer of quality control.

Once all information is verified, Compliance Program Coordinator submits it to CIWQS.

The District's Legally Responsible Official certifies all spill reports.

Figure 5 – District Spill Overview Chain of Communication

EFFECTIVENESS

The District utilizes the following Key Performance Indicators for measuring effectiveness of this Element:

- Have there been any changes requiring updates to the Organizational Chart?
- Have there been instances when a service call for a spill was not properly routed to response personnel?
- Were all spill response activities documented and forwarded to the LRO?
- Have there been any changes in assigned responsibilities for implementing the SSMP?
- Is there a process in place to ensure all contact information remains up to date?

IMPLEMENTATION PLAN/SCHEDULE

No.	Plan	Schedule	Responsible Party		
		,	LRO	Superint.	CF
2.1	Review names, contact information and position responsibilities. Update, as necessary.	Semi-Annually		X	X
2.2	Review Chain of Communication outcomes for all spill responses	Each Spill Event	X	X	X
2.3	Review Organizational Chart for any changes. Update, as necessary.	Semi-Annually		X	X

RESILIENCE

Resilience is addressed in Element 2 by:

- Ensuring that more than one person is capable and responsible for specific duties for SSMP implementation, e.g., back-up personnel.
- Designation of more than one LRO to help ensure full and continuous coverage of duties.
- Testing the phone notification system to ensure calls are received and routed to appropriate personnel.

APPENDIX 2 INCLUSIONS

None

3. Legal Authority

WDR REQUIREMENTS

Attachment D-3 (pg. D-4)

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

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

COMPLIANCE

The above items are addressed below in order:

- Authority for preventing illicit discharges into the District's sanitary sewer collection system is
 provided by <u>District Ordinance No. 2025-3</u>. The purpose of this section is to prevent the discharge
 or any pollutant or any combination of pollutants into the sewers that would obstruct or damage
 the collection system, interfere with treatment or threaten harm to human health or the
 environment.
- The District does not own any storm drain assets located within the District service area. As such, the District has de facto authority to access storm drains during and after spill events should the need arise from the cities of Lake Forest, Laguna Hills, Mission Viejo, Laguna Woods, and Aliso Viejo. Historically, the District has accessed storm drains owned by other agencies when needed, retrieved the sewage and returned it to the sewer system, cleaned the storm drain system, and notified the storm drain owner. The District collaborates with storm drain system owners to further formalize procedures and address expectations for complying with this requirement.
- The District's authority to require sewer system components and connections to be properly
 designed and constructed is provided in <u>District Ordinance No. 2004-1</u> adopted by the El Toro
 Water District Board of Directors on April 22, 2004.
- The District's legal authority to enforce any violation of its sewer ordinances, service agreements, or other legally binding procedures is provided <u>in District Ordinance No. 2025-3</u> including specific enforcement provisions, penalties, notices of non-compliance, and other legally binding procedures and authority.
- The District's authority to obtain easement accessibility agreements for locations requiring sewer system operations and maintenance is provided in District Ordinance No. 2025-3.

EFFECTIVENESS

The District utilizes the following Key Performance Indicators for measuring effectiveness of this Element:

- Are the District ordinances and standards adequate for fulfilling the SSMP Plan legal requirements?
- Does the District have a process in place for periodic review and evaluation of ordinances?
- Have there been instances when the code or ordinance did not address a need or circumstance?

IMPLEMENTATION PLAN/SCHEDULE

No.	Plan	Schedule	Responsible Party		
			LRO	Superint. + Engr.	CF
3.1	Review Ordinance(s) to confirm all documents provide necessary required legal authority.	Once per 6-year SSMP Update Cycle	X	X	
3.2	Confer with storm drain owners to ensure current practices and contact information are up to date.	Annually		X	
3.3	Monitor and document occasions when Ordinance(s) failed to address issues as intended.	Continuously	Х	X	Х

RESILIENCE

Resilience is addressed in Element 3 by:

• Keeping abreast of industry trends and local ordinances that may affect operations.

APPENDIX 3 INCLUSIONS

None

4. Operation and Maintenance Program

WDR REQUIREMENTS

Attachment D-4 (pg. D-4)

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

4.1. Updated Map of Sewer System

WDR REQUIREMENTS

Attachment D-4.1 (pg. D-4)

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

COMPLIANCE

Knowledge of the locations and physical attributes of all District facilities is essential to effective operation and maintenance of the system. The District has informal internal procedures utilizing its Geographical Information System (GIS) of all District mainlines, manholes and other facilities to maintain sewer maps in GEOVIEWER software.

The District utilizes a computerized maintenance management system (CMMS), <u>Geoviewer</u>, to schedule and track all field work. The CMMS has a mapping feature that shows the sewer collection system including pump stations, force mains, gravity lines, manholes and other conveyance facilities and surrounding reference features. The CMMS the District is utilizing also provides field access to record drawings for District Operations personnel. District sewer maintenance staff utilize I-pads to access the CMMS, assign work through a work order function, complete work orders and close them out.

Additional District mapping resources available to field staff include the following:

- Sewer System Atlas Map Book
- Sewer System Geodatabase (GIS)
- Maps contained in District Water and Sewer System Master Plan Final Report, September 2023

District sewer system maps will be made available to State and Regional Water Board staff upon request.

EFFECTIVENESS

The District utilizes the following Key Performance Indicators for measuring effectiveness of this Element:

- Were all map updates completed in a timely manner?
- Are all staff trained in the procedure for providing map update information?
- Are newly installed sewer assets incorporated into the system maps?
- Are there terrain features or assets that should be incorporated in future map updates (e.g. exposed pipe, siphons, ARVs, surface water, etc.)?

IMPLEMENTATION PLAN/SCHEDULE

No	Plan	Schedule	Responsible Party		
			LRO	Superint	CF
4.1.1	Review map update procedures with all affected staff.	Annually		X	Х
4.1.2	Review/ensure all newly installed facilities have been updated and included in the system maps	Annually		X	Х

4.2. Preventive Operation and Maintenance Activities

WDR REQUIREMENTS

Attachment D-4.2 (pgs. D-4/D-5)

"A scheduling system and a data collection system for preventive operation and maintenance activities conducted by staff and contractors. The scheduling system must include:

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

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

COMPLIANCE

The purpose of a work order system is to program and track all required inspection and maintenance activities within the collection system to help proactively prevent blockages/operational problems or spills. The District utilizes the Computerized Maintenance Management System (CMMS), <u>GEOVIEWER</u>, which allows the District to make informed decisions regarding its assets and infrastructure by using the collected data from field work orders and documented inspections.

The District utilizes for its CMMS, <u>GEOVIEWER</u>, that includes scheduling, work orders and asset management. The scheduling system allows staff to put certain activities on a preventive schedule where the CMMS will automatically create work orders on a prescribed interval. Work orders for other activities are generated by supervisory personnel on an as-needed basis.

District uses a Computerized Maintenance Management System (CMMS, GEOVIEWER) to assist in the management and maintenance of the District's facilities. The CMMS stores and enables staff to retrieve data such as maintenance history, service calls, comments and complaints. In addition, the CMMS interfaces with the District's GIS mapping program. The District utilizes several resources and tools to provide information which enables the District to prioritize maintenance activities required on each specific District asset. CCTV, manhole inspections, work order history, spill history, site risk assessment and observations from maintenance crews are examples of these resources. The CMMS capabilities include ability to produce scheduled and unscheduled work orders for all the District's assets. Literally anything that requires any form of routine maintenance is included. Schedules for maintenance activities are input into the system by District staff based on information found using methods discussed above. Following the completion of the scheduled task the completed work order is then entered into the CMMS. The database keeps a history of each work order and any related findings during that event. District Field staff also have access to create work orders and request scheduling work for management review directly in the CMMS (GEOVIEWER).

EFFECTIVENESS

The District utilizes the following Key Performance Indicators for measuring effectiveness of this Element:

- Are the District's maintenance, operations, and engineering work orders periodically audited for accuracy and completeness?
- Does the District monitor "open," "overdue," or "not yet completed" work orders to ensure completion of tasks?
- Annually verify districts inspection and maintenance activities are continuing to reduce the number of spills.
- Is maintenance work being completed as scheduled?

IMPLEMENTATION PLAN/SCHEDULE

No.	Plan	Schedule	Responsible Party			
			LRO	Superint.	CF	
4.2.1	Monitor "Past Due" work orders to ensure critical work is being completed	Quarterly		X	X	
4.2.2	Review scheduled PMs to ensure the prescribed schedule remains appropriate.	Annually		X	Χ	

4.3. Training

WDR REQUIREMENTS

Attachment D-4.3 (pg. D-5)

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

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

COMPLIANCE

The District's training program covers numerous areas involving or associated with wastewater collection systems and serves to develop and maintain highly qualified, knowledgeable, and capable staff. This training is provided through a variety of modes (self-study, seminars, conferences, on-the-job, etc.) and begins from the first day on the job and continues regularly thereafter.

Staff involved in responding to customer service calls, including sewage spills, receive annual training on the District's Spill Emergency Response Plan. This training is part classroom and part hands-on exercises and drills for responding to spill events and includes containment, restoring flow, spill volume, recovered, spill start time estimations, cleanup and completing the spill event data collection forms.

The District has developed spill response procedures for its personnel who perform work for the District. The District personnel are required to:

- Immediately notify the District of any sewage spill they encounter.
- Make attempts to contain the spill.
- Take photos of the:
 - o Spilling structure
 - o The affected area
- 10-second video of spilling structure
- Cordon off the area to keep the public safe; and
- Remain onsite until District staff arrives and relieves them.

This language is included in service agreements and discussed during pre-job meetings. This includes routine maintenance schedules in GEOVIEWER for performing necessary maintenance and work activities to maintain the entire collection system.

As a condition of employment all collection system employees are certified in collection system maintenance through the technical certification program of the <u>California Water Environment Association</u> (CWEA).

The District is highly committed to ensuring highly trained and knowledgeable staff. The District requires employees to pursue professional development, and all expenses incurred are reimbursed by the District. The collection system staff holds CWEA Collection System Maintenance Certifications in addition to other various professional wastewater related certifications and credentials. Staff regularly attend vocational

training provided by industry vendors and professionals. The Legally Responsible Official and Designated Data Submitters regularly attend Waste Discharge Requirement update training courses to ensure the SSMP is up to date and in compliance with the General Order, as well as CIWQS reporting procedures. The entire staff attends regularly scheduled meetings to discuss safety, emergency response and receive training in collection system operations and maintenance. All training courses are documented.

To support high-quality outcomes, the District maintains active oversight during its construction projects. District staff routinely observe and monitor contractor activities to help confirm that work is performed in accordance with project specifications and industry standards.

The District's standard construction documents include special provisions outlining the contractor's responsibilities for proper qualifications, experience, and conduct. These provisions also reserve the District's right to reject work that does not meet requirements and require corrective action. Additionally, the work is subject to general guarantee and warranty provisions, reinforcing the expectation that improvements will last and function as intended.

EFFECTIVENESS

The District utilizes the following Key Performance Indicators for measuring effectiveness of this Element:

- Has all training been completed as scheduled?
- Have records of training and attendance been documented and maintained?
- Have all staff demonstrated ability and knowledge after each training event?
- Have contractors received, at a minimum, direction for reporting and responding to spills?

IMPLEMENTATION PLAN/SCHEDULE

No.	Plan	Schedule	Responsible Party			
			LRO	Superint.	CF	
4.3.1	Review training documentation to ensure all staff have received required training	Quarterly		X	X	
4.3.2	Review agreements with contractors and/or pre-job meeting minutes to ensure contract personnel have received instruction for responding to sewage spills	Each Contract		X	X	

4.4. Equipment Inventory

WDR REQUIREMENTS

Attachment D-4.4 (pg. D-5)

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

COMPLIANCE

The District maintains a host of equipment and spare parts for both routine maintenance and for contingency or emergency operations and has identified spare parts and components considered to be critical for the operation of pump stations and gravity sewers.

The parts and equipment can be categorized as follows:

- Parts needed for sewer pipe maintenance and repair.
- Parts needed for sewer pump station maintenance and repair.
- Equipment needed to maintain both sewer lines and sewage pump stations.

The District has invested in several pieces of equipment dedicated to maintenance of the sewer collection system.

- <u>2015 Freightliner Hydrocleaner (Unit #31)</u> The District continues to operate the 2500 psi hydrocleaner with a 500-foot reel. The hydrocleaner is utilized for the majority of the sewer line cleaning operations.
- 2004 Hydrocleaner (Unit# 32) The District continues to operate the 2000 psi hydrocleaner with a 500-foot reel. The hydrocleaner is utilized for the majority of the sewer line cleaning operations. This unit is used to supplement the sewer line cleaning operation as well as fill in when the primary hydrocleaner is down for service or repairs.
- 2008 Sterling Vactor (Unit #61) The Vactor Combination Machine is used for multiple applications. The Vactor is equipped with a 9-yard debris tank, a 1,200-gallon water tank and a 500-foot hose. The Jetter function is used at 2500 psi to supplement the line cleaning operation. The District attempts to extend the useful life of the various lines cleaning equipment by splitting service where possible. The vacuum function is used for maintenance at lift station wet wells as well as to remove debris from the sewer line that accumulates during the line cleaning operation.
- 1993 Peterbilt Vactor (Unit #80) The district continues to operate a second Vactor Combination Machine and is used for multiple applications. The Vactor is equipped with a 9-yard debris tank, a 1,200-gallon water supply and a 500-foot hose. This unit is used at 2500 psi to supplement the sewer line cleaning operation as well as the vacuum function. This unit is used to supplement the sewer line cleaning operation as well as fill in when the primary Vactor is down for service or repairs.
- <u>Trailer Mounted Mini Jetter (Unit #310)</u> Portions of the District sewer system are outside of the
 right of way in heavily developed areas or landscaped areas. The mini Jetter is used for cleaning
 sewer lines that are not accessible to the larger hydro cleaners and Vactor. The mini Jetter is
 equipped with a 500-foot hose reel. The hose reel can also be attached to the hydro cleaners or
 Vactors to extend the useable hose length on those units to as much as 1,000 feet.
- <u>CCTV Inspection Van (Unit #52)</u> The District's Sewer Closed Circuit TC (CCTV) Inspection Program
 is accomplished primarily via the use of a 2014 Freightliner Utility Master Panel Van. The CCTV Van
 is equipped with an operator control station and a camera staging area. The CCTV equipment is

comprised of a tractor driven 459 pan & tilt Cues color sewer camera with digital capability. The system includes 1,300-feet of cable. The tractor and camera are controlled from a control console equipped with the tractor and camera controls as well as a computer and equipment for recording. The CCTV Inspection Van is sued for the video inspection of the sewer main lines ranging in size from 6 inches to 21 inches in diameter.

- Small CCTV Van (Unit #29) The District utilizes a 2008 Ford E-350 Van for smaller CCTV operations. The small CCTV van includes a "Push-Pull" color sewer camera with 300 feet of cable. The small CCTV system is equipped with Secure Digital or SD Card recording capability. The small CCTV Van is used either on smaller pipe (4 inches to 6 inches in diameter) or in areas that are not easily accessible to the larger CCTV Inspection Van.
- <u>Spartan Cutters</u> The District has two Spartan Cutters to be used in root cutting operations. One of the Spartan Cutters is carried in the Small CCTV Van.
- Bypass Pumping Equipment In the event of a system failure the District will immediately mobilize
 equipment and personnel to affect a repair. The District Sewer Spill Response Plan directs District
 personnel to implement containment measures simultaneously with the repair effort. The District
 has invested in bypass pumping equipment that would allow emergency pumping of sewage
 around the repair area to a downstream manhole.

If additional equipment is needed, it can be rented or supplemented by outside contracted services. Further, the District participates in a formal mutual aid agreement with neighboring agencies that includes sharing equipment in emergencies. Additionally, the District utilizes on-call service agreements to supplement staff on an as-needed basis.

EFFECTIVENESS

The District utilizes the following Key Performance Indicators for measuring effectiveness of this Element:

- Have inventory lists been audited as scheduled?
- Have any inventory deficiencies or omissions been discovered and rectified?
- Has the District experienced any equipment failure that inhibited a spill response?

IMPLEMENTATION PLAN/SCHEDULE

No.	Plan	Schedule	Responsible Party		
			LRO	Superint.	CF
4.4.1	Audit inventory lists to ensure stock is adequate	Annually		X	x
4.4.2	Check with vendors to ensure lead times for critical parts are as expected.	Annually		X	Х
4.2.3	Ensure contracts with emergency support services are current	Annually			X

RESILIENCE

Resilience is addressed in Element 4 by:

- Developing an SOP for updating maps when errors are discovered.
- Developing and using forms (paper or electronic) for data collection to help ensure all pertinent information is consistently collected.
- Periodically evaluating inspection cycle intervals to help ensure they are optimized.
- Requiring staff to demonstrate ability and/or knowledge for all training activities.
- Monitoring equipment and critical spare parts usage for and trends.
- Performing periodic audits of the vehicle and equipment inventory List.

APPENDIX 4 INCLUSIONS

Specifications 5.19 - Operations and Maintenance

WDR REQUIREMENTS

Specification. 5.19 (pg. 27)

"To prevent discharges to the environment, the Enrollee shall maintain in good working order, and operate as designed, any facility or treatment and control system designed to contain sewage and convey it to a treatment plant."

COMPLIANCE

A summary of the current Preventative Operation and Maintenance Programs for the District's sewer system is summarized below:

Gravity Main Cleaning

Cleaning the gravity pipe is what prevents a buildup of roots, debris and grease from blocking the sewer and causing a spill. The cleaning is typically done with a sewer cleaning truck which uses high pressure water sent through a hose that is pushed up the sewer line. A nozzle at the end of the hose scours the inside of the sewer pipe washing debris and grease down to the lower manhole where it is vacuumed into the truck for disposal. In the case of roots and grease, a rotating cutter can be attached to the nozzle that will cut away the roots intruding into the pipe through a joint or crack.

The District cleans the entire collection system on a rotating basis on average every 24 months. The line cleaning operation is accomplished utilizing the hydrocleaner unit operated by two trained District operators. The program is typically conducted in a progressive manner meaning that the system is cleaned from manhole to manhole continuing each successive day at the manhole following that at which work was ceased on the previous day. During the course of the line cleaning operation every manhole is inspected for deterioration, infiltration or insect infestation. If manhole deterioration is severe or water intrusion is significant the condition is noted in the comments section of the Line Cleaning Log, and the manhole is referred to the Manhole Repair Program. Manholes with significant insect infestation are scheduled for pest control treatment. The actual cleaning operation is conducted by the insertion of the Jetter and hose into the pipe on the upstream direction. The line is then cleaned by the application of water at approximately 1,200 psi directed back in the downstream direction. The nozzle and hose are pulled back to the insertion manhole bringing any debris with it. If the operators notice irregularities such as significant color changes or root debris the pipe is referred to the CCTV Inspection Program for further analysis. If debris is accumulated during the line cleaning operation the Vactor unit will be used to remove the debris. More significant amounts of debris may warrant further analysis as part of the CCTV Inspection Program. The Collection Foreman maintains all maintenance records, schedules and supervises the collection system maintenance program.

Hot Spots

The District currently has 54 Hot Spot locations targeting specific reaches of sewer pipes that have a history of grease-related problems of posing higher than normal risk of a spill. The Hot Spots are cleaned on a more frequent basis ranging from weekly to quarterly depending on the severity of the problem. Cleaning of Hot Spots may require multiple passes with the Jetter depending on the condition as well as previous experience.

Root Treatment

When an excessive number of roots are found entering a gravity sewer, the roots are chemically treated so they die back from the sewer pipe. Herbicide foam (Root X) is flushed down the sewer pipe, attaches to the roots, and is absorbed into them. Within a few weeks, they die back from the sewer joint or crack, eliminating growth for two or more years. During the inspection and maintenance of the system areas that have experienced are susceptible to root intrusion are referred to the Root Abatement Program. These areas are then corrected either by physical root cutting or chemical treatment.

Condition Assessments

Pipelines

The District visually inspects the entire collection system on a rotating basis every 5 years. The pan and tilt feature of the District camera system is also used to investigate lateral connections to assess any visible deficiencies. The Collections Foreman maintains all video inspection records and supervises the video inspection program. Any problems identified during the video inspection are scheduled for correction depending on the severity. Copies of the video recording are made and supplied to the Department charged with implementing a repair or correction.

The sewer collection system is broken down into ten (10) maintenance zones. A spot audit program is conducted independently but, in an effort, to supplement the normal Line Cleaning, CCTV Inspection and Root Abatement programs. Line Cleaning and CCTV devote two days per month conducting spot audit CCTV inspections and line cleaning work throughout the system such that representative portions of each maintenance zone are inspected and cleaned at least twice per year.

Condition Assessment - Manholes

The corrosive environment inherent in sewer systems can lead to the deterioration of the concrete in sewer manholes. Left unabated this deterioration can result in addition to debris in the pipeline as concrete breaks off or ultimately a complete collapse of the manhole. During its inspection of each manhole District personnel observe the structural condition of the manhole itself. Manholes that exhibit structural distress are scheduled for repair. Typically, the repair entails a coating of the manhole to prevent further deterioration. The District includes funds to accommodate anticipated manhole coating requirements in its annual maintenance in its annual maintenance budget.

Pump Stations Inspections

The District has an established and comprehensive pump station inspection program including the following details:

• SCADA Monitoring – The District operates an extensive SCADA Monitoring System. The SCADA system provides a real time view of the operating condition of each sewage lift station. Each lift station is equipped with a variety of alarm points that allow District operators to closely monitor the operating status of each facility. Alarm points such as high wet well levels, pump fails, power fails, and check valve fails will allow the District to quickly respond to any problem in an effort to restore operation prior to an overflow. The ability to monitor the operation also positions the operators to target maintenance where appropriate. The SCADA system is equipped with an automatic dialer that will notify the District's on-call personnel in the event of an alarm after normal business hours.

- Regular Inspections The District Pump Stations Department is responsible for the maintenance
 of the District's network of sewage lift stations. Pump Stations personnel visit each lift station on
 regularly scheduled rounds twice each week. The District also has a manhole inspection and
 rehabilitation program in place. Typically, 7 to 10 manholes with problems identified are
 rehabilitated each year.
- <u>Inspection Logs</u> Lift stations inspections (rounds) are completed twice a week. During rounds, inspection logs in GEOVIEWER are maintained to document the condition of the facility. Station data such as pump run hours, discharge pressures and wet well levels are also recorded.
- Regular Maintenance Any problems or maintenance requirements observed during the sewer lift station inspections are forwarded to the Pump Stations Foreman for correction. The Pump Stations Foreman will prioritize and implement any necessary repairs or corrections in a timely manner. Those maintenance issues with the potential to cause a spill will be repaired with the greatest urgency.
- <u>Check Valve Program</u> Each pump discharge line at each lift station is equipped with a check valve and limit switch. Whenever a check valve does not fully open or close an alarm is sent via the PLC to the District SCADA system. The Pump Stations Foreman will direct an operator to "de-rag" the check valve in a timely manner.
- <u>Valve Maintenance Program</u> One of the lift station suction, discharge and check valves is exercised through a full range of motion once each year.
- Pump and Motor Maintenance Program Lift Station pumps and motors are serviced on a rotating basis at a minimum of a biannual basis. The service includes motor stator insulation surge testing, a bake and dip of the motors to recoat the motor windings, a coating of exterior body of the pump and motor and a replacement of all bearings, O-rings, and pump seal. The exterior electrical power cords and pump impellers are visually inspected during the service and replaced as needed.
- Pump Sequencing Each sewer lift station is equipped with a minimum of two pumps. The
 operating hours for each pump are monitored and reported by the SCADA system. This data is
 reviewed daily by the Pump Stations Department to structure the pump sequencing at each facility
 such that the individual pump operating hours are approximately equal. The review of this data
 also serves as a valuable troubleshooting guide or as an indicator of a pump problem.
- <u>Electrical Maintenance Program</u> Electrical maintenance of lift stations is performed on a regular schedule and as needed by the District's Electrical Maintenance Department. The Electrical Maintenance Department performs and annual wire tightening program in each lift station panel. However, the district is migrating to a spring tight termination versus screw tightening to mitigate this issue.
- <u>Component Replacement Program</u> Electrical and mechanical components are scheduled for replacement as they approach their predicted useful service life.
- <u>Lift Station Redundancy Program</u> Each sewer lift station is equipped with a permanently installed back up pump in addition to the pumps necessary to meet the normal peak influent flow demand. The redundant pump is included in the normal "lead / lag" pump sequencing program to ensure it generates run hours similar to each of the other pumps. In the event of a failure of the lead pump the plc will automatically switch to the first lag pump. The PLC will also generate a SCADA system alarm so the Pump Stations Department may initiate corrective action.
- Wet Well Level Monitoring Redundancy The wet well level monitoring functions is also equipped with a redundant backup. All lift stations are equipped with two sonic level meter units in the electrical control panel and redundant transponders mounted in the wet well. In the event of a failure of either the level sensor or the transponder the wet well level data will continue to be seamlessly transmitted to the PLC by the redundant sonic meter or transponder. Any failure of a

component of the level metering system will generate an alarm at the PLC which will be transmitted to the Central SCADA system at the District Operations Center. If the level sensing system has failed, the PLC would still receive high wet well level alarms from backup float balls installed in each wet well.

- <u>PLC Power Supply</u> Each PLC is equipped with a redundant power supply. In the event of a failure of either the SCE power source or the backup generator, power the PLC will continue to seamlessly operate while also generating an alarm to the SCADA system.
- Spare Parts The District maintains an inventory of spare parts for each lift station. The spare parts inventory includes one spare pump and motor for each lift station, spare flexible discharge piping and clamps for the submersible lift stations and spare drive shafts for the lift stations with drive shafts. In the event of a failure of any of these items the spare is immediately installed while the original components are repaired or replaced to restore the spare parts inventory.
- Backup Pumping System The operation of the sewer lift stations is controlled by the stand-alone Programmable Logic Controllers (PLCs). In the event of a failure of the PLC, the sonic level meters mounted in each wet well are capable of controlling and staging the pumps based on predetermined level set points until operation of the PLC has been restored. A failure of a PLC will generate an alarm to the District SCADA system.
- <u>Management Inspections</u> The Operations Superint. will randomly conduct inspections of the sewer lift stations. The inspections will be conducted such that every lift station in the District is inspected annually.

Pump Stations Backup Power

The operation of the District's network of sewer lift stations is dependent upon power supply from Southern California Edison. The interruption of the incoming power supply has the potential to disrupt the operation of sewer lift stations and hereby generate a spill. To mitigate the potential for a power failure to create a spill the District has made a significant investment in standby power facilities. The District has installed stationary generators complete with automatic transfer switches at 8 of its 11 lift stations. A ninth generator is installed, without a transfer switch, at another lift station. The remaining two stations have ample storage capacity to permit the mobilization of any of the District's two portable generators in the event of a power failure. The District's Operation Center is also equipped with a stationary generator and automatic transfer switch. This facility will ensure the Operations Center, and the SCADA system will function in the event of a power failure. Each station is equipped with alarm points to notify the Central monitoring station of any power interruptions.

Each station is also equipped with a portable power generator receptacle connection with Kirk Interlock Protection systems. In the unlikely event of a simultaneous power interruption and failure of a stationary generator the District will mobilize a portable generator to the site. Each stationary generator is equipped with an alarm point to notify the Central Monitoring System of a generator fail condition. The District maintains two portable generators equipped with cables and plugs for each size of Motor Control Center in the District system. At least one generator is connected to a vehicle at all times for purposes of immediate mobilization.

Preventative O/M (Rocks, Debris and Vandalism)

Locking Manhole Covers – In areas where the District has had problems with vandalism or debris in manholes, locking manhole covers have been installed. These covers prevent unauthorized opening of the manhole and reduced access to vent holes thereby mitigating against debris entering the manhole.

Repair Program - Pipelines

Pipeline breaks or structural failures in the collection system are typically identified by the CCTV Inspection Program. Any structural problems in sewer mains or the public portion of the sewer lateral resulting from root intrusion are referred to the District Operations Department for repairs. The Operations Superint. prioritizes the repairs on a scale of 1-4. The Operations Department schedules repairs according to priority.

<u>Grease Control</u> – Refer to Element 7 below for details.

5. Design and Performance Provisions

5.1. Updated Design Criteria/Construction Standards/Specifications

WDR REQUIREMENTS

Attachment D-5.1 (pg. D-5)

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

COMPLIANCE

The District has specific design and construction standards in place. The District Design and Construction Standards for Sewer Facilities govern the design and construction of newly constructed sewer facilities and rehabilitations. These standards are updated periodically. Design and construction standards include specifications and details for all sewer facilities such as, pipe materials, minimum sizes, slopes and cover, pipe bedding and backfill, structure standards and many other factors.

The District has specific design and construction standards in place that govern the design and construction of newly constructed sewer facilities and rehabilitations. The District updates these standards periodically. General design and construction notes are available on the District's website at <a href="https://example.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample.com/thesample

EFFECTIVENESS

The District utilizes the following Key Performance Indicators for measuring effectiveness of this Element:

Are plan checking QA/QC processes helping to ensure adherence to the standards?

IMPLEMENTATION PLAN/SCHEDULE

No.	Plan	Schedule	Responsible Party		
			LRO	Superint. + Engr.	CF
5.1.1	Ensure all project plans are approved in accordance with the District's Standard Specifications and Details.	Each Project		X	
5.1.2	Verify design standards and hydraulic model previously completed are adequate and consistent with current standards of practice.	2025		X	

5.2. Procedures and Standards

WDR REQUIREMENTS

Attachment D-5.2 (pg. D-5)

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

COMPLIANCE

The District adheres to the latest edition of the Greenbook Standard Specifications for Public Works Construction for testing all newly constructed sewer facilities. Testing is typically performed by the contractor and witnessed by a District inspector to verify compliance with District standards. Required tests may include vacuum testing of manholes, low-pressure air testing of sewer lines, mandrel testing for deflection, and closed-circuit television (CCTV) inspection. All newly constructed sewer assets must be designed, constructed, tested, and inspected in accordance with the District's Standard Drawings and the latest Greenbook specifications.

EFFECTIVENESS

The District utilizes the following Key Performance Indicators for measuring effectiveness of this Element:

- Were any design or installation deficiencies found during warranty inspections?
- Are deviations from standard procedures and/or specs, testing, etc., justified and documented?
- Does the District stay abreast of industry design standards and technical advances in the industry?

IMPLEMENTATION PLAN/SCHEDULE

No.	Plan	Schedule	Responsible Party		
			LRO	Superint.	CF
5.2.1	Verify inspection procedures are adequate and consistent with current standards of practice	Continuously			X
5.2.2	Verify design standards and hydraulic model previously completed are adequate and consistent with current standards of practice.	Continuously			X

RESILIENCE

Resilience is addressed in Element 5 by:

- Staying abreast of industry trends and standards.
- Performing warranty inspections of newly installed or repaired assets to evaluate design and installation practices.
- Evaluating as-built changes for trends and areas for design and performance improvements.

APPENDIX 5 INCLUSIONS

6. Spill Emergency Response Plan

WDR REQUIREMENTS

Attachment D-6 (pg. D-6)

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

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

COMPLIANCE

The District's Spill Emergency Response Plan (SERP) is a stand-alone document that contains all the key elements necessary for an appropriate spill response: notification, emergency incident response, reporting, and impact mitigation. The current plan is being prepared by Fischer Compliance, LLC on contract, to meet and exceed the requirements of the WDR, which became effective on June 5, 2023, expected to be completed in August 2025. A copy of the SERP will be available for viewing at the District office upon request.

EFFECTIVENESS

The District utilizes the following Key Performance Indicators for measuring effectiveness of this Element:

- Have staffs' spill response efforts helped to prevent the discharge of sewage to surface waters?
- Do post-spill assessments indicate staff are following the procedures outlined in the SERP?
- Is SERP training effective and are trainees demonstrating adequate knowledge and abilities?

IMPLEMENTATION PLAN/SCHEDULE

No.	Plan	Schedule	Responsible Party		
			LRO	Superint.	CF
6.1	Perform SERP training including practice drills.	Annually		X	Х
6.2	Review Post Spill Assessments to ensure adherence with the SERP and to identify any trends that should be addressed.	Annually		x	Χ

RESILIENCE

Resilience is addressed in Element 6 by:

- Multiple staff are trained to respond to spill events.
- Post-spill assessments are conducted to evaluate staff's adherence to the SERP and to identify areas for improvement.
- Data collection forms are used to direct staff to collect all the required data to be submitted to CIWQS and are designed as a guide to a proper spill event response.
- The District employees several different spill volume estimation methods to account for different circumstances.

APPENDIX 6 INCLUSIONS

7. Sewer Pipe Blockage Program

WDR REQUIREMENTS

Attachment D-7 (pg. D-7)

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

The procedures must include, at minimum:

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

COMPLIANCE

In many sanitary sewer collection systems, Fats, Oils, and Grease (FOG) is known to be a significant cause, and or contributor, of sewer blockages in pipe and the cause of operational disruptions and damage to sewage pump stations. Although service areas that include commercial and institutional food service establishments (FSEs) are obvious sources of FOG, residential communities, especially those of medium and high-density multi-family residences, can also be a significant source of FOG.

Plan/Schedule (Outreach)

The District has an established public education outreach program for Fats, Oils and Grease (FOG) related issues administered under the District's industrial waste/pre-treatment program. The District makes an aggressive effort to educate its commercial and residential customers regarding the potential damage from grease in the sewer system. This effort is made up of articles in the District newsletter as well as presentations at homeowner's group meetings and Community Advisory Group meetings.

Plan/Schedule (Disposal)

Pipe blocking substances collected during maintenance activities, primarily through cleaning, are collected and disposed of. The debris that is removed from the sewer mains is separated into solid and liquid waste tanks as it is vacuumed into a debris tank and dumped into bins at the Water Recycling Plant.

Legal Authority

Fats, Oils & Grease Control Regulations Applicable to Food Service Establishments, are required per <u>Section</u> 13000 of the El Toro Water District Administrative Code, adopted June 26, 2025.

Requirements (Grease Removal Devices)

Fats, Oils & Grease Control Regulations Applicable to Food Service Establishments, are required per <u>Section</u> <u>13000 of the El Toro Water District Administrative Code</u>, adopted June 26, 2025, including grease removal devices.

Authority to Inspect

FOG inspections are conducted periodically by trained District staff at restaurants and other commercial FSE's.

Hot Spot Program

The District has identified portions of its collection system subject to excessive grease and other pipe blocking substances as part of its Hot Spot maintenance program (see Specification 5.19 above for more details).

<u>Identification of Source Control Measures</u>

The most important preventative maintenance practice related to grease control is the determined effort to minimize the amount of grease introduced into the system. The District Collections Foreman monitors the activities and inspects the facilities of each restaurant of food establishments within the District service area. Grease removal devices are required in all new food establishments. The Collections Foreman has the discretion to determine the adequacy of the grease removal device.

For additional information, the District maintains an internal FOG Control Program Operations Manual available for review upon request.

EFFECTIVENESS

The District utilizes the following Key Performance Indicators for measuring effectiveness of this Element:

- Have there been any blockages/spills from any identified problem area?
- Is the District receiving feedback on public outreach efforts?
- Are the debris and other sewage solids collected during cleaning activities being disposed of appropriately?
- Have there been spills due to excessive fats, oil, grease, roots, or non-dispersible wipes discovered in the sewer system during the audit period?
- Are there repeat offenders among FSEs?
- Are enforcement trends decreasing?
- Are Source Control and Collection staff included in the plan check process?

IMPLEMENTATION PLAN/SCHEDULE

No	Plan	Schedule	Re	rty	
			LRO	Superint. + Engr.	CF
7.1	Review/evaluate enforcement and inspection findings and implement changes as necessary.	Annually		X	Х
7.2	Review spill rates and causes and make changes to maintenance programs, as necessary.	Annually		x	х

RESILIENCE

Resilience is addressed in Element 7 by:

- Inspection of select assets directly downstream of grease producing businesses to ensure source control is effective.
- Residential FOG outreach and education program.
- Performance of regular assessments of system assets to monitor performance.
- QA/QA process for evaluating pipe cleaning effectiveness.
- Daily disposal of pipe blocking materials retrieved during maintenance activities.

APPENDIX 7 INCLUSIONS

8. System Evaluation, Capacity Assurance, Capital Improvements

WDR REQUIREMENTS

Attachment D-8 (pg. D-7)

"The Plan 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."

8.1. System Evaluation and Condition Assessment

WDR REQUIREMENTS

Attachment D-8.1 (pgs. D-7/D-8)

"The Plan must include procedures to:

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

COMPLIANCE

The above requirements are addressed below:

- a. The assessment of a collection system involves every component of the District's collection system, including pipelines, manholes, and pump stations. It is of key importance to regularly perform asset condition assessments to initially establish a condition baseline and to monitor condition changes over time.
 - The District uses CCTV inspection equipment for spot checking for blockages and specific investigations of pipe blocking substances where necessary. This is made possible by maintaining historic records of inspection and maintenance activities and institutional knowledge.
- b. As discussed in Specifications 5.10, currently, the District's CCTV return interval is once every 5 years. The entire system has been inspected multiple times and staff has monitored pipe performance. Structural defects are a higher priority and are addressed in a prioritized manner. The District takes an adaptive approach and continuously monitors and evaluates pipe performance and assessment schedules to determine the optimal Assessment interval.
- c. A condition assessment of a sewer pipeline or manhole produces information regarding the deficiencies of those facilities. To prioritize the deficiencies, the District uses its Geoviewer Computerized Maintenance Management System (CMMS.) Each manhole in a sewer system is given an identification number and entered into the CMMS. Each portion of the sewer pipe between two manholes is identified by its upstream and downstream manhole numbers. As information is entered from televised (CCTV) logs of sewer pipelines and manholes, the CMMS uses its native software ratings to determine the severity of the deficiency or deficiencies. The CMMS is queried to prioritize the deficiencies using national standards.
- d. Once a condition assessment of all or a portion of a sewer system has been completed, identified deficiencies are prioritized, short/long-term rehabilitation and replacement measures determined, and a time schedule for such work can be developed.
- e. The District is not aware of any exiting of sewage from its system. However, it is recognized that where there are areas of infiltration, should the water tables drop below the pipe itself, there is the potential, even though unlikely in most cases, for exfiltration. Infiltration defects have been assigned a higher risk factor and are prioritized accordingly.
- f. Inspection and assessment activities are documented in the District's CMMS. All collected data is used for the purpose of documenting maintenance efforts, evaluating system performance, and making maintenance and corrective action decisions today and into the future.
- g. The District has determined that the collection system is not currently impacted by climate change impacts, as detailed in the WDR requirements listed above. The potential for these impacts will be periodically monitored, at least every three years during the SSMP audit cycle, so the District will be in a position to anticipate possible impacts and be prepared to act, as needed.

EFFECTIVENESS

The District utilizes the following Key Performance Indicators for measuring effectiveness of this Element:

- Has the District maintained its schedule for inspecting the sewer assets listed below and is data being reviewed in a timely manner?
 - o CCTV Gravity Mains
 - Laterals
 - Manholes
 - Pump Stations
- Are inspection efforts discovering deficiencies in a timely manner?
- Are maintenance and inspection activities being properly performed as scheduled?

IMPLEMENTATION PLAN/SCHEDULE

No.	Plan	Schedule	Responsible Party			
			LRO	Superint. + Engr.	CF	
8.1.1	Review/evaluate enforcement and inspection findings and implement changes as necessary.	Annually		X	X	
8.1.2	Review spill rates and causes and make changes to maintenance programs, as necessary.	Annually		Х	х	
8.1.3	Hold meeting to discuss any issues that may result from climate changes.	Annually	X	X	X	

8.2. Capacity Assessment and Design Criteria

WDR REQUIREMENTS

Attachment D-8.2 (pgs. D-8/D-9)

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

- Dry-weather peak flow conditions that cause or contributes 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
- Identify the major sources that contribute to the peak flows associated with sewer spills.

The capacity assessment must consider:

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

COMPLIANCE

To evaluate the capacity of a given sewer system, a hydraulic model is needed. A hydraulic model is a calculation of the expected sewage flows in any given location of sewer system, based on assumed and/or measured design criteria. The Master Plan modeling (APP 8.1) shows that the District's collection system does not spill at dry-weather flow conditions The District did not specifically model to identify when spills would occur. Rather, the District simulated the 10-year, 24-hour storm condition to identify the peak flow event (see Appendix 8.1).

EFFECTIVENESS

The District utilizes the following Key Performance Indicators for measuring effectiveness of this Element:

- Number of capacity-related spills or surcharge condition during the audit period.
- Has the system responded to rain events as indicated by the hydraulic model?
- Has there been any changes to zoning designations (residential, commercial, industrial)?

SYSTEM EVALUATION, CAPACITY ASSURANCE, CAPITAL IMPROVEMENTS

IMPLEMENTATION PLAN/SCHEDULE

No	Plan	Schedule	Re	rty	
			LRO	Superint. + Engr.	CF
8.2.1	Monitor/evaluate significant rain events to see if they exceed the design storm in the hydraulic model.	Each significant rain evet		X	X
8.2.2	Identify and monitor flood-prone areas susceptible to erosion from rain events	After each significant rain event		X	X
8.2.3	Monitor flows in each basin and update the hydraulic model	Per Engineering Department schedule			X

8.3. Prioritization of Corrective Action

WDR REQUIREMENTS

Attachment D-8.3 (pg. D-9)

"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."

COMPLIANCE

The District's hydraulic analysis concluded that the existing sewer system has sufficient capacity to convey all anticipated dry weather flows. While minor surcharges may occur in isolated areas during wet weather events, these conditions are not expected to lead to sanitary sewer overflows.

To proactively address identified deficiencies and ensure continued system reliability, the District is moving forward with the following lift station improvement initiatives:

- Aliso Creek Lift Station: Recent pump performance testing identified inadequate firm capacity. The
 District is currently finalizing the design to resolve this issue, with construction scheduled to begin
 within approximately two years.
- Systemwide Electrical Upgrades: Electrical system improvement projects are underway at all lift stations. These upgrades will modernize aging infrastructure and ensure full compliance with updated electrical codes and arc flash safety requirements.

EFFECTIVENESS

The District utilizes the following Key Performance Indicators for measuring effectiveness of this Element:

- Has the District adhered to its system evaluation/condition assessment schedule?
- Has the District adhered to its prioritization/corrective procedures for sewer repair and capacity improvement projects?
- Have projects been completed before deficiencies caused failures?

IMPLEMENTATION PLAN/SCHEDULE

No.	Plan	Schedule	Responsible Party		
			LRO	Superint.	CF
8.3.1	Utilize all available data for prioritizing corrective actions considering severity and consequences of potential spills.	Each CIP Update		X	Х
8.3.2	Maintain documents and recordkeeping of system evaluation and condition assessment inspections and activities.	Continuously		X	X

8.4. Capital Improvement Plan

WDR REQUIREMENTS

Attachment D-8.4 (pg. D-9)

"The capital improvement plan must include the following items:

- Project schedules include completion dates for all portions of the capital improvement program;
- Internal and external project funding sources for each project; and
- Joint coordination between operation and maintenance staff, and engineering staff/consultants during planning, design, and construction of capital improvement projects; and interagency coordination with other impacted utility agencies."

COMPLIANCE

The District's Capital Improvement Plan (CIP) identifies these projects as well as their funding.

District Operations and Engineering staff meet bi-weekly to discuss and coordinate efforts in the planning, development and construction of all associated sewer system capital improvement projects.

EFECTIVENESS

The District utilizes the following Key Performance Indicators for measuring effectiveness of this Element:

Has the District's capital improvement plan schedule been adhered to?

IMPLEMENTATION PLAN/SCHEDULE

No.	Plan	Schedule	Responsible Party		
			LRO	Superint. + Engr.	CF
8.4.1	Hold regular coordination meetings, with all parties, to help keep the projects on track and resolve issues that may arise in a timely manner.	Annually		х	Х
8.4.2	For schedules that are not followed, justify and document the reason.	Each Delayed Project			х

RESILIENCE

Resilience is addressed in Element 8 by:

• Is there an annual review of the Capital Improvement Plan by all appropriate individuals including both Engineering and Operations?

SYSTEM EVALUATION, CAPACITY ASSURANCE, CAPITAL IMPROVEMENTS

APPENDIX 8 INCLUSIONS

- 8.1 Sewer Master Plan
- 8.2 Capacity Assessment and CIPs
- 8.3 El Toro Water District Annual Budget FY 2025-2026

9. Monitoring, Measurement, and Program Modifications

WDR REQUIREMENTS

Attachment D-9 (pg. D-9)

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

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

COMPLIANCE

The above requirements are addressed below.

The District maintains accurate and relevant inspection and maintenance records for the collection system. Much of the documentation today is maintained electronically, which allows for ease of access and analysis. This helps District staff to make sound decisions and prioritize activities when dealing with the routine and the unexpected.

Monitoring of the District's SSMP focuses on each element in terms of its implementation and effectiveness. The SSMP has been designed to include key performance indicators for each element, which are used to measure effectiveness. In addition, implementation responsibilities are included for each element to help ensure the SSMP is being implemented as intended.

The District assesses the success of maintenance and operation activities by ensuring activities are performed as expected, by monitoring actual outcomes compared to intended outcomes, as well as monitoring spill trends.

The District is committed to continuous improvement and monitors and evaluates performance of work programs and SSMP elements to ensure intended outcomes are achieved while looking for areas for improvement. Although the SWRCB requires that the SSMP be updated every six years, the SSMP should be considered as a dynamic document and may require updating on a more frequent basis. Routine changes to administrative information, notwithstanding, minor changes will likely be required to address improvements identified through the SSMP Audit or through modifications required as conditions change.

The District monitors spill trends, at a minimum every three years during required audits, utilizing the CMMS database, inspection records and CIWQS data. These resources are helpful in planning and programing work, and adjusting as needed, enabling the District to be adaptive and capitalize on lessons learned.

EFFECTIVENESS

The District utilizes the following Key Performance Indicators for measuring effectiveness of this Element:

- Are SSMP Elements being periodically evaluated for effectiveness?
- Are work activities and spill events being documented?
- Has a plan and schedule been established to address audit findings/deficiencies from the last audit?
- Is Trend Analysis being performed on spill causes?
- Have work programs been assessed and updated as necessary?

IMPLEMENTATION PLAN/SCHEDULE

No.	Plan	Schedule	Responsible Party		
			LRO	Superint.	CF
9.1	Assess work programs to ensure outcomes are as intended.	Annually		X	X
9.2	Prepare updates to work programs and the SSMP based on assessments.	As Needed		X	X
9.3	Monitor and evaluate spill trends. Document efforts.	Annually		X	Х

RESILIENCE

Resilience is addressed in Element 9 by:

- Development of key performance indicators to measure effectiveness of the SSMP.
- Performing periodic reviews of the SSMP to help ensure it is being properly implemented.
- Developing and adhering to a timeline to correct deficiencies found during the audit process.
- Periodically evaluating work programs to help ensure effectiveness.

APPENDIX 9 INCLUSIONS

10. Internal Audits

WDR REQUIREMENTS

Attachment D-10 (pg. D-10)

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

COMPLIANCE

The District completed its last SSMP Audit in February 2025 (see Appendix 10.1) and will complete audits every three years moving forward. The objective of the audit is to evaluate compliance, implementation and effectiveness of the SSMP. Additionally, the SSMP includes a description of how the District will comply with the requirements of each WDR Element. The audit review includes an evaluation to determine whether the District is continuing to maintain compliance with the WDR.

<u>Implementation</u> is evaluated by determining whether the District is continuing to execute the SSMP as stated.

<u>Effectiveness</u> is evaluated by using key performance indicators, which have been developed specifically for each Element.

<u>Resilience indicators</u> have been developed for each Element. These indicators serve to demonstrate how resilience is built into the District's SSMP and inspection, maintenance and spill response activities. Any deficiencies discovered through the District's SSMP Audit process are noted and a plan and schedule to implement corrective measures are established.

EFFECTIVENESS

The District utilizes the following Key Performance Indicators for measuring effectiveness of this Element:

- Have audits been performed as required?
- Have the audits assessed compliance, implementation, and effectiveness?
- Have deficiencies been identified?
- Has a plan and schedule to rectify the deficiencies been established?

IMPLEMENTATION PLAN/SCHEDULE

No.	Plan	Schedule	Responsible Party		rty
			LRO	Superint.	CF
10.1	Schedule audits in advance of due dates to ensure adequate time to complete. District has 6 months to complete the audit from the end of the audit period.	Beginning at end of audit period		X	X
10.2	Ensure a plan and schedule is developed to address deficiencies.	Once the Audit is completed		x	X

RESILIENCE

Resilience is addressed in Element 10 by:

- Periodically evaluating key performance indicators during the audit period to assess effectiveness and make corrections, if necessary, prior to the audit.
- Evaluating previous audits to ensure deficiencies have been rectified.
- Scheduling the audit due dates and completing the audit on time.

APPENDIX 10 INCLUSIONS

• 2021-2024 SSMP Audit Report (Fischer Compliance LLC)

11. Communication Program

WDR REQUIREMENTS

Attachment D-11 (pg. D-10)

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

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

COMPLIANCE

When the District experiences a spill, it is standard procedure to secure the affected area and keep the public away. This is generally done using barricades, cones and caution tape. Should the District experience a spill that may require closure of public areas or enter a source drinking of water, signs will be immediately placed indicating the issue and providing contact information. Staff will remain on site to provide an additional safety factor until appropriate authorities respond and direct otherwise. In all cases, the District will follow the advice of higher authorities, such as the local environmental health department and other regulatory authorities. The District has a Public Information Officer who is utilized when needed.

There are several opportunities for stakeholders and the public to participate and provide input into the development and update of the District's SSMP. During its initial development stage, as with each SSMP update the SSMP and related documents are presented to the District Board of Directors review and approval. SSMP updates are now required every six years.

The District does not currently have satellite systems but maintains informal mutual partnerships with neighboring collection system agencies and also is a member of <u>WEROC</u> to improve ongoing communications with other collection system agencies, especially with supporting the District with emergency response operations for spills.

EFFECTIVENESS

The District utilizes the following Key Performance Indicators for measuring effectiveness of this Element:

- Does the District place all SSMP action items on the agenda for regular counsel/board meetings?
- Does the District have signage, or other means, readily available to notify the public of environmental or public risk factors related to a sewage spill?
- Does the District perform outreach to residential customers?

IMPLEMENTATION PLAN/SCHEDULE

No.	Plan	Schedule	Responsible Party		
			LRO	Superint.	CF
11.1	Ensure the Board of Directors approves the SSMP per schedule.	Every 6 years		X	х
11.2	Ensure the SSMP is posted on the District website and the link functions properly.	Annually		X	Х
11.3	Ensure Sewage Spill Warning signs are readily available to communicate with the public when necessary	Annually			Х

RESILIENCE

Resilience is addressed in Element 11 by:

- Use the SSMP as a tool to communicate to the public how the District is managing the system.
- Maintain a consistent presence in the service area by attending community events or issuing periodic newsletters or other communications to the public.
- Make it clear and easy for the public to contact the District.

APPENDIX 11 INCLUSIONS

LIST OF APPENDICIES

APPENDIX 1	• None
APPENDIX 2	• None
APPENDIX 3	• None
APPENDIX 4	• None
APPENDIX 5	• None
APPENDIX 6	• None
APPENDIX 7	• None
APPENDIX 8	 8.1 Sewer Master Plan 8.2 Capacity Assessment and CIPs 8.3 El Toro Water District Annual Budget FY 2025-2026
APPENDIX 9	• None
APPENDIX 10	• 10.1 2021-2024 SSMP Audit Report (Fischer Compliance LLC)
APPENDIX 11	• None