

Sewer System Management Plan (SSMP)

2025 Update

Sanitary Sewer Collection System for
Waste Discharge ID (WDID): # 2SSO10181



REVIEWED AND APPROVED BY:

Hayes Morehouse, Water Pollution Control Manager
Legally Responsible Official
City of San Leandro
Sanitary Sewer Collection System
(includes Element Development Plans & Schedules)

PREPARED BY:



Date Signed

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SSMP CHANGE LOG

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SSMP CHANGE LOG

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City of San Leandro
Att: Hayes Morehouse
Legally Responsible Official (LRO)
3000 Davis Street
San Leandro, CA 94577

Dear Mr. Morehouse,

We are pleased to present the new 2025 Sewer System Management Plan (SSMP) Update developed in partnership with the City of San Leandro's management. The 2025 Update meets and exceeds compliance with the 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 City's latest SSMP Audit findings.

The 2025 SSMP is a declaration of what the City is doing to demonstrate full compliance with the WDR. Attachment A of the 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." We suggest that the City review the SSMP on a regular basis, and as required by the WDR, continuously document changes to its SSMP in a change log attached to the Plan.

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

Sincerely,

A handwritten signature in black ink that reads 'James Fischer'.

James Fischer, P.E.
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 City of San Leandro (City) 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 No. WQ 2022-0103-DWQ for Sanitary Sewer Systems (referred to throughout this document as the WDR). The City provided all details, information and institutional insights for preparation of the SSMP. The document has been developed to meet the size, scale, and complexity of the City, serving as a “living document” used as a tool for managing and operating the City's sanitary sewer collection system. Additionally, the latest 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 document to harmonize formatting/content and incorporate recommended suggested guidance wherever possible.

The City's commitment to meeting regulatory requirements, along with its proactive approach to operation and management of the collection system, has served it well, as evidenced by the system's performance relative to other agencies in the region and the state.

Figure 1 provides key spill metrics, including data comparing the City's spill record with state and regional system data for the five-year period of May 2020 through June 2025. The City 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.

General Information						
<u>Region</u>	<u>Place ID</u>	<u>Place Name</u>	<u>CS Category</u>	<u>Place Address</u>	<u>Place County</u>	
2	630999	San Leandro CS	Municipal(Public)	835 14Th San Leandro CA 94550	Alameda	

Collection System Spill Summary							
Operational Indices: San Leandro CS							
Spill Rate Index (spills/100mi/yr)							
	Category 1			Category 2		Category 3	
	Main System	Laterals	Other	Main System	Other	Main System	Other
San Leandro CS	0.3	N/A	0.0	0.0	0.0	1.33	0.0
State Municipal(Public) Average	1.63	N/A	0.85	0.93	1.3	2.26	0.44
Region Municipal Average	2.84	N/A	0.69	0.79	0.05	3.27	0.63

Net Volume Spills Index (gallons/1000 Capita/yr)							
	Category 1			Category 2		Category 3	
	Main System	Laterals	Other	Main System	Other	Main System	Other
San Leandro CS	198.97	N/A	0.0	0.0	0.0	0.13	0.0
State Municipal(Public) Average	3316.18	N/A	1686.91	167.28	1081.93	43.71	13.96
Region Municipal Average	-2761.34	N/A	1488.73	131.01	0.87	80.9	45.04

Figure 1 -Collection Spill Summary: Operational Indices for City with State and Regional Data

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 City's approach to complying with the WDR requirements.
3. Effectiveness – As measured by Key Performance Indicators (KPIs.)
4. Implementation – Demonstrates how the City 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 City's collection system and procedures.
6. Appendix Inclusions – List the items included in the Appendix for each SSMP Element, if any.

Abbreviations and Acronyms

BMP	Best Management Practices
CCTV	Closed Circuit Television
CIP	Capital Improvement Program
CIPP	Cured in Place Pipe
CIWQS	California Integrated Water Quality System (State Water Board Online Spill Database)
CMMS	Computerized Maintenance Management System
ENG	Engineering
EPA	US Environmental Protection Agency
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
MGR	Water Pollution Control Manager
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
SUP	Collections Supervisor
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

[Att. 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

[Att. 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 City is committed to fully implementing the WDR which includes addressing all requirements by integrating a wide range of programs specifically designed for ensuring the integrity and efficiency of the City’s sanitary sewer collection system. Moreover, the City 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, pump station maintenance, root control, and source control, 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 City 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

1.2. SSMP Update Schedule

WDR REQUIREMENTS

[Att. 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 City utilizes the State Water Board’s online lookup tool to ensure compliance with all required due dates for updating its SSMP and completing its required SSMP Audits (see chart below). The City’s most recent SSMP audit was completed for the period August 2021 through August 2024.

Sewer System Management Plan & Subsequent Update Due Dates					
System Name	WDID Number	Original Plan Required Due Date	Required Plan Update Due Date	Required Plan Update Due Date	Required Plan Update Due Date*
San Leandro CS	2SSO10181	8/2/2009	8/2/2014	8/2/2019	8/2/2025

Audit Due Dates								
System Name	WDID Number	Original Required Plan Audit Due Date	Required Plan Audit Due Date	Required Plan Audit Due Date	Required Plan Audit Due Date	Required Plan Audit Due Date	Required Plan Audit Due Date	End of Required 3-Year Audit Period**
San Leandro CS	2SSO10181	8/2/2011	8/2/2013	8/2/2015	8/2/2017	8/2/2019	8/2/2021	8/2/2024

Figure 2 - Sewer System Management Plan, Subsequent Update and Audit Due Dates

EFFECTIVENESS

The City 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		
			Mgr	Eng	Sup
1.2.1	Prepare for next SSMP Audit	Begin 5/2/2027	X		X
1.2.2	Complete and Upload next SSMP Audit	By 11/2/2027	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 5/2/2030	X		X
1.2.5	Complete and Upload next SSMP Audit	By 11/2/2030	X		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	X		X
1.2.8	City Council approval deadline for next SSMP Update	By 8/2/2031	X		X

1.3. Sewer System Asset Overview

WDR REQUIREMENTS

Att. 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 county(ies);*
- *Service area boundary;*
- *Population and community served;*
- *System size, including total length in miles, length of gravity mainlines, length of pressurized (force) mains, and number of pump stations and siphons;*
- *Structures diverting stormwater to the sewer system;*
- *Data management systems;*
- *Sewer system ownership and operation responsibilities between Enrollee and private entities for upper and lower sewer laterals;*
- *Estimated number or 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 City of San Leandro is in Alameda County and encompasses approximately 13 square miles. As of 2024, the City had a population of 86,571. The City maintains roughly two thirds of the sewers within the City limits, primarily serving the northern portion of the City. The remainder of the City is served by the Oro Loma Sanitary District. The sewage from the City sewer system is conveyed to and treated at the San Leandro Water Pollution Control Plant (WPCP).

The City’s wastewater collection system serves approximately 71,000 people in the service area shown in Figure 3, below. The sewer system consists of 122 miles of gravity sewers, 3 miles of force main, 12 lift stations, and 2,383 manholes. Most of the pipelines were constructed from 1940 to 1979 while most of the lift stations were constructed from 1940 to 1959.

The City has one siphon and no stormwater diversion structures.

The City uses RedZone Robotics’ ICOM3 to manage the collection system preventive maintenance program. The City is actively working on updating ICOM3 to a new RedZone product called Integrity. The City uses ArcGIS for its mapping.

There are approximately 19,000 upper and lower service laterals connected to the system. The City owns 19 of these laterals (i.e., on City-owned property). Other than those on City-owned property, the City is not responsible for any of the laterals. The property owner is fully responsible for maintenance and repair of the private sewer laterals.

The percentage of residential, commercial, and industrial service connections is shown in Table 2, below.

Overall, the City is in a good position to maintain its collection system. It has not identified any unusual challenges other than a portion of the City is served by the Oro Loma Sanitary District collection system.

The City maintains up to date maps of its collection system.

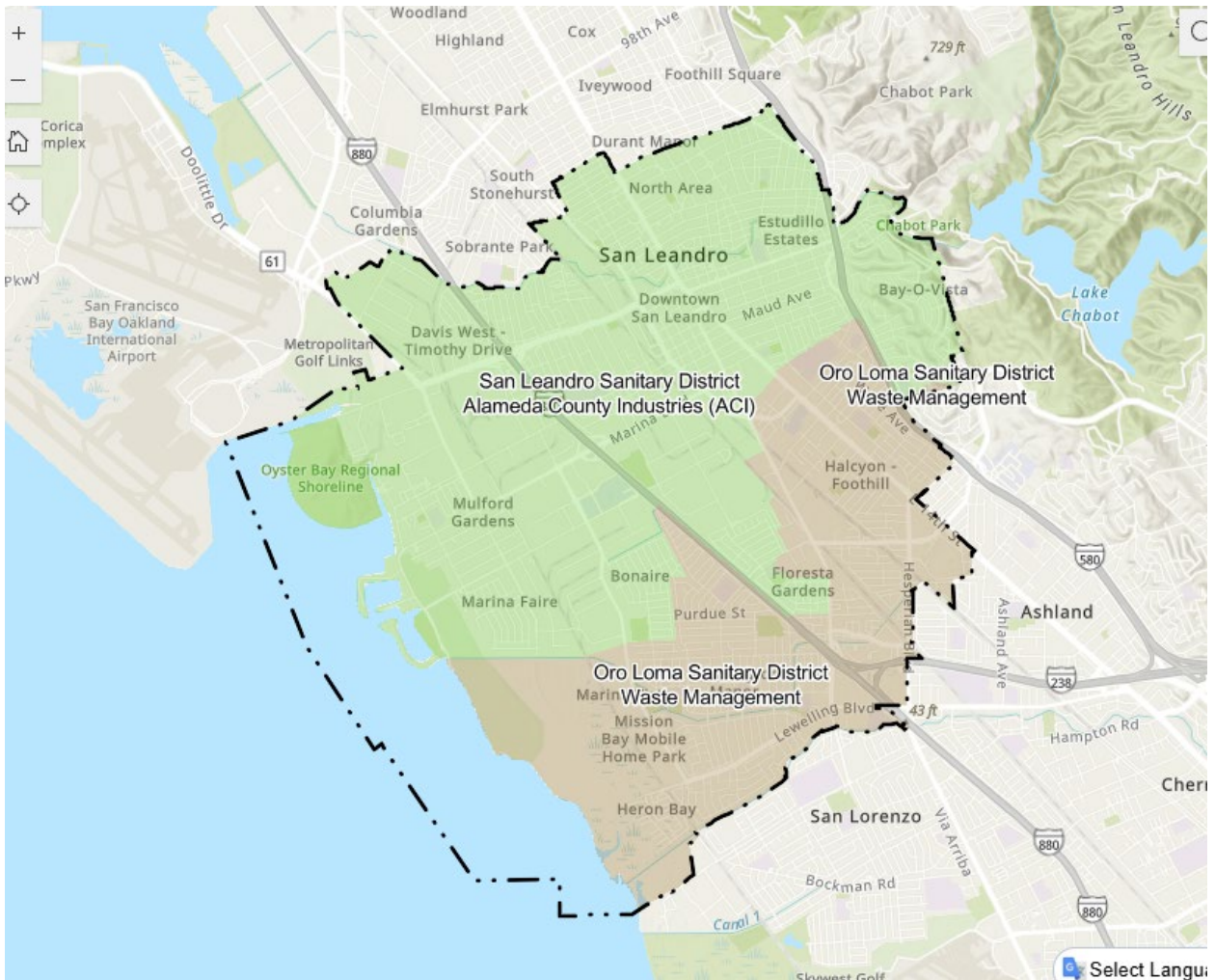


Figure 3 - City Vicinity Map and Service Area

Use Type	Number or % of Connections
Residential	unknown
Commercial	unknown
Industrial	unknown
Total	Approximately 1,200

Table 2 - City sewer connection flow classifications and connections data

EFFECTIVENESS

The City 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		
			Mgr.	Eng	Sup
1.3.1	Review City-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	Update maps.	Within 30 Days of Submittal of Completion of Development Project		IT Dept	

RESILIENCE

Resilience is addressed in Element 1 by:

- Implement a system for collecting and managing asset data.
- 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 Enrollee 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 Plan, 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

The City's current Sewer System Management Plan (SSMP) has been updated to meet the requirements of Order WQ 2022-0103-DWQ and addresses the required Elements. The SSMP addresses management, operations and maintenance procedures specific to the City’s collection system. The City 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 City keeps up with current industry standards, technology and best practices by reviewing industry periodicals, networking, attending training classes, and attending industry conferences and workshops. The City continuously evaluates emerging practices, equipment and technologies for possible implementation to enhance sewer operations.

Specifications 5.7 – Allocation of Resources

WDR REQUIREMENTS

Specification. 5.7 (pg. 22)

“The Enrollee 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:*
- *Compliance with this General Order,*
- *Full implementation of its updated Sewer System Management Plan,*
- *System operation, maintenance, and repair, and*
- *spill responses.”*

COMPLIANCE

In 2024, the City's Water Pollution Control Division completed a Needs Assessment to better understand the projects required to maintain the City's wastewater infrastructure. The City's Water Pollution Control Plant went into operation in 1939 and most recently completed an upgrade in 2017. The sewer collections system which includes 125 miles of sewer pipeline and 12 lift stations throughout the service area is also in need of maintenance and upgrades. The [Capital Improvement Program](#) (CIP) for Wastewater Treatment and Collections 10 Year Plan was presented to and approved by City Council at the October 21st, 2024 City Council Meeting.

The City hired Bartle Wells Associates to perform a [Sewer Rate Study](#) to evaluate and project financial requirements in order to operate and maintain the wastewater system. This study took into consideration the proposed CIP costs, increases in operational costs, as well as costs that will be incurred due to new state regulations to propose rates to adequately meet needs. A Proposition 218 rate increase was completed and finalized in June 2025. New rates will be effective after July 1, 2025, and will increase each subsequent year until 2029.

The City relies almost entirely on revenues from wastewater rates to fund the costs of providing wastewater service. As such, wastewater rates must be set at levels adequate to fund the costs of operating and maintaining the wastewater system, fund necessary capital improvements to keep the wastewater system in good operating condition and pay for debt service. A secondary source of revenue is from capacity fees that funds the installation of facilities to areas not yet served and to upsize pipes to ensure adequate capacity and other capital needs.

The Proposition 218 increase in funding will allow the budget for sewer repair and replacement to increase from \$750,000 annually to \$2,100,000 annually. The City is generally adequately staffed, although there is one collection system vacancy as of mid-2025. The City is in the process of replacing its vac truck and otherwise owns and operates the necessary equipment to effectively maintain its collection 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 City is aware of the consequences for noncompliance including associated penalties for violations. The City 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 City 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 City 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 City publishes its SSMP, available for public review, on its website at the [Sewer System](#) page and also maintains a paper copy in its offices which can be made available for inspection during regular business hours.

2. Organization

WDR REQUIREMENTS

Att. 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 Element;*
- Organizational lines of authority; and*
- Chain of communication for reporting spills from receipt of complaint or other information, including the person responsible for reporting spills to the State and Regional Water Boards and other agencies, as applicable. (For example, county health officer, county environmental health agency, and State Office of emergency Services.)*

COMPLIANCE

The above items are addressed in order below:

The City has two Legally Responsible Officials: (a) Hayes Morehouse, the Water Pollution Control Manager and (b) Chad Truesdell, the Collections Supervisor. Both people meet the requirements set forth in Specifications 5.1 of the WDR.

Responsible Position Contact Information

Responsible Position Contact Information	Phone	Email
City Manager: Janelle Cameron		jcameron@sanleandro.org
WPC Manager: Hayes Morehouse	510-577-3434	hmorehouse@sanleandro.org
Collections Supervisor: Chad Truesdell	510-577-6058	ctruesdell@sanleandro.org
Engineering Manager: Erwin Ching	510-577-3439	eching@sanleandro.org
WPC Management Analyst: Ramya Sankar	510-577-3337	rsankar@sanleandro.org
City Attorney: Richard Pio Roda		richard@redwoodpubliclaw.com

Table 3 - Responsible Position Contact Information

Implementation Responsibilities

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

Table 4 - Implementation Responsibilities

2.1. Organizational Chart

The following chart depicts the overall organization of the City's Water Pollution Control Division:

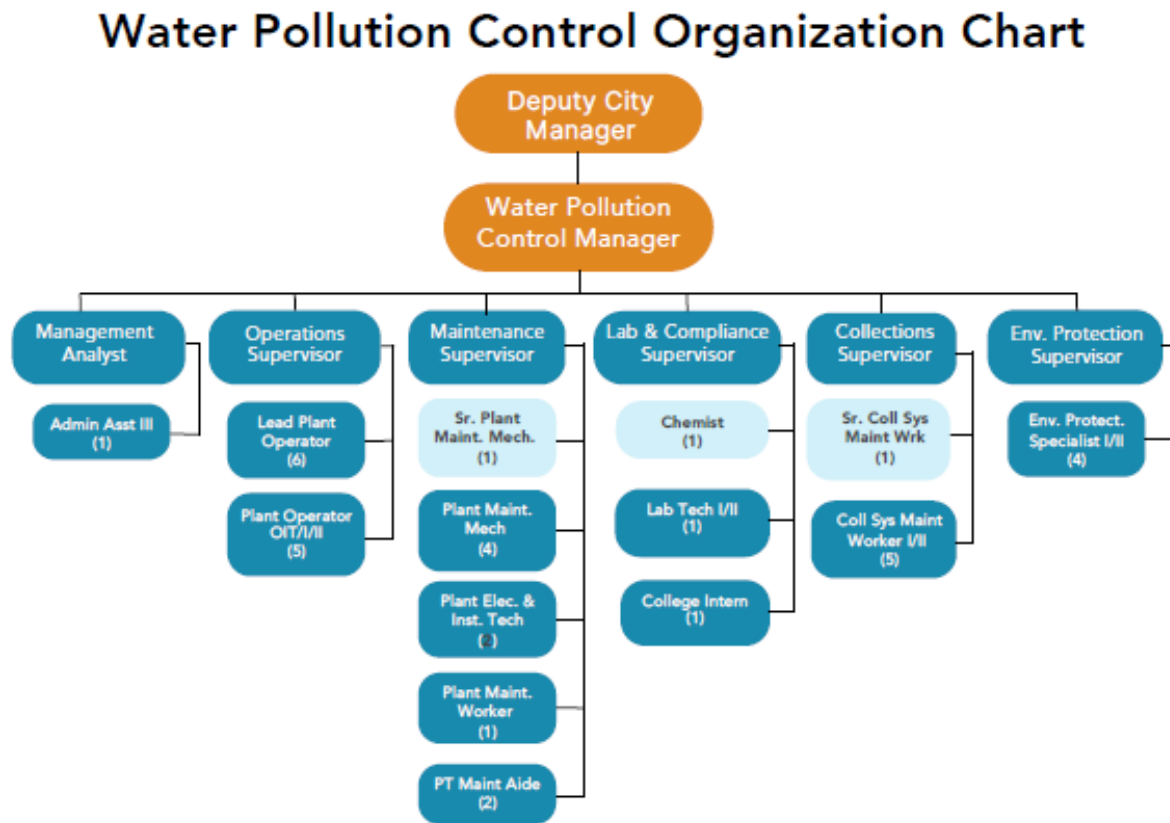


Figure 4 – City Organization Chart

2.2. Organizational Staffing Responsibilities

The City's organizational lines of authority and staffing are as follows:

City Manager:

Under general guidance from the City of San Leandro City Council, serves as the chief executive officer with responsibility for all City Functions

City Attorney:

Serves as legal counsel for the City and is responsible for maintaining the City Administrative and Municipal Codes.

Water Pollution Control Manager:

Organizes, directs and reviews the activities and operations of sewer system and the City of San Leandro Water Pollution Control Plant. Has overall responsibility for the Water Pollution Control Division Capital Improvement Program. Coordinate assigned activities and programs with the Water Pollution Control Division and the Public Works Department and outside agencies.

Engineering Manager:

Plans, organizes, directs and manages the Project Development team of the Engineering Division of the Public Works Department; coordinates and directs the activities of the Capital Improvement Program; supervises and participates in the conduct of complicated engineering, operations and maintenance planning, design, and investigation activities connected with the maintenance, operation, expansion and refurbishment of a system of sanitary treatment and conveyance facilities.

Collections Supervisor:

Manages, plans, coordinates, and reviews the work of the Collections Section of the Water Pollution Control Division. Ensures the compliant operation of all regulatory requirements, Policies and Procedures, manages Collections Section budget, trains, mentors, and manages assigned staff.

Collection System Maintenance Workers I/II:

Responsible for maintaining the collection system, including cleaning and CCTV inspection. Responsible for sewer overflow emergency response.

2.3. Chain of Communication for Reporting Spills

The most common way the City is notified of blockages and spills is by public observation and reporting. Contact numbers and information about reporting spills are on the City's website at the [Water Pollution Control](#) page. The website states "If you have a sewer spill, immediately call the Treatment Plant at 510-577-3434. If there is no answer, please call the San Leandro Police Department at 510-577-2740. Our crews will locate the blockage and determine whether it is in the public sewer; if it is, the crew will remove the blockage and arrange for cleanup."

The City's Water Pollution Control Plant office receives service calls during regular business hours – Monday through Friday, 7:30 a.m. to 4:00 p.m. All service calls received during these hours are referred directly to the Collections System Maintenance Supervisor or to the standby Collections System Maintenance Worker. Outside of these hours, callers are directed by voice mail to contact the on duty Police dispatcher, who has been trained to direct calls regarding the sanitary sewer system to the standby Collections worker.

All calls for service are immediately responded to within one hour, with a typical response time of 30 minutes. Collections staff maintains a 24 hours/day, seven days/week standby schedule to respond to after-hour, weekend and holiday service calls and emergencies. The standby worker summons additional help as needed.

If an overflow occurs, the first responder has the responsibility of initiating the overflow response in the SERP, including evaluating the overflow upon arrival, implementing best management practices to contain the overflow and prevent it from entering a storm drain or other channel, contacting the Collections System Maintenance Supervisor, calling additional help if needed, photographing the site, clearing the blockage, and making regulatory notifications if required. The Collections Supervisor and/or the Water Pollution Control Manager complete the CIWQS data entries.

The Collections Supervisor and Collections workers are each furnished with a City-financed cell phone. Additionally, there are four line-of-sight radios available for use when there are communications issues or during events where crews need radio communications such as confined space entries or main line cleaning and televising.

WPCD Sewage Overflow Notification Procedure

1. Report all spills to a supervisor.
2. Contain the spill.
3. Determine the overflow volume and impact.
4. If volume is more than 1000 gallons, or if overflow reaches water of the state, start the two-hour notification procedure.

EFFECTIVENESS

The City 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		
			Mgr.	Eng	Sup
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
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

Att. 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 in order below:

Authority to prevent illicit discharges into the City’s wastewater collection system.

The City’s Municipal Code, [Section 3-15-200](#) to [Section 3-15-215](#), prohibits the discharge of non-stormwater to the sewer system (with exceptions for such activities as water line flushing, landscape irrigation, and dechlorinated swimming pool water), prohibits any discharge that would result in a violation of the WPCP’s NPDES permit, prohibits illicit drainage connections, and prohibits the discharge of trash and other debris,

The City’s Municipal Code, [Section 3-14-300](#) through [Section 3-14-370](#) include general discharge prohibitions, limitations on wastewater strength, prohibitions of specific discharges such as fats, oils, grease, and toxics, prohibits the discharge of stormwater, groundwater, and yard drainage into the sanitary sewer, prohibits dilution as a substitute for treatment, limits the use of garbage grinders, and prohibits the discharge of certain types of hospital waste.

The City’s pre-planned collaboration and coordination with storm drain agencies.

The City owns and operates most of the storm drains within its boundaries and has a de facto legal authority to ensure access to these storm drains in the event of a wastewater spill. The Sewer Collections staff maintain both the sewers and the storm drains. Having the same personnel operate both systems allows for streamlined spill response.

In addition, both Alameda County Flood Control and Conservation District (ACFCCD) and Caltrans own and operate storm drains within the City limits. The City has historically had good communications with ACFCCD, and the City is permitted to do work within their drains as necessary. If a spill were to occur within a ACFCCD storm drain, the City would cleanup the spill. To comply with the WDR requirement, the City will contact

ACFCCD and Caltrans to discuss a mutual aid agreement to allow the City to respond to any wastewater spills which enter a County of Caltrans storm drain.

Require that sewer system components and connections be properly designed and constructed.

Regulations pertaining to the design, construction, and inspection of private sewer systems, building sewers, and connections are included in the Municipal Code and explained in the City's Standard Plans. The City's Municipal Code, [Section 7-1-925](#) states that all improvements "shall conform to generally acceptable engineering standards and to City of San Leandro Subdivision Improvement Standards." The City's [Subdivision Improvement Design Standards](#) include specific criteria for the design of sanitary sewers and state that the City's [Standard Plans](#) for sanitary sewers shall be utilized.

Ensure access for maintenance, inspection, and/or repairs for portions of the service lateral owned and/or operated by the Enrollee.

The City's Municipal Code [Section 3-14-640](#) establishes the property owner as the responsible party for ownership and maintenance of both the upper and lower lateral. It is the property owner's responsibility to maintain and repair the sewer lateral from the house or business up to the point of connection with the public sanitary sewer main.

Enforce any violation of its sewer ordinances, service agreements, or other legally binding procedures.

The City's Municipal Code [Chapter 3-18](#) is titled "Environmental Enforcement". Section 3-18-105 states that the Chapter's intent is to provide "for uniform and effective enforcement of the City of San Leandro Storm Water Management and Discharge Control Ordinance in Chapter 3-15 and the Uniform Wastewater Discharge Regulations in Chapter 3-14." The Chapter has sections detailing the authority to inspect, violations deemed a nuisance, emergency correction, issuance of a cease and desist order, notice to clean, and civil actions, among others.

Obtain easement accessibility agreements for locations requiring sewer system operations and maintenance, as applicable.

With respect to new construction, the City's Municipal Code [Section 7-1-800](#) states that as a condition of a final map, the subdivider "shall dedicate or make an irrevocable offer of dedication of all parcels of land within the subdivision that are determined to be needed by the City Council for...public utility easements...". With respect to the older parts of the City, the City will investigate the feasibility of an audit to determine whether written easements exist.

EFFECTIVENESS

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

- Are the City ordinances and standards adequate for fulfilling the SSMP legal requirements?
- Does the City 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		
			Mgr.	Eng	Sup
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	X	X	X
3.4	Contact ACFCCD and Caltrans to discuss a mutual aid agreement to allow the City to respond to any wastewater spills which enter a ACFCCD or Caltrans storm drain.	By 6/1/2026			x
3.5	Investigate feasibility of an audit to determine whether written easements exist in older portion of City.	Begin by 6/1/2026	X	X	X

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

[Att. 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

[Att. 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

The City maintains up-to-date maps of its sewer system. Each of the City’s 184 base maps are digitized and formatted into an ArcGIS based mapping system. The ArcGIS mapping system is linked to the Collection Department CMMS program, a street directory, and CCTV inspection Records. The link allows the map to be populated with key data such as pipe size and pipe length. The maps show gravity line segments, force main segments, manholes, lift stations, stormwater conveyances, City/District boundaries, and valve boxes. Information Technology provides updated map pages to all map holders on a regular basis.

Maps are continuously updated by Engineering as new tracts are accepted, and map corrections are identified by the collection crew based upon field observations. If field staff find a mapping error, they will notify Engineering, who makes the update. Simple updates (i.e., manhole placement) are completed immediately, while more complex updates (i.e., force main location) take longer.

Upon request, the City will provide the system maps to State and Regional Water Board staff.

EFFECTIVENESS

The City 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		
			Mgr	Eng	Sup
4.1.1	Review map update procedures with all affected staff.	Annually		X	X
4.1.2	Review/ensure all newly installed facilities have been updated and included in the system maps.	Annually		X	X

4.2. Preventive Operation and Maintenance Activities

WDR REQUIREMENTS

Att. 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 City uses ICOM3 to manage the collection system preventive maintenance program. Maintenance planning and scheduling is used to establish annual and other periodic maintenance goals. These goals include the sewer pipe scheduled cleaning and CCTV inspection objectives. The ICOM3 Planner is used to assign maintenance frequencies to the collection system components.

In the ICOM3 Planner mode, a set of assets or activities can be defined as a route. Planned maintenance activities can be grouped logically by geographic area, project, activity type or priority and displayed on the map or in an organized list view.

Routes can then be broken down into work orders, which can be assigned to any Collections worker. Once the work order has been created, it remains open until the cleaning has been accomplished and a report has been submitted. ICOM3 allows the supervisor to monitor the completion of cleaning objectives.

The system facilitates issuing, both electronically and on paper, copies of all work orders for activities planned and scheduled in the system. Work orders are issued for all maintenance management activities, inspections, customer service calls, and spill response. This includes issuing work orders for both scheduled and unscheduled inspections, cleaning, and other maintenance activities.

Work orders are generated for routine sewer cleaning, CCTV inspection (condition assessment and construction inspection), FOG activities, repairs, refurbishments, replacements, manhole/structure inspections, service calls, and spill reporting. The scheduling system allows staff to put certain activities on a preventive schedule and rely on ICOM3 to automatically create work orders on a prescribed interval.

EFFECTIVENESS

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

- Are the City's maintenance, operations, engineering work orders periodically audited for accuracy and completeness?
- Does the City monitor "open," "overdue," or "not yet completed" work orders to ensure completion of tasks?
- Are inspection and maintenance activities reducing the number and volume of spills?
- Is maintenance work being completed as scheduled?

IMPLEMENTATION PLAN/SCHEDULE

No.	Plan	Schedule	Responsible Party		
			Mgr.	Eng	Sup
4.2.1	Review work completed to date to ensure critical work is being completed.	Quarterly			X
4.2.2	Review scheduled Preventative Maintenance to ensure the prescribed schedule remains appropriate.	Annually			X

4.3. Training

WDR REQUIREMENTS

Att. 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 City’s training program covers many areas associated with wastewater collection systems and serves to develop and maintain highly qualified, knowledgeable, and capable staff. All Collections System staff receive regular training utilizing both in-house resources and outside vendors and wastewater organizations such as CWEA, WEF, and California State University, Sacramento (Office of Water Programs) courses. The safety and compliance training records are maintained by the City’s Human Resources Department and are available for review. Professional training completed by Collections System staff is maintained electronically by the Collections System Supervisor.

All Collections System Staff are certified as Collection System Maintenance Operators Grade I or higher through CWEA. All new Collections System staff are directed by the Supervisor to become certified. CWEA Grade II certification is a requirement for advancement from Collections System Maintenance Worker I to Collections System Maintenance Worker II. A requirement of maintaining the CWEA certificate is to complete documented annual professional training. In addition, all camera truck operators must obtain NASSCO certification.

The Collections staff attend a weekly tailgate training of a relevant topic. Handouts and sign in sheets are utilized.

Staff who respond to sewage spills have received training from an outside vendor to review how to implement the updated SERP, including how to estimate spill volume, and the requirements of the WDR. The training included an on-site practice drill with training on emergency response procedures with flow estimating from the holes in manhole covers. The training also included determining spill start times, volume estimation and recovery estimation, and CIWQS reporting procedures. Future spill response training will either be conducted in-house or by an outside contractor.

Contractors who work on the sewer collection system are instructed by City staff on the process to follow in the event of a spill. Staff provide contractors with a spill response form such as the one found in Appendix 4.1.

EFFECTIVENESS

The City 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		
			Mgr.	Eng	Sup
4.3.1	Review training documentation to ensure all staff have received required training.	Quarterly			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	

4.4. Equipment Inventory

WDR REQUIREMENTS

[Att. D-4.4 \(pg. D-5\)](#)

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

COMPLIANCE

The City has the following equipment available for emergency operations and collection system maintenance:

- 1 truck-mounted continuous rodder
- 1 combination cleaning truck
- 1 hydro jet cleaning truck
- 1 closed circuit television truck
- 2 emergency response trucks
- 1 emergency response trailer
- 1 lift station response truck
- 2 mobile emergency bypass pump trailers

The City’s lift stations incorporate a two-pump design to provide for seamless operation in the event of a pump failure. All lift stations are part of a SCADA network with remote alarm capability. All lift stations have a replacement pump in stock.

Except for regularly manned, securable, low flow facilities, all lift stations are fitted with a bypass pump connection, portable generator connection, and/or a permanent emergency generator set. The City maintains a fleet of portable diesel trash pumps and generators in sufficient quantity that a City-wide event would not prevent transmission of sewage to the plant.

Each lift station has a posted plan informing responders of specific contingency equipment to be used in case of failure of electrical or mechanical systems. The City has also created a lift station response and training manual detailing the use of contingency equipment in both individual and City-wide failure situations.

All contingency equipment is kept in top working order including regularly scheduled maintenance and monthly run tests. The City keeps large stocks of onsite diesel fuel, hoses, tow vehicles and fittings to facilitate a rapid and appropriate response. The City’s Emergency Response Trailer contains the following critical replacement and spare parts:

QUANTITY	PART #	DESCRIPTION
2	EU2000i	Honda Generator
2	WSP100AA	Honda Submersible Pump
4	3256-PSB1-1/2X20	1" 1/2 X 20' Green Flex Suction Hose
4	3256-PSB1-1/2X10	1" 1/2 X 10' Green Flex Suction Hose
8	3246-PDR2X50	1" 1/2 X 25' Red Lay Flat Hose
8	3246-PDR2X50	1" 1/2 X 50' Red Lay Flat Hose
8	3246-PDR2X50	1" 1/2 X 100' Red Lay Flat Hose
0		O-Rings For Cam Locks
1	WEC-800-610SET	6" To 10" Plug with 20' inflation hose/rope, monitoring gauge & ball valve plug length 22" weight 7.2 lbs
1	wec-800-1218set	12" To 18" Plug with 20' inflation hose/rope, Monitoring gauge & ball valve Plug length 28" weight 21.6 lbs
0		110 Amp Blower
1		Craftsman 110 Volt - 8 Gal Compressor
1		50' Air Hose
1		6' Air Hose Whip
2		42" X 42" Drain Blockers (Storm Drain Covers)
1		Ultra Spill Burn 10'x4-1/2"x2-1/4 (For Storm Drains)
1		95 Gal Spill Kit
0		110 Volt Stand Alone Lights
1		5 Gal Gas Container
0		30 Gal Trash Can
2		Push Brooms
2		Square Point Shovels

Table 5- Emergency Response Trailer Contents

EFFECTIVENESS

The City 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 City experienced any equipment failure that inhibited a spill response?

IMPLEMENTATION PLAN/SCHEDULE

No.	Plan	Schedule	Responsible Party		
			Mgr.	Eng	Sup
4.4.1	Audit inventory lists to ensure stock is adequate.	Annually			X
4.4.2	Check with vendors to ensure lead times for critical parts are as expected.	Annually			X
4.2.3	Ensure contracts with emergency support services are current.	Annually	X		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 and trends.
- Performing periodic audits of the vehicle and equipment inventory List.

APPENDIX 4 INCLUSIONS:

- 4.1 Example Contractor Spill Response Form
- 4.2 Hot Spot list

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

As described in Section 4.2, ICOM3 is used to generate work orders for routine sewer cleaning, CCTV inspection (condition assessment and construction inspection), FOG activities, repairs, refurbishments, replacements, manhole/structure inspections, service calls, and spill reporting.

Sewer Cleaning

Cleaning sewers is the City’s primary sewer maintenance activity. The City has both frequent, focused cleaning as well as cyclic cleaning for pipes not on the focused cleaning schedule.

The City is currently on a one-year schedule to inspect and clean each public main pipe. Excessive grease buildup in City mains is also addressed through the FOG program areas. Problem areas are identified by Collections staff and forwarded to the City’s Engineering staff where they are prioritized and scheduled into the capital improvement program.

Hot Spots

Areas that have known problems such as excessive grease buildup or odor problems are cleaned and checked on a much more frequent basis based on experience history. Approximately 5% of the system is included in the Hot Spot cleaning program, with inspection on a weekly or bi-weekly basis, and cleaning on a 30, 60, or 90-day schedule. Cleaning frequency depends on the history and cause of stoppages or overflows on a line. Focused cleaning is performed primarily by jetting. A listing of the Hot Spots is found as Appendix 4.2.

Root Control

The City has both a focused and cyclic root treatment program. Roots encroach upon the interior of sewer mains through structural cracks, faulty pipe joints and defective laterals. Root intrusion is also a common problem in sewer laterals which are shallow. If roots are observed to be an issue during routine cleaning, in response to complaints, or through observations from CCTV inspections, root cutting is performed with chain flail attachments on the jetters or with mechanical cutters. The City also engages a contractor to perform chemical root control in the most affected pipes annually.

CCTV Inspections

The City maintains a television inspection program. Sewer segments undergo detailed video inspection for both structural and condition damage. The program’s goal is to televise the entire collection system every seven years. This goal has not been met recently, in part because the CCTV truck was frequently inoperable due to maintenance issues and the City lacked staff. However, a new truck has been budgeted, staff have been hired, and the City intends to expand its CCTV program. In addition, the City plans to hire a contractor to CCTV the larger pipes. The City will strive to meet its goal of CCTV’ing the entire system every seven years.

Critical defects are identified for spot repairs and deteriorated reaches for potential rehabilitation or replacement. A future cleaning frequency can be determined for each pipe reach based on the results of the inspections.

Each CCTV video is viewed by a lead Collections System Maintenance Worker, and the pipe is graded per standards outlined in the NASSCO Pipeline Assessment Certification Program (PACP). Using the PACP Code Matrix, each PACP defect code is assigned a condition grade from 1 to 5. Grades are assigned based on potential for further deterioration or pipe failure. Pipe failure is defined as when the pipe can no longer convey the pipe design capacity.

After assessment is complete, CCTV videos are uploaded both to ICOM3 and to the t4 Spatial program. t4 Spatial is a cloud-based program that displays Collection System assets, and correlates video to a specific line segment. Each frame in the video can be associated with a specific location on the GIS map. It is expected that the City's upcoming use of Integrity software will replace t4 Spatial.

City Engineering Department staff can search for pipe segments with PACP grades of 3 or higher and view specific portions of video that reveal problem locations of the pipe. This allows the City to put together an accurate list of sewer line point repairs and replacements needed for the following fiscal year. Also, repairs are completed more efficiently due to the City's ability to provide very accurate locations to contractors for required repairs.

Manhole Inspections

As part of the focused and cyclic cleaning programs, City Collections staff visually inspect manholes for corrosion, debris or damage around the base, cracks or holes, and condition of manhole steps. Inspections involve a visual assessment of the overall manhole condition and observed deficiencies that could result in I/I.

Ratings applied to manhole investigations use the standards of the NASSCO Manhole Condition Assessment Program (MCAP) for each of the manhole structure components including the rim and lid, chimney/cone, bench and channel. Each component is rated as poor, fair, or good condition as a gross determination of construction adequacy of the structure and its component parts. Staff conduct a detailed investigation of manhole conditions when a connecting line segment is defined as a rehab project, and corrections needed to the manhole structure are then included as part of the project work.

Pump Station Inspections and Assessment

Pump stations are inspected on a weekly basis. Weekly inspections include visual check of the equipment, manual cycling of pumps, checking and cleaning floats, recording hour meter readings, and cleaning off debris. In addition, pump stations receive extensive maintenance each year, which includes cleaning out of sump and removing pumps for inspection and performing repairs if necessary.

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 City’s Municipal Code, [Section 7-1-925](#) states that all improvements “shall conform to generally acceptable engineering standards and to City of San Leandro Subdivision Improvement Standards.” The City’s [Subdivision Improvement Design Standards](#) include specific criteria for the design of sanitary sewers and state that the City’s [Standard Plans](#) for sanitary sewers shall be utilized. These standard specifications are a comprehensive set of standards that cover all sewage or wastewater facilities in the City. The standard specifications are available to contractors and the general public at no charge and are updated periodically, as necessary. A copy is also available from the City’s website.

Permits are required prior to construction of any private sewage disposal system. A permit is also required prior to constructing a building or lateral sewer or connecting to a public sewer. The permit application includes a review of plans and specifications by the City. Construction permits require construction of building sewers be in accordance with county and city requirements and be inspected by an Engineering Inspector prior to acceptance by the City.

The Standard Plans give design details for sanitary sewer connections, manholes, and sewer crossings. It does not include standards for pipelines or pump stations. This is because there are too variables to consider; each pipeline or pump station design must be site-specific. Instead, the Engineering Department works with the developer’s designer to determine the appropriate design for the particular location that the pipeline or pump station will be installed.

EFFECTIVENESS

The City 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		
			Mgr.	Eng	Sup
5.1.1	Ensure all project plans are approved in accordance with the City’s Standard Specifications and Details.	Each Project		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 City’s Engineering Department has full-time Construction Inspectors who inspect both new construction and repairs. The inspector insures all construction meets the City’s standard specifications and other applicable codes. Permits are required for all work on wastewater facilities in the City, and no facility is accepted unless it is permitted, inspected, and tested in accordance with the standard specifications.

EFFECTIVENESS

The City 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 City stay abreast of industry design standards and technical advances in the industry?

IMPLEMENTATION PLAN/SCHEDULE

No.	Plan	Schedule	Responsible Party		
			Mgr	Eng	Sup
5.2.1	Verify inspection procedures are adequate and consistent with current standards of practice	Assessed annually		X	
5.2.2	Verify design standards and hydraulic model previously completed are adequate and consistent with current standards of practice.	Annually		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:

- None

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 interagency coordination to expedite spill containment and recovery;*
- *Implement pre-planned coordination and collaboration with storm drain agencies and other utility agencies/departments prior, during, and after a spill event;*
- *Conduct post-spill assessments of spill response activities;*
- *Document and report spill events as required in this General Order; and*
- *Annually, review and assess effectiveness of the Spill Emergency Response Plan, and update the Plan as needed.”*

COMPLIANCE

The City’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 dated July 23, 2023, and prepared by DKF Solutions Group, LLC, meets the requirements of the WDR. Initial training has been provided to affected staff and refresher training is conducted annually. A copy of the SERP is available for viewing at the City office upon request and is found on the City’s [Sewer System](#) webpage.

EFFECTIVENESS

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

- Have staff's 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		
			Mgr.	Eng	Sup
6.1	Perform SERP training including practice drills.	Annually			X
6.2	Review Post Spill Assessments to ensure adherence with the SERP and to identify any trends that should be addressed.	Annually	X		X

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 City employees several different spill volume estimation methods to account for different circumstances.

APPENDIX 6 INCLUSIONS:

- None

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

The City maintains and implements a FOG source control program to reduce the amount of fats, oils, and grease discharged to the sanitary sewer system. This pre-treatment program is administered by the Environmental Services Section of the Water Pollution Control Division. Their pre-treatment program is coordinated with the Collections Section on a regular basis to identify and correct illicit discharges.

The WDR’s requirements above are addressed below:

Public Outreach.

The City’s website has a comprehensive webpage that discusses [Fat Oils and Grease](#). The page includes information about the types of food that can cause FOG, why FOG is a problem, how FOG affects residents, and ways to prevent FOG. The City attends the annual Cherry Festival, and a thousand or more people stop by the City’s booth for information on the FOG program. The City has a YouTube channel that contains information about FOG, includes FOG mailers in the residents’ bills, and hands out a FOG comic book (see cover page below). When City staff inspect FSEs, they provide educational materials in addition to conducting an inspection.



Figure 5 - FOG Control Comic Book Cover

Disposal.

FOG which is generated by FSEs is collected in grease interceptors or grease traps which are maintained by the FSEs. The accumulated FOG is pumped out by licensed haulers hired by the FSEs and taken to the haulers' own facilities. City staff remove FOG from the collection system during their routine pipe maintenance. This grease is disposed of at the City's Water Pollution Control Plant on an as-needed basis.

Legal authority to prohibit discharges.

The City has legal authority to prohibit discharges to the collection system through the Uniform Wastewater Discharge Regulations, Title III, Chapter 14, Article 3 ([Sewer Use Regulations](#)) and Article 7 ([Monitoring and Inspection](#)) of the City's Municipal Code.

Requirement to install grease interceptors, design standards, etc.

Title III, Chapter 14, [Section 3-14-350](#) of the City's Municipal Code requires the installation and proper maintenance of interceptors at any facility that has the potential for discharging grease-laden wastewater. The section states, in part: "All interceptors shall be of a type and capacity approved by the Manager. The interceptor shall be installed in conformity with approved plans and in accordance with all City Codes and regulations."

Authority to inspect and enforce.

The City has the legal authority to inspect grease producing facilities through the Uniform Wastewater Discharge Regulations, Title III, Chapter 18, Section 3-18-125 ([Authority to Inspect](#)) of the City's Municipal

Code. Title III, Chapter 18 ([Environmental Enforcement](#)) also provides the authority to enforce violations of the Title III.

FOG-related problem areas.

All lines within the collection system are inspected and cleaned annually. Priority is given to areas with a history of problems relating to FOG, roots or structural impairment. Areas with a history of FOG hot spots are investigated and cleaned at least quarterly. The areas requiring quarterly monitoring and cleaning frequency are downtown San Leandro and the service area surrounding the Bermuda lift station. Attachment 4.2 lists the City's hot spots, which include areas impacted by FOG.

FOG hot spots (areas with increased incidence of grease build-up) are cleaned to remove the risk of a blockage occurring and are subsequently inspected once per week. The sewer line is cleaned using either a hydro jet with spinning nozzle or a power rodder. The combo unit/vacuum truck is also used whenever feasible to recover the FOG. Additionally, information on the location, severity and possible source is relayed to the Environmental Services Section. Inspectors follow up at FSEs that may have contributed to the grease build-up. The collection crew continues to monitor the area weekly until the problem is abated through inspection or repair.

While the City has known areas with commercial grease sources (e.g. restaurants), most of the City's grease problems are in residential areas and the result of lines with poor grade. Lines with known poor grade will be prioritized for CCTV inspection. With information on the causes of grease problems, maintenance activities and schedules can be modified, or sewer repairs made to better control grease buildup and minimize grease-related spills.

Source control measures.

Beginning in 2002, the City's Environmental Services Section (ESS) identified FSEs located within the collection system service area. In January 2003, a letter, survey and FOG fact sheet were mailed to 125 FSEs as the first part of a FOG education and outreach program. A list of all FSEs is maintained in ESS's database, and records are periodically updated via information from business permit applications, the business license permit database and building permits.

ESS staff conducts permit plan checks on new construction and tenant improvements of FSEs. Plan checks include, but are not limited to, identification and proper connection of grease-bearing fixtures to a properly sized grease interceptor. The plan check and field inspection, as part of the building permit process, includes an interceptor sizing component and an Interceptor Maintenance Education component, which includes the City's maintenance requirements, BMP requirements, and record keeping and reporting requirements.

ES inspectors conduct inspections at FSEs in areas identified by the collection crew as FOG hot spots. Inspections include a review of grease interceptor maintenance records, FOG BMPs, and storm water BMPs. Inspections are conducted at new or remodeled FSEs as part of the building permit final review process to verify grease interceptor installation. During these site visits, the City's FOG fact sheet is distributed and each of the elements (FOG, storm water, and integrated pest management) is discussed. Posters and storm water BMP guidance from the Alameda Countywide Clean Water Program are also distributed.

The City would like to increase the number of ES staff dedicated to the FOG control program. Appendix 7.1 contains the City's FOG Fact Sheet and Food Facility Inspection form.

EFFECTIVENESS

The City 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 City 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	Responsible Party		
			Mgr.	Eng	Sup
7.1	Review/evaluate enforcement and inspection findings and implement changes as necessary.	Annually		X	X
7.2	Review spill rates and causes and make changes to maintenance programs, as necessary.	Annually		X	X
7.3	Update educational information about FOG and post on websites and other social media outlets.	Beginning second half 2025			X

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:

- 7.1 FOG Fact Sheet and Food Facility Inspection form

8. System Evaluation, Capacity Assurance, Capital Improvements

WDR REQUIREMENTS

Attachment D-8 (pg. D-)

“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:*
- *Hold a high level of environmental consequences if vulnerable to collapse, failure, blockage, capacity issues, or other system deficiencies;*
- *Are located in or within the vicinity of surface waters, steep terrain, high groundwater elevations, and environmentally sensitive areas;*
- *Are within the vicinity of a receiving water with a bacterial-related impairment on the most current Clean Water Act section 303(d) List.*
- *Assess the system conditions using visual observations, video surveillance and/or other comparable system inspection 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:

System Evaluation:

The City's collection system evaluation involves every component of the City collection system, including pipelines, manholes, and pump stations. It is of key importance to regularly perform pipeline condition assessments to initially establish a baseline condition and to monitor changes over time. The City uses visual inspections, CCTV inspections, and spill data to evaluate the performance of system assets and adjust as necessary.

Justify the amount of system assessed each year:

The City has maintained its system with a low spill rate and cleans most of the system yearly. The City has not yet determined the optimal cleaning interval or CCTV inspection interval. Once a CCTV inspection has been completed for the entire system, staff will evaluate the findings to determine the optimal inspection frequency.

Prioritize condition assessment areas:

The City considers that most of its collection system has roughly the same environmental risk. Therefore, the City does not currently prioritize condition assessments based on environmental consequences or proximity to surface waters but intends to do so in the future.

Assess system using visual observations, etc.:

The City assesses system conditions using visual observation and video surveillance.

Evidence of flow exiting from system:

The City is currently not aware of any exiting of sewage from the collection system. The City actively inspects and maintains its collection system to prevent sewage from exiting and impacting the environment.

Maintain documents:

The City documents all inspections, maintenance, and evaluations of the sewer system using its CMMS and GIS programs. These documents are maintained at the City offices or in the CMMS program.

Climate change:

The 2015 Capacity Study includes a study of expected wet weather flows but does not include an assessment of how climate change may affect storm intensity. The City intends to evaluate the potential for increased spills due to higher flows and I/I from increased storm intensity through completion of a "climate assessment" specific to the sanitary sewer system and Water Pollution Control Plant. The City will continue to review the potential impacts of climate change and will update this section as needed.

EFFECTIVENESS

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

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

IMPLEMENTATION PLAN/SCHEDULE

No.	Plan	Schedule	Responsible Party		
			Dir	Eng	Sup
8.1.1	Review/evaluate enforcement and inspection findings and implement changes as necessary.	Annually			X
8.1.2	Review spill rates and causes and make changes to maintenance programs, as necessary.	Annually	X		X
8.1.3	Hold meetings to discuss any issues that may result from climate changes.	Annually	X	X	X
8.1.4	Prioritize condition assessments based on environmental risk.	Beginning first quarter 2026	X		X
8.1.5	Evaluate the potential for increased spills due to higher flows and I/I from increased storm intensity.	Beginning first quarter 2026	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 contribute to spill events;*
- The appropriate design storm(s) or wet weather events that cause or contribute to spill events.*
- The capacity of key system components; and*
- Identify the major sources that contribute to the peak flows associated with sewer spills.*

The capacity assessment must consider:

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

COMPLIANCE

The City has periodically completed flow monitoring and hydraulic modeling analyses to anticipate future growth or increased demand on the system. The City’s most recent *Sanitary Sewer Capacity Study and Master Plan* was completed in 2015 to confirm existing flows in the collection system and anticipate capital needs for capacity improvement. The project used a systematic process that incorporated land use planning information, water use and flow monitoring data, and design criteria for estimating wastewater flows, and applied in a computer hydraulic model of the trunk sewer system. The model was used to assess how the system would perform under various planning and flow scenarios and identify pipes and/or pump stations that may not have sufficient capacity to convey the predicted flows under existing or future conditions. Improvement projects were developed to provide the required capacity, the capital costs of the required projects were estimated, and the projects were prioritized based on the model results.

Two planning scenarios, defined based on planning information and discussions with the City’s Community Development Department staff, were evaluated for Master Plan. The existing scenario examined the current capacity of the sewer system based on existing development, with flows defined based on winter water use data and calibrated to flow monitoring data collected in 2013 and 2014. The future scenario incorporated information on planned development provided by the City. Planned development represents approximately 3,600 new residential dwelling units and 2.8 million square feet of commercial and industrial building floor space, which are estimated to increase current base wastewater flows by about 30 percent.

Model results were examined to determine trunk system capacity needs, as indicated by areas where flow in the pipes would exceed their capacity and cause surcharge conditions (water levels higher than the

tops of the pipes). Figure ES-4 of the Master Plan shows the capacity assessment results for future peak wet weather flow conditions, indicating existing trunk sewers that were predicted by the model to be surcharged due to “throttle” conditions (peak flow exceeding full pipe capacity) or due to backwater from a downstream throttle condition, and locations of where the model predicts a surcharge condition severe enough to violate the City’s capacity criteria (defined as water level within four feet of manhole rims). Most of these locations were also predicted to be capacity issues under existing peak wet weather flows.

The model predicted that no overflows would occur under design storm conditions, and no surcharge under peak dry weather flows. Furthermore, all the modeled pump stations have adequate firm capacity (capacity with largest pumping unit out of service) to convey the predicted peak wet weather flow without violating freeboard criteria or resulting in sewer overflows, although for two of the stations (Bermuda and Teagarden), some backup surcharge may occur.

The model included a “time to overflow” analysis of five lift stations. The results showed that all the lift stations appear to have adequate time to avoid overflows under a shutdown due to a power outage, based on the expected time it would take City staff to reach the stations after receiving an alarm and activate an on-site backup generator or connect to a portable generator. For the smaller stations, due to limited data with which to accurately determine the storage capacity in the upstream sewers, the modeling was not sufficiently conclusive to quantitatively assess the time to overflow under a wet weather event.

Spill data from the past several years do not indicate that dry weather capacity is a major contributor to spill events. However, it appears that I/I is a contributor to spill events during wet weather. The City intends to develop a procedure to identify wet weather capacity problems.

EFFECTIVENESS

The City 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)?

IMPLEMENTATION PLAN/SCHEDULE

No	Plan	Schedule	Responsible Party		
			Mgr.	Eng	Sup
8.2.1	Monitor/evaluate significant rain events to see if they exceed the design storm in the hydraulic model.	Each significant rain event		X	X
8.2.2	Monitor flows in each basin and update the hydraulic model	Per Engineering Department schedule			X
8.2.3	Develop a procedure to identify wet weather capacity problems.	Beginning in 2026	X	X	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 2015 Capacity Study identifies areas that may need capacity increases. However, it did not prioritize these based on the consequences of potential spills. Moving forward, the City intends to prioritize its CIP projects based, in part, on the potential for spills and will document how projects were selected for funding.

EFFECTIVENESS

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

- Has the City adhered to its system evaluation/condition assessment schedule?
- Has the City 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		
			Mgr.	Eng	Sup
8.3.1	Utilize all available data for prioritizing corrective actions considering severity and consequences of potential spills.	Each CIP Update	X	X	X
8.3.2	Maintain documents and recordkeeping of system evaluation and condition assessment inspections and activities.	Continuously		X	X
8.3.3	Prioritize CIP projects based, in part, on the potential for spills and document how projects were selected for funding.	Beginning in 2026	X	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 2015 Master Plan includes a recommended Capital Improvement Program (CIP), designed to provide adequate sewer capacity for current and future flows. In addition to projects required to address capacity criteria violations, the recommended CIP also includes several projects that address surcharge conditions predicted by the model. The recommended capacity improvements are found in Table ES-2 of the Master Plan.

In 2021, the City completed a \$1.9 million point source repair project and in 2024, the City completed a \$1.8 million point repair project and lift station vault lid project.

The City’s more recent CIP planning relies on data from both the Master Plan and internal inspections, which are used to compile and prioritize capital projects. These projects are then scheduled as part of the two-year budget process. Point repairs are made soon after discovery and are frequently re-prioritized to insure uninterrupted sewer service.

In 2024, the City’s Water Pollution Control Division completed a Needs Assessment to better understand the projects required to maintain the City’s wastewater infrastructure. The [Capital Improvement Program](#) (CIP) for Wastewater Treatment and Collections 10 Year Plan was presented to and approved by City Council at the October 21st, 2024 City Council Meeting. As a result of the June 2025 Proposition 2018 rate increase, the City’s annual budget for point repairs, line replacement and other upgrades will be approximately \$2,500,000 per year.

The City intends to complete the following projects in FYs 2025 through 2027:

- Davis Street manhole replacement, which will replace the influent structure coming into the WQCP;
- San Rafael Lift Station upgrade, which will include installing a bypass valve and CIPP lining the force main;
- Annual point repairs in FY 2025, 2026, and 2027; and
- Replacement or CIPP lining for Floresta/Anza Way line.

EFFECTIVENESS

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

- Has the City’s capital improvement plan schedule been adhered to?

IMPLEMENTATION PLAN/SCHEDULE

No.	Plan	Schedule	Responsible Party		
			Mgr.	Eng	Sup
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	X	X	X
8.4.2	For schedules that are not followed, justify and document the reason.	Each Delayed Project			X

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?

APPENDIX 8 INCLUSIONS

- None

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:

Maintaining Information:

The City maintains accurate and relevant inspection and maintenance records for the collection system, including field data such as pipe cleaning and inspection frequencies, FSE inspections, and information regarding spills. Much of the documentation is maintained electronically, which allows for ease of access and analysis. This helps City staff to make sound decisions and prioritize activities when dealing with the routine and the unexpected.

Monitoring SSMP elements:

Monitoring of the City’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.

Assessing Preventative Operations:

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

Updating the SSMP:

The City 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 is 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.

Identifying Spill Trends:

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

EFFECTIVENESS

The City 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		
			Mgr.	Eng	Sup
9.1	Assess work programs to ensure outcomes are as intended.	Annually		X	X
9.2	Ensure work programs and the SSMP are updated based on assessments.	As Needed		X	X
9.3	Monitor and evaluate spill trends. Document efforts.	Annually		X	X

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:

- None

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 City completed its most recent audit for the period ending August 2024; this document is found as an Appendix to this SSMP. The City 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 City will comply with the requirements of each Element.

The audit review includes an evaluation to determine if compliance has been met. A list of priority improvement opportunities will be prepared and updated as part of the audit program. Improvement opportunities will be used to prioritize and develop program modifications and will be initiated based on the priority and the available funding. An overview of SSMP related work completed between audits will be included in the program audits.

Implementation is evaluated by determining if the City is executing the SSMP as stated.

Effectiveness is evaluated by using key performance indicators, which have been developed specifically for each element. An additional evaluation is performed to comply with Specifications 5.6 addressing resilience. Resilience indicators have been developed for each element. These indicators serve to demonstrate how resilience is built into the SSMP and inspection, maintenance and spill response activities.

Any deficiencies discovered through the audit process are noted and a plan and schedule to implement corrective measures are established. All audit reports will be certified by the City’s LRO. All changes or modifications of the SSMP resulting from the Audit shall be listed in the SSMP Change Log.

EFFECTIVENESS

The City 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		
			Mgr.	Eng	Sup
10.1	Schedule audits in advance of due dates to ensure adequate time to complete. City 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:

- 10.1 2021-2024 Audit

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*
 - *The development, implementation, and update of its Plan, including opportunities for public input to Plan implementation and updates.*
- *Owners/operators of systems that connect into the Enrollee’s system, including satellite systems, for:*
 - *System operation, maintenance, and capital improvement-related activities.”*

COMPLIANCE

Spills:

When the City 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 City 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 City will follow the advice of higher authorities, such as the local environmental health department and other regulatory authorities. In a major emergency, the City will coordinate resources with Oro Loma Sanitary District and/or the East Bay Dischargers’ Authority.

Public Participation:

There are several opportunities for stakeholders and the public to participate and provide input into the development and update of the City’s SSMP. During its initial development stage, as with each SSMP Audit and update of the SSMP, the SSMP and related documents are presented to the City Council for review and acceptance. Prior to each City Council Meeting, these documents are included in Agenda packet which are readily available for review on the City’s website.

Satellite Systems:

The City has no tributary or satellite systems and therefore has no communication program for them.

EFFECTIVENESS

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

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

IMPLEMENTATION PLAN/SCHEDULE

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

RESILIENCE

Resilience is addressed in Element 11 by:

- Use the SSMP as a tool to communicate to the public how the City 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 City.

APPENDIX 11 INCLUSIONS

- None

LIST OF APPENDICES

APPENDIX 1	• None
APPENDIX 2	• None
APPENDIX 3	• None
APPENDIX 4	• 4.1 Example Contractor Spill Response Form • 4.2 Hot Spot list
APPENDIX 5	• None
APPENDIX 6	• None
APPENDIX 7	• 7.1 FOG Fact Sheet and Food Facility Inspection form
APPENDIX 8	• None
APPENDIX 9	• None
APPENDIX 10	• 10.1 2021-2024 Audit
APPENDIX 11	• None