



Sewer System Management Plan (SSMP)



Western Municipal Water District

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MAY 2025

1 Certification

I certify that Western Municipal Water District's (Western Water's) 2025 Sewer System Management Plan (SSMP) including its attachments and appendices comply with the requirements set forth in the General Waste Discharge Requirements (WDR) for Sanitary Sewer Systems, Order No. 2022-0103-DWQ. I further certify that the documents were prepared under Western Water's direction and supervision to assure that qualified personnel provided input, evaluated the contents, and subsequently incorporated the information in this 2025 SSMP into the daily operation and maintenance of Western Water's Sanitary Sewer Systems; that the information included in this 2025 SSMP is, to the best of my knowledge, true, accurate, and complete, and that the 2025 SSMP has been duly presented to and approved by Western Water's Board of Directors at its July 02, 2025 public meeting.

Christopher Fike

Chris Fike
Director of Maintenance Operations

Jul 23, 2025

Date

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2 Acronyms

AC	Acre
CCTV	Closed Circuit Television
CFO	Chief Financial Officer
CFR	Code of Federal Regulations
CIP	Capital Improvement Program
CIWQS	California Integrated Water Quality System
CMMS	Computer Maintenance Management System
CPC	California Plumbing Code
CWA	Clean Water Act
CWEA	California Water Environment Association
DWQ	Division of Water Quality
EMWD	Eastern Municipal Water District
EPA	Environmental Protection Agency
ERP	Enforcement Response Plan
FOG	Fats, Oils, and Grease
FSE	Food Service Establishment
GIS	Geographic Information System
I/I	Inflow and Infiltration
IEBL	Inland Empire Brine Line
LEL	Lower Explosive Limit
LRO	Legally Responsible Official
MRP	Monitoring and Reporting Program
NASSCO	National Association of Sewer Service Companies
NPDES	National Pollutant Discharge Elimination System
OES	Office of Emergency Services
O&M	Operations and Maintenance
POTW	Publicly Owned Treatment Works
RCDEH	Riverside County Department of Environmental Health
RWQCB	Regional Water Quality Control Board

SCADA	Supervisory Control and Data Acquisition
SERP	Spill Emergency Response Plan
SOP	Standard Operating Procedure
SPPWC	Standard Plans for Public Works Construction (Greenbook)
SRRRA	
SSMP	Sewer System Management Plan
SSO	Sanitary Sewer Overflow
SWRCB	State Water Resources Control Board
WDR	Waste Discharge Requirements
WMWD	Western Municipal Water District, now referred to as Western Water
WQ	Water Quality
WWRF	Western Water Recycling Facility

3 Introduction

This Sewer System Management Plan (SSMP) has been prepared in compliance with the requirements of the State Water Resources Control Board (SWRCB), Order 2022-0103-DWQ (Order). This chapter includes a brief overview of Western Water’s service area and sanitary sewer system, a summary of the regulations that serve as the impetus for the development of this SSMP, and the purpose and organization of this SSMP.

3.1 Waste Discharge Requirements

On December 6, 2022, the SWRCB adopted Order 2022-0103-DWQ, the Statewide General Waste Discharge Requirements (WDR) for Sanitary Sewer Systems, which requires all federal and state agencies, municipalities, counties, districts, and other public entities that own or operate a sanitary sewer system greater than one mile in length to comply with the elements of the WDRs. The WDRs serve to provide a unified statewide approach for reporting and tracking SSOs, establishing consistent and uniform requirements for SSMP development and implementation, establishing consistency in reporting, and facilitating consistent enforcement for violations.

The Statewide WDRs, established under the Order, set directives for owners and operators of sanitary sewer systems to ensure adequate and efficient management, operation, and maintenance of these systems. The key requirements under the WDRs include:

- a. Spill Prevention and Control
 - Enrollees must take all feasible steps to prevent and minimize the volume of sanitary sewer overflows (SSOs) and to implement response procedures that reduce the risk of untreated or partially treated wastewater reaching storm drains, creeks, or waters of the State. Enrollees must proactively maintain system resilience and implement appropriate spill emergency response procedures to protect public health and the environment.
- b. Mandatory Spill Reporting
 - Any SSO that discharges to waters of the State must be promptly reported to the California Integrated Water Quality System (CIWQS), the California Office of Emergency Services, and relevant local health agencies. Spills exceeding 50,000 gallons require additional technical reports, including receiving water quality monitoring and impact assessments.
- c. SSMP Compliance
 - All agencies must develop, implement, and regularly update a Sewer System Management Plan (SSMP) that includes detailed provisions for system operation, maintenance, capacity assurance, and spill emergency response. The SSMP must align with the updated 11 required elements outlined in Attachment D of the Order and must be certified by the governing body overseeing the sewer system.
- d. Audit and Plan Updates
 - Enrollees are required to conduct internal SSMP audits every three years to assess the implementation and effectiveness of their plans. Additionally, SSMPs must be fully updated every six years to reflect changes in operations, maintenance, and regulatory requirements.
- e. Electronic System Mapping and Reporting

- Agencies must submit a digital sanitary sewer system service area boundary map to the State Water Board by December 31, 2025. All reporting must be conducted electronically through CIWQS, ensuring transparency and accessibility of spill data for regulatory review.

This SSMP includes the various plans and programs that comprise a comprehensive SSMP.

3.2 Service Area and Sewer System

Western Water provides wastewater collection services to residential, commercial, and industrial customers in parts of Riverside County. The service area spans 527 square miles and serves approximately 1 million residents, of which over 22,000 of those residents are served by Western Water’s collection systems. Western Water operates and maintains three regulated collection systems under the Order: the WRCRWA Treatment Plant CS, the Murrieta SRWRF CS, and the Western WWRF CS.

This SSMP specifically covers the Murrieta SRWRF CS and the Western WWRF CS, collectively referred to as the Western Collection System. The WRCRWA Treatment Plant CS is addressed under a separate SSMP.

These two collection systems are regulated under different Waste Discharge Identification Numbers (WDIDs) and fall within two Regional Water Quality Control Board (RWQCB) regions:

Western Water Collection Systems	
Region 8	Region 9
Western WWRF CS	Murrieta SRWRF CS
8SS010637	9SS011213

Western Water owns and operates the Western Water Recycling Facility (WWRF) wastewater treatment facility, formerly the March Wastewater Treatment Plant. Western Water also owns a portion of the collection system in Murrieta that discharges into the Santa Rosa Water Reclamation Facility (SRWRF) for treatment. The SRWRF is owned by the Santa Rosa Regional Resources Authority (SRRRA), a joint powers authority consisting of Elsinore Valley Municipal Water District (EVMWD), Rancho California Water District (RCWD), and Western Water.

Western Water Wastewater Systems

In accordance with the Order, Western Water’s SSMP applies to all sewer systems governed by Western’s Board of Directors. Noteworthy is that the Order applies to pipelines, pump and lift stations, and not treatment plants. Treatment facilities are regulated under Federal NPDES permits or State Permits.

This SSMP applies to all Western Water wastewater pipeline and lift station systems, whether or not listed herein. The major systems currently governed by Western Water’s Board of Directors are as follows:

- Western Water’s collection system tributary to WWRF near March Air Reserve Base; for example, Woodcrest south of Van Buren Boulevard, Boulder Springs and Mission Ranch, generally known as Western Water’s East Retail Area.

- Western Water’s collection system tributary to the WRCRWA collection system; for example, Western Water’s El Sobrante, Lake Hills and Victoria Grove areas tributary to WRCRWA collection system, generally known as Western Water’s West Retail Area. Also, Western Water’s Corona Diversion Structure and Pipeline, constructed to convey wastewater from Corona to WRCRWA.
- Western Water collection systems tributary to SAWPA’s Inland Empire Brine Line (IEBL) system; for example, Western Water laterals tributary to the IEBL system.
- Western Water pipelines in and around the Inland Port at March Field tributary to the Eastern Municipal Water District system.
- Western Water pipelines within its Murrieta Division near the southern boundary of its 527 square-mile jurisdiction. Portions of the service area are tributary to the Santa Rosa Water Reclamation Facility (SRWRF).

System Overview

Western Water’s sewer system consists of various components designed to collect and convey wastewater efficiently throughout its service area. The following table summarizes key infrastructure elements currently in operation:

Component	Western WWRF CS	Murrieta SWRF CS	Total, Combined
Total System Length	147.88 miles	31.13 miles	179.01 miles
Gravity Mainlines	127.21 miles	31.18 miles	158.39 miles
Pressurized (Force) Mains	20.67 miles	0.00 miles	20.67 miles
Lift Stations	13	0	13
Diversion Structures	1	0	1

Sewer System Ownership and Responsibilities

The ownership and maintenance responsibilities for the sanitary sewer system between Western Water and private entities are as follows:

- Upper Laterals: Western Water does not own, operate or maintain upper laterals.
- Lower Laterals: Western Water does not own, operate or maintain lower laterals, except for the Southern CRC Lateral which has shared maintenance responsibility with Santa Ana Watershed Project Authority (SAWPA). However, if a private lateral spill occurred and needed to be repaired within the lower lateral, Western would conduct the repair and bill the owner of the lateral for the cost of the full repair.

Service Connections

Service Connections	Western WWRF CS	Murrieta SWRF CS
Total Connections	2,017	2,292
Residential	93.0%	93.0%
Commercial	6.5%	5.2%
Industrial	0.1%	0.1%
Government	0.3%	1.7%

Approximate service connections as of 2025.

Mapping and System Reference

An up-to-date sewer system map is maintained in accordance with Section 4.1 (Updated Map of Sanitary Sewer System) of this SSMP. This map provides detailed locations of all system assets, including pipelines, manholes, force mains, and lift stations, and is accessible for operational use and regulatory compliance.

3.3 Purpose

Western Water recognizes the importance of preventing sewage spills for the mutual protection of surface waters and the overall environment to safeguard public health and safety. Therefore, in a proactive approach to achieve WDR compliance, Western Water has prepared this comprehensive SSMP. This SSMP is designed to ensure continuous improvement of system performance, response, monitoring, data recording, and documentation for future system assessments. Western Water considers the completeness and practicality of the SSMP a critical component for its long-range plans to comply with all applicable regional, State, and Federal requirements under the CWA, the Regional Water Quality Control Board (RWQCB) and the WDRs.

This SSMP provides a summary of the action plan implemented by Western Water to comply with the sanitary sewer system requirements imposed by the WDRs and other governing agencies. In addition, it includes the specific details of the activities and procedures that personnel follow to implement the various programs encompassed in its overall efforts to efficiently manage, operate, and maintain its sanitary sewer system and facilitate the reduction and potential elimination of SSOs.

Western Water is committed to ensuring that this SSMP is fully implemented as written, with all programs, policies, and procedures being followed to maintain compliance with the Order. The agency has established a process for conducting periodic reviews of the SSMP, including internal audits every three years and full updates every six years. These reviews ensure that all elements of the SSMP remain effective, are properly implemented, and are

continuously improved to enhance sewer system management, prevent SSOs, and protect public health and the environment.

3.4 Implementation Schedule and Milestones

To ensure compliance with the Order and support the overarching goal of preventing sanitary sewer overflows, Western Water has established a structured implementation schedule with key recurring activities and milestones. These ongoing or periodic efforts are integrated into the SSMP and are critical to minimizing the risk of spills through proactive operations, maintenance, system evaluation, training, and infrastructure planning.

The following table identifies these milestones, which represent Western Water’s continuous efforts to manage and maintain its sanitary sewer system in a manner that prevents sewer spills:

Milestone	Completion Date	Description
SSMP Update & Certification	Every 6 years (Next 2031)	Ensure full compliance with 11 required elements.
SSMP Internal Audit	Every 3 years (Next: 2027)	Asses SSMP effectiveness and identify necessary modifications.
Service Area Digital Mapping	December 31, 2025	Submit electronic boundary map to the SWRCB.
Hydraulic Capacity Assessment	Ongoing (during master plan updates and during new development)	Identify system deficiencies and plan capital improvements.
Enhanced Maintenance for High-Risk Areas	Quarterly	Target areas with high FOG, root intrusion, or aging infrastructure.
Emergency Response Training	Annually	Conduct SSO simulation drills, spill containment training for field crews, SSO response procedures, sampling methods, and coordination with Source Control staff.
FOG Management & Enforcement	Annually and As Needed	Inspect grease interceptors for food service establishments and oil/water separators for auto service facilities, and conduct public education.
Pump Station Backup Power Review	During CIFP updates (2025/2026)	Assess and upgrade emergency generators for critical infrastructure.

3.5 SSMP Elements and Organization

This SSMP includes detailed information demonstrating Western Water’s efforts to comply with each of the mandatory and applicable elements required for its SSMP. The organization of this document is consistent with the SWRCB guidelines and includes the following eleven (11) mandatory WDR elements:

- i. SSMP Goal and Introduction
- ii. Organization
- iii. Legal Authority

- iv. Operation & Maintenance Program
- v. Design and Performance Provisions
- vi. Spill Emergency Response Plan
- vii. Sewer Pipe Blockage Control Program
- viii. System Evaluation, Capacity Assurance and Capital Improvements
- ix. Monitoring, Measurement and Program Modifications
- x. Internal Audits
- xi. Communication Program

Supporting information for an element is included in an appendix associated with the chapter, as applicable. Generally, information expected to require relatively frequent updates that can be modified without formal action is included in appendices.

In accordance with Section 5.5 of the Order, the SSMP shall be updated every six (6) years, and must include any significant program changes. Re-certification by Western Water’s Board of Directors is required in accordance with Section 5.5 of the Order when significant updates to the SSMP are made. To keep its files current, Western Water staff will take the six-year SSMP update to Western Water’s Board of Directors for re-certification whether or not there have been significant program changes. To complete the re-certification process every six years, a Western Water LRO will upload and certify a local governing entity-approved Sewer System Management Plan Update to the online CIWQS Sanitary Sewer System Database.

Appendix 1 contains the Change Log for this SSMP document and tracks any changes to the information presented herein. The change log is updated as needed, but at a minimum at least once annually.

3.6 Definitions

The following provides definitions for key aspects of this SSMP.

1. **Adaptive Management** - A process of continuously assessing and adjusting SSMP elements based on monitoring data, audit findings, and operational performance to improve effectiveness.
2. **Capacity Assurance** - The process of ensuring that a sanitary sewer system has adequate hydraulic capacity to convey peak flows without causing SSOs, including evaluation, planning, and capital improvement.
3. **California Integrated Water Quality System (CIWQS)** - The online database used by the State Water Board for reporting and tracking SSOs and other compliance data.
4. **Computerized Maintenance Management System (CMMS)** - Software used to schedule, document, and track maintenance activities, work orders, and asset conditions.
5. **Condition Assessment** - Evaluation of sewer system assets (e.g., pipes, manholes) to determine structural integrity, maintenance needs, and prioritization for repair or replacement.
6. **Design Storm** - A theoretical storm event (e.g., 10-year, 24-hour storm) used as a standard for evaluating

and designing sewer system capacity.

7. **Enrollee** - A public agency (e.g., Western Water) that owns or operates a sanitary sewer system and is subject to the requirements of the State Water Resources Control Board's Waste Discharge Requirements (WDRs).
8. **Enhanced Maintenance Area** - A location within the sewer system that requires increased cleaning or monitoring due to FOG, root intrusion, or historical SSO risk.
9. **Fats, Oils, and Grease (FOG)** - Substances typically originating from food service establishments that can accumulate in sewer lines and cause blockages.
10. **Hydraulic Modeling** - The use of computer models to simulate sewer system performance under various flow conditions to identify capacity deficiencies or risks.
11. **Inflow and Infiltration (I/I)** - Unwanted water entering the sewer system from stormwater (inflow) or groundwater (infiltration), which can overload the system and cause SSOs.
12. **Legally Responsible Official (LRO)** - A person or persons authorized by the Enrollee to certify and submit SSO reports to CIWQS and act as the official point of contact with regulatory agencies.
13. **Order** - Refers to State Water Resources Control Board Order No. 2022-0103-DWQ, also known as the General Waste Discharge Requirements for Sanitary Sewer Systems.
14. **Risk-Based Prioritization Matrix** - A decision-making tool used to rank capital improvement or maintenance projects based on risk factors such as likelihood of failure and consequence of failure.
15. **Spill or Sanitary Sewer Overflow (SSO)** - A spill is a discharge of sewage from any portion of a sanitary sewer system due to a sanitary sewer system overflow, operational failure, and/or infrastructure failure. Exfiltration of sewage is not considered to be a spill under the Order if the exfiltrated sewage remains in the subsurface and does not reach a surface water of the State.
 - a. **Category 1 – Spills to Surface Waters:** A Category 1 spill is a spill of any volume of sewage from or caused by a sanitary sewer system regulated under the Order that results in a discharge to:
 - i. A surface water, including a surface water body that contains no flow or volume of water; or
 - ii. A drainage conveyance system that discharges to surface waters when the sewage is not fully captured and returned to the sanitary sewer system or disposed of properly.

Any spill volume not recovered from a drainage conveyance system is considered a discharge to surface water, unless the drainage conveyance system discharges to a dedicated stormwater infiltration basin or facility. These spills require immediate reporting and follow-up investigation.

A spill from an Enrollee-owned and/or operated lateral that discharges to a surface water is a Category 1 spill.

- b. **Category 2 – Large Spills to Land:** A Category 2 spill is a spill of 1,000 gallons or greater, from or caused by a sanitary sewer system regulated under the Order that does not discharge to a surface water.

A spill of 1,000 gallons or greater that spills out of a lateral and is caused by a failure or blockage in the sanitary sewer system, is a Category 2 spill.

- c. **Category 3 – Small Spills to Land:** A Category 3 spill is a spill of equal to or greater than 50 gallons and less than 1,000 gallons, from or caused by a sanitary sewer system regulated under the Order that does not discharge to a surface water.

A spill of equal to or greater than 50 gallons and less than 1,000 gallons, that spills out of a lateral and is caused by a failure or blockage in the sanitary sewer system is a Category 3 spill.

- d. **Category 4 – Minor Spills to Land:** A Category 4 spill is a spill of less than 50 gallons, from or caused by a sanitary sewer system regulated under the Order that does not discharge to a surface water.

A spill of less than 50 gallons that spills out of a lateral and is caused by a failure or blockage in the sanitary sewer system is a Category 4 spill.

16. **Sanitary Sewer System** - A sanitary sewer system is a system that is designed to convey sewage, including but not limited to, pipes, manholes, pump stations, siphons, wet wells, diversion structures and/or other pertinent infrastructure, upstream of a wastewater treatment plant headworks, including:

- Laterals owned and/or operated by the Enrollee;
- Satellite sewer systems; and/or
- Temporary conveyance and storage facilities, including but not limited to temporary piping, vaults, construction trenches, wet wells, impoundments, tanks and diversion structures.

For purposes of this Order, sanitary sewer systems include only systems owned and/or operated by the Enrollee.

17. **Spill Emergency Response Plan (SERP)** - A plan that outlines procedures for immediate response to SSOs, including containment, mitigation, public notification, interagency coordination, and documentation.

18. **Source Control** - Regulatory and operational strategies to reduce pollutants (such as FOG or industrial waste) at their origin before they enter the sewer system.

19. **Spill Volume Estimation** - The process of calculating or approximating the total volume of wastewater released during an SSO using field methods, flow rates, and measurements.

4 Goals

Attachment D, Section 1 of State Order 2022-0103-DWQ

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.

Western Water's Board of Directors hereby adopts with its approval, certification and ongoing recertification of this SSMP the following goals:

1. To provide a plan and schedule to properly and efficiently manage, operate, and maintain Western Water's sanitary sewer systems, while taking into consideration risk management and cost benefit analysis. Western Water's SSMP shall contain a spill emergency response plan that establishes standard procedures for immediate response to an SSO in a manner designed to minimize water quality impacts and potential nuisance conditions.
2. To provide adequate capacity to convey peak flows, to provide notifications and reports to all required regulatory agencies in a timely manner, to minimize the frequencies of SSOs throughout Western Water's collection system, to effectively mitigate the effects of any SSO that may occur, and to provide public education to increase awareness of potential sewer pipe blocking substances and how they can impact the collection system.

In addition to the general goals stated above, Western Water has implemented the following goals specific to the SSMP elements to better evaluate the performance of Western Water's SSMP and ensure efficient and effective sewer system management:

1. Conduct annual SSMP refresher training;
2. Conduct SSO Emergency Response training on a regular basis;
3. Conduct a system-wide video inspection (CCTV) of all gravity main sewer lines once every five to seven years;
4. Meet assigned cleaning frequencies for all gravity mains;
5. Meet designated cleaning and maintenance frequencies for the sewer pump stations;
6. Reduce I/I within the sewer system; and
7. Meet all SSO reporting requirements.

5 Organization

Attachment D, Section 2 of State Order 2022-0103-DWQ

The SSMP must identify organizational staffing responsible and integral for implementing the local SSMP through an organization chart or similar narrative documentation that includes:

- *The name of the Legally Responsible Official as required in section 5.1 (Designation of a Legally Responsible Official) of this General Order;*
- *The position titles, telephone numbers, and email addresses for management, administrative, and maintenance positions responsible for implementing specific Sewer System Management Plan elements;*
- *Organizational lines of authority; 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.)*

Western Water’s organizational structure for the Operations staff, who are responsible for implementing and overseeing the SSMP program, is described in the following sections. Additionally, the general responsibilities of the personnel and chain of communication are included below.

Lines of authority are identified in the organizational chart within **Appendix 2** and a narrative description for each position follows:

General Manager - Establishes policy and plans Western Water’s work activities. Reports and advises the Board of Directors of various engineering and work matters, including those related to the Western Water’s collection system. Also, delegates responsibilities to lower staff through the Deputy General Manager.

Deputy General Manager - Receives general administrative direction from the General Manager. Exercises direct supervision over management, supervisory, professional, technical and clerical staff. Assists the General Manager in the development and implementation of strategic plans, leads staff, allocates resources, delegates responsibilities, and authorizes outside contractors to perform services.

Assistant General Manager/Chief Financial Officer - Under general direction, leads, plans, organizes, directs, and oversees the activities of the Finance and Administrative Department functions.

Director of Engineering - Under general policy direction, plans, organizes, directs and implements Western Water’s engineering activities and operations. Prepares wastewater collection system planning documents, manages capital improvement delivery system, documents new and rehabilitated assets and assists in coordinating the development and implementation of the SSMP.

Deputy Director of Engineering - Under general direction of the Director of Engineering, plans, organizes, directs and implements Western Water’s engineering activities and operations.

Executive Director of Operations - Under general policy direction, plans, organizes, directs and implements comprehensive strategies and programs for the operation of a large potable water distribution and wastewater collection and treatment system. Manages and coordinates all aspects of Western Water's Operations and assists in coordinating the development and implementation of the SSMP.

Director of System Operations - Under the general direction of the Executive Director of Operations, plans, organizes, directs and administers the operations of Western Water's wastewater treatment plants.

Director of Maintenance Operations - Under the general direction of the Executive Director of Operations, plans, organizes, directs and administers the maintenance of Western Water's wastewater and Preventive Maintenance functions.

Deputy Director of System Operations - Under the general direction of the Director of Systems Operations, plans, organizes, directs and administers the operations of Western Water's wastewater treatment plants.

Deputy Director of Maintenance Operations - Under the general direction of the Director of Maintenance Operations, plans, organizes, directs and administers the maintenance of Western Water's wastewater and Preventive Maintenance functions. Also coordinates the development and implementation of the SSMP.

Legally Responsible Officer (LRO) - Designated by the Director of Operations as the person/s responsible for certifying spill reports to CIWQS online SSO database as well as any other reports or information required by the State or Regional Water Boards.

Operations Field Manager - Construction/Collections - Assists in coordinating the development and implementation of Western Water's SSMP. Manages field operations and maintenance activities, provides relevant information to agency management, prepares and implements contingency plans, leads emergency responses, investigates and reports SSOs and trains field crews. Supervises the operation, maintenance, and cleaning of lift stations, domestic sewer systems, and contractors.

Operations Field Manager - Wastewater - Coordinates with Collections staff and Source Control staff when usual flow or discharges enter the wastewater treatment facility. This position supervises the operation and maintenance of Western Water's treatment facility, vehicles, and equipment.

Operations Technicians I/II/III/IV/Sr. Staff - Performs a wide variety of preventive maintenance activities, mobilizes and responds to notification of stoppages and SSOs (mobilize sewer cleaning equipment, by-pass pumping equipment, and portable generators). Assists with sewer line cleaning, inspects, repairs sewer lift stations and performs required maintenance.

Principal Engineer - Under general direction from Western Water's Deputy Director of Engineering, plans, organizes, directs and implements assigned engineering activities and operations.

Environmental and Regulatory Compliance Manager - Under general direction from Western Water's Deputy Director of Engineering, plans, organizes, directs and implements assigned regulatory activities and assists in coordinating the development and implementation of the SSMP on behalf of Western Water.

Senior Management Analyst - Under the general direction of the Environmental and Regulatory Compliance Manager, coordinates the development and implementation of Western Water’s SSMP with staff, including related training, SSMP updates, SOP’s, CIWQS reporting and documentation, and Western Water’s Board of Directors for approval.

Construction Management Administrator - Performs professional and technical contract administration and engineering inspection activities for Western Water’s construction projects; assigns, supervises and participates in the work of staff performing inspections of Western Water’s facilities; and assists in coordinating the development and implementation of SSMP.

Construction Inspector (Contractors) - Ensures that new and rehabilitated assets meet Western Water’s standards, works with field crews to handle emergencies when contractors are involved, and provides verbal reports to Principal Engineer.

Source Control Program Staff - Manages and assists in administering Western Water’s approved Source Control Program; manages and implements Western Water’s FOG Control Program; assists Western Water in complying with Federal, State and local environmental laws and regulations; develops and prepares as needed applicable permits, conducts inspections at industrial user facilities and provides support to all Elements of Western Water’s SSMP.

Sanitary Sewer Overflows

When anyone (member of the general public, law enforcement, regulatory agency, etc.) discovers a possible SSO they may call Western Water’s 24-hour emergency telephone hotline at (951) 789-5109 any day of the year to speak to a knowledgeable individual. The emergency number is listed on Western Water’s website under the “24-Hour Emergency Information” tab and in the local telephone directory.

The call will either be handled by Western Water’s administrative staff or rolled over to Western Water’s answering service. In either event, the information along with the caller’s phone number will be forwarded immediately to Western Water’s Call Team member assigned for the day.

The Call Team member receiving the information will either drive to the site or request a member of another Call Team to drive to the site depending on fastest response time, to determine if a SSO is eminent or occurring.

If the SSO is affirmed, the Call Team member at the site will mobilize a first responder team to control the SSO and mitigate its effects. The Call Team member will then contact one or more of the following to obtain additional resources if needed and report status of the SSO:

- Call Team - on-call team member: (951) 830-8206
- John Wolberd, Senior Operations Technician – Wastewater Collections, Office: (951) 789-5162, Cell (951) 551-1359
- Alex Chang, Operations Field Manager - Wastewater Collections and LRO, Office: (951) 789-5117, Cell: (951) 712-3070
- Dean Standing Warrior - Deputy Director of Maintenance Operations, Office: (951) 789-5113, Cell:(951) 818-4081

- Chris Fike - Director of Maintenance Operations, Office: (951) 789-5133, Cell: (949) 468-8463.

If for any reason, John Wolberd, Alex Chang, Dean Standing Warrior, or Chris Fike are unavailable the Call Team member will contact Paul Rukke, Executive Director of Operations, Office: (951) 789-5155, Cell (951) 751-3522.

All wastewater collection O&M Team members are trained in SSO response, control techniques and documentation. All reporting information will be forwarded to Alex Chang, Western Water's Authorized Representative (LRO) named above for purposes of reporting SSOs to the Environmental and Regulatory Compliance Manager, who will report the spill to the State and Regional Water Board and other agencies, as applicable (such as County Health Officer, County Environmental Health Agency, and/or State Office of Emergency Services (OES)). In the event the Environmental and Regulatory Compliance Manager is unavailable, or a spill occurs after hours, Alex Chang will notify regulatory agencies as applicable.

6 Legal Authority

Attachment D, Section 3 of State Order 2022-0103-DWQ

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

- *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.*

6.1 Introduction to legal Authority

Western Water's Board of Directors adopted Sewer Use Ordinance 393 in March 2021, hereafter referred to as the Wastewater Ordinance, and available in **Appendix 3**. The Wastewater Ordinance supersedes Western Water's previous Ordinances No. 380 and 382. The enforcement section of the Wastewater Ordinance has been reproduced as Western Water's Enforcement Response Plan (ERP), a stand-alone document that can be handed out for purposes of staff training and public education. The following information (Scope, Applicability and Authority) is as stated in the Wastewater Ordinance.

Western Water is regulated by several agencies of the United States government and State of California pursuant to the provisions of State and Federal Law. The Wastewater Ordinance provides the required legal authority to meet the intent, purposes, and policies set forth herein. Western Water is granted the authority to adopt the Wastewater Ordinance pursuant to the authorization of Western Water is granted the authority to adopt and enforce a Wastewater Ordinance pursuant to the Municipal Water District Law of 1911 (California Water Code § 71000 et seq.), California Government Code §§ 54739–54740, the California State Water Resources Control Board Order WQ 2022-0103-DWQ, the Federal Clean Water Act (33 U.S.C. § 1251 et seq.), and the General Pretreatment Regulations (40 CFR Part 403).

The table below summarizes how Western Water demonstrates compliance with the legal authority requirements set forth in the State Water Resources Control Board's General Order 2022-0103-DWQ. Each row identifies the applicable General Order requirement and cites relevant ordinances, technical specifications, or procedures that establish Western Water's authority to implement and enforce those requirements. Full ordinance language and supporting documentation are provided in the subsections that follow.

Legal Authority Order Requirements	Applicable Documents
<p>a) Prevent illicit discharges into its sanitary sewer system (examples may include I/I, stormwater, chemical dumping, unauthorized debris and cut roots, etc.)</p>	<ul style="list-style-type: none"> • Ordinance No. 393, Article 2 – General and Specific Prohibitions and Limitations on Discharges <ul style="list-style-type: none"> ○ Section 2.1 (A): General Prohibitions ○ Section 2.1 (B): Specific Prohibitions
<p>b) Collaborate with storm sewer agencies to coordinate emergency spill responses, ensure access to storm sewer systems during spill events, and prevent unintentional cross</p>	<ul style="list-style-type: none"> • Western Water anticipates initiating this coordination effort with storm water agencies and will incorporate the resulting procedures into the next SSMP update or sooner, if feasible.
<p>c) Require that sewers and connections be properly designed and constructed.</p>	<ul style="list-style-type: none"> • Ordinance No. 393, Article 3 – Use of the Public Sanitary Sewer System <ul style="list-style-type: none"> ○ Section 3.1: Sewer Hookup Required ○ Section 3.2: Notice to Proceed ○ Section 3.3: Sewer Connection Rules • Western Municipal Water District – Standard Specifications: General Provisions • Western Municipal Water District – Technical Provisions • Western Municipal Water District – Design Criteria for Sewer System Facilities
<p>d) Ensure access for maintenance, inspection, and/or repairs for collection system owned and/or maintained by the Public Agency.</p>	<ul style="list-style-type: none"> • Ordinance No. 393, Article 1 – General Provisions <ul style="list-style-type: none"> ○ Sections 1.6: Access • Ordinance No. 393, Article 3 – Use of the Public Sanitary Sewer System <ul style="list-style-type: none"> ○ Section 3.3 (C): Sewer Connection Rules
<p>e) Enforce any violation of its sewer ordinances, service agreements, or other legally binding procedures.</p>	<ul style="list-style-type: none"> • Ordinance No. 393, Article 1 – General Provisions <ul style="list-style-type: none"> ○ Section 1.9: Authority • Ordinance No. 393, Article 6 – Enforcement Response Plan
<p>f) Obtain easement accessibility agreements for locations requiring sewer system operations and maintenance, as applicable.</p>	<ul style="list-style-type: none"> • Ordinance No. 393, Article 1 – General Provisions <ul style="list-style-type: none"> ○ Section 1.6: Access • Formal easement agreements are secured as needed through property acquisition processes, capital improvement projects, or inter-agency coordination.

6.2 Illicit Discharges

Western Water possesses the legal authority to prohibit illicit discharges into its sanitary sewer system through Ordinance No. 393, specifically Article 2, Sections 2.1(A) and 2.1(B).

Section 2.1(A) establishes general prohibitions against introducing any material—liquid or solid—that may cause pass through or interference at the receiving POTW. These prohibitions apply to all users, regardless of whether they are subject to federal, state, or local pretreatment requirements.

Section 2.1(B) outlines a comprehensive list of specific prohibited discharges, including:

- Pollutants with explosive, corrosive, obstructive, or high-temperature characteristics;
- Substances that inhibit biological activity or pose a hazard to worker health and safety;
- Petroleum-based oils, cutting oils, and toxic gases or vapors;
- Wastewater with excessive color, foaming agents, or radioactive elements;
- Stormwater, groundwater, or runoff unless expressly authorized;
- Medical and infectious wastes, pesticides, herbicides, and other substances that may damage the sewer system or increase operational expenses.

Together, these provisions provide Western Water with enforceable legal authority to prevent illicit discharges that could impair wastewater treatment operations, create hazards, or damage infrastructure.

6.3 Collaboration with Storm Water Agencies

Currently, Western Water does not have formal, legally binding procedures in place to coordinate with storm water agencies for emergency spill responses or to ensure access to storm water infrastructure during SSO events. However, Western Water acknowledges the importance of this requirement under the Order and plans to take steps to address this item.

Western Water does have mutual aid agreements with outside agencies and is in the process of developing a mutual aid agreement with Eastern Municipal Water District. In 2023, Western Water entered into a Mutual Aid Agreement with the City of Riverside to provide mutual aid and assistance for water and wastewater utility services, including coordination during emergency events such as SSOs. This agreement represents a foundational step in establishing coordinated emergency response.

Western Water will continue working with its Member Agencies and local stormwater authorities (e.g., Riverside County Flood Control and Water Conservation District) to further develop procedures or additional agreements that:

- Facilitate coordinated emergency response to SSOs that may impact storm water infrastructure;
- Ensure appropriate access to storm drain facilities during spill response efforts;

Western Water anticipates initiating this coordination effort and will incorporate the resulting procedures into the next SSMP update or sooner, if feasible.

6.4 Proper Design and Construction

Western Water possesses the legal authority to require that sewers and connections are properly designed, permitted, and constructed in accordance with applicable codes and Western Water standards. This authority is established through Ordinance No. 393, Article 3, as well as Western’s adopted technical standards and specifications.

- **Section 3.1 – Sewer Hookup Required:** Users are required to apply for sewer service when mandated by the local building authority. No person may connect to Western Water’s system without prior written authorization in the form of a *Notice to Proceed* issued by Western Water.
- **Section 3.2 – Notice to Proceed:** Before any connection to the sanitary sewer system is authorized, users must obtain a Notice to Proceed, contingent on payment of all required fees, submittal of applicable permit applications, and agreement to comply with all Western Water, state, and federal discharge requirements.
- **Section 3.3 – Sewer Connection Rules:** All sewer connections must conform to Western Water rules, applicable building and plumbing codes, and the specifications in Western Water’s *Developer Handbook & Standard Drawings for Water and Sewer Facilities*. Connections must be gas and watertight and are subject to inspection. Additional provisions address backwater valve requirements and surface restoration standards.

In addition to the ordinance, the following design and construction standards provide detailed technical requirements and are enforceable under Western Water authority:

- **Western Municipal Water District – System Design Criteria (2011):** Defines sewer sizing, slope, hydraulic loading, and layout requirements.
- **Standard Specifications: General Provisions:** Establishes performance standards for contractors and defines roles and responsibilities for compliance with Western Water-approved plans.
- **Technical Provisions:** Specifies materials, installation practices, testing procedures, and related construction protocols for sewer facilities.

These combined documents ensure that all sewer infrastructure within Western Water’s jurisdiction is designed and built to protect public health, prevent infiltration/inflow, and support long-term system integrity.

6.5 Ensured Access and Maintained Right of Way

Western Water has the means and authority to ensure access for maintenance, inspection, and repair of its entire system using public right-of-way, exclusive easements, or fee title ownership. Rights of access are generally obtained at the time the property applies for sewer service but may also be acquired in advance through developer agreements. Access is a condition of sewer service.

This authority is reinforced by **Ordinance No. 393**, which provides enforceable provisions supporting Western Water’s right to access and inspect properties connected to the sanitary sewer system:

- **Section 1.6 – Access:** Grants Western Water the right to enter properties from which wastewater is or may be discharged into the system for purposes of inspecting, observing, measuring, sampling, and testing. Western Water personnel are permitted access at reasonable times, and property owners with security measures must facilitate timely entry for authorized staff.
- **Section 3.3(C) – Sewer Connection Rules:** Requires property owners to notify Western Water when sewer connections are ready for inspection and affirms Western Water’s authority to inspect any physical connection to the system before it becomes operational.

These provisions ensure Western Water can fulfill its responsibilities under the General Order by maintaining safe, functional, and accessible sewer infrastructure throughout its service area.

6.6 Enforcement

Western Water maintains the legal authority to enforce its sewer use ordinance and compel compliance through a combination of regulatory powers and a structured enforcement program.

- **Section 1.9 - Authority** of Ordinance No. 393 establishes Western Water’s authority under state and federal law, including the California Water Code, Government Code, Clean Water Act (33 USC §§), and General Pretreatment Regulations (40 CFR 403). Western Water is empowered to adopt and implement limitations, conditions, and prohibitions on sewer discharges. It also has the right to establish flow restrictions, require compliance schedules, and take enforcement actions both within and beyond its service boundaries, including for users discharging into its system under contract.
- **Article 6.0 - Enforcement Response Plan** provides a comprehensive enforcement structure to address violations of the Sewer Use Ordinance. The ERP outlines a range of administrative, civil, and legal remedies and incorporates principles of progressive enforcement in line with 40 CFR 403.8(f)(5). Enforcement responses are calibrated based on the severity and nature of violations.

6.7 Easement Accessibility

Western Water has the legal authority to access private property for the purposes of inspecting, sampling, and testing discharges into the sanitary sewer system, as outlined in Section 1.6 of Ordinance No. 393. This section authorizes Western Water to enter any property from which wastewater is or may be discharged for the purposes of inspecting, observing, measuring, sampling, and testing. Western Water personnel may access all parts of the property’s wastewater generating and disposal facilities at reasonable times and may install any necessary monitoring or metering equipment. Where security measures are in place, the ordinance requires property owners to make necessary arrangements to allow prompt entry by Western Water staff for official business.

In addition to ordinance-based access rights, Western Water secures formal easement agreements where physical access to sanitary sewer infrastructure is needed across private property. These easements are obtained:

- As a condition of sewer service approval;
- Through the property acquisition process for capital improvement projects;
- As part of developer agreements; or
- Through coordination with other public agencies.

Together, Western Water’s ordinance provisions and formal easement acquisition practices ensure that Western Water can maintain reliable access to its entire collection system.

7 Operations & Maintenance

Attachment D, Section 3 of State Order 2022-0103-DWQ

The SSMP must include the items listed below that are appropriate and applicable to the Enrollee’s system.

- **Updated Map of Sanitary Sewer System**

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.

- **Preventive Operation and Maintenance Activities**

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.

- **Training**

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.

- **Equipment Inventory**

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

7.1 Collection System Mapping

The locations of Western Water’s maintained wastewater system pipes and associated appurtenances were originally documented based on as-built drawings. In addition to the record drawings, Western Water now request that developers submit CAD files for new developments.

The locations of Western Water’s maintained wastewater system pipes and associated appurtenances were originally documented based on as-built drawings. These as-built drawings were used to develop a Geographic Information System (GIS) database of the facilities that facilitates management of O&M activities and expedites data management and retrieval for reporting purposes. The Engineering Division maintains hard copy maps at the Meridian Office including sewer blueprints and detailed cut sheets showing vertical location of sewers. Adequate mapping details are provided in both electronic form and hard copy to meet or exceed the requirements of the State Order. In addition, field crews have access to the GIS mapping system in the field via a web viewer. Western Water is also in the process of updating the CMMS system to one that can view the GIS data layers, complete and track work orders, and have the ability to access sewer system notes and historical issues via tablets rather than relying on printed maps and work orders. GIS-based maps of the Western Water collection systems are included in **Appendix 4**.

Necessary revisions and/or updates to the GIS information are typically identified by the Operations crews while performing routine operation and maintenance activities. Discrepancies between field conditions and the GIS are submitted to GIS staff to ensure corrections are implemented into the mapping system.

Western Water maintains an up-to-date map(s) of the sanitary sewer system, including gravity line segments, manholes, pumping facilities, pressure pipes, and valves. Upon request, Western Water will provide Water Board staff access to these detailed maps. While the maps included in **Appendix 4** provide general reference information, the complete, detailed mapping data is available in Western Water’s physical and digital records at the Operations and Engineering offices.

The locations of storm water conveyance facilities are available on the Riverside County Water Conservation & Flood Control District’s website at <http://rcflood.org/NPDES/> under the tab “Stormwater and Water Conservation Tracking Tool” for field crews to review, if needed. While not responsible for the O&M of the storm drain system, Western Water O&M staff are trained to understand the storm drainage network to supplement SSO response actions.

7.2 Preventative Operation and Maintenance

Western Water has historically cleaned the majority of the sewer system on a two-year cleaning cycle. The system is divided into three separate areas: the East System tributary to the Western Water WWRF, the West System tributary to the WRCRWA collection system, and lines conveying flow within the portion of the Murrieta collection system operated and maintained by Western Water.

Each area is cleaned every other year. Western Water has two active Vactor jetting trucks with two-man crews to manage cleaning activities and other maintenance related activities within the service area.

The Standard Operating Procedure (SOP) for Collection System Maintenance and Line Cleaning contains details to effectively maintain the sewer collections system (**Appendix 4**). The SOP describes hydraulic cleaning, CCTV inspection, manhole inspections, flume inspections, force main inspections, air valve inspections, lift station maintenance and inspection activities, GIS mapping accuracy, and record-keeping activities. Manhole inspections are a part of the line-cleaning program.

During routine manhole inspections and cleaning, Western Water documents and addresses any observed maintenance issues such as but not limited to: debris accumulation, pest infestations (e.g., cockroaches), and structural damage (e.g., cracks, pitting, or missing aggregate). If significant deterioration is observed, repairs or rehabilitation measures are then scheduled to prevent further degradation.

Manholes and vaults within the sanitary sewer systems are being inspected and noted on the Daily Line Cleaning Report along with findings during the cleaning of the adjacent sewers.

Inspection of sewers, manholes and vaults is part of the sewer cleaning program and condition reports are a part of the Daily Line Cleaning Report filled out by the field team members. Reported problems on the Daily Line Cleaning Report trigger more frequent cleaning and/or CCTV work to investigate the issue.

At the beginning of each day, the collection crew is given a packet of work orders. Each time a section of the sewer is cleaned, the collection crew(s) completes a cleaning record of that section of sewer including:

- Date and time of the cleaning
- Method of cleaning
- Identity of the cleaning personnel
- Cause of any potential stoppages
- Location of stoppage or routine cleaning activity
- Any further actions that are necessary or taken

When the job has been completed, the collection crew records their findings on the work order and all the completed work orders are returned at the end of the day with the statistics for the day, e.g., sewer line footage that was cleaned, CCTV footage, etc.

The implementation of a computerized maintenance management system (Infor Public Sector, formerly “Hansen”) enhances operations and maintenance strategies through documented asset performance and maintenance history. Through the use of CMMS, there is monitoring and control of the maintenance program, recording and reporting of maintenance costs, percentage of proactive and reactive work, and the identification of critical assets at risk for undesirable failures. An effective CMMS supports planning and scheduling efforts to minimize major service disruptions through strategic-level intervention methodologies, such as through reliability centered maintenance. In addition, KPIs have been developed to track the miles of lines cleaned and CCTV inspected. These values are displayed visually using charts that are updated monthly and shared with management.

Western Water has identified areas of the collection system that require more frequent cleaning – known as enhanced maintenance areas – which are cleaned on a quarterly interval. Enhanced maintenance areas include areas that are subject to accumulation, and areas of structural defects such as sags or debris and FOG accumulation.

7.3 Rehabilitation and Replacement Plan

Western Water is committed to performing CCTV inspection of their entire system, including manholes, every five to seven years. In addition to routine CCTV inspection, Western Water currently utilizes in-house staff to conduct as-

needed CCTV inspections. As-needed CCTV inspections are typically triggered based on cleaning crew observations but can also be triggered by a sewer system blockage or SSO.

Rehabilitation and replacement are based on structural issues identified during routine sewer system maintenance activities or as a follow-up to an SSO. Once an issue is identified, the cause of the structural issue is confirmed through the use of CCTV.

When the problem is not easily remedied through more frequent cleaning, it is added as a repair/replacement project into Western Water’s CIP. This master project schedule includes costs for labor and maintenance. The numerous entries are summarized with major activities and anticipated costs for the upcoming fiscal year with priorities identified. With an iterative approach, the work and costs are revised based on current estimates and priorities, then when the draft is final, the requests are submitted to Western Water management for consideration by Western Water’s Board of Directors for the upcoming fiscal year budget. Western Water’s procedure for rehabilitation and replacement of the Sanitary Sewer System meets or exceeds the requirement of the State Order.

7.4 Training

Western Water provides regular in-house and external training for its Operations & Maintenance (O&M) team and contractors to ensure compliance with the General Order requirements for sanitary sewer system operation and maintenance. Training includes classroom instruction, simulated activities at the El Sobrante Operations Center, and on-the-job field training.

Operations Technicians II and above are required to be certified by a professional organization such as the California Water Environment Association (CWEA), demonstrating their level of knowledge and experience in applying sewer system management practices. Additionally, O&M personnel are evaluated at least once per year to assess proficiency and performance, which informs decisions regarding compensation and additional training needs.

Western Water’s training program includes the following required elements:

1. General Order Compliance
 - All O&M staff receive annual training on the requirements of the Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (Order No. 2022-0103-DWQ), including reporting, monitoring, and regulatory compliance obligations.
2. Spill Emergency Response Plan (SERP) Training and Practice Drills
 - Western Water conducts regular spill response training and simulation drills to ensure O&M personnel and contractors are prepared for real-world sanitary sewer overflows (SSOs).
 - These drills include response procedures outlined in Western Water’s Sanitary Sewer Overflow Emergency Response Plan (SERP), with a focus on containment, mitigation, and compliance with regulatory notification and reporting requirements.
 - Training includes proper deployment of spill containment measures, bypass pumping operations, traffic control, and sampling procedures for regulatory reporting.
3. Skilled Spill Volume Estimation for Field Operators
 - Field operators receive specialized training on spill volume estimation methodologies, including the use of field measurement tools, flow rate calculations, and visual assessment techniques to ensure accurate spill reporting.

4. Electronic CIWQS Reporting Procedures
 - Staff responsible for submitting SSO reports receive hands-on training on the California Integrated Water Quality System (CIWQS).
 - This training includes how to correctly classify SSOs, input required data and submit reports in compliance with State Water Resources Control Board (SWRCB) guidelines.
5. Customer Service Training
 - The O&M team receives training on responding to customer service requests, including handling private lateral issues, odor complaints, and sewer-related concerns.
6. Health and Safety Training
 - All O&M personnel receive annual training in first aid, CPR, and general workplace safety to ensure a safe working environment.
 - Additional training is provided for confined space entry, personal protective equipment (PPE) use, and hazardous spill response.

7.5 Contingency Equipment and Replacement Parts Inventory

The O&M Team maintains a parts inventory for the equipment used to service various components of the Sanitary Sewer System, as well as equipment and material that make up the Sanitary Sewer System. The parts inventory includes pipe for sewers, components for lift stations, and manhole rings and appurtenances for manholes. Service equipment includes, for example, Western Water’s Vactor trucks, the Emergency Response trailer, hose reel trailer for by-pass pumping, portable compressors, portable pumps, portable generators and hand tools. The Sanitary Sewer System parts inventory list maintained by Western Water is included in **Appendix 4**. In general, critical parts including pipe sections for sewers of various diameter and concrete manholes bases, rings and tops that are staged at the El Sobrante Operations Center or remote storage facility. Repair material and equipment are a part of the warehouse inventory. The warehouse system is operated with a computerized minimum and maximum inventory system that can be tailored as needed based on past and current history of usage.

8 Design and Performance Standards

Attachment D, Section 5 of State Order 2022-0103-DWQ

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

- *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 Attachment D of the General Order, the procedures must include component-specific evaluation of the design criteria and*
- *Procedures, and standards for the inspection and testing of newly constructed, newly installed, repaired, and rehabilitated system pipelines, pumps, and other equipment and appurtenances.*

8.1 Design and Construction Standards

Copies of Western Water's Technical Provisions of its standard specifications and General Provisions of its standard specifications for construction of new facilities are provided in **Appendix 5**. Technical Provisions of the specifications address technical construction details and requirements during construction for new and replacement facilities. General Provisions of the specifications address legal detail, requirements and procedures. Both provisions are in every contract. Technical Provisions and Standard Drawings are available on the Western Water website.

A copy of Western Water's design criteria is also provided in **Appendix 5** and made available on the Western Water website (within the Developer's Handbook) to establish planning and design requirements for Sanitary Sewer Systems with such parameters as depth of water to diameter of pipe (d/D) ratios, minimum pipe size, system loading in gallons, and other data needed to properly design sewers, lift stations, manholes and other components.

8.2 Procedures for Inspection and Testing

Western Water has established procedures and standards for the inspection and testing of all newly constructed, newly installed, repaired, and rehabilitated system components, including pipelines, pump stations, manholes, and appurtenances and related sewer infrastructure.

Copies of Western Water's requirements for establishing and implementing procedures and standards for inspecting and testing the installation of new facilities prior to acceptance are attached within **Appendix 5**.

General and Technical provisions of Western Water Construction Specifications provide detailed information about Western Water's requirements for inspection with instructions to the contractor for everything from notification to begin work to acceptance of the facility.

Wastewater personnel are routinely involved in the sewer design review process by being able to provide historical and current use information for Engineering personnel. This information is valuable in the design of sewer lines and appurtenances to ensure that the project will meet expectations.

As stated previously in Section 2, Western Water staff includes a Construction Management Administrator and a team of Construction Inspectors to manage, inspect, and test newly constructed or rehabilitated facilities.

For example:

The new manholes that are installed are visually tested to determine if there are any conditions of inflow or infiltration. This activity is particularly important in areas with traditionally shallow groundwater tables.

All new sewer projects are CCTV inspected after completion. This includes all private sewer systems in commercial projects. Video inspection and inclinometer testing is useful to determine if the private sewer systems were built according to design and that all construction debris has been removed from the new facilities.

9 Spill Emergency Response Plan

Attachment D, Section 6 of State Order 2022-0103-DWQ

The SSMP 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 Order; and
- Annually, review and assess effectiveness of the Spill Emergency Response Plan, and update the Plan as needed

Western Water has updated its Spill Emergency Response Plan (SERP) in accordance with the Order, ensuring compliance with the latest regulatory requirements. The updated SERP (included in **Appendix 6**) outlines the agency's spill response procedures, responsibilities, and coordination efforts to protect public health and the environment. The key elements of Western Water's SERP include:

1. SSO Notification and Reporting

- Western Water ensures that all SSOs are promptly reported to regulatory agencies, including CIWQS, California Office of Emergency Services, and local health agencies.
- Reporting requirements are based on spill category, ensuring compliance with updated notification timelines.

2. Spill response procedures

- Western Water’s policy is to immediately respond to all spills, whether on public or private property, and to take all necessary actions to prevent SSOs from reaching storm drains, flood control channels, or waters of the State.
- The SERP details containment, recovery, and decontamination measures to mitigate environmental impacts.

3. Emergency Response Coordination

- The Spill Response Team, led by the Operations Field Manager-Construction/Collections, coordinates emergency efforts, including mobilizing internal crews and external contractors for spill mitigation and cleanup.
- A chain of command and notification procedure ensure an organized response to all SSOs.

4. Training and Spill Response Drills

- Western Water provides spill response training to appropriate staff to ensure familiarity with the Spill Emergency Response Plan (SERP).
- Contractors involved in emergency repairs receive guidance to support proper spill response practices.

5. Water Quality Monitoring and SSO Volume Estimation

- Western Water has implemented updated procedures for water quality sampling in cases where spills reach surface waters.
- Spills greater than 50,000 gallons require the preparation of a SSO Technical Report, including sampling data and environmental impact assessments.

6. Public Notification and Advisory Procedures

- Western Water follows public notification protocols for SSOs that pose a risk to public health, including posting warning signs, coordinating with local health agencies, and conducting community outreach where applicable.

10 Sewer Pipe Blockage Control Program

Attachment D, Section 7 of State Order 2022-0103-DWQ

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

10.1 Introduction to Sewer Pipe Blockage Control Program

Western Water's Sewer Pipe Blockage Control Program (formerly the FOG Control Program) addresses those mandatory SSMP provisions outlined in the Order. The program is designed to mitigate blockages and SSOs caused by FOG, rags, debris, and other obstructions.

The Sewer Pipe Blockage Control Program aims to minimize SSOs, enhance system performance, and ensure compliance with state and federal wastewater discharge regulations. To implement this program effectively, Western Water has developed a Sewer Pipe Blockage Control Program Manual (included in **Appendix 7**) that integrates:

- Western Water’s existing regulations governing FOG, wipes, rags and other obstructive materials, including the General Prohibitions and Specific Prohibitions outlined in Ordinance No. 393, which regulate oil and grease loading to prevent interference with the treatment process. Local Limits are typically only applied to permitted industries, food service establishments (FSEs), or commercial businesses.
- Western Water Sewer System Management Practices, which provide guidance on source control, best management practices, and enforcement measures.
- Pretreatment requirements for industries, ensuring industrial and commercial users comply with discharge limits and source control expectations related to FOG and other obstructive substances before wastewater enters Western Water’s system.
- Educational outreach materials available for FSEs, industrial users, and the general public, promoting proper disposal practices to prevent sewer blockages caused by FOG and other non-dispersible materials such as wipes and debris.

The following subsections detail each element of the Sewer Pipe Blockage Control Program, including public education, disposal planning, enforcement authority, maintenance strategies, and inspection protocols.

10.2 Public Education for Proper Disposal of FOG and Other Pipe-Blocking Substances

Western Water uses Source Control inspectors as the principal education and outreach method to contact the restaurant community, food service establishments (FSEs) and residents regarding FOG and other materials known to contribute to sewer blockages, such as wipes and rags. Occasionally the Source Control inspectors will participate in outreach efforts sponsored by other agencies. During an inspection of a restaurant or food service facility, the inspector will use the opportunity to inform and educate the owner or manager about the various laws and regulations that affect their business. The inspectors also provide useful information related to interceptor design, maintenance, and businesses that can assist the restaurants and food service facilities in maintaining pretreatment equipment.

Educational procedures are outlined in Western Water’s Sewer Pipe Blockage Control Program document in **Appendix 7**.

10.3 Disposal Plan, Schedule and Facilities for Pipe Blocking Substances

Western Water’s Sewer Pipe Blockage Control Program, included in **Appendix 7**, outlines the proper disposal methods for FOG and other pipe-blocking substances. FOG waste collected from grease interceptors is required to be removed by licensed grease waste haulers and disposed of at approved treatment facilities. A list of acceptable disposal facilities is maintained by Western Water’s Source Control Program and is available upon request. All disposal facilities approved by Western Water are licensed waste haulers, permitted by Riverside County. Western

Water requires that all FSEs and grease haulers maintain disposal manifests and comply with applicable schedules outlined in the Sewer Pipe Blockage Control Program to ensure timely and appropriate disposal.

10.4 Legal Authority to Prohibit Blockage-Causing Discharges

Legal authority is outlined in Western Water’s Sewer Pipe Blockage Control Program made a part of **Appendix 7**, published as a stand-alone document with the same name and found in Western Water’s Wastewater Ordinance. Western Water’s Wastewater Ordinance provides Western Water the legal authority to prohibit discharges of FOG and other blockage-causing materials to the system in compliance with the State Order. The Wastewater Ordinance is sanctioned by State and Federal law and by General Pretreatment Regulations (40 CFR 403) as referenced in Section 3 herein. The Wastewater Ordinance is available on Western Water’s website and in **Appendix 3** of this SSMP.

10.5 Interceptor Requirements

Western Water’s Wastewater Ordinance requires designated food processing facilities, including restaurants, to install an approved gravity grease interceptor. The interceptor is required to meet all installation and maintenance requirements of Western Water’s Wastewater Ordinance. The interceptor shall be sized to be the larger of the design criteria specified in the current version of the Uniform Plumbing Code or the design criteria specified by Western Water. The interceptor shall contain a minimum of two chambers, with a manhole cover over each chamber and internal plumbing fixtures (tees), and shall include a sample box. Western Water’s Wastewater Ordinance requires all dischargers, including permitted FSEs, to meet specific discharge limits designed to protect the sewer collection and treatment system. An approved interceptor design has been included in **Appendix 5**.

10.6 Authority and Staffing to Inspect FOG Facilities

Western Water has the authority to inspect FOG producing sites as a result of State and Federal Codes and Western Water’s Wastewater Ordinance. As stated in the Wastewater Ordinance, Western Water shall be granted permission to enter any properties from which Wastewaters are being or are capable of being discharged into the Sanitary Sewer System for purposes of inspecting, observing, measuring, sampling, and testing the Discharge. Western Water shall have access at reasonable times to all parts of the person’s wastewater generating and disposal facilities for the purposes of inspection and sampling. Western Water shall have the right to set up on the person’s property such devices as are necessary to conduct sampling or metering operations. Where a person has security measures in force, the person shall make necessary arrangements so that authorized personnel from Western Water will be permitted to enter without delay for the purpose of performing their specific responsibilities.

Western Water has competent staff and the necessary staffing to inspect sites and enforce all regulations including those relating to FOG. Western Water staff members are knowledgeable in all aspects of the Wastewater Ordinance.

10.7 Identification of Sewer Segments Prone to Blockages

Due to the limited number of Food Service Facilities in the Western Water service area, there are few areas of the sewer system subject to excessive FOG accumulation. Western Water has identified all areas subject to blockage-causing material accumulation and have established cleaning schedules to address these locations. Maps with locations of all enhanced maintenance area locations slated for quarterly cleaning, including areas with FOG accumulation, are included in **Appendix 4**.

10.8 Source Control Measures for All Sewer Pipe Blockage Sources

Control measures are implemented with Western Water's Source Control Program and are applied as needed to remedy potential FOG issues and other discharge issues. Source Control staff meet with FSE owners during inspections, and as needed, to discuss the Western Water's FOG Control Program including proper grease control device maintenance. Western Water has developed formal literature to be disseminated during these meetings. Although Source Control does not have jurisdictional authority over residential customers, Western Water makes FOG educational materials available to the public via its website and provides general public outreach through events such as Western Water's Open House. Sample FOG educational materials are included in **Appendix 7**.

11 System Evaluation, Capacity Assurance, and Capital Improvements

Attachment D, Section 8 of State Order 2022-0103-DWQ

The Plan must include procedures and activities for:

1. System Evaluation and Condition Assessment

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 methods;*
- *Utilize observations/evidence of system conditions that may contribute to exiting of sewage from the system which can reasonably be expected to discharge into a water of the State;*
- *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.*

2. Capacity Assessment and Design Criteria

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

- *Dry-weather peak flow conditions that cause or contributes to spill events;*
- *The appropriate design storm(s) or wet weather events that causes or contributes to spill events;*
- *The capacity of key system components; and*
- *Identify the major sources that contribute to the peak flows associated with sewer spills.*

The capacity assessment must consider:

- *Data from existing system condition assessments, system inspections, system audits, spill history, and other available information;*
- *Capacity of flood-prone systems subject to increased infiltration and inflow, under normal local and regional storm conditions;*
- *Capacity of systems subject to increased infiltration and inflow due to larger and/or 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.*

3. Prioritization of Corrective Action

The findings of the condition assessments and capacity assessments must be used to prioritize corrective actions. Prioritization must consider the severity of the consequences of potential spills.

4. Capital Improvement Plan

The capital improvement plan must include the following items:

- *Project schedules including 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.*

Western Water’s SSMP covers both the Riverside Retail and Murrieta Retail sewer systems. Each system is evaluated and planned for under separate Sewer Master Plans (SMPs), which serve as the foundational documents for system evaluation and capacity assurance:

- The 2025 Riverside SMP is currently under development and will assess hydraulic capacity and future infrastructure needs for the Riverside Retail system.
- The 2021 Murrieta SMP, completed in November 2021, replaced the 2014 version and provides a comprehensive evaluation of the Murrieta Retail system, including buildout flow projections, hydraulic modeling, groundwater infiltration analysis, and a Capital Improvement Program.

11.1 System Evaluation and Condition Assessment

Western Water evaluates the condition and hydraulic capacity of its sanitary sewer system using best practices, field inspections, and sewer master planning. Two master plans dated June 2014 (East and West Systems for the Riverside Retail Service Area) and August 2014 (Murrieta Retail Service Area) are currently in use and included in **Appendix 8**. These plans provide baseline hydraulic modeling, identify capacity constraints under buildout conditions, and support capital improvement planning.

The 2021 Murrieta Sewer Master Plan (SMP) includes a detailed evaluation of the Murrieta collection system, supported by GIS-based asset mapping and extensive flow monitoring. Six permanent flow monitors were installed and provide ongoing data to assess dry and wet weather performance. The SMP identifies areas with high groundwater infiltration (GWI) and confirms that rainfall-dependent inflow/infiltration (RDII) is minimal, based on R-T-K analyses.

Western Water is currently working on a 2025 Riverside Sewer Master Plan.

Systemwide condition assessment using CCTV inspection and manhole evaluations are ongoing.

1. Ongoing Condition Assessment: Western Water is committed to completing a comprehensive condition assessment of its sewer system. The assessment includes CCTV inspection of gravity sewers; manhole inspections; visual evaluations and field verifications supported by SCADA monitoring; and review of SCADA flow data and manual capacity calculations for IEBL laterals.
2. High-priority Areas for Condition Assessment: Western Water will prioritize system components for future inspections that:
 - Are in areas prone to collapse, failure, or blockages.
 - Are located near surface waters, steep terrain, or high groundwater elevations.
 - Are in areas with repeated SSOs or high I/I (Inflow and Infiltration) contributions.
 - Are identified as vulnerable to climate change impacts (e.g., flooding, wildfires, or erosion).

Recent efforts include the replacement of aging sewer lines on and around MARB to restore hydraulic capacity and reduce failure risk.

3. Climate Resilience Review: In alignment with the Order, Western Water will incorporate climate vulnerability considerations into its condition and capacity assessments. This includes evaluating:
 - Exposure to extreme storm events that may cause overflows or exceed system capacity;
 - Flood-prone areas and their contribution to I/I;
 - Potential erosion, wildfire, or seismic impacts to pipeline infrastructure and lift stations;
 - Long-term impacts of climate change on sewer system performance.

Implementation Plan for Compliance

To ensure compliance with the Order, Western Water will:

- Establish a formal tracking system for condition assessments.
- Complete climate vulnerability assessment and integrate findings into capital planning.

11.2 Capacity Assessment and Design Criteria

The 2014 Riverside Sewer Master Plan and 2021 Murrieta Sewer Master Plan provide Western Water with planning documents that outline the potential service area boundaries, available capacity of existing facilities, location and sizing of future sewer conveyance facilities, and the costs and potential connection fees for capital cost recovery.

An updated Sewer Master Plan for the Riverside Retail Service Area is currently in process for Western Water’s collection system and is expected to be completed in 2025. The updated Sewer Master Plan will incorporate a capacity evaluation focused on identifying system constraints that could contribute to SSOs due to limited hydraulic capacity.

The 2021 Murrieta Sewer Master Plan already includes these elements. It uses InfoSewer hydraulic modeling to assess existing and future flows, applying q/Q ratios, velocity requirements, and design storm conditions based on a 10-year, 24-hour rainfall event. Evaluation showed no need for upsizing existing mains; rather, planned infrastructure expansions aim to provide service to future developments.

1. Peak Flow Analysis: Western Water’s capacity evaluation considers:
 - Dry weather peak flow conditions to assess normal operating constraints.
 - Wet weather peak flow conditions based on a 10-year design storm event to ensure adequate system resilience.
 - Monitoring of Inflow & Infiltration (I/I) trends to determine excessive groundwater or stormwater intrusion.
2. Hydraulic Deficiency Identification: Hydraulic modeling and system monitoring identify:
 - Pipe Pipelines approaching or exceeding capacity during peak flows.
 - Lift stations operating near design limits requiring upgrades.
 - Force main and gravity main bottlenecks impacting flow conveyance.
3. Establishing Standard Design Criteria:
 - Western Water will adopt updated sewer design standards to ensure adequate capacity for new developments.
 - Capacity-related SSOs will be formally tracked to guide system expansion and CIP prioritization.

Implementation Plan for Compliance

To enhance system capacity assurance and comply with the Order, Western Water will:

- Conduct a system-wide flow monitoring study to validate wet weather capacity (2025).
- Establish official design storm criteria and incorporate it into design guidelines (2025).
- Implement I/I reduction strategies within the Capital Improvement Plan (2026).

11.3 Prioritization of Corrective Actions

Western Water prioritizes corrective actions based on the severity and impact of system deficiencies. Upon completion of the system evaluation and condition assessments, the following are implemented where applicable;

1. Risk-Based Prioritization Matrix: To determine the urgency of corrective actions, Western Water will establish a risk-based ranking system considering:

- Likelihood of failure (age, material condition, maintenance history).
 - Consequence of failure (environmental impact, proximity to sensitive areas).
 - Regulatory compliance risk (potential for enforcement actions).
2. Emergency System Deficiencies: For infrastructure identified as high risk, Western Water will implement:
- Expedited repair or replacement of critical system components.
 - Backup systems for essential lift stations and force mains.
 - Preventive maintenance programs to extend asset life and reduce failures.
 - Integrate risk-based prioritization into CIP decision-making.

Murrieta System Note:

Western Water’s 2021 Murrieta Sewer Master Plan incorporated a risk-based approach to identifying corrective actions, particularly those related to excessive groundwater infiltration (GWI). The plan identified basins with disproportionately high GWI and recommended targeted rehabilitation strategies. These include phased pipe and manhole repairs prioritized based on flow data, field investigations, and cost-effectiveness. Although the SMP does not include a formal prioritization matrix, the evaluation framework fulfills the intent of corrective action planning as described in this section.

11.4 Capital Improvement Plan (CIP)

Western Water maintains a Capital Improvement Plan (CIP) that is adopted as part of Western Water’s annual budgeting process. The CIP outlines short- and long-term capital projects necessary to maintain and improve Western Water’s sewer infrastructure, address identified capacity and condition deficiencies, and support new development.

The 2021 Murrieta SMP includes a phased CIP to support long-term system capacity and service extension. Key elements include:

- Over 46,000 linear feet of new gravity mains to serve future development (mostly 8", 10", and 15" diameter).
- Total project cost estimates of \$19.1 million, inclusive of construction, contingency, and soft costs.
- Coordination with SRRRA and EMWD to address future treatment needs, as existing allocations (1.0 mgd and 0.25 mgd, respectively) will be exceeded at full buildout.

The Fiscal Year 2025–2029 CIP, included in **Appendix 8**, identifies project-specific scopes, funding sources (including grants, loans, and internal reserves), and multi-year implementation schedules. Projects are grouped by category and include collection system upgrades, rehabilitation, asset replacement, SCADA improvements, I/I reduction efforts, and major treatment facility expansions.

Projects are developed and prioritized based on findings from Western Water’s Sewer Master Plans and condition assessments (e.g., CCTV inspections, SCADA monitoring), and are reviewed by engineering, operations, and finance staff. The CIP is updated annually and submitted to the Board of Directors for approval.

While several projects address inflow and infiltration (I/I) and aging infrastructure, future CIP updates will further integrate results of Western Water’s climate vulnerability assessments, including storm-related risks and seismic hazards.

Western Water will also begin reporting estimated project completion dates and implementation status in future SSMP updates or audits, to align with Order 2022-0103-DWQ.

12 Monitoring, Measurement, and Program Modifications

Attachment D, Section 9 of State Order 2022-0103-DWQ

The SSMP must include an Adaptive Management section that addresses SSMP implementation effectiveness and the steps for necessary SSMP 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.*

To ensure the continued effectiveness and improvement of Western Water’s SSMP, the agency has implemented a structured monitoring and measurement process. This process involves the ongoing collection and analysis of data related to SSMP implementation, sewer system performance, and preventive maintenance activities. Through regular review and evaluation, Western Water can identify trends, assess program effectiveness, and make informed updates or modifications to improve compliance, system reliability, and environmental protection.

12.1 Maintain Relevant Information

Western Water uses the SSMP as the central document in the array of numerous documents used to establish and prioritize SSMP activities. A key document used to form the culture of responsiveness is Western Water’s Mission Statement. Documents describing Western Water’s organization are used to identify individual responsibility and proper channels of communications. Legal documents such as Western Water’s Wastewater Ordinance are used to enforce SSMP activities especially when SSMP activities can be significantly impacted by those outside Western Water’s organization.

Mapping documents, maintenance records, annual budgets for rehabilitation and replacement of system components, five- year Capital Improvement Plans, and sewer master plans are used to prioritize SSMP activities and establish funding commitments in support of the SSMP.

Sanitary sewer system planning criteria, design requirements, construction standards and specifications, and inspection protocols are means and methods to ensure all new construction and rehabilitation are consistent with the SSMP intent.

Western Water plans to maintain a centralized, digital recordkeeping system to document all activities related to SSMP implementation, including periodic reviews, staff meetings, training, and major technical studies. These

records are to be organized by topic and reviewed annually during the SSMP internal audit to ensure completeness and accessibility.

12.2 Monitor the Implementation of the SSMP

The SSMP elements are discussed periodically throughout the year during regular staff meetings with the Director of Operations and the division supervisors. Additional meetings to assess the effectiveness of individual elements are held as needed. Major studies, such as the Sewer Master Plan update, the 2020 Murrieta Sewer Division Flow Evaluation, the 2019 MARB and Non-Cantonment Area Groundwater Infiltration Study and Sewer System Rehabilitation Plan, as well as the triennial audits, are also used to measure the effectiveness of the SSMP and make revisions as appropriate.

Western Water tracks the location and cause of all SSOs, blockages, and gravity main hot spots into a database system. Western Water maintains a log of all cleaning activity, which details the size, material and location of each pipe cleaned, as well as the equipment utilized, and any relevant remarks observed during the cleaning. Sewer main and manhole inspection data, staff training and spare parts inventory are also tracked to confirm SSMP goals and requirements are met.

12.3 Assess the Preventative Maintenance Program

Western Water field staff inspect all gravity mains and manholes during routine cleaning and request localized video inspections when their observations warrant further investigation. Additionally, Western Water conducts system-wide video inspections, and each pipe is given a score based on the National Association of Sewer Service Companies' (NASSCO) pipeline rating system. These ratings, as well as the observed condition of each pipeline, allow Western Water to identify gravity mains that are at risk of collapse or prone to more frequent blockages due to pipe defects.

The preventative maintenance program is structured enough to support training and individual learning curves yet flexible enough to account for variable conditions. Finally, in the event of an SSO the maintenance team can respond quickly with the necessary material and equipment in part because it has assembled a SSO response equipment trailer that contains first responder equipment and can be towed immediately to the site of the SSO.

The success of the preventative maintenance program overall is assessed by the reduction (or lack thereof) of SSOs over time. Using SSO trend data, further described in Section 12.1.5 below, Western Water assesses their preventative maintenance program and makes modifications, as necessary, to reduce SSOs in the system.

12.4 Update SSMP Program Elements

Western Water's SSMP program elements are updated in accordance with the results of the monitoring described within this chapter, the internal SSMP audits that are conducted once every three years as required by the Order. Program elements are updated, as necessary, based on regular review to improve the implementation of the SSMP and achieve the overall goals of a reduction of the frequency and volume of SSOs over time.

The following table identifies Western Water’s planned actions that are not yet fully implemented but are necessary to comply with the Order. These actions are tracked to ensure accountability and timely updates in future SSMP revisions or audits.

Planned Action	SSMP Section	Responsible Party	Target Completion Date	Notes
Establish formal tracking system for condition assessments	11.1 – System Evaluation	O&M/Consultant	Ongoing	Supports annual CCTV goals
Develop risk assessment tool for prioritizing system vulnerabilities	11.1 – System Evaluation	O&M/Consultant	Ongoing	Identifies high risk areas
Complete climate vulnerability assessment and integrate into capital planning	11.1 – System Evaluation	O&M/Consultant	By next audit	Includes sea level rise, flooding, fire
Conduct system-wide flow monitoring study	11.2 – Capacity Assessment	Engineering/Consultant	In progress	Informs wet weather design
Establish design storm criteria and update design guidelines	11.2 – Capacity Assessment	Engineering/Consultant	In progress	2025 Sewer Master Plan
Implement I/I reduction strategies within Capital Improvement Plan	11.3 – Corrective Actions	Engineering/Consultant	In progress	
Include estimated CIP project completion dates in future SSMPs or audits	11.4 – CIP	Regulatory Compliance/O&M	By next audit	Improves project transparency
Develop and implement SSO spill response drill program	9 – SERP	Collections	Annually	Required by Order Attachment D
Develop formal coordination procedures with stormwater agencies	6.1 – Legal Authority	Admin/Regulatory Compliance	By next audit	For joint emergency response

12.4.1 Identify SSO Trends

In order to monitor the implementation and measure the effectiveness of the SSMP, Western Water tracks several SSO-related performance indicators for the past 10 years, including:

- Number of SSOs
- Number of SSOs by category
- Number of SSOs by cause
- Number of SSOs in enhanced maintenance areas
- Volume of SSOs in gallons.

This SSO tracking data is included in **Appendix 9**. While SSOs within the Western Water service area are rare, Western Water analyzes areas of potential SSOs and high-risk for SSOs. Western Water identifies these locations and implements the necessary corrective actions to mitigate for potential SSOs in these locations.

13 SSMP Program Audits

Attachment D, Section 10 of State Order 2022-0103-DWQ

The SSMP 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 the Order.

As a part of its SSMP, Western Water conducts periodic audits. At a minimum, Western Water audits its SSMP every three years and prepares a report that is reviewed by management. If conditions change that warrant an increased audit frequency, Western Water will adjust its audit cycle accordingly.

Audits will review Western Water's SSMP activities from the time of the last audit and will summarize the data accumulated through its monitoring, measuring, and program modification efforts. Particular attention will be paid to each program's effectiveness in meeting its goals, objectives, and priorities while ultimately being tied into the budgetary process.

The audit process will include the review of additions or improvements made to the collection system during the current audit period and describe planned additions and improvements for the upcoming audit period. Supporting documents will be reviewed to ensure they are up to date and the most recent documents are available and referenced. This process will also ensure that historical documents are kept for future reference.

The results of the audit, including identification of any deficiencies and the steps taken or planned to correct them, will be included in the audit report. The audit report will be used in Western Water's budgeting process when planning future CIP projects.

Employee training will be reviewed to ensure programs and mechanisms are in place to provide necessary training, and that all staff are up to date with required training. Training includes on the job requirements, safety, required licenses and/or certificates, and professional development.

Completed audits are retained on file by Western Water. The public can obtain information about Western Water's SSMP Audits by calling Western Water's offices at (951) 571-7100.

14 Communication Program

Attachment D, Section 11 of State Order 2022-0103-DWQ

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.*

Effective communication is essential for ensuring transparency, fostering public trust, and supporting regulatory compliance. Western Water’s Communication Program is designed to inform and engage the public and regulatory agencies regarding the SSMP, SSO reporting, and sewer system performance. This section outlines how Western Water disseminates information about its sewer system management efforts and how it responds to inquiries or concerns from stakeholders, in alignment with the requirements of the Order.

14.1 Communication with the Public

State Order requirements are complex with eleven major categories, over three-dozen subcategories and the numerous elements of its monitoring and reporting program. The Western Water SSMP has increased complexity with various Western Water systems tributary to different POTWs and collection systems (Western Water WWRF, Western Riverside County Regional Wastewater Authority, Orange County Sanitation District via SAWPA’s IEBL system, Eastern Municipal Water District, and Santa Rosa Regional Reclamation Authority). Because of the complexity and numerous POTWs, Western Water staff members provide thorough notification when developing or updating the SSMP.

Prior to its adoption by the Board of Directors, the updated draft SSMP will be submitted to staff members for review and comment. The Board of Directors will publicly review the updated SSMP at a regularly scheduled meeting of the Board of Directors to receive comments from all interested parties prior to considering its adoption. The SSMP is available on Western Water’s website for public review with a contact phone number listed to receive any questions or comments about the SSMP. For security reasons, the Appendices to the SSMP will not be posted to Western Water’s website.

With the completion of each audit, the results will be shared with staff members responsible for various elements of the SSMP for information and education. Audit reports are kept on file at Western Water offices.

Western Water created a call center to enable the residents of Western Water’s service area to call one phone number to report any problem with anything related to Western Water’s services. This number is frequently used to ask questions about the Sanitary Sewer System and to report problems. The report generated from the call center service request order has a chronological events feature that allows dispatch to accurately report the information. This system creates a direct communication link with Western Water customers.

Western Water has procedures to notify the public in the event of a sanitary sewer overflow (SSO) or discharge that results in the closure of a public area (e.g., parks, trails) or that enters a source of drinking water. Notifications are coordinated with appropriate agencies such as local health departments or emergency services. The procedures include internal communication protocols and responsibilities, a method for issuing public notifications (e.g., signage, door hangers, website announcements), and documentation of the response. Western Water’s Strategic Communications team will follow Western Water’s standard emergency outreach protocols if an event occurs within Western Water’s service area and poses a public health or operational impact.

Additionally, Western Water’s website contains information about their FOG Program, Wastewater Ordinance, design criteria and other information relative to the SSMP to keep the public informed. As discussed in Section 10, FOG educational materials are distributed regularly to FSEs.

14.2 Communication with Additional Agencies

Western Water staff regularly coordinate with neighboring agencies through periodic meetings and routine email communication. Staff also maintain direct contact with one another via cell phone for day-to-day operations. When the SSMP is substantially updated, Western Water shares the updated document with its tributary and satellite agencies.

APPENDICES

Project Report - Auto-Numbering

Final Audit Report

2025-07-23

Created:	2025-07-16
By:	Jennifer McMullin (jmcmullin@wmwd.com)
Status:	Signed
Transaction ID:	CBJCHBCAABAA5VymD2Ckq11UWrh0bijrmkJtZNApwJq

"Project Report - Auto-Numbering" History

-  Document created by Jennifer McMullin (jmcmullin@wmwd.com)
2025-07-16 - 7:31:05 PM GMT
-  Document emailed to Chris Fike (CFike@wmwd.com) for signature
2025-07-16 - 7:31:13 PM GMT
-  Email viewed by Chris Fike (CFike@wmwd.com)
2025-07-16 - 7:31:19 PM GMT
-  Email viewed by Chris Fike (CFike@wmwd.com)
2025-07-23 - 7:44:36 PM GMT
-  Document e-signed by Chris Fike (CFike@wmwd.com)
Signature Date: 2025-07-23 - 8:22:35 PM GMT - Time Source: server
-  Agreement completed.
2025-07-23 - 8:22:35 PM GMT