SANITARY SEWER MANAGEMENT PLAN (SSMP)

Revised September 2025

CITY OF DEL MAR

CALIFORNIA

Table of Contents

Appendices

Attachments

Table of Tables

Table of Figures

Acronyms

AM	Area Maintenance
ADF	Average Daily Flow
BMP	Best Management Practices
Cal OES	California Office of Emergency Services
CCTV	Closed Circuit Television
CIP	Capital Improvement Program
City	City of Del Mar
CIWQS	California Integrated Water Quality System
DAA	District Agricultural Association
FOG	Fats, Oils, and Grease
FSE	Food Service Establishment
GIS	Geographic Information System
GPS	Global Positioning System
Greenbook	Standard Specifications for Public Works Construction
HMA	High Maintenance Area
I/I	Inflow and Infiltration
LRO	Legally Responsible Official
Metro JPA	Metro Wastewater Joint Powers Authority
MGD	Million Gallons per Day
MRP	Monitoring and Reporting Program
NOC	Notice of Correction
NOV	Notice of Violation
NPDES	National Pollutant Discharge Elimination System
O&M	Operation and Maintenance
PLSD	Private Lateral Sewage Discharge
POTW	Publicly Owned Treatment Works
PW	Public Works Department
SEJPA	San Elijo Joint Powers Authority
SDRSD	San Diego Regional Standard Drawings
SDRWQCB	San Diego Regional Water Quality Control Board
SERP	Spill Emergency Response Plan
SSMP	Sewer System Management Plan
SSO	Sanitary Sewer Overflow
SWRCB	State Water Resources Control Board
WDRs	Waste Discharge Requirements

1 Introduction

This Sewer System Management Plan (SSMP) has been prepared in compliance with the requirements of the State Water Resources Control Board (SWRCB) Statewide General Waste Discharge Requirements (WDRs) for Sanitary Sewer Systems Order No. 2006-0003 DWQ (Order). The purpose of the Order is to provide a consistent statewide approach for eliminating Sanitary Sewer spills. As required, a copy of the SSMP is maintained at the City of Del Mar (City) Public Works Department (PW) and is available to the public, state and SDRWQCB upon request and to the City's operating and maintenance personnel at all times.

This SSMP presents City's policies and procedures to manage, operate, and maintain the City's sanitary sewer system (collection system) and comply with requirements of the Order. This SSMP is a living document subject to constant review and revision as conditions and needs of the collection system change.

1.1 Regulatory Background

On May 2, 2006, the SWRCB adopted WDRs for Sanitary Sewer Systems Order No. 2006-0003-DWQ (Order). This Order mandates all federal and state agencies, municipalities, counties, districts, and other public entities that own or operate sanitary sewer collection systems greater than one mile in length that collect and/or convey untreated or partially treated sewer to a Publicly Owned Treatment Works (POTW) facility in the State of California to comply with terms of the Order. In 2008, the SWRCB issued revised Monitoring Reporting Program (MRP) requirements to rectify notification deficiencies that occurred early in program implementation. After several years of implementation, another amendment to the Order was issued in 2013 to better advance the SSO reduction program objectives, assess compliance, and enforce the requirements of the Order. The "Order" in this document refers to the original 2006 WDR for sanitary sewer collection systems and all related amendments (Appendix A).

In 2007, the San Diego Region Water Quality Control Board (SDRWQCB) issued Waste Discharge Requirements (WDRs) for sewage collection agencies in San Diego Region (Order No. R9-2007-0005). Requirements set forth in the SDRWQCB WDR are more stringent than and supersede the requirements established by the Order. These requirements are specified in this SSMP where applicable and are included in Appendix A.

1.2 Service Area and Sewer System

The City owns and operates a sanitary sewer collection system which provides service to approximately 4,500 residents via approximately 1,800 sewer connections. The collection system consists of approximately 27 miles of sewer mains, three miles of force main, one pump station and one lift station. Seventy-eight percent (78%) of the sewer lines consist of 6"-8" diameter pipe, 20% are 9"-15" diameter pipe, and 2% are 16"-24" diameter pipe. Within the City's jurisdiction, there are sewer lines that are owned and operated by either the City of Solana Beach or the City of San Diego. These sewer lines are located in the following areas alongside sewers owned by the City of Del Mar:

- Owned by City of San Diego
    - Camino Del Mar (southbound) between Carmel Valley Road and approximately 1,600ft north of Carmel Valley Road
    - Carmel Valley Road (eastbound and westbound) between Camino Del Mar and approximately 400ft west of Torrey Point Road
- Owned by City of Solana Beach
    - Via de la Valle (westbound) between S. Cedros Ave. and Valley Ave.
    - Via de la Valle (eastbound) between Camino del Mar and Interstate-5
    - Jimmy Durante Blvd. between Via de la Valle and Hilton Del Mar entrance

- Border Ave. between S. Sierra Ave. and Camino del Mar
- Camino del Mar (northbound) between Via de la Valle and Brigantine Seafood Restaurant entrance

The City's collection system conveys an annual average flow of 0.55 million gallons per day (MGD). The City sends a majority (98%) of its sanitary sewer flows north to the San Elijo Joint Powers Authority (SEJPA) and a portion of its sanitary sewer flows (2%) to Metro Wastewater Joint Powers Authority (Metro JPA). The general parameters of the City's agreement with the SEJPA is that the City cannot exceed an average daily flow of 0.6 MGD of sanitary sewer flow to the San Elijo Wastewater Reclamation Facility for treatment during dry weather. During wet weather, the allowed capacity increases to 1 MGD. As a member agency of the Metro JPA, the City uses the City of San Diego treatment facility for covering a few homes and businesses.

In the event of extreme emergency flows, the San Elijo Wastewater Reclamation Facility can handle an additional 0.18 MGD, for a short duration, or alternatively, the City could convey sanitary sewer flows to the City of San Diego's Wastewater facility, which can handle a total of 2.16 MGD from the City of Del Mar.

1.3 Document Organization

This SSMP identifies how the City complies with or implements applicable and mandatory requirements. The organization of this document is developed in accordance with mandatory elements per Section D.13 of the Order. This document also presents the City's SSO Water Quality Monitoring and Reporting program. Table 1 presents the mandatory elements of an SSMP and corresponding document sections.

Table 1: Mandatory Elements of an SSMP (per Provision D.13)

Provision	Requirement	City's SSMP Section
D.13(i)	Goals and Objectives	2
D.13(ii)	Legal Authority	3
D.13(iii)	Organization	4
D.13(iv)	Operation and Maintenance Program	5
D.13(v)	Design and Performance Provisions	6
D.13(vi)	Spill Emergency Response Plan (SERP)	7
D.13(vii)	Fats, Oils, and Grease (FOG) Control Program	9
D.13(viii)	System Evaluation and Capacity Assurance Plan	10
D.13(ix)	Monitoring, Measurement and Plan Modifications	11
D.13(x)	SSMP Program Audits	12
D.13(xi)	Public Communication Program	13
G.2	Monitoring and Reporting Requirements	8

2 Goals

The goal of the SSMP is to provide a plan and schedule to properly manage, operate, and maintain the City's sanitary sewer collection system. The plan is intended to help reduce and prevent SSOs, as well as mitigate any SSOs that may occur.

The City has established several goals to achieve successful management and maintenance of the collection system. Goals promote unified efforts toward improvements affecting the operations, maintenance, and management of the collection system. They also reflect performance, safety, levels of service, resource use, and other criteria.

The goals of the City are to:

1. Properly manage, operate, and maintain all portions of the City's sanitary sewer collection system through timely implementation of the elements of the SSMP.
2. Provide adequate capacity to convey the peak sanitary sewer flows.
3. Control inflow and infiltration to minimize peak sanitary sewer flows.
4. Eliminate SSOs through completion of the sewer maintenance schedule, cleaning the system's High Maintenance Areas quarterly, and following established duty protocols and reporting procedures.
5. Mitigate any impacts that are associated with SSOs.
6. Minimize the number and impact of SSOs through education and communication with collection system users.
7. Meet all applicable regulatory notification and reporting requirements.

Commitment to continual improvement will also ensure that the SSMP is both a living and sustainable document that is continually updated, revised, and tailored toward the City's needs.

3 Legal Authority

The SSMP must include the following:

a) Prevent illicit discharges into its sanitary sewer system (examples may include I/I, storm water, chemical dumping, unauthorized debris and cut roots, etc.);
b) Require that sewer and connections be properly designed and constructed;
c) Ensure access for maintenance, inspection, or repairs for portions owned or maintained by the Public Agency;
d) Limit the discharge of fats, oils, and grease and other debris that may cause blockages; and
e) Enforce any violation of its sewer ordinances.

Legal authority to enforce the SSMP is established through the City's local ordinances and municipal code. Chapter 22 of the Municipal Code (Title 22) is related to the SSMP and can be found at the City's website (provided below). Sections of Chapter 22 demonstrating legal authority in compliance with Order Section D.13(iii) are as follows:

A. Prevent illicit discharges

- City of Del Mar Regulation of Discharge into City Sewer System (Chapter 22.16)
- City of Del Mar Use of Sewer System Required (Chapter 22.08.02)

B. Require that sewers and connections be properly designed and constructed

- City of Del Mar Design and Construction of Sewer Connections (Chapter 22.08.030)

C. Ensure access for maintenance, inspection, or repairs for portions owned or maintained by the Public Agency

- City of Del Mar Responsibility for Installation, Maintenance and Replacement (Chapter 22.08.070)
- City of Del Mar Work to be Performed by City; Work by Others (Chapter 22.08.060)

D. Limit the discharge of fats, oils, and grease and other debris that may cause blockages

- City of Del Mar General Limitations, Prohibitions, and Requirements on Fats, Oils, and Grease ("FOG") Discharges (Chapter 22.08.050)
- City of Del Mar Monitoring and Inspecting Facilities Requirements (Chapter 22.08.065)

E. Enforce any violation of its sewer ordinances

- City of Del Mar City Manager to Enforce Chapter Provisions (Chapter 22.04.06)

A copy of the City's Municipal Code Title 22 is provided in Appendix B and can also be found at the following link: https://library.municode.com/ca/del_mar/codes/municipal_code

4 Organization

The SSMP must identify the following:

a) The name of the responsible or authorized representative.
b) The names and telephone numbers for management, administrative, and maintenance positions responsible for implementing specific measures in the SSMP program. The SSMP must identify lines of authority through an organization chart or similar document with a narrative explanation; and
c) The chain of communication for reporting the SSOs, from receipt of a complaint or other information, including the person responsible for reporting SSOs to the State and Regional Water Board and other agencies if applicable.

This section presents the name of the City's authorized representative, a list of contacts responsible for implementing the SSMP, and the chain of communication for reporting the SSOs.

4.1 Authorized Representative

The Public Works Director is identified as the City's Legally Responsible Official (LRO) and authorized representative registered with the State of California to officially sign and certify SSO reports submitted through the California Integrated Water Quality System (CIWQS) database. The LRO is also responsible for certifying SSMP milestones.

4.2 Contact Information

Figure 1 presents the City's organizational chart for the chain of communication and levels of authority regarding SSMP implementation. The chart identifies the administrative, maintenance, and management positions responsible for implementing, managing, and updating the specific measures included in this SSMP. The SSMP Implementation Responsibilities table (Table 2) accompanies the organizational chart and defines the role of each position to ensure all elements of this SSMP are implemented. Contact information for identified positions responsible for implementing the SSMP is included in Table 3.

In the event of an SSO, response and notification procedures presented in the City's Spill Emergency Response Plan (SERP) are to be followed. Provided in Attachment 1, the SERP identifies the staff positions responsible for managing the SSO response, investigating the SSO cause, and reporting the SSO to the appropriate parties. The SERP includes a consolidated list of contact information of key personnel and contractors available to respond to SSOs, as well as the sequence of communication for reporting SSOs and the appropriate agencies to be notified.

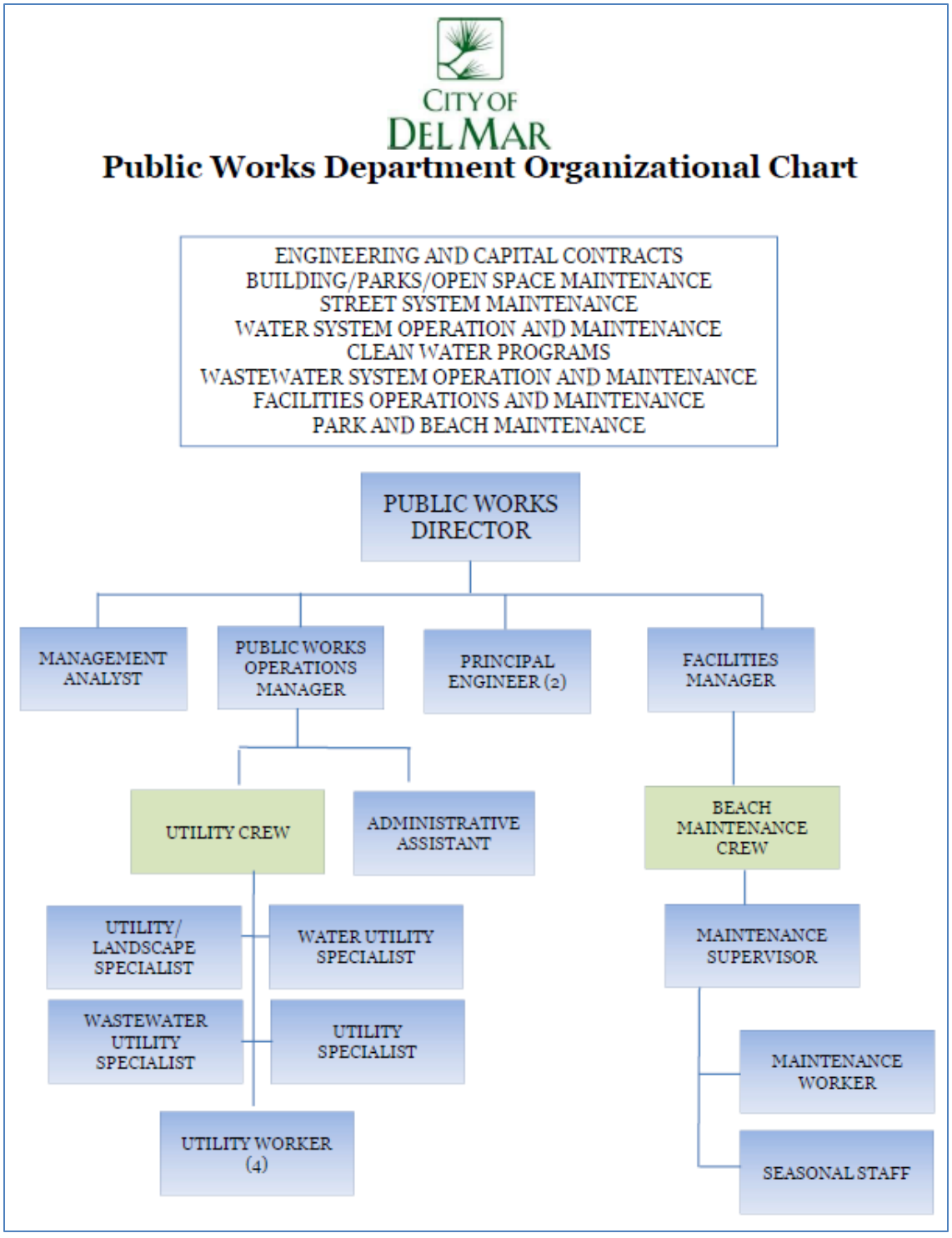

Figure 1: City of Del Mar Organizational Chart

Table 2: SSMP Implementation Responsibilities

Position	Responsibilities
Mayor and City Council Members	• Adopt policies • Certify SSMP
City Manager	• Ensure policies are appropriate • Ensure policies can be implemented • Ensure regulatory compliance • Approve additional resources
Public Works Director and/or City Engineer	• Manage policies, procedures, and resources for SSMP activity implementation • Monitor and manage sanitary sewer improvement projects • Monitor and manage special projects • Manage resources for SSMP implantation • Coordinate support with City Engineer • Manage and monitor SSMP implementation and effectiveness • Initiate SSMP updates • Primary Legally Responsible Officer for CIWQS certification
Public Works Operations Manager	• Implement and measure effectiveness of SSMP • Coordinate and schedule field activities to include training/safety practices • Monitor and manage field operations • Monitor and manage equipment and parts inventory • Communicate SSMP effectiveness to Director of Public Services • Recommend improvements to SSMP procedures • Backup Legally Responsible Officer for CIWQS certification • Monitor SSMP plans and procedures • Work directly with data-submitter (Management Assistant)
Sanitary Sewer Operations and Maintenance Workers	• Perform daily activities, execute plans and procedures • Assess SSMP plans and procedures • Communicate SSMP effectiveness to PW Operations Manager • Ensure safety procedures are implemented

Table 3: Contact List

Name	Role	Main	Direct Line
Ashley Jones	City Manager	(858) 755-9313	(858) 704-3630
Leslie Devaney	City Attorney (Devaney Pate Morris & Cameron)	(619) 354-5030	N/A
Joe Bride	Public Works Director, LRO	(858) 755-3294	(858) 704-3681
Karen Falk	Principal Engineer	(858) 755-3294	(858) 375-9533
Martin Boyd	Principal Engineer	(858) 755-3294	(858) 375-9531
Michael D'Aquila	Facilities Manager	(858) 755-3294	(858) 704-3684
Alex Panduro	Public Works Operations Manager	(858) 755-3294	(760) 214-5097
Andre Proano	Wastewater Utility Specialist	(858) 755-3294	N/A
Vacant	Utility Specialist	N/A	N/A
Tim Thiele	Engineering Manager (Michael Baker International)	(760) 476-9193	(760) 603-6243
Polly Robertson	Management Analyst	(858) 755-3294	(858) 704-3677
Teresa Teichman	Administrative Assistant II	(858) 755-3294	(858) 704-3678

5 Operations and Maintenance Program

The SSMP operations and maintenance (O&M) program must include the following:

a) Maintain an up-to-date map of the sanitary sewer system, showing all gravity line segments and manholes, pumping facilities, pressure pipes and valves, and applicable storm water conveyance facilities;

b) Describe routine preventive operation and maintenance activities by staff and contractors, including a system for scheduling regular maintenance and cleaning of the sanitary sewer system with more frequent cleaning and maintenance targeted at known problem areas. The Preventative Maintenance program should have a system to document scheduled and conducted activities, such as work orders;

c) Develop a rehabilitation and replacement plan to identify and prioritize system deficiencies and implement short-term and long-term rehabilitation actions to address each deficiency. The program should include regular visual and TV inspections of manholes and sewer pipes, and a system for ranking the condition of sewer pipes and scheduling rehabilitation. Rehabilitation and replacement should focus on sewer pipes that are at risk of collapse or prone to more frequent blockages due to pipe defects. Finally, the rehabilitation and replacement plan should include a capital improvement plan that addresses proper management and protection of the infrastructure assets. The plan shall include a time schedule for implementing the short and longterm plans plus a schedule for developing the funds needed for the capital improvement plan;

d) Provide training on a regular basis for staff in sanitary sewer system operations and maintenance, and require contractors to be appropriately trained; and

e) Provide equipment and replacement part inventories, including identification and critical replacement parts.

The City's PW is responsible for ensuring proper and efficient operation of the collection system. O&M responsibilities include but are not limited to routine maintenance and cleaning of the City's sewer pump stations and sewer pipelines, responding to SSOs, and performing closed circuit television (CCTV) inspections and assessment of the collection system. It is important to note that the City's PW is not responsible for maintaining sewer assets owned by the City of Solana Beach or City of San Diego.

The City maintains an up-to-date map of the collection system in a detailed map book, as required by Section D.13(iv)(a) of the Order. Features of the collection system recorded in this map book include but are not limited to the following:

- Gravity mains
- Cleanouts
- Forced mains
- Network structure
- System valves
- Laterals
- Fittings
- Manholes
- Pump stations
- Storm and potable piping

The City Engineer is responsible for ensuring all new as-builts are incorporated into the City's Geographic Information System (GIS) database, and that printed PW map books are updated accordingly. Additionally, as PW staff perform maintenance and visual inspections, discrepancies are noted and provided to City Engineering staff to update the City's sewer GIS. Data is collected on an ongoing basis and provided to the City Engineer annually to update GIS files and re-print map book pages.

5.1 Preventive Maintenance Program

To ensure operational efficiency, the City's collection system requires regularly scheduled inspections and continual maintenance. Maintenance and inspection activities enable the City to monitor various system components and address identified maintenance issues. Routine maintenance and inspection activities

are discussed in the following sub-sections, and additional O&M program documents (e.g., pipeline cleaning protocols, pump station maintenance protocols, equipment inventories) are provided in Appendix C.

5.1.1 Maintenance Activities

The City cleans the full sewer system on a schedule based on sewer line sizes. During cleanings, manholes are also visually inspected. PW crews use the City's Sewer Map Book, which describes the entire collection system from manhole to manhole, and a combination of Microsoft Office and TRAKiT programs for scheduling and tracking of maintenance field data. As maintenance activities are performed, maintenance records are produced by PW staff and submitted to the PW Operations Manager.

Scheduled maintenance for the City's collection system is as follows:

- Pipes less than 15-inches are cleaned every 15 months, and
- Pipes greater than or equal to 15-inches are cleaned every 5 years.

The collection system also consists of a pump station and a lift station. The pump station is inspected and cleaned twice per week; the lift station is operational 24-hours a day and runs for approximately one-hour a day and is inspected and cleaned monthly (Appendix C). Maintenance of the pump station, lift station and associated wet wells includes inspection and/or reporting of the following items:

- Wet well liquid level
- Pump meter readings
- Pump oil levels
- Conditions of belts
- Maintaining mechanical seals
- Air quality of underground stations
- Pump settings
- Alarm system
- Cleaning wet wells
- Greasing pumping bearings

In addition to routine maintenance activities, the City maintains High Maintenance Areas (HMAs) quarterly. HMAs are areas of the sewer system that are known to have a history of SSOs, often related to sediment build-up, Fats, Oils and Grease (FOG), or roots. HMAs are determined based on previous SSOs, CCTV inspections, and location of Food Service Establishments (FSEs). HMAs are evaluated on an ongoing basis, and HMA designation is removed when the deficiency is addressed. For example, clearing of sediment build-up or removal of roots at a facility would prompt removal of HMA designation. HMAs identified due to the presences of FSEs, however, remain as HMAs since quarterly maintenance activities in these areas is a key preventative maintenance measure.

5.1.2 Inspection Activities

Regular and systematic inspection and assessment of collection system facilities is a method to monitor the condition of the facilities and the effectiveness of maintenance operations. For the inspection of pipelines, the City performs its own CCTV inspections as well as contracts a company to perform scheduled CCTV inspections, when needed. City staff utilize an in-house CCTV as needed during the year to examine trouble spots as SSOs or other issues occur. A city-approved contractor, on the other hand, performs an as-needed robust CCTV inspection of the collection system. Pipelines identified in need of repair or replacement through CCTV inspections are designated as HMAs to be serviced; HMA designation is removed from these facilities when repair or replacement has taken place. The replacement and rehabilitation of the City's collection system is discussed in Section 5.2.

5.2 Sewer Replacement and Rehabilitation Program

Information from the City's Preventative Maintenance Program such as observations during maintenance activities and CCTV inspection findings, is used to identify sewer repair and replacement needs. This information in addition to other asset information (e.g., age, material) is considered in prioritizing capital

improvement projects and determining short- and long-term tasks. PW submits prioritized replacement or rehabilitation requests to the Engineering Division for preparation of design and specifications of work to be done. These designs and specifications are then shared with the City's contractor to perform replacement or repair.

As identified in the City's adopted budget and the City's five-year adopted sewer rates, the Sewer Replacement and Rehabilitation Program undergoes a bi-annual contract maintenance program which funds capital improvements of non-emergency system problems (i.e., collection system replacements or repairs).

5.3 Equipment and Replacement Part Inventories

PW maintains an inventory of materials and equipment necessary for the operation and maintenance activities of the City's collection system. The inventory is maintained and updated annually by PW staff and kept on file in the PW facility. The City's maintenance vehicles, equipment, and replacement parts are readily accessible to operations staff and kept in the Public Works Yard. Additional parts and equipment are stored on-site to address various types of routine and emergency conditions, as needed. Appendix C provides a list of equipment and vehicles available to staff for maintenance of the collection system and identifies critical replacement parts.

A maintained onsite inventory enables the City to address SSOs efficiently and effectively and restore service to customers with minimal disruption. For repairs that extend beyond the City's internal resource capabilities, the City retains the services of professional contractors.

5.4 Training and Safety Program

Training is an important aspect in PW for City staff and contractors working on City sites. A training budget exists to ensure all City staff is properly trained and to provide each staff member with tuition reimbursement. New staff receive on-the-job training tailored to the City's collection system and maintenance equipment. For new equipment, all staff are trained by the contractor or manufacturer, and all equipment manuals are available for reference. Staff are also trained to respond to major emergencies and disasters per the protocols identified in this plan and associated documents (e.g., SERP). Staff also attend offsite workshops and collective training via internet webinars, where possible. Grade Certification in Collection System Maintenance is encouraged.

Proficiency is required for all job positions and promotions, and training records are maintained and updated by PW Administrative Assistant. Appendix D provides blank copies of the training documentation form.

6 Design and Performance Provisions

The SSMP requires the following design and performance requirements:

a) Design and construction standards and specifications for the installation of new sanitary sewer systems, pump stations and other appurtenances; and for the rehabilitation and repair of existing sanitary sewer systems; and

b) Procedures and standards for inspecting and testing the installation of new sewers, pumps, and other appurtenances and for rehabilitation and repair projects.

This section outlines the City's requirements for the design and construction of new, rehabilitated, and replacement sewer system facilities, including mains, tie-ins, service laterals, cleanouts, manholes, and other system appurtenances.

6.1 Design and Construction Standards and Specifications

The City has established standards and specifications to ensure consistency and proper construction of and connections to the City's collection system. These standards and specifications are intended to ensure access to the system for maintenance, inspection and repair. Standards and specifications for the design and construction of collection system facilities are found in following documents:

- Standard Specifications for Public Works Construction (Greenbook);
- San Diego Regional Standard Drawings (SDRSD) and City-annotated SDRSD Drawings,
- City of Del Mar Municipal Code; and
- Project specific construction contract documents.

All construction, repair or rehabilitation projects must be completed in accordance to these and City construction contract documents prior to dedication or acceptance by the City. All design work for City must be done by a registered California professional engineer and all contractors must be licensed and insured.

6.2 Inspecting and Testing

Inspection information regarding new and/or rehabilitation projects provided by the contractor(s) is reviewed by the City's designated inspector to ensure compliance with design and construction policies. For unique projects, or projects not covered by the standard materials, specific inspection, and testing requirements are developed by the City Engineer.

7 Spill Emergency Response Plan

The City must develop and implement a Spill Emergency Response Plan (SERP) which includes the following:

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

The City's SERP establishes procedures for City staff to appropriately and efficiently respond to, contain, correct, and clean up spills. The SERP is intended to minimize the effects of spills on the environment while protecting the public's health and safety. Objectives of the SERP are summarized as:

- Protect public health and safety, and the environment;
- Minimize the impacts of spills;
- Satisfy regulatory and discharge permit conditions;
- Protect private and public property;
- Protect City personnel; and
- Protect City-owned assets.

Attachment 1 presents the City's SERP. The SERP is available to any contractor who may provide service to the City to ensure that the contractors are properly informed of the response procedures. All PW staff receive regularly scheduled trainings covering spill responses and any updates to the SSMP, SERP, and associated documents. Hands-on training demonstrations ensure all staff is adequately prepared to respond to a spill event.

Figure 2 illustrates an overview of steps when responding to a spill.

Figure 2: Overview of the Spill Response Procedures

7.1 Spill Water Quality Monitoring and Reporting

The City must comply with Monitoring and Reporting Program (Order No. WQ 2022-0103-DWQ) requirements regarding spill event notification and reporting, water quality monitoring, and record keeping. The City is required to:

a) Notify the California Office of Emergency Services (Cal OES) and obtain a notification control number within two hours of becoming aware a spill greater than or equal to 1,000 gallons discharged to surface water or spilled in a location where it probably will be discharged to surface water.
b) Submit spill reports for spills originating from the City's sanitary sewer collection system.
c) Conduct water quality sampling within 18 hours after initial spill notification for spills in which 50,000 gallons or greater are spilled to surface waters.
d) Maintain records including:
    - Spill event records
    - Documentation of SSMP implementation, SSMP updates, and SSMP audits
    - System telemetry records if relied upon to document and/or estimate spill volume
    - Water quality monitoring records
    - Equipment records for owned/leased equipment pertaining to the operation, maintenance, or construction of the sewer system
    - Work orders for operations and maintenance projects

Per the San Diego Region WDR for Sewer Collection Agencies (Order No. R9-2007-0005), the City is required to report all known Private Lateral Sewage Discharges (PLSDs) to the State Water Board.

The protocol to notify appropriate entities, including Cal OES, of spill events is described in the City's SERP (Attachment 1). This section describes the City's reporting, water quality monitoring, and record keeping procedures.

7.2 Reporting

The City reports spills to SWRCB, regardless of size and recovery, originating from the City's sanitary sewer collection system. Reports are required to be submitted via the California Integrated Water Quality System (CIWQS) Sanitary Sewer System Database[1]. If the CIWQS Sanitary Sewer System Database is unavailable to submit required reports or certify reports, City staff must fax all required information to the San Diego Regional Water Quality Control Board office at 619.516.1994.

As required, the City has one Legally Responsible Official (LRO) who is registered with the State of California to sign and certify reports submitted via CIWQS officially. Data Submitters are registered with the State to enter spill data, create and edit spill reports, and review data, but cannot certify reports. Data Submitters are typically the First Responders to an spill location or the person who collects the spill data for reporting. Data submitters in the City include O&M staff, PW Deputy Director, and PW Operations Manager.

Reported spills are divided into four categories:

- **Category 1 Spill**: Sewage discharges, of any volume, resulting from a failure in the City's collection system that:
    - Results in a discharge to a drainage conveyance system and/or surface water; or
    - Discharges to a drainage conveyance system and were not fully captured and returned to the sanitary sewer collection system.

[1] http://ciwqs.waterboards.ca.gov

- **Category 2 Spill**: Sewage discharges, 1,000 gallons or greater, resulting from a failure in the City's collection system that **do not** reach surface waters or a drainage conveyance system, including instances where the discharge was fully recovered from the City's storm drain system.
- **Category 3 Spill**: Sewage discharges equal to or greater than 50 gallons and less than 1,000 gallons, resulting from a failure in the City's collection system that **do not** reach surface waters or a drainage conveyance system.
- **Category 4 Spill**: Discharges less than 50 gallons resulting from a failure in the City's collection system that **do not** reach surface waters or a drainage conveyance system.

Reporting requirements are as follows:

- **Category 1 or 2 Spill**: Submit a Draft report within 3 business days of becoming aware of the spill and submit a certified final report within 15 calendar days of the spill end date. See Section 7.2.1 for more details.
- **Category 3 Spill**: Submit a certified report within 30 calendar days of the end of the month in which the spill occurred. See Section 7.2.1 for more details.
- **Category 4 Spill**: Submit certified report including estimated total spill volume and total number of Category 4 spills within 30 calendar days of the end of the month in which the spill occurred. See Section 7.2.1 for more details.
- **Enrollee Owned and/or Operated Lateral Spills:** Upload and certify a report by February 1st after the end of the calendar year in which the spills occurred. See Section 8.1.1 for more details.
- **Spill Technical Report**: For Category 1 spills in which 50,000 gallons or greater are discharged to surface water, submit a certified Spill Technical Report within 45 calendar days of the spill end date. See Section 7.2.2 for more details.
- **"No Spill" or "Category 4 Spills" and/or "Non-Category 1 Lateral Spills" Monthly Certification:** If no spills or only Category 4 and/or Lateral Spills occur during a calendar month, submit a certified "No Spill" or a "Category 4 Spills" and/or "Non-Category 1 Lateral Spills" certification statement within 30 calendar days after the end of the designated month.
- **Category 4 and/or Lateral Spills Annual Certification:** For Category 4 spills and spills from laterals that are caused by a failure or blockage in the lateral that do not discharge to a surface water, submit annual report of record keeping and provide records upon request
- **Amended Spill Reports:** A certified spill report may be updated within 90 calendar days of the spill end date by either amending the report or adding an attachment. After 90 calendar days, the report may be amended by submitting justification for why the additional information was not available prior to the end of the 90 days. The State Water Board can be contacted at the following email address: SanitarySewer@waterboards.ca.gov.

Additional details on the Spill Reports and Technical Reports submitted by the City are in the following sub-sections.

7.2.1 Spill Reports

In compliance with the requirements, the City submits draft and certified spill reports for Category 1 and 2 spills to the CIWQS Sanitary Sewer System database, as well as certified spill reports for Category 3 and 4 spills . Table 4 summarizes required information which are included in the spill reports.

Table 4: Mandatory Reporting Information for Spill Reports

Required Item	Category 1 Spill		Category 2 Spill		Category 3 Spill	Category 4 Spill
	[illegible]	Certified Spill Report	[illegible]	Certified Spill Report	Certified Spill Report	Certified Spill Report
Spill contact information (name and phone number of contact)	✓	I	I	I	I	
Spill location name	I	I	I	I	I	
Date and time the Enrollee was notified, or self-discovered, the spill	I	I	I	I	I	
Operator arrival time	I	I	I	I	I	
Estimated spill start date and time	I	I	I	I	I	
Date and time California Office of Emergency Services was notified, and the assigned control number	I	I	I	I		
Description, photographs, and GPS coordinates of where spill originated: if multiple points, describe each appearance point and provide GPS coordinates for the appearance point closest to failure point	✓	I	I	I	I	
Estimated total spill volume exiting system	I	I	I	I	I	I
Description and photographs of the extent of the spill and spill boundaries	✓	I	I	I	I	
Did the spill reach a drainage conveyance system? If yes, provide the information for the next five items:	I	I	I	I	I	
1. Description of the drainage conveyance system transporting the spill;	✓	I	I	I	I	
2. Photographs of the drainage conveyance system entry location(s);	I	I	I	I	I	
3. Estimated spill volume fully recovered from the drainage conveyance system;	I	I	I	I	I	
4. Estimated spill volume remaining within the drainage conveyance system;	I	I	I	I		
5. Estimated spill volume discharged to a groundwater infiltration basin or facility, if applicable			I	I	I	
Description and photographs of all discharge point(s) into the surface water;	✓	I				
Estimated spill volume that discharged to surface waters; and	I	I				
Estimated total spill volume recovered.	I	I		I	I	
Description and GPS coordinates of spill event destinations		I		I	I	
Spill end date and time		I		I	I	

Required Item	Category 1 Spill		Category 2 Spill		Category 3 Spill	Category 4 Spill
	[illegible]	Certified Spill Report	[illegible]	Certified Spill Report	Certified Spill Report	Certified Spill Report
Description of how spill volume was calculated; including methodology, assumptions, type of data relied on		I		I	I	
Description of how spill start and end times were determined;including methodology, assumptions, type of data relied on		I		I	I	
Cause of spill (root intrusion, grease deposition, etc.)		I		I	I	
System failure location (main, lateral, pump station, etc.)		I		I	I	
Description of pipe/infrastructure material, and estimated age of the pipe/infrastructure material at failure location		I		I	I	
Description of the impact of the spill		I		I	I	
Whether or not spill was associated with a storm event		I		I	I	
Description of spill response activities including description of immediate spill containment and clean up efforts		I		I	I	
Description of spill corrective action, including steps planned or taken to reduce, eliminate, and prevent reoccurrence, and a schedule of major milestones for those steps		I		I	I	
Local regulatory enforcement action taken against an illicit discharge in response to this spill, as applicable, and					I	
Identifiable system modifications, and operation and maintenance program modifications needed to prevent repeated spill occurrences at the same spill event location (capital improvements, adjusted maintenance schedule/methods, inspected or repaired assets)					I	
Spill response completion date		I		I		
Detailed narrative of investigation and findings of cause of spill		I		I		
Reason for ongoing investigation and expected completion date		I		I		
Name and type of receiving water body impacted		I				
Observed impacts on aquatic life		I				
Public closure, restricted public access, temporary restricted use, and/or posted health warnings due to spill		I				

Required Item	Category 1 Spill		Category 2 Spill		Category 3 Spill	Category 4 Spill
	[illegible]	Certified Spill Report	[illegible]	Certified Spill Report	Certified Spill Report	Certified Spill Report
Number of days closed/restricted due to spill		✓				
Whether or not spill was located within 1,00 feet of a municipal surface water intake		✓		✓		
If water quality samples were collected, identify sample locations and parameters the water quality samples were analyzed for (NA if no samples were taken)		✓				
Total number of all Category 4 spills						✓

7.2.2 Spill Technical Report

The City submits an Spill Technical Report and performs water quality monitoring (See Section 8.2) for any spill in which 50,000 gallons or greater is discharged to surface waters. The Spill Technical Report details the causes of the spill, the City's response, and the results of the water quality monitoring. This report is submitted in addition to the Category 1 Spill report. The Spill Technical Report is required to include the following information:

- Detailed explanation of how and when the spill was discovered,
- Photographs illustrating the spill origin, the extent and reach of the spill, drainage conveyance system entrance and exit, receiving water, and post-cleanup site conditions;
- Diagram showing the spill failure point, appearance point(s), flow paths and ultimate destination(s),
- Detailed description of the methodology employed, and available data used to calculate the volume of the discharge volume and, if applicable, the recovered spill volume
- Detailed description of the cause(s) of the spill,
- Description of the pipe material, and estimated age of the pipe material, at the failure location;
- Description of the impact of the spill;
- Copy of original field crew records used to document the spill; and
- Historical maintenance records for the failure location,
- Chronological narrative description of all actions taken to terminate the spill,
- Explanation of how the Sewer System Management Plan Spill Emergency Response Plan was implemented to respond to and mitigate the spill; and
- Final corrective action(s) completed and a schedule for planned corrective actions, including:
    - Local regulatory enforcement action taken against an illicit discharge in response to this spill, as applicable,
    - Identifiable system modifications and operation and maintenance program modifications needed to prevent repeated spill occurrences, and
    - Necessary modifications to the Emergency Spill Response Plan to incorporate lessons learned in responding to and mitigating the spill.
- Description of all water quality sampling activities conducted;
- List of pollutants and parameters monitored, sampled and analyzed; as required in section 2.3

(Receiving Water Monitoring) of this Attachment;
- Laboratory results, including laboratory reports;
- Detailed location map illustrating all water quality sampling points; and
- Other regulatory agencies receiving sample results (if applicable).
- Evaluation of spill impact(s), including a description of short-term and long-term impact(s) to beneficial uses of the surface water.

7.2.3 Private Lateral Sewage Spill Reports

The City is encouraged to report all known Private Lateral sewage spills to the SWRCB via CIWQS Sanitary Sewer System Database within 24 hours of becoming aware of the spill. The City is encourage to report any Private Lateral sewage spill to surface waters or drainage conveyance system to CAL OES. As required, 30 days after the end of the calendar month in which the Private Lateral sewage spill occurs, the City shall complete a monthly certification. These reports identify the sewage discharge as occurring and caused by a private lateral. If known, a responsible party (other than the City) is identified. The City is not responsible for the cause, cleanup, or repair of Private Lateral sewage spills.

7.3 Water Quality Monitoring

As required, the City conducts water quality sampling within 18 hours after initial spill notification for Category 1 spills in which 50,000 gallons or greater is spilled to surface waters. City's Data Submitters enter water quality sampling data into the CIWQS Sanitary Sewer System Database as part of the Spill Technical Report. The City's Spill Water Quality Monitoring Program (Appendix E) provides guidance on spill water quality monitoring and includes the following:

- protocols for water quality monitoring,
- procedures to account for spill travel time and scenarios where monitoring may not be possible (e.g., safety, access restrictions),
- discussion of calibration and maintenance of instruments and devices used to implement the Spill Water Quality Monitoring Program, and
- identification of required constituents to be monitored.

7.4 Recordkeeping and Document Retention

The City retains individual spill records for a minimum of five (5) years from the date of the spill occurrence. This period may be extended if requested by a San Diego Regional Water Quality Control Board Executive Officer. All records are available for review upon State or Regional Board staff's request.

Records retained include but not limited to include:

- Certified reports as submitted on-line;
- Date, time, and method of notification;
- Date and time the complainant first noticed the spill, if available,
- Narrative description of the complaint, including any information the caller provided regarding whether the spill has reached surface waters or a drainage conveyance system, if available;
- Complainant's contact information, if available, and;
- Final resolution of the complaint;
- Original recordings of continuous monitoring efforts;
- Spill logs;
- Action(s) or planned action(s) to prevent future spills from recurring;
- Records documenting the steps and/or remedial action(s) undertaken by City staff, using all available information;
- Work orders, work completed, and maintenance records associated with responses and

investigations of spill related problems;

- A list and description of complaints from customers or others; and
- Documentation of performance and implementation measures.
- Records documenting how estimate(s) of volume(s) and, if applicable, volume(s) of spill recovered were calculated;
- All California Office of Emergency Services notification records, as applicable;

To facilitate the City's ability to report regularly on spills, the Public Works Director maintains a record log that contains information about each spill. This database can be queried for trends and used as a cross reference for on-line spill reporting requirements. The City's SERP (Attachment 1) contains additional information on documentation.

8 Fats, Oils, and Grease (FOG) Control Program

The City is required to prepare and implement a FOG control program to reduce the amount of these substances discharged to the sanitary sewer collection system. Requirements specifically include:

a) An implementation plan and schedule for a public education outreach program that promotes proper disposal of FOG;
b) A plan and schedule for the disposal of FOG generated within the sanitary sewer system service area. This may include a list of acceptable disposal facilities and/or additional facilities needed to adequately dispose of FOG generated within a sanitary sewer system service area;
c) The legal authority to prohibit discharges to the system and identify measures to prevent SSOs and blockages caused by FOG;
d) Requirements to install grease removal devices (such as traps or interceptors), design standards for the removal devices, maintenance requirements, BMP requirements, record keeping and reporting requirements;
e) Authority to inspect grease producing facilities, enforcement authorities, and whether the City has sufficient staff to inspect and enforce the FOG ordinance;
f) An identification of sanitary sewer system sections subject to FOG blockages and establishment of a cleaning maintenance schedule for each section; and
g) Development and implementation of source control measures for all sources of FOG discharged to the sanitary sewery system for each section identified in (f) above.

The City's FOG Control Program is intended to eliminate SSOs due to excessive FOG and reduce the adverse effects of FOG discharges on sewage treatment operations. Program details are presented in Attachment 2. Elements of the City's FOG Control Program include the following:

- Kitchen best management practices,
- Grease trap installation, operation and maintenance requirements,
- Grease interceptor installation, operation and maintenance requirements,
- Notification requirements,
- Record keeping and reporting requirements,
- Permits and enforcement,
- Drawing submittal and review of new facilities and tenant improvements, and
- Public education.

8.1 Legal Authority to Prohibit Discharges

Legal authority to prevent FOG from causing SSOs is discussed in Section 3. Discharge prohibition of FOG is in Municipal Code §22.08.050 and §22.16.

8.2 Requirements for Installation of Pretreatment Devices and Implementation of BMPs

The City's FOG Control Program requires that each food service establishment (FSE) be solely responsible for the installation, operation, maintenance and repair of approved pretreatment devices. Requirements for installation of grease removal devices, design standards for removal devices, BMPs, and record keeping (including maintaining manifests, records, receipts, and invoices related to all cleaning, maintenance, and grease removal from interceptors) is stated in the City Ordinance.

BMPs are practices, procedures, and maintenance activities performed by FSE staff to reduce the FOG discharged to the City's collection system, thereby reducing potential for FOG-caused SSOs. Each FSE shall implement BMPs as they pertain to handling and disposing of wastes containing FOG. Training of new and existing employees to properly implement BMP activities will serve to ensure and reinforce proper

handling and disposal of FOG. Kitchen BMPs are described in greater detail in FOG Control Program (Attachment 2).

8.3 Facility Inspection

The City has established the authority to inspect facilities for compliance with the FOG control program. To determine whether an FSE complies with the conditions of the FOG Control Program and City Municipal Code, the City will inspect each FSE a minimum of once annually. A copy of the City's Inspection Form is included as part of the complete FOG Control Program (Attachment 2). The FSE shall make the following available:

- Access to grease pretreatment devices,
- Access to flow measuring and monitoring devices,
- Manifests, receipts, and invoices of grease device maintenance,
- Documents identifying the waste hauler carrier,
- Documents identifying the disposal site locations, and
- Records of employee training in best management practices.

If violation(s) are observed, the violation(s), along with a description of what was observed, are recorded on the inspection form. Documentation of the violation(s) shall serve as the formal Notice of Non-Compliance (NOC) or Notice of Violation (NOV). Additionally, a follow-up inspection shall be scheduled to determine whether the required corrective actions have been implemented and if additional improvements are necessary.

8.4 Maintenance Schedule for High Maintenance Areas

As described in Section 5.1, maintenance of collection system facilities in HMAs is performed quarterly and is used to monitor FOG compliance for FSEs. Based on the results of grease cleaning surveys/inspections of City sewer mains, the City can determine if additional BMPs and/or maintenance requirements are needed for FSEs.

8.5 Development and Implementation of Source Control Measures

Development and implementation of source controls measures to remove FOG from the sanitary sewer are as described in the FOG Control Program (Attachment 2).

8.6 Disposal of FOG

The disposal of FOG by FSEs is outlined within the FOG ordinance sections of the City's Municipal Code (Chapter 22.08) and is covered by legal agreements with the State's 22nd District Agricultural Association and the City of San Diego. Any disposal of FOG by the City is performed by licensed waste haulers.

8.7 Public Education

Public outreach and education is an ongoing program. The City continually works with FSEs and provides educational materials and outreach annually during FSE FOG inspections. The City's adopted Public Works Rates support the operational costs of annual inspections as identified in a specific line item within the contracts section of the Adopted Operational Budget for Sewer Collection System.

9 System Evaluation and Capacity Assurance Plan

The SSMP must prepare and implement a capital improvement plan (CIP) that includes the following:

a) Evaluation: Actions needed to evaluate those portions of the collection system that are experiencing or contributing to an SSO discharge caused by hydraulic deficiency. The evaluation must provide estimates of peak flows (including flows from SSOs that escape from the system) associated with conditions similar to those causing overflow events, estimates of the capacity of key system components, hydraulic deficiencies (including components of the system with limiting capacity) and the major sources that contribute to the peak flows associated with overflow events;

b) Design Criteria: Where design criteria do not exist or are deficient, undertake the evaluation identified in (a) above to establish appropriate design criteria; and

c) Capacity Enhancement Measures: Steps needed to establish a short-and long-term CIP to address identified hydraulic deficiencies, including prioritization, alternatives analysis, and schedules. The CIP may include increases in pipe size, I/I reduction programs, increases and redundancy in pumping capacity, and storage facilities. The CIP shall include an implementation schedule and shall identify sources of funding.

d) Schedule: A schedule of completion dates for all portions of the capital improvement program developed in (a)-(c) above. This schedule shall be reviewed and updated consistent with the SSMP review and update.

This section discusses the City's capacity management measures to address the current and future capacity requirements of its collection system and the recommended improvement projects.

9.1 Previous Studies

The City has completed several sewer studies over the life of the sewer system. Although dated, because the City is a built-out community, these studies still provide relevant information.

- **June 2007** – 21st Street Sewer Pump Station Preliminary Design Report
- **Dec 1, 2008** – Public Works Disposal Agreement between the City of Del Mar and the 22nd District Agricultural Association. The 22nd DAA reconstructed their sewer force main under the San Dieguito River in 2009. The City of Del Mar monitors the flow from the 22nd DAA force main through a flow meter located at the discharge point on the south bank of the river. Prior to this force main construction and after several years of study and negotiation, on December 1, 2008, the City of Del Mar and the 22nd DAA reached agreement and signed a document which limits discharge from the 22nd DAA to the City of Del Mar preserving the capacity of the North Beach Gravity Sewer mains.
- **July 1, 2009** – The City began the latest five (5) year sewer rate program for the City's utility customers. These rates, as adopted, fund the five (5) year Capital program in conjunction with the State Revolving Fund, which funded the 21st Street lift Station.
- **October 2010** – Final Design with Plans and Specifications for the 21st Street Sewer Pump Station– Design by City Engineering firm PBS&J with QA/QC performed by IEC Engineering. Plans and specifications for the 21st St Pump Station are available from PW upon request. The City's new 21st Pump Station was constructed with a larger wet well and an emergency storage facility capable of hours of overflow detention in the event of a pump station failure.
- **2014** – The City completed an updated Water and Sewer Master Plan to fund construction and repair of PW lines identified as in need of replacement due to size, pipe material, or condition.
- **January 1, 2015** – The City implemented a new sanitary sewer rate schedule based on the March

2014 Wastewater Rate Review Staff Report as a part of the five (5) year sewer rate program.

- **2019** – The City implemented a new sanitary sewer rate schedule based on the cost of doing business, the increased need to replace aging sanitary sewer infrastructure, and increased cost to transport and treat sanitary sewage. The last schedule rate adjustment for sanitary sewer services occurred on January 1, 2019, based on the five-year rate schedule adopted in 2014.

9.2 Evaluation of Capacity and Design Criteria

The 1998 City of Del Mar Sewer Capacity Study established design criteria for peak dry and wet weather flows, population density, per capita sewage generation, pipe criteria, and infiltration rates. The evaluation included a review of dry weather peak flow conditions and identified areas of the system that required modification and/or expansion. Recommendations for assessing current and future capacity requirements as well as a proposed schedule to complete the modifications are included. This study is available from PW upon request.

9.3 Evaluation Process

The 1998 City of Del Mar Sewer Capacity Study presented an assessment of the hydraulic capacity of the existing major sewer pipelines located within the City service area. No capital improvement projects were identified as a result of this study. Additionally, the sewer system was evaluated based on future designated land use to ensure that there was sufficient capacity in the collection system under build- out conditions.

9.4 Enhancement Measures

The City's last sanitary sewer flows audit was performed in 2013, which determined that the City has an Average Daily Flow (ADF) of 0.551 MGD. The City continues to maintain the sewer lift stations and the sewer mains through ongoing video monitoring, bi-annual maintenance contracts, and other funded capital programs as identified in the adopted five (5) year sewer capital budget. Any future enhancements identified in future investigations, studies, or audits shall be included in updates to the SSMP and are contingent upon the five (5) year budget approvals.

9.5 Scheduling

Due to the built-out nature of the City, capacity assurance reviews are not required regularly, except when large projects that make significant changes to the sewer system are identified. Given the age of the most recent Capacity Study (performed in 1998), the City will continue to review population growth, changes to the collection system characteristics, and changes in businesses present in the City, to determine if an updated capacity study is necessary.

10 Monitoring, Measurement, and Program Modifications

The SSMP must be monitored and modified to maintain its effectiveness and perform the following:

a) Maintain relevant information that can be used to establish and prioritize appropriate SSMP activities;
b) Monitor and implement and, where appropriate, measure the effectiveness of each element of the SSMP;
c) Assess the success of the Preventive Maintenance Program;
d) Update program elements, as appropriate, based on monitoring or performance evaluations; and
e) Identify and illustrate SSO trends, including frequency, location, and volume.

The following subsections provide a summary of procedures implemented to monitor implementation and effectiveness of this SSM and how the City intends to update the SSMP.

10.1 Maintain Information Pertaining to SSMP Activities

The Public Works Director has the overall responsibility for maintaining and updating the SSMP, along with maintaining records of related activities. This involves input and coordination with the Public Works Operations Manager and the maintenance staff.

10.2 Monitor and Measure SSMP Effectiveness

Performance indicators, particularly quantity and volume of SSO's, are used to evaluate the long-term effectiveness of the SSMP and are reported to the Water Board in the Annual SSMP Report.

Table 5 lists the quantitative indicators that are currently tracked. As the historic record grows, future annual reports to the Water Board will include trend plots for key measures. Performance measures related to maintenance activities are also tabulated and charted in the annual collection system report.

In addition to the information tracked in Table 5 and collected during SSO responses (Attachment 1), the following information is maintained and used to monitor and measure the effectiveness of the City's SSMP:

- Number of FOG inspections
- Number of FOG issues identified
- Location of FOG issues
- Location of all SSOs
- Number of gallons from SSO(s)
- Linear feet of sewer lines cleaned
- Linear feet of sewer lines televised
- Number of mainline blockages
- Location of all blockages
- Cause of blockage

10.3 Assessment of Preventive Maintenance Program

The City's O&M Program describes the City's current procedures and practices as they pertain to O&M activities (Section 5). The City should assess the efficiency of the O&M Program every two (2) years utilizing the data identified in Section 11.2 and any other relevant data to operations and maintenance of the sewer system. Based on this assessment, recommendations should be developed and implemented based on a schedule proportionate to the urgency of the change.

Table 5: Table for Proposed SSMP Performance Indicators

Indicator	FY 2021-2022	FY 2020-2021	FY 2019-2020
1. Number of SSO's (by fiscal year)			
A. Wet Season (Oct 1 to April 30)			
B. Dry Season			
2. Number of SSO's (by volume not recovered)			
A. < 10 gal			
B. 10 - 99 gal			
C. 100 - 999 gal			
D. > 1000 gal			
3. SSO Volume			
A. Total			
B. Recovered			
4. Number of SSO's (by cause)			
A. Blockages			
1. Roots			
2. Grease			
3. Debris			
4. Debris from Laterals			
5. Animal Carcass			
6. Construction Debris			
7. Rags (Disposable wipes)			
8. Multiple Causes			
B. Pump Station			
1. Electrical Failure			
2. Mechanical Failure			
C. Natural Disaster			
D. Bypass system failure during a construction project			
E. Cause Unknown			
5. Number of SSO's per mile of sewer per year			
6. Volume of SSO's per mile of sewer per year			
7. Average Emergency Response Time			
8. SSO during Business Hours			
9. SSO Non-Business hours			
10. Maintenance activities (linear ft/yr)			
11. Televised inspection			
12. Root Control program (Linear foot)			

10.4 Update Program Elements

The SSMP is a living document, and it will be regularly reviewed for updates on a five (5) year basis to reflect program or organization changes, new regulatory requirements, and other changing conditions. In addition to the 5-year SSMP review, the Order requires bi-annual audits of the program. Findings from these reviews and audits will be analyzed, and the SSMP will be updated accordingly to improve any deficient elements. For more details on the bi-annual audits, see Section 12.

10.5 Identify and Illustrate SSO Trends

The City maintains a database with information related to emergency calls received reporting potential and/or actual SSOs. Additional information to be included in the documentation process is the frequency, location, and approximate volume of each SSO event. In addition, work orders are created and stored in the City's TRAKiT program. SSO trends are illustrated in graphs that are updated annually and are included as part of the audits to track trends and progress. Once trends are identified, PW will develop measures to correct any recurring problems. The number and frequency of SSOs, total volume of SSOs, volume of SSOs reaching surface water, and association of SSOs by cause, may also be shown graphically and included as part of SSMP audits.

11 SSMP Program Audits

The SSMP must have periodic internal audits performed. These audits must:

a) Occur every two years;
b) Be prepared as a report and be kept on file;
c) Focus on evaluating the effectiveness of the SSMP and the City's compliance with the SSMP requirements; and
d) Identify any deficiencies in the SSMP and steps to correct them.

The SSMP program audits as well as O&M program audits are discussed in this section.

11.1 SSMP Program Audits

The City will audit its SSMP on a bi-annual fiscal year cycle from the date of initial City Council approval of the SSMP. If conditions change that warrant increased audit frequency, the City will adjust its audit cycle accordingly. Audits will review the City's SSMP activities from the time of the last audit and will summarize the data accumulated through its monitoring, measuring, and program effectiveness in meeting its goals, objectives, and priorities while ultimately being tied into the budgetary process. A blank SSMP audit form is provided in Appendix F; completed SSMP audits are retained on file by the City.

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

Employee training will be reviewed to ensure programs and mechanisms are in place to ensure that all staff is up to date with required training and that the training program is adequate. Training includes on the job requirements, safety, required licenses and/or certificates, and professional development. Blank training logs are included in Appendix D and completed training logs are maintained at the PW facility.

11.2 O&M Program Audits

In addition to the bi-annual SSMP audits, an annual O&M program progress audit will be performed. This audit is to confirm that regularly scheduled O&M program activities are on track to be completed in the prescribed timeframe. This audit will assist PW on evaluating their program on an annual basis and adjust staff and resources where needed.

12 Communication Program

The SSMP requires a communication system plan that provides the following:

a) Provide opportunity for the public to provide inputs to the SSMP is developed and implemented.
b) Develop a plan to communicate with systems that are tributary and/or satellite to the City's sanitary sewer system.

A goal of the SSMP is to minimize the number and impact of SSOs through education and communication with collection system users. As a result, the City has been actively engaging the public in issues surrounding collection system performance. The communication strategies used by the City to educate and inform the public regarding the appropriate use of the sanitary sewer collection system are provided in this section.

12.1 Stakeholder Groups

There are various stakeholder groups that have been identified for outreach and communication efforts to collaborate on potentially sensitive issues. This approach allows the public to embrace the SSMP and reach shared goals with the City through a reduction of SSOs. A list of stakeholders is presented in Table 6.

Table 6: Stakeholder Groups

Stakeholder Group	Potential Issues of Interest
Domestic Ratepayers and Local Neighborhood Associations	Proposed rate increases, FOG Program, local impacts from capital programs
22nd DAA (Fairgrounds)	Master planning, capacity issues, emergency response plans, capital programs
Food Service Establishments	FOG Program
Developers	Legal authority and design standards
Contractors	Capital programs and contracting of maintenance activities
Engineering Consultants	Design standards, capital programs, consulting opportunities
Other City Departments	FOG Program, design standards, emergency response plans
City Council	SSMP progress, Utility rates, public impacts, and communications program
Regulators	Emergency response plans, SSO reporting activities, SSMP program audits

12.2 Updates on SSMP

Draft versions of or notices on draft updates to the SSMP will be available to the public online (www.delmar.ca.us) and at the Public Works Department (2240 Jimmy Durante Boulevard, Del Mar, California 92014). The public will be allowed to provide input in written form to the Department. The Department will be responsible for responding to all comments received from customers.

12.3 Website and Media

Website and media outreach are is provided on the City's website. Additional information is available at City Hall and Public Works Department. The public can find information at these locations regarding

updates on the City's sewer policies, standards, and procedures.

12.4 Other Communication Programs

Public meetings to discuss City-related issues are held regularly in the City Council Chambers. The City encourages residents to attend City Council meetings to become better informed about how the City functions and to learn about various issues.

The water conservation program was developed to assist with conserving the amount of water being sent to the sewer system. Conserving the amount water introduced into the sewer system provides more capacity. The City's website has a link on how to conserve water: https://www.delmar.ca.us/470/Water-Conservation

The Special Outreach Program is a communication program implemented as issues or potential issues are observed through the SSMP's activities. This program is used to inform specific individuals, stakeholders, and/or businesses of SSMP findings. For example, during O&M activities, significant sewer line blockages may be observed in close proximately to food establishments. Through this outreach program, educational materials and open conversations with restaurant management/owners could assist with addressing the issue or potential issues as it relates to FOG.