

Sewer System Management Plan

WDID# 2SSO10167

Adopted by City Council – June 17, 2025 Submitted to State Water Resources Control Board – July 2025

> In consultation with: Causey Consulting Walnut Creek, CA 94598

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List of Abbreviations	and Acronyms
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Acronym	Definition
ACPHD	Alameda County Public Health Department
BMP	Best Management Practices
CCTV	Closed circuit television
CIP	Capital Improvement Plan
City	City of Pleasanton
CIWQS	California Integrated Water Quality System
СМ	Corrective Maintenance
CMMS	Computerized Maintenance Management System
COF	Consequence of Failure
COL	City of Livermore
CWEA	California Water Environment Association
DERWA	DSRSD-EBMUD Recycled Water Authority
DS	Data Submitter
DSRSD	Dublin San Ramon Services District
EBMUD	East Bay Municipal Utility District
ESM	Environmental Services Manager
ESS	Environmental Services Supervisor
FOG	Fats, Oils, Grease
FSE	Food Service Establishment
GCD	Grease Control Device
GIS	Geographical Information System
1/1	Inflow / Infiltration
KvA	Kilovolt-amperes
KW	Kilowatts
LAVWMA	Livermore-Amador Valley Water Management Agency
LOF	Likelihood of Failure
LRO	Legally Responsible Official
LS	Lift Station
MACP	Manhole Assessment Certification Program

Acronym	Definition
MGD	Million Gallons per Day
MRP	Monitoring and Reporting Program
NASSCO	National Association of Sewage Service Companies
NOAA	National Oceanic and Atmospheric Administration
NPDES	National Pollution Discharge Elimination System
O&M	Operation and Maintenance
OES	Office of Emergency Services
Plan	Sewer System Management Plan
PACP	Pipeline Assessment Certification Program
PMC	Pleasanton Municipal Code
POTW	Publicly Owned Treatment Works (DSRSD Regional Wastewater Treatment or COL Water Reclamation Plant)
PW	Public Works
R&R	Rehabilitation and Replacement
RCP	Reinforced Concrete Pipe
RWQCB	Regional Water Quality Control Board San Francisco
SCADA	Supervisory Control and Data Acquisition
SERP	Spill Emergency Response Plan
SHECAP	Sewer Hydraulic Evaluation and Capacity Assessment Plan
SOP	Standard Operating Procedure
SSO	Sanitary Sewer Overflow or Spill
Spill	SSO or Sanitary Sewer Overflow
SSMP	Sewer System Management Plan or Plan
SWRCB	California State Water Resources Control Board
VCP	Vitrified Clay Pipe
WDID	Waste Discharge Identification Number
WDP	Waste Discharge Permit
WDR	Waste Discharge Requirements for Sanitary Sewer Systems WQ 2022-0103-DWQ
YD	Year to Date

1.0: Element 1 – Goal and Introduction

The goal of the Sewer System Management Plan (SSMP or Plan) is to provide a plan and schedule to:

- Properly manage, operate, and maintain all parts of the Enrollee's sanitary sewer system.
- Reduce and prevent spills.
- Contain and mitigate spills that do occur.

The SSMP must include a narrative introduction section that discusses regulatory context, SSMP update schedule, and an overview of sewer system assets.

1.1: Regulatory Context

The State Water Resources Control Board (SWRCB) has previously issued statewide waste discharge requirements for sanitary sewer systems which include requirements for development of an SSMP. The SWRCB requirements were outlined in Order No. 2006-0003-DWQ, Statewide General Waste Discharge Requirements for Sanitary Sewer Systems and the Monitoring and Reporting Program WQ 2013-0058-Exec. These two SWRCB requirements were replaced on December 6, 2022, by SWRCB Order WQ 2022-0103-DWQ Statewide Waste Discharge Requirements, General Order for Sanitary Sewer Systems, which became effective for all enrolled agencies on June 5, 2023. The City's wastewater identification number for WDR compliance in the SWRCB CIWQS system is 2SSO10167.

The City also owns and operates a storm water collection system that is permitted under the RWQCB San Franscisco Bay Region Municipal Regional Stormwater NPDES Permit Order No. R2-2022-0018, under NPDES permit number CAS612008.

1.2: SSMP Update Schedule

This section outlines the City's schedule of future major milestones for updating and implementing its SSMP. As these milestones are completed this SSMP will be updated as appropriate and noted in the SSMP Change Log.

- 2025 SSMP Update Submittal to CIWQS by 7/31/25
- Electronic Service Area Map Submittal to CIWQS by 12/31/25
- Utilities Resource Review 10/2025
- Long-Term Sewer CIP Report 10/2025
- Sewer Rate and Connection Fee Updates Effective 7/2026
- 8/2024 to 8/2027 SSMP Audit Submittal to CIWQS by 1/31/28
- 8/2027 to 8/2030 SSMP Audit Submittal to CIWQS by 1/31/31

• 2031 SSMP Update – Submittal to CIWQS by 7/31/31

1.3: Sewer System Asset Overview

The City owns and operates a sewer system that serves a population of approximately 76,000 in a 25 square mile service area that is shown in Figure 1-1. The sewer system consists of approximately 253 miles of gravity sewers, approximately 4.9 miles of force mains, 8 siphons, 11 active pump stations, and approximately 21,000 service connections. The average dry weather flow is approximately 6 million gallons per day (MGD). The City has agreements with DSRSD and City of Livermore (for Ruby Hill area only) for wastewater treatment and is a member of LAVWMA for treated wastewater disposal. The City also has an agreement with Alameda County that allows sewage flows from their Castlewood Service Area to be transported through the City's collection system (including LS-10) for treatment at DSRSD.

Sewer service laterals are owned by the property owner and therefore are the responsibility of the property owner to maintain. The City will not service, repair, rehabilitate, or replace any portion of sewer service laterals from the building to the public sewer main.



Figure 1-1: Sewer Service Area

The following tables provide a summary of the sewer program assets under management by the City.

Diameter, inches	Number of Line Segments	Pipe Length, linear feet	Portion of Sewer System, %
4	65	3,999	0.30%
6	1025	145,239	10.89%
8	4558	936,942	70.22%
10	461	106,132	7.95%
12	137	30,045	2.25%
14	6	190	0.01%
15	173	45,459	3.41%
16	3	325	0.02%
18	87	21,890	1.64%
21	18	6,323	0.47%
24	44	12,101	0.91%
27	52	15,638	1.17%
30	21	5,869	0.44%
33	9	3,122	0.23%
42	1	51	0.00%
Unknown	3	972	0.07%
Total	6,663	1,334,297	100%
Total Miles		252.7	

Table 1–1: Gravity	Pipeline	Asset Informatio	n by Pine Size
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Table 1–2: Gravity Pipeline Asset Information by Pipe Material

Material	Number of Line Segments	Pipe Length, LF	Percent of Sewer System
ABS	8	911	0.07%
ACP	96	24,997	1.87%
CIP	33	614	0.05%
DIP	132	9,405	0.70%
HDPE	15	2,632	0.20%
PVC	2449	440,336	33.00%
RCP	39	11,738	0.88%

Material	Number of Line Segments	Pipe Length, LF	Percent of Sewer System
STEEL	1	80	0.01%
VCP	3843	833,090	62.44%
Unknown	47	10,495	0.79%
Total	6,663	1,334,297	100%

Table 1–3: Gravity Pipeline Asset Information by Pipe Age

Age, Years	Construction Period	Percent of System*	Linear Feet of Main
0-15	2010 – Current	2.8%	37,807
16 – 35	1990 – 2009	33.1%	442,293
36 – 55	1970 – 1989	40.1%	534,866
56 – 75	1950 – 1969	23.3%	311,171
76 – 95	1930 – 1949	0.0%	-
95 – 115	1910 – 1929	0.0%	-
>115	Before 1910	0.0%	-
Unk	Unknown	0.6%	8,159
Total, linear feet		1,334,297	
Weighted Average Age		40.8	

Table 1–4: Sewer Lift Station Asset Information

Pump Station Name	Location	Construction or Upgrade Date	No. Pumps	Pump Firm Capacity gpm	Pump Manufacturer	Pump HP	Standby Generation KW
LS-2	8019 Foothill Road	1998	2	158	Flygt	3	25
LS-4	1065 Serpentine Lane	1981	2	459	Flygt	3	Uses portable when needed
LS-5	1723 Laguna Creek Lane	1968	3	1,751	Flygt	7.5	Uses portable when needed
LS-6	6900 West Las Positas Blvd.	2014	5	4,337 ¹	Flygt	20	200
LS-7	4950 Bernal Ave.	1980	3	6,255	General Electric	20	100

Pump Station Name	Location	Construction or Upgrade Date	No. Pumps	Pump Firm Capacity gpm	Pump Manufacturer	Pump HP	Standby Generation KW
LS-8	6890 Koll Center Parkway	1980	3	2,836	General Electric	60	155
LS-10	7341 Foothill Road	1986	2	292	Flygt	10	25
LS-12	302 Happy Valley Road	2002	2	409	Flygt	20	90
LS-13	3300 Busch Road	1992	2	N/A	Paco	2	Uses portable when needed
LS-14	6614 Alisal Street	2004	2	183	Flygt	10	Uses portable when needed
LS-15	2299 Vineyard Ave.	2006	2	N/A	Flygt	15	60

¹Firm capacity for LS-6 is based on capacity prior to surcharging. The City recently replaced pump impellers of all LS-6 pumps and will re-evaluate pump performance at a later date.

Table 1–5: Force Main Asset Information

Lift Station Name Upstream of Force Main	Year Installed	Length of the Force Main (LF)	Diameter (in)	Material
Sewer Lift Station LS-2	1994	1,235	4	PVC ¹
Sewer Lift Station LS-4	1982	354	4	PVC ¹
Sewer Lift Station LS-5	1968	774	10	CIP ¹
Sewer Lift Station LS-6	1968	2,814	10	Unknown
Sewer Lift Station LS-7	1981	909	16	Unknown
Sewer Lift Station LS-8	1980	10,010	18	Unknown
Sewer Lift Station LS-10	1985	4,477	4	DIP
Sewer Lift Station LS-12	1998	2,445	4	PVC
Sewer Lift Station LS-13	1989	18	4	PVC
Sewer Lift Station LS-14	2002	2,163	6	Unknown
Sewer Lift Station LS-15	2003	862	4	DIP/PVC
Total Pressure Mains, linear feet	26,061			
Total Pressure Mains, miles		4.9		

¹Pipe material changed from VCP in the GIS based on as-built information.

Siphon Location	Construction Date	Number of Siphon Barrels	Length Linear Feet ¹	Size Inches	Pipe Material
S-5 Laguna Vista Siphon	1988	1	200	10	VCP
S-8 Siphon	1968	2	400	14	MJCIP
Meadowlark Siphon-1	1968	1	588	8	PVC
Meadowlark Siphon-2	2018	1	784	8	MJCIP
Highland Oaks Siphon	1965	2	280	10, 14	CIP
Amberwood Siphon	1986	2	360	8	DIP
Nobhill Siphon	1966	2	400	8	DIP
Laguna Creek Siphon	2002	2	620	8	DIP
West Las Positas Siphon	1968	2	350	10	VCP
Total	, Linear Feet:	·	3982		
То	0.75				

Table 1–6: Sewer System Siphon Assets

¹Total length of siphon pipes for multiple-barrel siphons.

Table 1–7: Sewer Service Connections

Service Connection Type	Number	Percentage of System
Residential	19,617	93.3%
Multi Family	425	2.0%
Commercial	954	4.5%
Industrial	3	0.1%
Institutional	16	0.1%
Total	21,015	100%

1.4: References

• WDR Attachment D – Section 1

2.0: Element 2 – Organization

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

- a. The name of the Legally Responsible Official (LRO).
- b. The position titles, telephone numbers, and email addresses for management, administrative, and maintenance positions responsible for implementing specific SSMP elements.
- c. Organizational lines of authority.
- d. Chain of communication for reporting spills.

2.1: Organizational Chart

Implementation of the SSMP primarily falls under the City's Public Works Department. Divisions responsible for implementing elements of the sewer program include Utilities and Environmental Services, Engineering, and Customer Service & Billing. The City's current Public Works Department organizational chart is illustrated in **Figure 2–1**.

Figure 2–1: Public Works Department Organizational Chart



Positions responsible for management and implementation of the SSMP are described below.

Director of Public Works

To plan, organize, direct and review the activities and operations of the Public Works Department including the operations and maintenance of the City's streets, parks and trails, buildings, fleet, and utilities systems; to coordinate assigned activities with other departments and outside agencies; and to provide highly responsible and complex administrative support to the City Manager.

Assistant Director of Public Works – Utilities and Environmental Services

Under general direction from the Director of Public Works, the Assistant Director of Public Works-Utilities and Environmental Services is responsible for directing a wide variety of comprehensive functions and/or programs related to planning, operation and maintenance of the City's potable water facilities, recycled water facilities, sewer collection and storm drain systems; laboratory, environmental and regulatory compliance, as well as contract management with Zone 7 Water Agency, Dublin San Ramon Services District, DERWA, LAVWMA, City of Livermore and the County of Alameda. Additionally, this position provides administrative and operational management in assigned areas to advance the goals and mission of the City and the Public Works Department.

Utilities Planning Manager

Under general direction from the Assistant Director of Public Works, the Utilities Planning Manager performs planning level duties to support the City's utility systems including potable water, recycled water, sanitary sewer collection, and storm water. This position is responsible for utility infrastructure and water supply master planning efforts; assists in preparation of Capital Improvement Programs in the area of utilities; assists in annual planning and budgeting of Utilities Division led projects; assists in utility rate and connection fee studies; provides technical assistance to the Utilities Division; and acts as the Utilities Division liaison for planning related tasks with outside agencies and other City divisions and departments.

Utilities Division Manager

Under general direction from the Assistant Director of Public Works, the Utilities Division Manager manages, administers, directs, and provides oversight of the operation and maintenance (O&M) of the water, recycled water, sewer, and storm drain systems for the Utilities Division of the Public Works Department. This includes overseeing all day-to-day O&M and water laboratory activities; developing and directing goals, procedures, and programs; providing professional assistance to City management staff and outside agencies in area of expertise; ensuring regulatory compliance and quality control; managing personnel; administering budget; assisting in the development of safety and training programs; ensuring capital improvement and asset management programs meet the needs of the Utilities Division; and overseeing public communication.

Chief Utilities System Operator – Water System

Under the general direction of the Utilities Division Manager, oversees the O&M activities of the water system. This includes planning, organizing and directing all operations and maintenance functions required; supervising assigned crews that perform technically complex duties in the operations and maintenance of the water system; responding to citizens' needs and inquiries; providing reasonable and technical assistance to staff. The classification is regarded as the Chief System Operator in relation to State regulations for operation of the City's drinking water system.

Utilities Maintenance Supervisor – Sewer & Storm Systems

Under the general direction of the Utilities Division Manager, plans, organizes, directs, and oversees a comprehensive maintenance and repair program for sewer and storm drain systems. This includes prioritizing and scheduling maintenance and repair of wastewater collection and stormwater systems and lift stations, utilizing the computerized maintenance management program (CMMS); implementing special projects or programs such as the Sewer System Management Plan (SSMP); developing Standard Operating Procedures (SOPs); providing technical direction and quality assurance; assisting in budget and contract preparation and administration; perform duties of a California Integrated Water Quality System (CIWQS) Data Submitter and assisting the Legally Responsible Official (LRO) with preparing monthly and daily reports, while supervising assigned staff.

Lead Utility Systems Operator

Under limited supervision from the Chief Utilities System Operator and Utilities Systems Maintenance Supervisor, directs and supervises the work of maintenance and operations crews in charge of the water, sewer and storm drain systems. Performs difficult tasks associated with the repair, maintenance and operations of these systems. In addition, is responsible for specific administrative functions and performs related work as required. This position is considered to be the shift supervisor.

Utility System Operator I/II

Operator I is an entry-level operator classification and Operator II is a journey-level operator classification. Under supervision and through training and experience employees in these classifications are assigned increasingly more responsible duties in the operation and maintenance of the City's water, sewer and storm drain systems. Operators I and II are assigned on a rotating basis to crews responsible for either water, sewer, or storm drain systems. Operator II rotates through a 24-hr standby duty, responding to emergencies that deal with the water, sewer and storm drain systems.

Utilities Maintenance Worker

Under supervision performs a variety of duties associated with the City's operation and maintenance within the Utilities Division of the Public Works Department. Utilities work is

focused on potable/drinking water distribution, sanitary sewer collections, stormwater collections, urban runoff protection, recycled water distribution, water conservation and utility customer service.

Environmental Services Manager

Under general direction from the Assistant Director of Public Works, the Environmental Services Manager oversees environmental programs including the City's water conservation and recycled water program, hazardous materials management, storm water pollution prevention and the sewer pipe blockage control program.

Environmental Compliance Supervisor

Under general direction from the Environmental Services Manager, this position supervises and trains staff and assists in the administration of the Environmental Services Division. Performs duties in the areas of budgeting, purchasing, contract administration, short- and long-term planning, organizing and supervising operations and functions within the NPDES Permit, Industrial Inspection, Storm Water Inspection, Sewer Pipe Blockage Control Program, Environmental Hazmat programs, and the Backflow Protection Program.

Environmental Services Specialist

Under general direction, performs duties in one of two disciplines: Water Resources or Environmental Compliance. ESS-Water Resources performs day-to-day water conservation/recycled water program administration, landscape irrigation surveys, water conservation customer service, outreach, and inspections, and recycled water program related tasks including cross-connection testing, inspections, and program tracking. ESS-Environmental Compliance performs technical tasks in support of environmental compliance in regards to NPDES compliance, hazardous materials management, environmental analyses and assessments, fats, oils, and grease (FOG) program inspections, clean water program outreach, and other related work.

Assistant Director of Public Works – Engineering

Under the general direction of the Director of Public Works, the position oversees Public Works Capital Improvement Program, Land Development, Landscape Architecture and Public Works Inspection. Provides leadership, management, and supervision to professional and technical support staff and serves as City Engineer. Responsible for the development and implementation of City standards.

Assistant Director of Public Works – Operations & Maintenance

Under the general direction of the Director of Public Works, the position oversees Customer Service and Billing, Parks Division, and Operations and Maintenance Division which includes City buildings, fleet, streets, sidewalks and sign shop.

2.2: LRO and Data Submitters

An LRO must have authority to ensure compliance with the provisions of the General Order and make managerial decisions regarding the operation of the sewer system. The LRO must have direct authority over individuals that have the necessary qualifications, such as a recognized degree or certificate in sanitary sewer operations and maintenance or professional training and experience in sewer system management. In addition, the LRO must be authorized to make major capital improvement recommendations. The City's LROs by position are as follows:

- Primary LRO
 - o Assistant Director of Public Works: Utilities and Environmental Services
 - *This position is vacant at the time of this SSMP Update. In its vacancy the primary LRO is the Public Works Director.*
- Secondary LRO
 - o Utilities Division Manager
 - The scope of the Utilities Division Manager's legal responsibilities is limited to certification of spill reports.

Data Submitters are authorized to enter spill data and other WDR required information into the California Integrated Water Quality System (CIWQS) prior to LRO approval and certification. The City's Data Submitters by position are as follows:

- Data Submitters
 - o Utilities Maintenance Supervisor
 - Lead Utilities Systems Operators

2.3: Responsible and Authorized Representatives

The City's responsible and authorized representatives are summarized in Table 2-1.

<u>Note that while the position of Assistant Director of Public Works – Utilities and</u> <u>Environmental Services remains vacant, the Director of Public Works will fill the respective</u> <u>roles.</u>

Table 2–1 : Responsible and Authorized Representatives

Element	Element Name	Representative	Phone	Email
1	Introduction and Goals	Director of Public Works: Siew-Chin Yeong	925-931-5506	syeong@cityofpleasantonca.gov

Element	Element Name	Representative	Phone	Email
2	Organization	Director of Public Works: Siew-Chin Yeong	925-931-5506	syeong@cityofpleasantonca.gov
3	Legal Authority	City Attorney: Daniel Sodergren	925-931-5015	dsodergren@cityofpleasantonca.gov
4	O&M Program	Utilities Division Manager: Jeremy Cox	925-931-5522	jcox@cityofpleasantonca.gov
5	Design and Performance	Planning - Utilities Planning Manager: David Bruzzone CIP - Assistant	925-931-5542	dbruzzone@cityofpleasantonca.gov
	Provisions	Director of Public Works – Engineering: Adam Nelkie	925-931-5675	anelkie@cityofpleasantonca.gov
6	Spill Emergency Response Plan	Utilities Division Manager: Jeremy Cox	925-931-5522	jcox@cityofpleasantonca.gov
7	Sewer Pipe Blockage Control Program	Environmental Services Manager: Rita Di Candia	925-931-5513	rdicandia@cityofpleasantonca.gov
8	System Evaluation,	Planning - Utilities Planning Manager: David Bruzzone	925-931-5542	dbruzzone@cityofpleasantonca.gov
	Capacity Assurance, CIP	CIP - Assistant Director of Public Works – Engineering: Adam Nelkie	925-931-5675	anelkie@cityofpleasantonca.gov
9	Monitoring, Measurement and Program Modifications	Utilities Division Manager: Jeremy Cox	925-931-5522	jcox@cityofpleasantonca.gov
10	Internal Plan Audit	Director of Public Works: Siew-Chin Yeong	925-931-5506	syeong@cityofpleasantonca.gov

Element	Element Name	Representative	Phone	Email
11	Communications	Director of Public Works: Siew-Chin Yeong	925-931-5506	syeong@cityofpleasantonca.gov
A	Council Adoption	Director of Public Works: Siew-Chin Yeong	925-931-5506	syeong@cityofpleasantonca.gov
В	SSMP Performance Tracking	Utilities Division Manager: Jeremy Cox	925-931-5522	jcox@cityofpleasantonca.gov
С	SSMP Change Log	Director of Public Works: Siew-Chin Yeong	925-931-5506	syeong@cityofpleasantonca.gov

2.4: Chain-of-Communication for Reporting and Responding to Spills

In response to a spill event, the Public Works Department staff shall immediately implement the Spill Emergency Response Plan (SERP), discussed in more detail in Element 6. The SERP provides directions for the immediate verbal and written notification of City staff and agencies. The chain-of-communication for reporting and responding to spills is described in the SERP.

2.5: References

- WDR Attachment D Section 2
- <u>City of Pleasanton Spill Emergency Response Plan</u>

3.0: Element 3 – Legal Authority

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

- a. Prevent illicit discharges into its sanitary sewer system.
- b. Collaborate with storm sewer agencies to coordinate emergency spill responses, ensure access to storm sewer systems during spill events, and prevent unintentional cross connections sanitary sewer infrastructure to storm sewer infrastructure.
- c. Require that sewer system components and connections be properly designed and constructed.
- d. Ensure access for maintenance, inspection, and/or repairs for portions of the service laterals owned and/or operated by the Enrollee.
- e. Enforce any violation of its sewer ordinances, services agreements, or other legally binding procedures.
- f. Obtain easement accessibility agreements for locations requiring sewer system operations and maintenance, as applicable.

3.1: Municipal Code

The City's legal authority to implement its sewer program is provided by the City's Municipal Code, Title 15 Sewerage. The specific sections applicable to the requirements of the Sewer System Management Plan (SSMP) are stated in the table below.

Legal Authority Issue	Pleasanton Municipal Code
Prevent illicit discharges into the sanitary sewer system	15.28
Limit the discharge of fats, oils, and grease and other debris that may cause blockages	15.44
Require that sewers and connections be properly designed and constructed	15.32
Clearly defined maintenance responsibility	15.32.100
Enforce any violation of its sewer ordinances	15.12

Table 3–1: Summary of Legal Authorities

The City Attorney Office has procedures in place to update the municipal code when deficiencies are discovered by staff.

3.2: Agreements

The City has agreements with DSRSD and City of Livermore for wastewater treatment and a joint powers agreement under LAVWMA for treated wastewater disposal. The City also has

agreements with Alameda County that allows sewage flows from their Castlewood Service Area to be transported through the City's collection system (including LS-10) for treatment at DSRSD.

3.3: References

- WDR Attachment D Section 3
- City of Pleasanton Municipal Code Chapter 15
- Agreement with DSRSD: Wastewater Disposal Services (1992) and Supplemental Agreements 1 through 7 (through 2022)
- Agreement with City of Livermore: Wastewater and Disposal Services (1993) and First Amendment (2017)
- Agreements with Alameda County: Castlewood Service Agreement (1985); Maintenance and Operation Agreement (1985); and City Permit to Connect and Use of County Sewer System (1994)
- Joint Exercise of Powers Agreement for the LAVWMA (1997)

4.0: Element 4 – Operations and Maintenance Program

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

- a. An up-to-date map(s) of the sanitary sewer system, and procedures for maintaining and providing SWRCB 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 facilities within the sewer system service area boundaries.
- b. A scheduling system and a data collection system for preventative operations and maintenance activities conducted by staff and contractors including inspection and maintenance activities, higher frequency inspections, maintenance of known problem areas including areas with tree root problems, and regular visual and closed-circuit television (CCTV) inspections of manholes and sewer pipes. The data collection system must document the data from the system inspection and maintenance activities.
- c. 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 SERP, and CIWQS reporting.
- d. An inventory of sewer system equipment, including the identification of critical replacement and spare parts.

4.1: Collection System Map

The City has a Geographic Information System (GIS) that deploys ESRI ArcGIS platform which hosts sewer system assets information. The current sewer asset includes: gravity line segments, manholes, pumping facilities, and pressure pipes (force mains). The City also has similar information in its GIS for the storm water drainage and conveyance system within and around the City service area. The GIS information is available to internal City staff in the field and can be made available externally. The City's CCTV software and CMMS software are linked to its GIS.

Any new additions, improvements or modifications to the sewer systems are "as built" documented by Engineering or Utilities staff and forwarded to the City's GIS team where it is reviewed and then updated in GIS. These updates occur on a monthly basis and are available to all city employees thereafter.

4.2: Operations and Maintenance Program

The City's O&M program is based on regular inspections and condition assessments of assets. **Figure 4–1** provides a workflow for the City's O&M program. The elements of the program are described below. Record keeping of O&M activities are kept in the City's CMMS, MaintStar.

Figure 4–1: O&M Program Workflow



4.2.1: Gravity Mains

<u>Cleaning</u>: Sewer collection systems require continuous maintenance to ensure proper function/performance. In addition to common maintenance defects (roots, debris, grease, etc.), items not intended for the sewer system (non-dispersible wipes, kitty litter, floss, etc.) can be introduced at any time, which makes regular cleaning a high priority. Gravity mains will be cleaned on a 7-year frequency cycle and in a systematic manner to ensure flow efficiency. Gravity main segments will be cleaned from the downstream manhole to the upstream manhole whenever possible. Exceptions can be made in some cases: (1) there are no lateral connections on the gravity main being cleaned, or (2) a forward-cleaning nozzle is being used. The City will primarily use in-house resources to perform cleaning for piping 15-inch and smaller. However, until a resource study is completed (see Section 4.5) and needed employees are identified and hired, contract services will be used to supplement staff. For large diameter sewers (greater than 15-inch diameter) and siphons, all cleaning will be performed by contract services.

<u>Inspection:</u> CCTV inspection of gravity mains will follow cleaning and occur on a 7-year frequency cycle. The City will primarily use in-house resources to perform inspection for piping 15-inch and smaller. However, until a resource study is completed (see Section 4.5) and needed employees are identified and hired, contract services will be used to supplement staff. For large diameter sewers (greater than 15-inch diameter) and siphons, all inspections will be performed by contract services. CCTV inspections are intended to evaluate system performance and drive much of the maintenance and repair activities needed to properly operate the sewer collection system. Defects and other findings will be coded using the National Association of Sewer Service Companies (NASSCO), Pipeline Assessment Certification Program (PACP) and Pioneer software.

CCTV inspections will also occur as a follow-up to SSOs to determine the cause of the SSO and to ensure the affected pipe is performing adequately. This inspection will be performed as soon as possible after the SSO event. This inspection will be used to verify findings when reporting to CIWQS and will help determine maintenance and repair activities to prevent reoccurrence of the SSO.

<u>Hot Spots</u>: The City keeps a hot spot list, which are sewer pipe segments that have been identified by staff as requiring high frequency cleaning. When placed on the hot spot list, the pipe segment is assigned a maintenance frequency (i.e., monthly, quarterly, biannually, annually, etc.) and maintenance method (i.e., appropriate nozzle type). The pipe segment is also evaluated for feasibility, cost, and benefit of repair to determine if and when is the most appropriate time to implement improvements and remove the segment from the hot spot list.

<u>Root Control</u>: Gravity main segments to be included in the root control program are generally informed by the results of the cleaning and inspection program. Gravity main segments that

are included have roots cut by in-house staff prior to chemical applications by contracted services.

<u>Vector Control</u>: The objective of the vector control program is to: (1) maintain a safe working environment for staff and (2) proactively address public concerns and maintain good public image by reducing the likelihood of disease-transmitting vectors (i.e., spiders, insects, rats, etc.) migrating from the collection system to homes and businesses. This program is currently the responsibility of Alameda County. Any areas of infestation that are identified during inspection are alerted to Alameda County.

<u>Pipe Repair</u>: Pipe segments identified as requiring repair are either placed on the Utilities Division repair and replacement plan or flagged for further evaluation as part of the engineering-based condition assessments that inform the CIP (see Section 8). Pipe repairs on the Utilities Division repair and replacement plan are primarily performed utilizing contract services.

4.2.2: Manholes

The City will inspect manholes during the pipe cleaning and inspection process utilizing City inspection forms. Results of the inspection inform of the maintenance and/or repair activities needed. Manholes identified as requiring repair are either placed on the Utilities Division repair and replacement plan or flagged for further evaluation as part of the engineering-based condition assessments that inform the CIP (see Section 8). Manhole repairs on the Utilities Division repair and replacement plan are primarily performed utilizing contract services.

The City has 34 SMART covers installed in strategic locations to provide advanced notification of sewage surcharge and possibility of spill. These covers provide continuous monitoring/alerts and are maintained on a monthly basis by in-house staff.

4.2.3: Lift Stations

The City will inspect its lift stations utilizing City inspection forms. <u>Note that the City is in the</u> <u>process of standardizing its lift station inspection form at the time of this SSMP Update</u>. Inspections vary based on the type of inspection activity. Results of the inspection inform the maintenance and/or repair activities needed. Items identified as requiring repair are either placed on the Utilities Division repair and replacement plan or flagged for further evaluation as part of the engineering-based condition assessments that inform the CIP (see Section 8). Repairs on the Utilities Division repair and replacement plan are performed in-house or with contracted services based on the nature of the repair.

4.2.4: Force Mains

The City will inspect its force mains on a yearly basis by walking the alignment and looking for evidence of leaks such as sink holes or depressions. The City will also inspect its valve vaults and air valves on a quarterly basis. Results of the inspections inform of the maintenance and/or repair activities needed. Items identified as requiring repair are either placed on the

Utilities Division repair and replacement plan or flagged for further evaluation as part of the engineering-based condition assessments that inform the CIP (see Section 8). Repairs on the Utilities Division repair and replacement plan are primarily performed utilizing contract services.

4.3: Training

Sewer training currently falls under the Public Works Department's training program managed by the Emergency Services Manager. The purpose of the sewer training program is to provide knowledge, to develop the skills and abilities of Utilities staff to ensure competent performance and adherence to safe and efficient work practices, and to set performance expectations for new and existing employees. Training includes (1) safety in accordance with CalOSHA requirements and industry best practices and (2) job skills that are based off job competencies assessments. Training methods include discussion-based, computer-based, operations-based / drills, and on-the-job training. Training topics include the WDR, the City's SSMP and SERP, and CIWQS training for LROs and Data Submitters. Training topics also incorporate the Utilities Division's Standard Operating Procedures (SOPs). Training activities are documented by the Emergency Services Manager.

The City provides financial support and training opportunities for employees to advance their CWEA certification grades. Staff are actively involved in Bay Area Clean Water Agencies (BACWA) and CWEA. The City also requires contractors working in the wastewater collection system to provide training for their employees related to safety and in the activities that may cause spills and in responding to contractor-caused spills.

Note that the City is in the process of reorganizing the structure of its training and emergency services programs at the time of this SSMP Update. As changes are put into place, the City will update the SSMP to reflect. Additionally, as part of the Resource Evaluation discussed in Section 4.5, the City will evaluate in-house staffing and/or contract services needs to properly implement the program.

4.4: Vehicle and Equipment Inventories

The City's water and sewer-related vehicle and equipment is managed by the Public Works Department's Operations and Maintenance / Fleet Division. The division maintains a citywide database of vehicles and equipment that includes those assigned to water and sewer. Major water and sewer vehicles and equipment are summarized in **Table 4–1**. The division implements a policy for funding the replacement of vehicles and equipment that includes funds dedicated to water and sewer. <u>The City is currently working on an Asset Management</u> <u>Plan (AMP) which will include enhancement of the management of its City-wide vehicles and equipment. The plan is expected to be complete at the end of calendar year 2025.</u>

The City has interagency agreements and informal arrangements with neighboring agencies for vehicle and equipment support in the event of failure.

The Utilities Division maintains an inventory of routine parts for repair of sewer piping and lift stations. Note that the City is in the process of developing a critical spare parts list at the time of this SSMP Update.

Table 4–1: Major Vehicles and Equipment	
Vehicles	Equipment
Dump Truck, 1.5 ton w/ crane	Camera Inspection, Crawler
Stake Bed LG (8Wx12Lx4H)	Camera Inspection, Crawler
Step van CCTV Truck	Pump Hose Trailer
Utility bed, 1-1/2-ton with mounted hoist and auxiliary fuel tank	Sandbagger
12 ft. Dump Truck, 7-9 YD	Traffic Arrow Board
Flusher	6" Trash Pump
Utility Truck w/Scelzi Body (air compressor 369 ER)	Portable Generator 300kW
12 ft. Dump Truck, 7-9 YD	Compressor
Hydro-Excavator Muddog	Light Tower
Hydro Excavator Camel	Portable Generator 400kW
Hydro Excavator (On Order)	4" Trash Pump
Dump Truck 7-9 YD	Forklift
Dump Truck 7-9 YD	Backhoe
Dump Truck 7-9 YD	Backhoe
	Backhoe
	Equipment Trailer

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4.5: Resource Evaluation

To properly implement the O&M program defined in this SSMP, the City will perform a resource evaluation with an estimated completion date listed in Section 1.2. The resource evaluation will consider reorganizing the Utilities Division structure to establish dedicated sewer O&M staffing that is separate from dedicated water O&M staffing. The resource evaluation will also review the adequacy of internal staffing, contract service agreements/budgets, and vehicles/equipment. The results of the resource evaluation will inform the sewer rate study, which has an estimated completion date listed in Section 1.2.

Bobcat Loader

4.6: References

- WDR Attachment D Section 4
- NAASCO PACP

5.0: Element 5 – Design and Performance Provisions

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

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

5.1: Design Criteria and Construction Standards

The City's capacity and performance criteria for its sewer system are defined in the November 2024 Sewer Capacity Evaluation Report. The City's construction standards for its sewer system are defined in the July 2024 Standard Specifications and Details. These minimum standards shall apply to the City's capital improvement projects and private development projects. These standards will be reviewed and updated periodically.

5.2: Inspection and Testing of New Facilities

The City's July 2024 Standard Specifications and Details outlines the standards and procedures for testing newly installed facilities in addition to applicable state standards. For new facilities not addressed in the City's Standard Specifications and Details, such as lift stations, the City uses consultants to design improvements and identify inspection and testing requirements. The City utilizes a combination of in-house staff and consultants to inspect and oversee testing of new installations.

5.3: References

- WDR Attachment D Section 5
- City Standard Specifications and Details Standards, July 2024
- Sewer Capacity Evaluation Report, November 2024

6.0: Element 6 – Spill Emergency Response Plan

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

- a. Notify primary 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 the General Order, State law and regulations, and applicable Regional Water Board Orders.
- d. Ensure that appropriate staff and contractors implement the SERP 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.
- 1. Conduct post-spill assessments of spill response activities.
- m. Document and report spill events as required in this General Order.
- n. Annually, review and assess effectiveness of the Spill Emergency Response Plan, and update the Plan as needed.

6.1: Policy

Pursuant to the reissued WDR, the City has updated its Spill Emergency Response Plan (SERP), which incorporates water quality monitoring requirements. The purpose of the City's SERP is to support a prompt, orderly and effective response to spills, reduce spill volumes,

and collect information for prevention of future spills. A "spill or SSO" is defined by State Water Board Order No. WQ 2022-0103-DWQ as 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.

The City's employees are required to report all spills from City owned sewer mains and laterals and to take the appropriate action to secure the spill area, properly report to the appropriate regulatory agencies, relieve the cause of the spill, and ensure that the affected area is cleaned as soon as possible to minimize health hazards to the public and protect the environment. The City's goal is to respond to sewer system spills as soon as possible following notification. The City will follow reporting procedures regarding sewer spills as set forth by the San Francisco RWQCB and the SWRCB Order No. WQ 2022-0103-DWQ (SSSWDR).

The SERP provides guidelines for City personnel to follow in responding to, cleaning up, reporting, and properly documenting spills that may occur within the City's service area. Additionally, the SERP outlines procedures for responding to sanitary sewer spill backups into structures as required by the City's insurer. "Backup" is a term typically used by insurers to describe property damage resulting from exposure and contact to untreated or partially treated sewage.

The link to the Spill Emergency Response Plan document is included in Section 6.2. The SERP includes a narrative of the plan, Sewer Spill/Backup Response Workbook that contains all documents used to properly document the City's response activities to all spill events, and procedures for water quality monitoring when applicable.

6.2: References

- WDR Attachment D Section 6
- <u>City of Pleasanton Spill Emergency Response Plan</u>

7.0: Element 7 – Sewer Pipe Blockage Control Program

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

The procedures must include, at minimum:

- a. An implementation plan and schedule for a public education and outreach program that promotes proper disposal of pipe-blocking substances.
- b. 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.
- c. The legal authority to prohibit discharges to the system and identify measures to prevent spills and blockages.
- d. 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.
- e. 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.
- f. An identification of sanitary sewer system sections subject to fats, oils, and grease blockages and establishment of a cleaning schedule for each section.
- g. Implementation of source control measures for all sources of fats, oils, and grease reaching the sanitary sewer system for each section identified above.

7.1: Public Education and Outreach

The City's public education and outreach includes a website (see link in Section 7.3). The website includes information for food service establishments (FSE) including requirements for grease interceptors or traps, maintenance requirements, record keeping requirements (including sample logs), and a link to State-registered Transporter of Inedible Kitchen Grease to service grease removal devices. The website also includes information for residents. In addition to the website, FSEs are given publications and BMP literature as part of the inspection process.

7.2: Disposal of Pipe-Blocking Substances

Nearby drop-off facilities and wastewater treatment plants that accept FOG products include:

Location	Address	Phone
Alameda County Household & Business Hazardous Waste Programs (Livermore Facility)	5584 La Ribera Street Livermore, CA 94550	(800) 606-6606
Alameda County Household & Business Hazardous Waste Programs (Fremont Location)	41149 Boyce Rd. Fremont, CA 94538	(800) 606-6606
East Bay Municipal Utility District	2020 Wake Ave. Oakland, CA 94607	(510) 287-1651

7.3: Legal Authority

The City's legal authority to implement its sewer pipe blockage control program is provided by the City's Municipal Code, Title 15 Sewerage, Chapter 15.44.

7.4: Requirements to Install Grease Removal Devices

The City's Municipal Code, Title 15 Sewerage, Chapter 15.44 includes the City's requirements and standards for grease removal devices.

7.5: Authority to Inspect and Enforce

The City's Municipal Code, Title 15 Sewerage, Chapter 15.44 provides the City with authority to inspect and enforce against FOG producing facilities.

7.6: Sewer System Segments Subject to FOG

The largest concentration of commercial FOG sources are food service establishments (FSEs) located on Main Street in the downtown area. These facilities receive information on BMPs, and their effectiveness is monitored. Segments of the sewer system subject to FOG blockages are identified in the City's Hot Spot List and include cleaning frequencies.

7.7: Program Update and Future Implementation

The Environmental Services Division is responsible for managing the sewer pipe blockage control program. At the time of this SSMP Update, the division is in the process of hiring contract services to assist staff in updating the existing program for compliance with the new WDR and to provide inspection services on an interim basis. As part of the Resource Evaluation discussed in Section 4.5, the City will evaluate in-house staffing and/or contract services needs to properly implement the program including administration, inspection, and enforcement. As the sewer pipe blockage control program is updated, the City will update the SSMP to reflect.

7.8: References

- WDR Attachment D Section 7
- FOG Program Website

• City of Pleasanton Municipal Code Chapter 15

8.0: Element 8 – System Evaluation, Capacity Assurance, and Capital Improvements

The Plan must include procedures and activities for:

- a. Routine evaluation and assessment of system conditions.
- b. Capacity assessment and design criteria.
- c. Prioritization of corrective actions.
- d. A capital improvement plan.

8.1: Long-Term Capital Improvement Plan

The purpose of the City's long-term capital improvement plan (CIP) is to ensure sustainability of the sewer system's infrastructure and determine funding needs. The long-term CIP is a living plan that is reviewed on a 2-year cycle to evaluate implementation progress and updated on a 6-year cycle to reflect any changes in drivers and needs. Development of the long-term CIP is based on technical evaluations that include condition assessments and system capacity. The long-term CIP includes prioritized projects with cost estimates over a 20-year span. The long-term CIP is developed in coordination with Utilities Division O&M staff and Engineering Division staff.

The City's Engineering Division is responsible for implementing CIP projects. Engineering will utilize the long-term CIP as a guide for developing its 5-Year CIP budget that is updated every 2 years.

At the time of this SSMP Update, the City's initial long-term CIP is in the process of being prepared by Woodard & Curran and will be completed by the date shown in Section 1.2.

8.2: Condition Assessments

8.2.1: Gravity Mains

As discussed in Section 4, the City performs CCTV inspections of its gravity mains up to 15 inches in diameter. As part of the condition assessment process, this inspection data is evaluated for the purposes of identifying CIP projects. The latest evaluation was completed in November 2024 by Woodard & Curran for pipes inspected and coded through June 2024. In total, 424,370 linear feet (or about 30 percent of the City-owned pipes in the gravity collection system) had CCTV data and defect scoring that could be utilized for a risk based assessment. InfoAsset Planner[™] risk assessment software was used to develop likelihood of failure (LOF) and consequence of failure (COF) scores for each pipe in the system. LOF scoring was based on structural condition based on CCTV data, a "structural vulnerability" factor reflecting the age and material of the pipe (also used as a preliminary surrogate for structural condition for pipes without CCTV data), and frequency of required cleaning ("hot spots"). COF scoring considered the pipe size (reflecting its potential flow volume), environmental consequence

(e.g., proximity to storm drains or Waters of the State), location (road type), and community impact (proximity to commercial areas and public facilities). A weighting system was applied to each of the LOF and COF factors to determine an overall risk score and risk category (very low, low, medium, or high), reflecting its priority. Based on the risk assessment results, gravity sewers were identified for continued preventive maintenance (pipes without major defects) or R&R. Pipes with R&R recommendations of medium or high-risk ratings were identified for inclusion in the City's long-term CIP.

The City plans to expand the condition assessment evaluation to the remaining sewer pipes that have been inspected/coded since June 2024 (~103,000 linear feet inspected and coded and ~110,000 linear feet inspected and awaiting coding). Moving forward, the City plans to maintain an overall 7-year inspection frequency. The City will also consider making future refinements to COF criteria to more specifically identify sewers in other environmentally sensitive areas (e.g., steep terrain, high groundwater areas, areas near creeks, etc.) or areas that may be more vulnerable to the impacts of climate change. As part of the long-term CIP's 2-year review and 6-year update process, the City will review its CCTV inspection program to incorporate up-to-date information.

8.2.2: Large Diameter Sewers, Siphons, and Manholes

Inspection of the City's large diameter sewers, siphons, and manholes were not performed or conditions evaluated as part of the City's current CIP. Budget for these inspections and condition assessments will be included in the City's long-term CIP currently under development. Results of the inspections will be evaluated, and recommended improvements included in future 2-year reviews and 6-year updates of the long-term CIP.

8.2.3: Lift Stations

As discussed in Section 4, lift stations are regularly inspected by operators utilizing the City's lift station inspection forms. The lift stations also undergo an engineering assessment as part of the long-term CIP process. The last engineering assessment was completed in January 2025 by Woodard & Curran. The evaluation process included an initial review of record drawings and miscellaneous documents followed by onsite inspections and assessments of each station's configuration, process condition, mechanical condition, observed structural condition, safety, operations and maintenance insight, electrical, and overall long-term reliability. In addition, Woodard & Curran coordinated with City staff for input on which lift stations present the highest risk in terms of day-to-day operations. The assessment also incorporated the findings and recommendations of a separate generator study completed by TJC and Associates.

During the inspection of each lift station, issues were highlighted that may warrant additional attention or future improvements. For each facility, these identified issues were given numerical criticality (1 = Fair, 2 = Poor, 3 = Crucial) and categorized into six (6) groups: Process, Mechanical, Electrical, Structural, Site, and Health & Safety. Recommended lift
station improvements based on the results of the lift station condition assessments were prioritized and will be scheduled into the City's long-term CIP.

The East Amador Lift Station (EALS) which is owned and operated by Dublin-San Ramon Services District (DSRSD), conveys flow from the City of Pleasanton to the DSRSD Wastewater Treatment Plant. Although DSRSD is responsible for the condition assessment and implementation of improvements needed to this lift station, the City is responsible for funding these improvements. An allocation for those costs will be included in the long-term CIP.

8.2.4: Force Mains

Force mains are inspected as discussed in Section 4. Due to the challenges of inspecting force mains, the City will also include an engineering evaluation as part of its long-term CIP process. The evaluation will first include a desktop assessment of the force mains, which will include a review of pipe attributes (alignment, age, material, etc.), geotechnical conditions in the proximity of the force mains, pump cycling data, and break history. This analysis will help identify feasible and appropriate inspection methods for each force main. The inspections will be prioritized based on the same types of factors used for gravity pipe risk assessment. The force main inspections may include visual assessment of pipe alignments, inspection of discharge manholes, ultrasonic pipe thickness testing, and actual internal CCTV inspected (or partially inspected) may be added to the gravity pipe CCTV inspection program to be conducted by contractors. Once available, needed improvements based on the results of the condition assessments will be prioritized and scheduled into the City's long-term capital improvement plan as appropriate.

Evaluation of the City's force mains were not performed as part of the City's current CIP. Budget for these inspections and condition assessments will be included in the long-term CIP currently under development. Results of the inspections will be evaluated, and recommended improvements included in future 2-year reviews and 6-year updates of the long-term CIP.

8.3: Capacity Assessments

The City completed a Sewer Capacity Evaluation Report in November 2024 by Woodard & Curran, which summarizes the development of a calibrated hydraulic model used to analyze the capacity of the system, identify areas of capacity deficiencies, and develop recommendations for capacity improvements to be incorporated into the City's long-term CIP. Note that the City has not had any capacity-related spills from the sewer collection system.

8.3.1: Hydraulic Analysis

The hydraulic model was developed in InfoWorks[™] ICM modeling software and includes all active City-owned sewers, lift stations, and force mains in the system. Flows in the model were based on recent winter water use data (to estimate base wastewater flows) and flow monitoring data collected at 14 sites and during the 2022/23 wet weather season. The model

was calibrated to the flow monitoring data to confirm that it would predict both dry and peak wet weather flows with reasonable accuracy. Potential increases in sewer flows were also estimated and included in the hydraulic analysis based on projected future development and land use changes within the sewer service area.

8.3.2: Design and Performance Criteria

The City selected a 25-year return period, 24-hour rainfall event¹ as the basis for capacity assessment and design of its sanitary sewer system. This design event is considered to provide reasonable protection from the risk of sewer spills due to infrequent, extreme wet weather events.

The calibrated hydraulic model was used to simulate peak flows that would be expected in the system under both normal dry weather flows and during a design storm event, for both existing and future development conditions. Pipes with flow exceeding a flow depth to pipe diameter ratio of 0.75 under peak dry weather flow were considered deficient and in need of upgrade. Areas with excessive predicted surcharge (i.e., hydraulic gradeline reaching within 3 feet of the ground, indicating a potential risk of a sewer spill) under design storm peak wet weather flow were identified, and required capacity improvements to alleviate those capacity deficiencies were developed. However, if any surcharge was predicted to occur solely due to future development, then the City may require a capacity relief project evaluation before additional development could be connected to the system.

8.3.3: Capacity Assurance

The results of the hydraulic modeling indicated that the City's sewer system has adequate capacity to convey peak dry weather flows under both existing and future conditions. The results for design storm model simulations indicated two areas of the system that may be considered capacity deficient under existing conditions and two areas that could become capacity deficient in the future due to increased flows from future development. The capacity assessment also determined that all of the modeled system pump stations have sufficient firm capacity (capacity with largest pumping unit out of service) to convey the predicted design storm peak flow without exceeding the maximum allowable surcharge in upstream sewers.

The 2024 Sewer Capacity Evaluation identified four potential capacity improvement projects required to meet the City's capacity criteria. In several cases, alternatives were also identified, which could be evaluated as part of additional pre-design studies. Required system capacity improvements would be designed in accordance with the City's Engineering Standards (see Element 5). The recommended projects have been incorporated into the City's long-term CIP.

At the time of this SSMP Update, the City is evaluating potential development alternatives for the East Pleasanton Specific Plan area and respective impacts to sewer capacity. Any

¹ Based on NOAA Atlas 14, Volume 6, point precipitation frequency estimates and spatial variation across the Pleasanton sewer service area. Reference: <u>https://hdsc.nws.noaa.gov/hdsc/pfds_map_cont.html?bkmrk=ca</u>.

required capacity improvements will be funded and constructed by future developers and/or incorporated into the long-term CIP once identified.

8.3.4: Infiltration and Inflow

The hydraulic model was used to evaluate the magnitude of infiltration and inflow (I/I) into the City's sewer system. Peak I/I flow (for the 25-year design storm) was expressed as a wet weather peaking factor (ratio of peak I/I flow to average dry weather flow) for each flow meter tributary area. The wet weather peaking factors ranged from about 1.5 to 5, with most areas having peaking factors less than 4. While these values certainly indicate that the system is subject to I/I, the values are lower than many other San Francisco Bay Area systems. Based on the results of the capacity assessment, the City does not consider I/I to be excessive and warranting a targeted I/I investigation program, but it will continue to monitor flows (at its key pump stations and influent to the DSRSD treatment plant, and through future flow monitoring programs) and re-visit the need for a focused I/I program in the future.

8.4: Impacts of Climate Change

It is generally accepted that storm frequency and intensity will increase in the future as a result of climate change. Already, published rainfall statistics (e.g., NOAA Atlas 14) are likely out-of-date and are currently being updated. NOAA Atlas 15 is anticipated to be released in 2026. At that time, the City will re-evaluate its design storm and make adjustments if warranted in the capacity assessment. The City will continue to monitor conditions in the system during large wet weather events and take future action if observations indicate increased flows or risk of spills due to insufficient capacity during such events.

8.5: Project Funding

The City conducts sewer rate and connection fee studies on a periodic basis to assess the funding needs to support CIP, as well as O&M programs. <u>The next sewer rate and connection</u> *fee study is scheduled to be complete as shown in Section 1.2.*

8.6: References

- WDR Attachment Section 8
- Sewer Capacity Evaluation Report, November 2024
- NOAA Atlas 14

9.0: Element 9 – Monitoring, Tracking and Reporting System

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

- a. Maintaining relevant information, including audit findings, to establish and prioritize appropriate Plan activities.
- b. Monitoring the implementation and measuring the effectiveness of each element of the Plan.
- c. Assessing the success of the preventative operation and maintenance activities.
- d. Updating Plan procedures and activities, as appropriate, based on monitoring and performance evaluation.
- e. Identifying and illustrating spill trends, including spill frequency, locations, and estimated volumes.

9.1: Adaptive Management

The City regularly tracks and updates the performance results of its sanitary sewer program. In March of each year, the SWRCB requires that the City prepare and submit an Annual Report of its findings in CIWQS. During preparation and prior to certification of the Annual Report, the City will also perform the following related activities:

- Review the SERP for effectiveness and make any changes to ensure proper and timely responses.
- Evaluates the SSMP Audit Report's corrective actions to monitor implementation status.
- Report on key performance indicators summarized in Table 9-1 and update performance tracking graphs (see Appendix B).
- Document any required SSMP changes in the SSMP Change Log.

9.2: References

- WDR Attachment D Section 9
- Appendix B Spill and Operational Performance Tracking

Key Performance Indicator	Target			
Regulatory Compliance				
Number of Spills	5			
Spill Reports Completed on Time	100%			
Annual Report Completed on Time	100%			
SSMP Audit Completed on Time	100%			
SSMP Update Completed on Time	100%			
Spill Response				
Response Time (receipt of call to arrival at site)				
During Business Hours	Less than 30 min 95% of the time			
After Business Hours	Less than 90 min 95% of the time			
Spill Recovery Volume (average)	75%			
Spill Reduction				
Number of Repeat Spills	0			
Inspections & Maintenance				
 Gravity Mains & Manhole Cleaning and Inspections Completed 	7-Year Cycle (190,000 linear feet/year of piping and respective manholes)			
Lift Station Inspections Completed	75%			
 Force Main Inspections Completed Yearly Alignment Walks Quarterly Vault/ARVs 	100% 75%			
Open vs. Total Work Orders	25%			

 Table 9–1: Key Performance Indicator Targets per Calendar Year

10.0: Element 10 – SSMP Audits

The Plan shall include internal audit procedures, appropriate to the size and performance of the system, for the Enrollee to comply with section 5.4 the General Order.

10.1: City SSMP Audit Procedures

The City shall perform internal audits of the SSMP on a triennial (every 3 years) basis per the requirements of the General Order and a certified Audit Report will be completed, certified and uploaded to CIWQS no later than six (6) months following the end of the three-year audit period. If the results of the audit require updates or changes to the sewer program, the content and timeline to complete those changes will be described in the audit correctives action plan, and as the changes are made, they will be tracked in the SSMP Change Log.

The milestone for the next SSMP audit is included in Section 1.2.

10.2: References

- WDR Attachment D Section 10
- SSMP Audit Report: 8/2/21 to 8/2/24

11.0: Element 11 – Communication Program

The SSMP must include procedures for the Enrollee to communicate with:

- a. 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.
- b. Owners/operators of systems that connect into the Enrollee's system, including satellite systems, for system operation, maintenance, and capital improvement-related activities.

11.1: Communication Program

The SSMP Update shall be adopted by City Council at a City Council meeting prior to upload to CIWQS. To facilitate the City Council meeting, staff will include a draft version of the SSMP and prepare a staff report and presentation that provides background on regulatory requirements, SSMP purpose and content, and relationship to existing City policies and programs. The draft SSMP and staff report will be available to the public through posting of the City Council meeting agenda on the City's website. The City Council meeting will be open to the public and include a period for public comment. The final and adopted SSMP will incorporate input from the City Council meeting. Any significant changes to the adopted SSMP in the future will be approved by City Council through a similar process.

The SSMP Update report (including referenced SERP) that is adopted and uploaded to CIWQS will be posted on the City's Utilities Division webpage (see link in Section 11.2). Any changes to the SSMP Update report will be made in the report, documented in the SSMP change log, and then reposted to the City's Utilities Division webpage. Note that unless the changes are significant, the SSMP Update report will not be resubmitted to CIWQS until the next 6-year due date.

Other communication efforts of the sewer program will include annual check-ins with City Council on KPIs, and public outreach on SSOs and the sewer pipe blockage control plan as described in those programs.

11.2: References

- WDR Attachment D Section 11
- <u>Utilities Division Website</u>

Appendix A: SSMP City Council Adoption Documents

RESOLUTION NO. 2025-036

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF PLEASANTON TO APPROVE THE 2025 SEWER SYSTEM MANAGEMENT PLAN

WHEREAS, the City of Pleasanton owns and operates a sewer collection system; and

WHEREAS, the State Water Resources Control Board on December 6, 2022, adopted the Statewide Waste Discharge Requirements General Order WQ 2022-0103-DWQ (Order), which became effective June 5, 2023 and established updated regulatory requirements for sewer collections systems within California; and

WHEREAS, the Order requires the preparation of a Sewer System Management Plan (SSMP) by all agencies enrolled under the Order;

WHEREAS, the Order requires that the SSMP be approved by the governing body of the agency at a public meeting.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF PLEASANTON DOES **RESOLVE, DECLARE, DETERMINE AND ORDER THE FOLLOWING:**

SECTION 1. The City of Pleasanton approves the 2025 SSMP.

SECTION 2. The City's Legally Responsible Official, as designated in the SSMP, is authorized to submit the SSMP to the State Water Resources Control Board.

PASSED, APPROVED AND ADOPTED by the City Council of the City of Pleasanton at a regular meeting held on June 17, 2025

I. Jocelyn Kwong, City Clerk of the City of Pleasanton, California, certify that the foregoing resolution was adopted by the City Council at a regular meeting held on the 17th day of June 2025, by the following vote:

Councilmembers Eicher, Gaidos, Nibert, Testa, Mayor Balch Aves: Noes: None Absent: None Abstain: None

Clerk

APPROVED AS TO FORM:

Daniel G. Sodergren, City Attorney

Appendix B: Spill and Operational Performance Tracking

Spill Performance Results















Operational Performance Results









Appendix C: SSMP Change Log

SSMP CHANGE LOG			
Date	SSMP Element #	Description of Change / Revision Made	Person Authorizing Change