Resolution No. 6311-2020

RESOLUTION OF THE CITY COUNCIL OF THE CITY OF SEBASTOPOL ACEPTING AND CERTIFYING THE CITY OF SEBASTOPOL SEWER SYSTEM MANAGEMENT PLAN, OVERFLOW EMERGENCY RESSPONSE PLAN AND THE WATER QUALITY MONITORING PLAN

WHEREAS, the State Water Resources Control Board enacted Board Order No. 2006-0003-DWQ on May 2, 2006, establishing Waste Discharge requirements for all public agencies that own or operate sanitary sewer systems greater than one mile in length that collect or covey intreated wastewater to a publicly owned treatment facility; and

WHEREAS, the City of Sebastopol, in partial compliance with Order No. 2006-003-DWQ, enrolled for coverage under the Statewide General Waste Discharge Requirements for Sanitary Sewer Systems on October 6, 2006; and

WHEREAS, effective September 9, 2013 the WDR Monitoring and Reporting requirements were modified and amended by Executive order No. WQ-2013-0058-EXEC changing reporting and recordkeeping requirements and modified the categories of sanitary sewer overflows; and

WHEREAS, the WDR requires agencies to prepare and governing boards to adopt Sewer System Management Plans with specific Elements at least every five years; and

WHEREAS, the WDR as amended also requires the agency to prepare and adopt Overflow Emergency Response Plans and Water Quality Monitoring Plans; and

WHEREAS, the City has also recently entered into a Settlement and release of Claims Agreement with California River Watch that requires the City update and the Council to adopt certain revisions to the City of Sebastopol sewer program in the Sewer System Management Plan, the Overflow Emergency Response Plans and the Water Quality Monitoring Plans; and

WHEREAS, the WDR requires the governing body to consider revising as necessary and recertifying the three Plans after any changes, revisions, or amendments to the City program resulting from operational changes, settlement agreements or enforcement actions; and

WHEREAS, the necessary changes, revisions and amendments have now been prepared and are ready for City Council consideration.

NOW, THEREFOR, BE IT RESOLVED that the City Council of the City of Sebastopol hereby approves this Resolution accepting and certifying the Sewer System Management Plan, the Overflow Emergency Response Plans and the Water Quality Monitoring Plans for the City Sebastopol dated September 15, 2020;

AND BE IT FURTHER RESOLVED, that the City's Legally responsible Official is directed to certify under penalty of perjury in the State of California CIWQS database System the adoption of the Sewer System Management Plan.

The above and foregoing Resolution was duly passed, approved, and adopted at a meeting by the City Council on the 15th day of September 2020 by the following vote:

VOTE:

AYES: Councilmembers Carnacchi, Gurney, Hinton, Vice Mayor Glass and Mayor Slayter
NOES: None
ABSTAIN: None
ABSENT: None

APPROVED: _____
Mayor Patrick Slayter

ATTEST: _____
Mary Gourley, Assistant City Manager/City Clerk, MMC

APPROVED AS TO FORM:_____
Larry McLaughlin, City Manager/Attorney

Sanitary Sewer Management Plan
September 2020
City WDID #1SSO10017

Originally Certified August 3, 2010
Resolution No: 5812
Readopted: March 17, 2015
Resolution No: 6031
Readopted: September __, 2020
Resolution No: _____

Prepared In Conjunction With:
Causey Consulting
Walnut Creek, CA 94598

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CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations

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Dante Del Prete, Public Works Superintendent

Legally Responsible Official

Introduction

1.1. Sewer System Management Plan

This Sewer System Management Plan (SSMP) has been prepared by the City with the assistance of Causey Consulting, Walnut Creek, CA. It is a compendium of the policies, procedures, and activities that are included in the planning, management, operation, and maintenance of City's sanitary sewer system. City Council adopted the original SSMP on August 3, 2010 as required by the Sanitary Sewer Waste Discharge Requirements (GWDR).

The State Water Resources Control Board (SWRCB) has issued statewide waste discharge requirements for sanitary sewer systems, which include requirements for development of an SSMP. The State Water Board requirements are outlined in Order No. 2006-0003-DWQ, Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, dated May 2, 2006 (GWDR), and Order No. WQ-2008-0002-EXEC, dated February 20, 2008, which was amended by Order No. 2013-0058-EXEC, effective September 9, 2013, which changed the Monitoring and Reporting Program (MRP) requirements. This SSMP is intended to comply with the GWDR and MRP revised requirements. The City is also named in the Santa Rosa Subregional Water Reclamation Facility National Pollution Discharge Elimination Permit No. CA0022764 issued pursuant to Regional Board Order No. R1-2013-0001.

The structure (section numbering and nomenclature) of this SSMP follows the above referenced GWDR Section D13. This SSMP is organized by the SWRCB outline of elements; and contains language taken from the GWDR at that beginning of each element. The GWDR uses the term "Enrollee" to mean each individual municipal wastewater collection system that has completed and submitted the required application for coverage under the WDR (in this case, the Enrollee is the City of Sebastopol. The City's waste discharger identification number (WDID) in the California Integrated Water Quality System (CIWQS) is 1SSO10017. The City must report and certify all SSOs using the WDID number into the statewide reporting system.

1.2. Sanitary Sewer System Facilities

The City operates a sanitary sewer system that serves an estimated population of 7,768 as of 2020 in a 4.4 square mile service area. The sewer system serves 2,754 service connections. The sewer system consists of 29.6 miles of gravity sewers (approximately 750-line segments), 750 manholes, 2.7 miles of force mains, and two (2) pump station as of March 2020. The sewer lines range in size from six (6) inches to twenty-one (21) inches in diameter. The City is a member of the Central Marin Sanitation Agency (CMSA) that is responsible for the conveyance, treatment and disposal of all sewage discharged into the City sewer system. The City is responsible for the lower laterals connecting to the City sewer system from the property line to the City main (10.5 miles) and the property owner is fully responsible for installation, maintenance and repair of the private upper sewer lateral(s) from the structure to the lower lateral. The City provides service and repair of the lower lateral (the portion of the lateral that extends from the sewer main in the public right-of-way to the clean out at the property line/edge of the right-of-way or for easements

to the easement line). The property owner is responsible for installation, maintenance, operation, inspection, testing, rehabilitation, and repair of the upper lateral that extends from the clean out at the property line/edge of right-of-way or from the easement edge to the building. The City Council may, in the future, consider requirements for the testing and repair of laterals for purposes of reducing infiltration and inflow. Figure 1 contains a map of the City's sanitary sewer system. The composition of the sewer piping by size, material and pipe age of construction is shown on Tables 1, 2 and 3.

Intro Figure 1 provides a map of City's sanitary sewer service area. **Intro** Table 1 lists the size distribution of the gravity sewer pipes in the City sewer system.

Intro Table 2 provides the gravity sewer pipes material of construction.

Intro Table 3 provides the system information of Gravity Sewer System Inventory of Sewer Lines by Pipe Age.

Intro Figure 1: City Sewer System Area Map

Intro Table 1: Gravity Sewer System Size Distribution

Diameter, Inches	Number of Line Segments	Pipe Length, Linear Feet	Portion of Sewer System, %
6	340	102,030	65.3
8	81	24,365	15.6
10	40	11,983	7.7
12	22	6,627	4.2
14	11	3,201	2.1
15	5	1,424	0.9
16	3	868	0.6
18	1	108	0.1
21	5	1,428	0.9
Unknown	15**	4,277	2.7
Total	**523**	**156,311**	**100.0**
Total, miles		**29.6**	**100.0**

Source: City supplied infrastructure file 6/26/20

Intro Table 2: Gravity Sewer System Materials of Construction

Material	Number of Line Segments	Pipe Length, LF	Percent of Sewer System
VCP	106	31,726	20.3
PVC	13	3,804	2.4
DIP	349	104,751	67.0
ACP	39	11,753	7.5
Unknown	**15****	**4,277**	**2.7**
Total	**523**	**156,311**	**100.00**
Total, Miles		**29.6**	

Source: : City supplied infrastructure file 6/26/20

Intro Table 3: Gravity Sewer System Inventory of Sewer Lines by Pipe Age

Age in Years	Construction Period	Linear Feet of Gravity Sewers	Miles of Gravity Sewer	Percent of System
0-15	2000 - current	7,814	1.48	5
16 – 35	1980 – 1999	31,258	5.92	20
36 – 55	1960 – 1979	78,144	14.8	50
56 – 75	1940 – 1959	31,258	5.92	20
76 – 95	1920 – 1939	7,814	1.48	5

Age in Years	Construction Period	Linear Feet of Gravity Sewers	Miles of Gravity Sewer	Percent of System
95 – 115	1900 – 1919	0	0	0
>115	Before 1900	0	0	0
Total		**156,288**	**29.6**	

Source: CIWQS 2/3/20

1.3. Definitions, Acronyms, and Abbreviations

Asbestos Cement Pipe (ACP)

American Society for Testing and Materials (ASTM)

American Water Works Association (AWWA)

Best Management Practices (BMP)

Refers to the procedures employed in commercial kitchens to minimize the quantity of grease that is discharged to the sanitary sewer system. Examples include scraping food scraps into a garbage can and dry wiping dishes and utensils prior to washing.

Building Lateral

Refers to the piping (upper and lower lateral) that conveys sewage from the building to the City sewer system.

Calendar Year (CY)

Capital Improvement Plan (CIP)

Refers to the document that identifies future capital improvements to City's sanitary sewer system.

California Integrated Water Quality System (CIWQS)

Refers to the State Water Resources Control Board online electronic reporting system that is used to report SSOs, certify completion of the SSMP, and provide information on the sanitary sewer system.

Capital Improvement Plan (CIP)

Refers to the document that identifies future capital improvements including renewal and replacement and capacity enhancements to the City's sanitary sewer system.

City

Refers to the City of Sebastopol

City Clean Out

Refers to the clean out that is typically located on the building lateral near the sidewalk (lower lateral) or at the edge of the City right-of-way. The City clean out is used to provide access for City crews to provide courtesy maintenance to the lower lateral. Not all buildings in the City have a City clean out.

Clean Water Act (CWA)

California Water Environment Association (CWEA)

Closed Circuit Television (CCTV)

Refers to the process and equipment that is used to internally inspect the condition of gravity sewers.

Computerized Maintenance Management System (CMMS)

Refers to the computerized maintenance management system that is used by City to plan, dispatch, and record the work on its sanitary sewer system. SEDARU is the propriety software City uses for workflow management.

Director of Utilities

Means the person at the City of Santa Rosa Subregional Water Reclamation System responsible for the administration and enforcement of the City FOG and industrial waste program.

Division of Water Quality (DWQ)

Refers to the State of California Division of Water Quality of the State Water Resources Control Board.

Ductile Iron Pipe (DIP)

Enforcement Response Plan (ERP)

Plan for the enforcement of pretreatment program of the City of Santa Rosa Environmental Compliance Division.

Enrollee

A federal or state agency, municipality, county, district, and other public entity that owns or operates a sanitary sewer system, as defined in the general GWDRs, and that has submitted a complete and approved application for coverage under the GGWDR

Fats, Roots, Oils, and Grease (FROG)

Refers to fats, oils, and grease typically associated with food preparation and cooking activities that can cause blockages in the sanitary sewer system.

Feet per sec (fps)

First Responder

Refers to the field crew or the On-Call personnel that are City's initial response to an SSO event or another sewer system emergency.

Fiscal Year (FY)

Means a 12-month periods beginning July 1st and ending June 30th.

Food Service Establishment (FSE)

Refers to commercial or industrial facilities where food is handled/prepared/served that discharge to the sanitary sewer system.

Full-time Equivalent (FTE)

Refers to the equivalent of 2,080 paid labor hours per year by a regular, temporary, or contract employee.

Gallons per Day (GPD)

Grease Removal Device (GRD)

Refers to grease traps and grease interceptors that are installed to remove FOG from the wastewater flow at food service establishments.

General Waste Discharge Requirements (GWDR)

Refers to the State Water Resources Control Board Order No. 2006-0003, Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, dated 5/2/2006.

Geographical Information System (GIS)

Refers to City's system that it uses to capture, store, analyze, and manage geospatial data associated with City's sanitary sewer system assets.

Global Positioning System (GPS)

Refers to a field device it that is recommended to determine the longitude and latitude of sanitary sewer overflows for use in meeting CIWQS reporting requirements.

Grease Removal Device (GRD)

Refers to grease traps and grease interceptors that are installed to remove FROG from the wastewater flow at food service establishments.

Infiltration/Inflow (I/I)

Refers to water that enters the sanitary sewer system from storm water and groundwater.

- Infiltration enters through defects in the sanitary sewer system after flowing through the soil.
- Inflow enters the sanitary sewer without flowing through the soil. Typical points of inflow are holes in manhole lids and direct connections to the sanitary sewer (e.g. storm drains, area drains, and roof leaders).

Lateral

See Building Lateral

Legally Responsible Official (LRO)

Person(s) formally designated by City to be responsible for formal reporting and certifying of all reports submitted to the CIWQS.

Lower Lateral

That portion of the sewer lateral from the main to the private property line or cleanout at the street or for easement lines from the edge of the easement to the City sewer system

Maintenance Management System (MMS)

See computerized maintenance management system.

Manhole (MH)

Refers to an engineered structure that is intended to provide access to a sanitary sewer for maintenance and inspection.

Mainline Sewer

Refers to City publicly owned wastewater collection system piping that is not a private lateral connection to a user.

Monitoring, Measurement, and Plan Modifications (MMPM), SSMP Element IX

Monitoring and Reporting Program (MRP)

State Water Resources Control Board WQ 2013-0058-EXEC effective September 9, 2013.

National Association of Sewer Service Companies (NASSCO)

Notification of an SSO

Refers to the time at which City becomes aware of an SSO event through observation or notification by the public or other source.

Nuisance

California Water Code section 13050, subdivision (m), defines nuisance as anything that meets all the following requirements:

a. Is injurious to health, or is indecent or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property.

b. Affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal.

c. Occurs during, or as a result of, the treatment or disposal of wastes.

Office of Emergency Services (OES or Cal OES)

Refers to the California State Office of Emergency Services.

Operations and Maintenance (O&M)

Overflow Emergency Response Plan (OERP), Element VI of the SSMP and Appendix D

Pipeline Assessment and Certification Program (PACP)

Refers to the NASSCO certification program that is used for the evaluation and condition assessment of sewer lines and appurtenances from closed circuit televising of the lines and appurtenances.

Polyvinylchloride Pipe (PVC)

Preventive Maintenance (PM)

Refers to maintenance activities intended to prevent failures of the sanitary sewer system facilities (e.g., cleaning, CCTV, repair, etc.).

Private Lateral (PSL)

The sewer pipeline from the plumbing of a building to the property line, or cleanout to the building or for easements from the edge of the sewer easement to the building.

Private Lateral Sewage Discharges (PLSD)

Sewage discharges that are caused by blockages or other problems within a privately-owned sewer service lateral.

Property Damage Overflow

Refers to a sewer overflow or backup that damages a private property owner's premises.

Public Works (PW)

Pump Station (PS)

Regional Water Quality Control Board (RWQCB)

Refers to the North Coast Regional Water Quality Control Board.

Santa Rosa Subregional Water Reclamation System (SRSWRS)

Refers to the Subregional Water Reclamation Facility to which the Sebastopol wastewater is discharged for treatment and disposal. The staff of this agency is also responsible for the FOG and industrial waste program administration in the City service area.

Sanitary Sewer Backup (Backup)

A wastewater backup into a building and/or on private property caused by blockages or flow conditions within the publicly owned portion of a sanitary sewer system.

Sanitary Sewer Overflows (SSO)

Any overflow, spill, release, discharge, or diversion of untreated or partially treated wastewater from a sanitary sewer system. SSOs include:

a. Overflows or releases of untreated or partially treated wastewater that reach waters of the United States;

b. Overflows or releases of untreated or partially treated wastewater that do not reach waters of the United States; and

c. Wastewater backups into buildings and on private property that are caused by blockages or flow conditions within the publicly owned portion of a sanitary sewer system.

d. SSOs that include multiple appearance points resulting from a single cause will be considered one SSO for documentation and reporting purposes in CIWQS.

NOTE: Wastewater backups into buildings caused by a blockage or other malfunction of a private sewer lateral are not SSOs.

SSO Categories:

Category 1: Discharge of untreated or partially treated wastewater of any volume resulting from a sanitary sewer system failure or flow condition that either:

- Reaches surface water and/or drainage channel tributary to a surface water; or
- Reached a Municipal Separate Storm Sewer System (MS4) and was not fully captured and returned to the sanitary sewer system or otherwise captured and disposed of properly.

Category 2: Discharge of untreated or partially treated wastewater greater than or equal to 1,000 gallons resulting from a sanitary sewer system failure or flow condition that either:

- Does not reach surface water, a drainage channel, or an MS4, or
- The entire SSO discharged to the storm drain system was fully recovered and disposed of properly.

Category 3: All other discharges of untreated or partially treated wastewater resulting from a sanitary sewer system failure or flow condition.

Sanitary Sewer System or Sewer System

Refers to the sanitary sewer facilities that are owned and operated by the City

Sanitary Sewer Overflow Emergency Response Plan (SSORP)

Sebastopol Municipal Code (SMC)

Sensitive Area

Refers to areas where an SSO could result in a fish kill or pose an imminent or substantial danger to human health.

Sewer System Management Plan (SSMP)

Standard Operating Procedures (SOP)

Refers to written procedures that pertain to specific activities employed in the operation and maintenance of the Sanitary Sewer System.

Standard Dimension Ratio (SDR)

Refers to the ratio of pipe diameter to pipe wall thickness in plastic pipes.

Standard Operating Procedures (SOP)

Refers to written procedures that pertain to specific activities employed in the operation and maintenance of the sanitary sewer system.

Standard Specifications

Refers to the latest edition of Standard Specifications published by the California Department of Transportation, Caltrans.

State Water Resources Control Board (SWRCB)

Refers to the California Environmental Protection Agency, State Water Resources Control Board.

Note: The State Board is a separate entity from the North Coast Regional Water Quality Control Board, although the agencies are closely connected.

Supervisory Control and Data Acquisition (SCADA)

Refers to the system that is employed by City to monitor the performance of its pump stations and to notify the operating staff when there is an alarm condition that requires attention.

System Evaluation and Capacity Assurance Plan (SECAP) SSMP Element VIII

Untreated or Partially Treated Wastewater

Any volume of waste discharged from the sanitary sewer system upstream of a wastewater treatment plant headworks.

Upper Lateral

Refers to that portion of the Private Lateral generally from the property line or cleanout or for easement connections from the edge of the easement to the building owned and maintained by the private property owner.

Vitrified Clay Pipe (VCP)

Waste Discharge Identification Number (WDID)

A unique identification number for the certification and reporting of collection system related actions and overflows in the CIWQS System. The City WDID is 1SSO10017

Wastewater Discharge Permit (WWDP)

The written permit or mechanism by which new or increased contributions of pollutants or changes in the nature of pollutants to the Subregional System by industrial users, maybe controlled to ensure compliance with applicable pretreatment standards, pretreatment requirements, or City local limits.

Water Discharge Requirement (GWDR, SSO GWDR)

Water Body

Any stream, creek, river, pond, impoundment, lagoon, wetland, or bay.

Water of the State

Refers to "any surface water, including saline waters, within the boundaries of the state." (California Water Code § 13050(e)).

Water Quality Monitoring Plan (WQMP)

Work Order (WO)

Refers to a document (paper or electronic) that is used to assign work and to record the results of the work.

1.4. References

- State Water Resources Control Board Order No. 2006-0003, Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, California State Water Resources Control Board, May 2, 2006.
- State of California Water Resources Control Board Order No. WQ-2008-0002-EXEC, Adopting Amended Monitoring and Reporting Requirements for Statewide General Waste Discharge Requirements for Sanitary Sewer Systems dated February 20, 2008
- State Water Resources Control Board Order No. Order No. 2013-0058-EXEC, Amending Monitoring and Reporting Program for Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, September 9, 2013.

Element I: Goals

Goal: The goal of the SSMP is to provide a plan and schedule to properly manage, operate, and maintain all parts of the sanitary sewer system. This will help reduce and prevent SSOs, as well as mitigate any SSOs that do occur.

I-1: SSMP Goals

The goals of the City of Sebastopol SSMP are:

1. To properly and safely manage, operate, and maintain all portions of the City's wastewater collection system; and
2. To understand the condition of and maintain of infrastructure to maximize the life of the collection system; and
3. To operate and maintain our system to minimize impacts on customers; and
4. To effectively identify and remedy design, construction, and operational deficiencies; and
5. To minimize the frequency of SSOs; and
6. To mitigate the impacts that are associated with any SSO that may occur; and
7. To meet all applicable regulatory notification and reporting requirements.

I-2: References:

None.

Element II: Organization

Organization: The SSMP must identify:

(a) The name of the responsible or authorized representative as described in Section J of this Order.

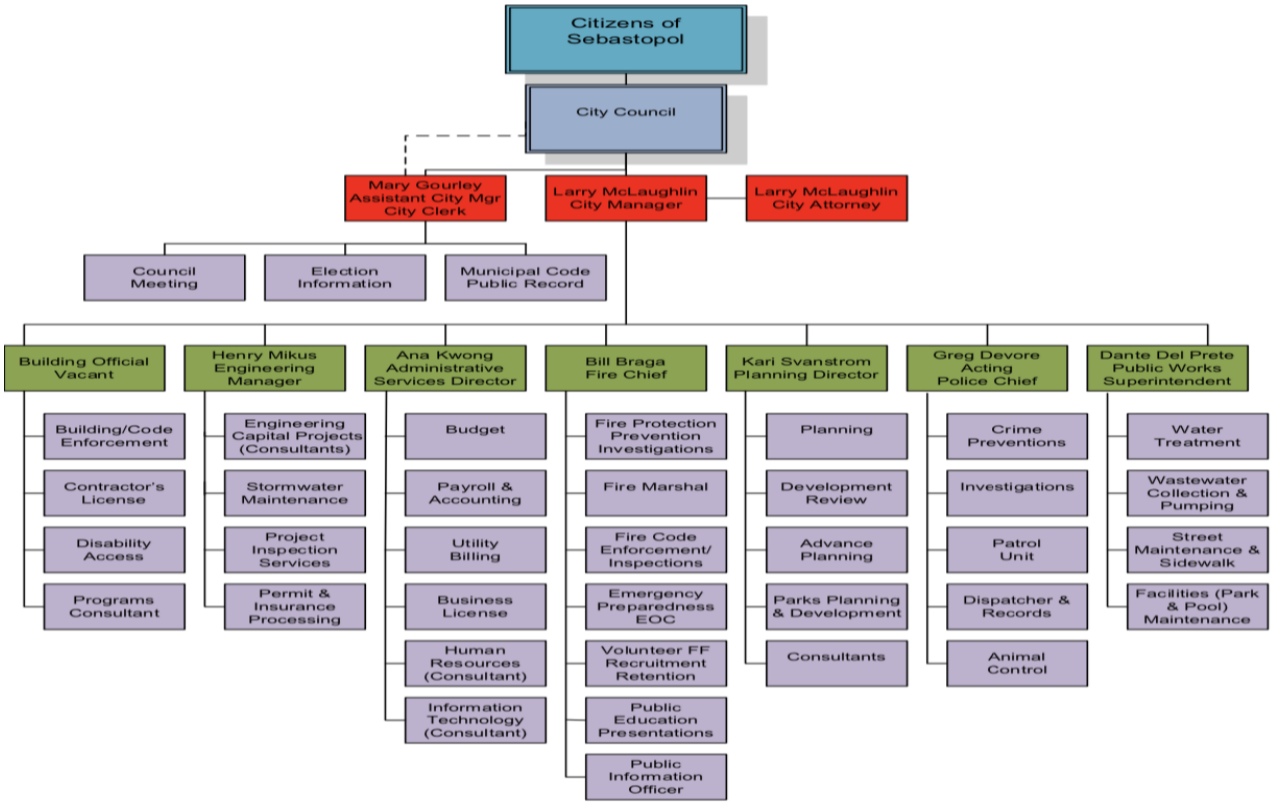
(b) The names and telephone numbers for management, administrative, and maintenance positions responsible for implementing specific measures in the SSMP program. The SSMP must identify lines of authority through an organization chart or similar document with a narrative explanation; and

(c) The chain of communication for reporting 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 (such as County Health Officer, County Environmental Health Agency, Regional Water Board, and/or State Office of Emergency Services (OES)).

II-1: Organizational Structure

The organization chart for the management, operation, and maintenance of the City's wastewater collection system is shown on **Figure II-1**.

Figure II – 1: City Organization Chart



II-2: Authorized Representatives

The City's Legally Responsible Officials (LRO) for wastewater collection system matters is the Public Works Superintendent. In addition, the City Manager and the Assistant Public Works Superintendent have been designated as additional LROs for the City. An LRO is authorized to submit electronic and written spill reports to the Office of Emergency Services (OES) and the statewide reporting system (CIWQS). They are the City's legally responsible officials who are authorized to certify electronic spill reports submitted to CWIQS or as required by the WDR and/or MRP.

II-3: Responsibility for SSMP Development, Implementation and Maintenance

The Public Works Superintendent, the Assistant Public Works Superintendent and the Engineering Director have responsibility for developing, implementing, periodically auditing, and maintaining the City's SSMP. He/she may delegate the responsibility for developing, implementing, periodically auditing, and maintaining portions of the City's SSMP to his/her staff. The City of Santa Rosa Environmental Compliance Division is responsible for the City FOG Program in Element 7.

Other City Staff responsible for developing, implementing, and maintaining specific elements of the City's SSMP, along with their job titles and contact information, are described below and listed in **Table II-1**.

City Manager (LRO) - Directs and coordinates administration of city government in accordance with policies determined by city council by performing the following duties personally or through subordinate supervisors.

Public Works Superintendent (LRO) - Under administrative direction, to plan, organize, direct and coordinate the streets, parks, water distribution, sanitary sewer, wastewater treatment, swimming pool and vehicle maintenance programs of the City; to insure proper plan review for new Public Works projects; to represent Public Works functions with community groups and other government agencies, and to do related work as required.

Assistant Public Works Superintendent (LRO) - To serve as department head in the absence of the Public Works Superintendent; under department head's direction, to assign, supervise and assist in the construction, maintenance and repair of streets, water, sewer, parks and related public works facilities.

Management Analyst - Works under a minimum of supervision performing difficult, complex administrative and technical support duties, including specialized technical work related to Public Works operations, regulatory compliance, capital project management and contract administration, development review, permitting, inspection and oversight, and risk management. Provides expert customer service and information and referral to the public and City department staff.

Senior Maintenance Worker - Under direct supervision of the Maintenance Supervisor, to plan, direct, supervise, evaluate, and participate in the construction, maintenance and repair of streets, water, sewer, parks, and related public facilities.

Maintenance Worker III/II/I - Under general supervision, to operate light and moderately heavy power-driven equipment; to perform a variety of semiskilled or skilled manual tasks and to do specialized skilled jobs as required.

Laborer - Under general supervision, to perform a variety of semiskilled or skilled manual tasks and to do specialized skilled jobs as required. This position serves as an introduction to City Service and as a means to evaluate if a worker may be eligible to compete for other positions in the Maintenance Worker Classifications.

Engineering Manager – Performs various professional field and office engineering work to the management and administration of the City's Capital Improvement Program (CIP) and public works infrastructure construction and maintenance projects; provides professional staff assistance to the Public Works Superintendent and the consulting City Engineer and other departments; performs a variety of studies and prepares and presents staff reports and applications for State and Federal funding.

Service Contractors – The City has agreements with the City of Santa Rosa for the management and administration of the FOG program and for environmental compliance.

Responsibility for SSMP Implementation and Maintenance

The Public Works Superintendent, the Assistant Public Works Superintendent and the Engineering Manager have responsibility for developing, implementing, periodically auditing, and maintaining the City's SSMP. He/she may delegate the responsibility for developing, implementing, periodically auditing, and maintaining portions of the City's SSMP to his/her staff. The City of Santa Rosa Environmental Compliance Division is responsible for the City FOG Program in Element 7.

City Staff responsible for developing, implementing, and maintaining specific elements of the City's SSMP, along with their job titles and contact information, are shown in **Table II-1**.

Table II – 1: Responsible Officials for SSMP Elements

Element	Element Name	Responsible City Official	Phone	Email
0	Introduction	Public Works Superintendent	707-823-5331	ddelprete@cityofsebastopol.org
1	Goals	Public Works Superintendent	707-823-5331	ddelprete@cityofsebastopol.org
2	Organization	Public Works Superintendent	707-823-5331	ddelprete@cityofsebastopol.org
3	Legal Authority	City Engineer	707-823-2151	lgaffney@cityofsebastopol.org

Element	Element Name	Responsible City Official	Phone	Email
4	O & M Program	Public Works Superintendent	707-823-5331	ddelprete@cityofsebastopol.org
5	Design and Performance Provisions	Engineering Manager	707-823-2151	hmikus@cityofsebastopol.org
6	OERP	Public Works Superintendent	707-823-5331	ddelprete@cityofsebastopol.org
7	Fats, Roots, Oils and Grease (FROG) Control Program	City of Santa Rosa Environmental Compliance	707-543-3369	mstgeorge@srcity.org
8	System Evaluation and Capacity Assurance Plan	Engineering Manager	707-823-2151	hmikus@cityofsebastopol.org
9	Monitoring, Measurement and Program Modifications	Public Works Superintendent	707-823-5331	ddelprete@cityofsebastopol.org
10	Program Audits	Public Works Superintendent	707-823-5331	ddelprete@cityofsebastopol.org
11	Communications Program	Engineering Manager	707-823-2151	hmikus@cityofsebastopol.org
App A	SSMP Board Adoption Documents	City Council	707-823-1153	ddelprete@cityofsebastopol.org
App B	SSMP Audit Reports	Public Works Superintendent	707-823-5331	ddelprete@cityofsebastopol.org
App C	SSMP Audit Checklist	Public Works Superintendent	707-823-5331	ddelprete@cityofsebastopol.org
App D	SSMP Change Log	Public Works Superintendent	707-823-5331	ddelprete@cityofsebastopol.org
App E	OERP	Public Works Superintendent	707-823-5331	ddelprete@cityofsebastopol.org
App F	Water Quality Monitoring Plan	Public Works Superintendent	707-823-5331	ddelprete@cityofsebastopol.org

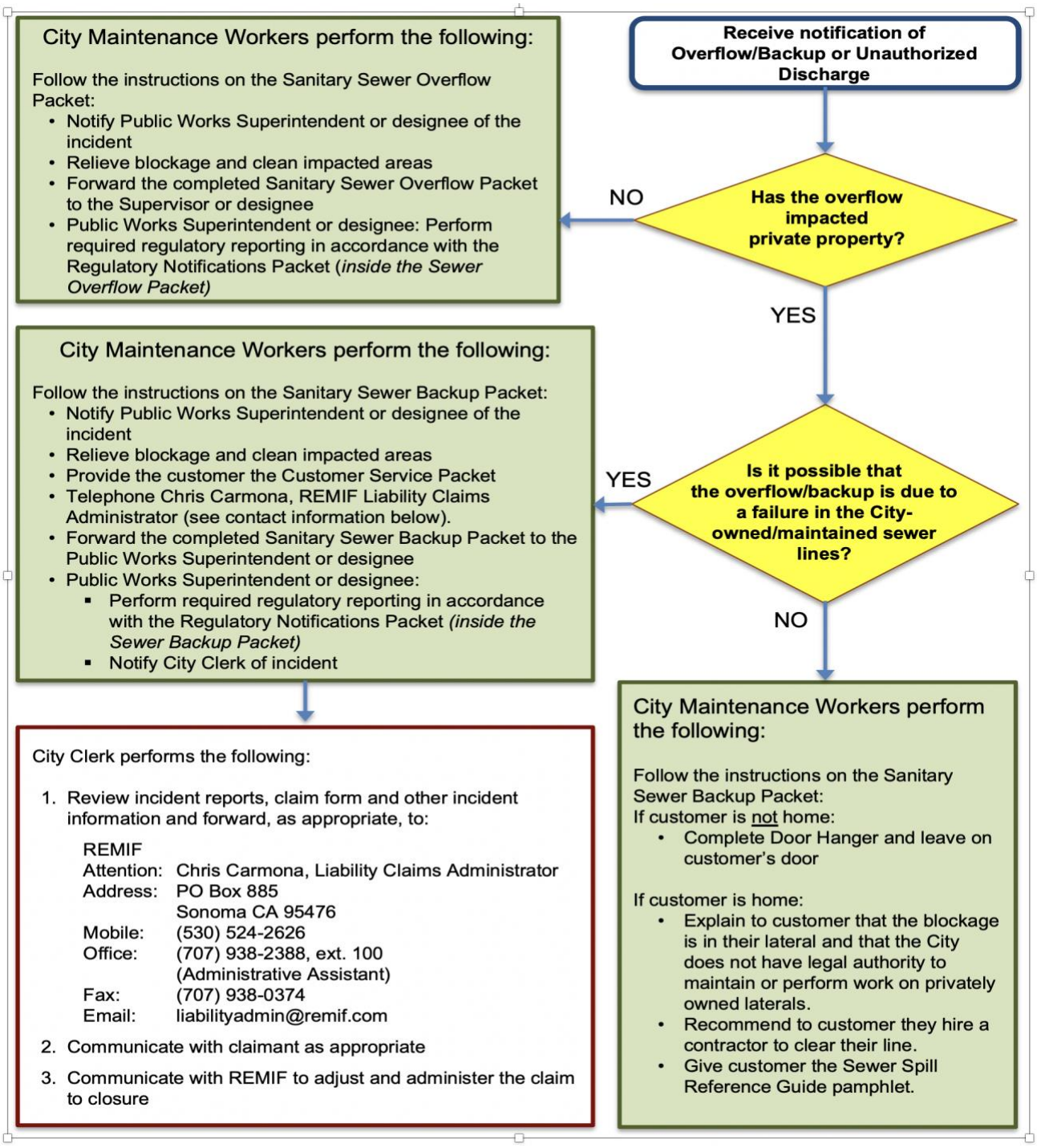
Source: Sebastopol Infrastructure table 6-26-20

II-4: SSO Reporting Chain of Communication

The SSO Reporting Chain of Command follows the Organization Chart shown in **Figure II – 1**. The SSO Reporting process and responsibilities are described in detail in the Overflow Emergency Response Plan described in more detail in Element VI.

The SSO Reporting process and responsibilities are described in the Overflow Emergency Response Plan in Appendix D.

Figure II – 2: Chain of Communications Flow Chart



II-5: References:

None.

Element III: Legal Authority

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

(a) Prevent illicit discharges into its sanitary sewer system (examples may include I/I, stormwater, chemical dumping, unauthorized debris and cut roots, etc.);

(b) Require that sewers and connections be properly designed and constructed;

(c) Ensure access for maintenance, inspection, or repairs for portions of the lateral 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.

III-1: City Municipal Code

The Sebastopol Municipal Code describes the City's current legal authorities. The legal authorities provided by the Municipal Code generally found in Title 13, Chapter 13.08 et seq. and other Municipal Code sources that address the regulatory requirements are summarized on **Table III-1**. In addition, the City has transferred authority for the FOG and industrial pretreatment program to the Santa Rosa Subregional Water Reclamation Facility Director of Utilities and the Utilities Environmental Compliance Section.

Table III – 1: Summary of Legal Authorities

Requirement	Legal Authority Reference Sebastopol Municipal Code (SMC)
Prevent illicit discharges into the wastewater collection system	13.08.070
Limit the discharge of fats, oils, and grease and other debris that may cause blockages	13.08.060
Require that sewers and connections be properly designed and constructed	13.08.060(B)
Require proper installation, testing, and inspection of new and rehabilitated sewers	13.08.060(B)
Clearly define City responsibility and policies	13.08.030
Ensure access for maintenance, inspection, or repairs for portions of the service lateral owned or maintained by the City	13.08.290(F)
Control infiltration and inflow (I/I) from private service laterals	13.08.240E2(r)
Limit the discharge of fats, oils, and grease and other debris that may cause blockages	13.08.240E*

Requirement	Legal Authority Reference Sebastopol Municipal Code (SMC)
Requirements to install grease removal devices (such as traps or interceptors), design standards for the grease removal devices, maintenance requirements, BMP requirements, record keeping and reporting requirements	13.08.210 et seq. and 15.04.070 (Uniform Plumbing Code)*
Authority to inspect grease producing facilities	13.08.290
Enforce any violation of its sewer ordinances	13.08.300 - 310

*In addition, the City by agreement with the Santa Rosa Subregional Water Reclamation Facility is required to maintain and operate the City collection system FOG and industrial waste program in accord with applicable laws and regulations and the Subregional Partners Agreement.

III-2: Agreements with Satellite Agencies

The City works closely with the Santa Rosa Subregional Water Reclamation staff and participates in all outreach programs related to FOG source control and industrial waste. The City has no publicly owned sewer systems satellite to the City sewer system.

III-3: References

- Agreement Between City of Santa Rosa and the City of Rohnert Park, City of Sebastopol and South Park County Sanitation District For Use of Santa Rosa Subregional Sewerage System dated April 3, 1975 as amended three times the latest being in December 8, 1994.

Element IV: Operations and Maintenance Program

Operation and Maintenance Program. The SSMP must include those elements listed below that are appropriate and applicable to the Enrollee's system:

(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 stormwater 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 (PM) 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 long-term 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 of critical replacement parts.

IV-1: Collection System Mapping

The City currently has collection system maps that are dated and have not been revised in many years. Collection staff has over time identified changes that are needed on forty-two-inch (42") maps that are carried in the operations vehicles and are in the main Public Works office. The 2005 City Sanitary Sewer Utility Master Plan included the most recent updates of the City collection system maps in AutoCAD however the City does not have appropriate software to be able to access these maps. The Santa Rosa Subregional Water Reclamation Facility currently hosts a GIS website that the City can use for mapping capabilities. The City currently has a contract for the complete updating of sewer system maps in GIS format that will be included in the Santa Rosa hosted mapping system. This will allow City staff to make regular updates as they are found in the field or as new improvements are completed. The City has developed Map Updating

Procedures to assure that all known updates and corrections found in the field are added to the maps

The field crews continue to use hard copy maps in the vehicles. The hard copy maps contain update information from the past operations of the collection system directly on the maps. Once the new GIS maps are available, the field crews will be provided with the new maps which will include all historical revisions currently identified on the hard copy maps.

IV-2: Computer Asset Maintenance Management System (CMMS)

The City has recently acquired the Cartograph SEMS Technology computerized maintenance management system. The staff will be implementing the asset inventory along with establishing work order processing of all operations and maintenance on the City sanitary sewer collection system in the near future. Once fully implemented, the sewer program will assist in the historical pipeline maintenance recordkeeping, schedule of both high frequency and normal maintenance activities scheduled and completed by City staff. This SEMS historical information will be used to enhance the efficiency and effectiveness of the sewer program operations. It is anticipated that all sewer assets will be tracked in the new system and will assist with life cycle determinations as well as tracking system renewal and replacements and assist with capital planning activities.

The use of a CMMS will create a systematic set of records that will support the recordkeeping requirements of the GWDR as well as easily track and make available performance results from the maintenance program. This software addition should assist the City in evaluating the effectiveness of its program in meeting the requirements of the GWDR and the goals of the City identified in Element 1.

IV-3: Preventive Operation and Maintenance

The elements of City's sewer system O&M program include:

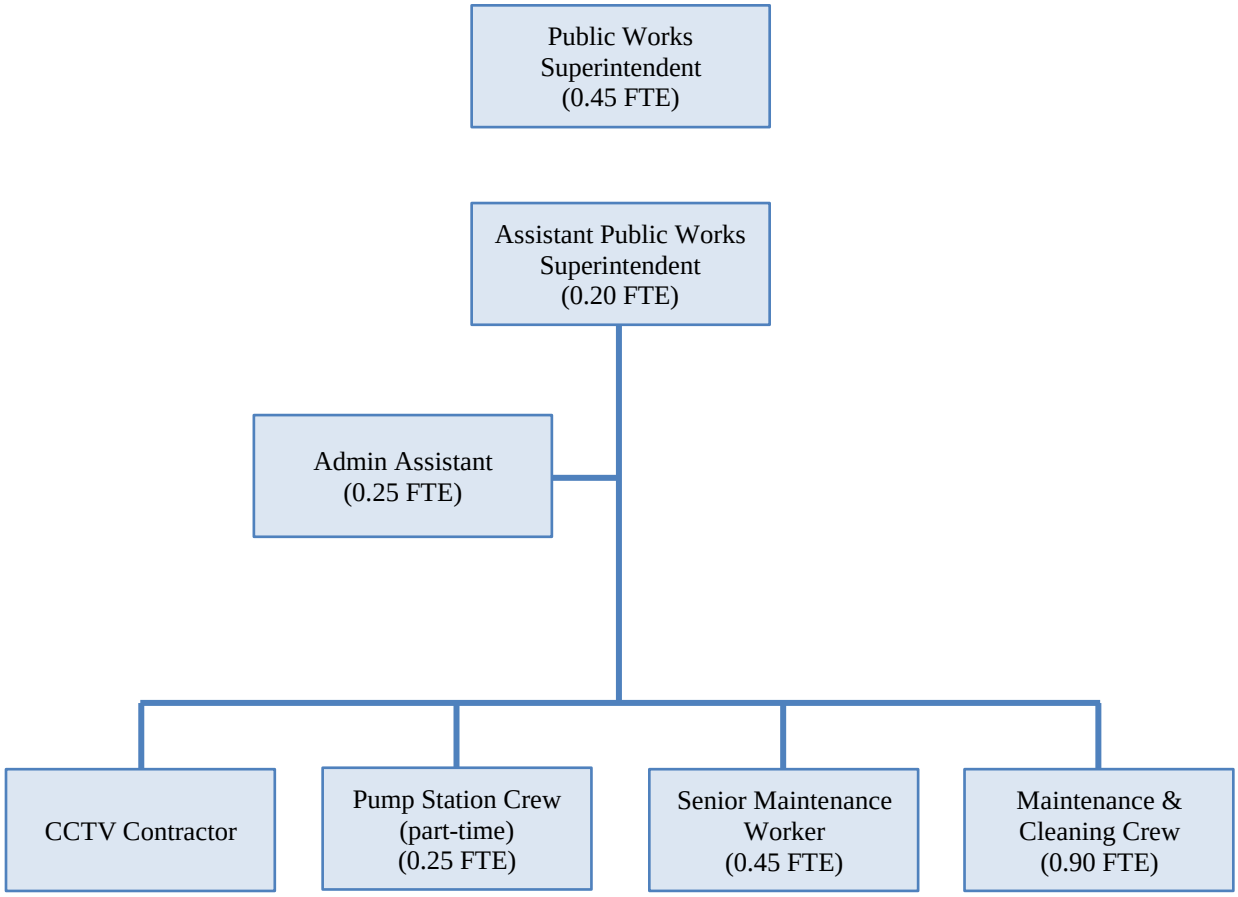
- Proactive, preventive, and corrective maintenance of gravity sewers;
- CCTV inspection program to determine the condition of the gravity sewers;
- Periodic inspection and preventive maintenance for the pump stations and force mains;
- Rehabilitation and replacement of sewers that are in poor condition; and
- Proper training for City employees and contractors to assure proper operations and maintenance of the collection system facilities.

City's Public Works Department identified below in **Figure IV – 1 Organization Chart** is responsible for the normal maintenance and operations of the sanitary sewer collection system and the proper planning and emergency response. They are also responsible for capital and renewal and replacement planning and construction activities. Santa Rosa Regional coordinates and manages the fats, roots, oils, and grease (FROG) program for all food service establishments (FSE) in the service area.

The City Public Works Department staff is required to conduct all utility related functions. This requires each position in the organization chart to be able to conduct multiple utility functions such as water, storm drainage and sewer system maintenance. The total allocation of staffing resources to the collection system operations and maintenance function is currently 2.3 FTEs in 2020/2021. The two crews and the senior maintenance worker are responsible for sewer system cleaning, hot spot cleaning, emergency response, pump station operation and maintenance and minor CCTV of small lines. The City currently had a services contract for a complete CCTV and condition assessment of all sewer lines and manholes completed since the last SSMP revision in 2015. Since then City staff has been responsible for minor CCTV work in the collection system. The results are being used to evaluate cleaning protocols and future condition assessment needs and to prioritize future short- and long-range planning for renewal and replacement of sewer lines.

The crews are generally composed of one maintenance worker III and one maintenance worker I except when working in busy traffic areas or where safety is a concern. In these locations a third public works employee would be added to the crew to assure proper safety of the working crew.

Figure IV – 1: City Sewer Program Organization Chart



IV-3.1: Gravity Sewer Maintenance

The City proactively cleans its sewer system every five (5) years and is moving to clean six (6) miles per year, and it preventively cleans sewers with a history of problems monthly. The line cleaning crew evaluates cleaning results based upon the Nature and Quantity of Debris Removed

During Cleaning **Table IV – 1** below. Staff places line segments on the high frequency schedule based upon past cleaning results, history of SSO events, history of cleaning results, previous CCTV assessments and/or professional judgment. One sewer-cleaning crew is assigned part-time to these activities and there are two (2) crewmembers per crew, depending on the specific activities required. These crews operate combination- cleaning units to accomplish cleaning of lines.

The City has broken the collection system into five (5) sewer basins for purposes of preventative maintenance – these basins are rotated annually until the entire system has been cleaned in approximately five years. In the future, the City will be moving to a condition-based program that will result in cleaning based upon the cleaning results and CCTV assessments. **Table IV – 2** contains the historical line cleaning results for the past five years excluding the high frequency cleaned line totals and lines 15 inches and greater. Currently, the City has approximately 4,000 linear feet of larger diameter lines that do not receive regular cleaning due to their size and lack of historical performance problems.

The City has evaluated the methods available for the management and proper cleaning of sewer lines and will be utilizing the new SEMS CMMS system discussed above within the next two years. Finally, the collection system also contains two (2) siphons that have not experienced any operational problems but have never had direct maintenance to them. The City will also be evaluating proper maintenance procedures for these facilities in the next two (2) years.

Gravity sewer maintenance is currently scheduled by collection system zone only. The City has no formal work order (WO) or computerized maintenance management system (CMMS) currently. The City has selected and is under contract for the implementation of the SEMS CMMS for the management and scheduling of all complaints, preventative maintenance, and condition assessment activities. The use of a CMMS will create a systematic set of records that will support the recordkeeping requirements of the GWDR as well as easily track and make available performance results from the maintenance program. This software addition will assist the City in evaluating the effectiveness of its program in meeting the requirements of the GWDR and the goals of the City identified in Element 1.

Table IV – 1: Nature and Quantity of Debris Removed During Cleaning

Type of Debris	Clear (no debris)	Light	Moderate	Heavy
Sand, grit, rock	CLR	DL	DM	DH
Grease	CLR	GL	GM	GH
Roots	CLR	RL	RM	RH
Other (specify)	CLR	OL	OM	OH

Table IV – 2: Historical Gravity Cleaning Results

Calendar Year	Line Cleaning Results, linear feet	Line Cleaning Results, miles	Percent of System Pipes (using 29.6 mi)
2015	45,500	8.6	29.11
2016	13,500	2.6	8.64
2017	13,500	2.6	8.64
2018	51,900	9.8	33.21
2019	141,000	26.7	90.22
Total	**265,400**	**50.27**	**169.8**
Average per year	**53,080**	**10.05**	**34.0**

Source: City supplied infrastructure file dated 6/26/20

IV-3.1.1: Pipe Condition Assessment

The City's CCTV crew does periodic condition assessment and follow-up after all SSO events. The last full CCTV and condition assessment of the City collection system lines was done during the 2005 Sanitary Sewer Utility Master Plan Project. The City recently authorized a services contract to have the entire collection system and all manholes televised and new condition assessments completed. The results were used to assist with the cleaning program as well as establishing new priorities for the renewal and replacement of pipelines and manholes. The historical CCTV activity are included below in **Table IV – 3** and represent the calendar year assessments completed by City staff generally when a problem is found during cleaning or subsequent to an overflow event. The City CCTV inspection program will televise all lines at least every fifteen (15) years. The City will in the future be moving to a condition-based CCTV frequency based upon the PACP results as stated in **Figure IV – 2** below. In addition, in the next ten years, the City will repair, rehabilitate, replace, abandon or reinspect all pipe segments within two hundred (200) feet of Zimpher Creek or Calder Creek and were found in a prior Condition Assessment to have a PACP structural rating of 4 or 5. These projects will be prioritized along with any other capital needs during the annual preparation of the sewer system capital improvement program

The City has one sewer repair crew to correct problems identified by the CCTV or sewer cleaning crews. Repairs are completed in priority order based on Pipeline Assessment and Certification Program (PACP) rating City crews are limited to repairs that are minor and do not require trench shoring. All other repairs are contracted with local construction companies.

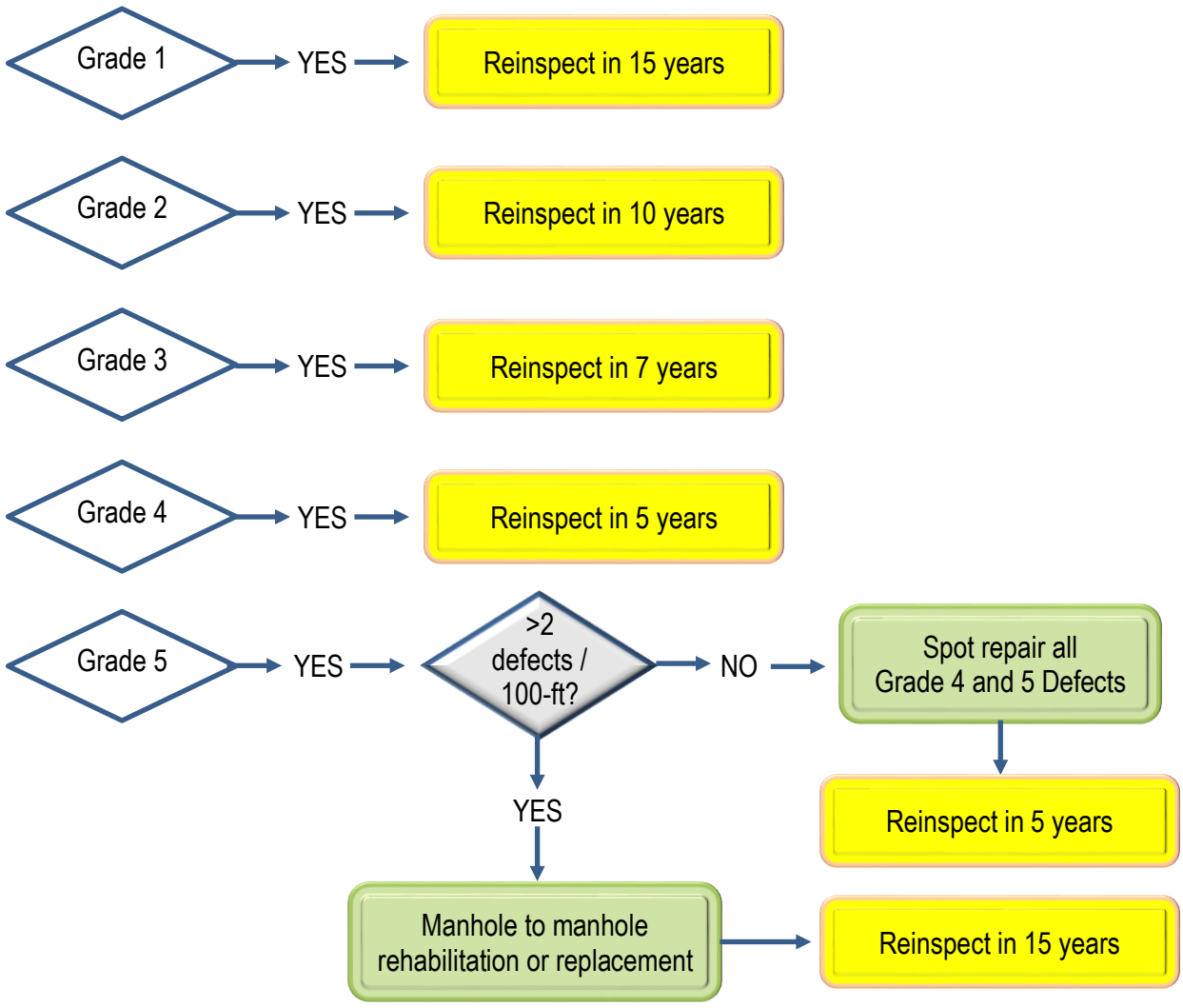
The wastewater collection system staff maintains a list of known structural deficiencies determined from past and current CCTV results conducted during pipeline assessments. This list is maintained in priority order by structural rating. High priority structural deficiencies, PACP ratings 4 and 5, are repaired or have been repaired as soon as possible by the City's sewer repair crew or by an outside contractor on an as-needed basis.

Table IV – 3: Historical Closed-Circuit Television by Calendar Year

Calendar Year	CCTV, Linear Feet	CCTV, miles	Percent of the System
2015	14,117	2.69	10.0
2016	71,551	13.55	50.4
2017	74,305	14.07	52.3
2018	2,525	0.48	1.8
2019	2,095	0.40	1.5
Total	**164,593**	**31.17**	**115.9**
Average per year	**32,919**	**6.24**	**23.2**

**Source City supplied infrastructure file dated 6/26/20*

Figure IV – 2: CCTV Return Frequency Flow Chart



IV-3.1.2: Manhole Inspection and Maintenance Program

As a result of the current settlement agreement with River Watch, the City, in the next two years will be implementing a new Collection System Inundation Mitigation Project that includes the installation of five manhole overflow alarms and tracking systems and has agreed to the replacement of twenty (20) new manhole frames and covers. The City staff will be assessing existing manholes to determine these manholes most in need of new frames and covers. In addition, the City staff regularly inspects and reports on manhole conditions as part of the active five-year pipeline cleaning program. These reports establish the need for any repairs or replacements due to manhole deterioration or corrosion.

IV-3.1.3: Pump Stations and Force Mains Maintenance

The City conducts regular operational inspections of its pump stations. Sanitary sewer pump stations are inspected on a daily basis. The wet wells are cleaned monthly. The electrical equipment preventive maintenance is scheduled annually. Mechanical equipment preventative maintenance is conducted based upon reductions in pump efficiencies noted by the field staff inspections. The City annually inspects both pump station related facilities utilizing **Supplement IV – 1**, Pump Station and Force Main Assessment Checklist.

The two (2) City Pump Stations discharge to 1.99 miles of force mains. Force main alignments are inspected on an annual basis, and discharge locations are surveyed for possible damage and corrosion from the release of hydrogen sulfide when the force main discharges to the gravity collection system. **Tables IV – 4** and **IV – 5** below lists the pump stations and force mains in the City, respectively.

The City has developed written pump station standard operating procedures for each pump station and these documents include the hard copy maintenance forms that are used to record important pump station operating and condition information.

Table IV – 4: Pump Station Locations and Asset Information

Pump Station Name	Location	No. Pumps	Pump GPM	Pump Manufacturer	Pump HP	Standby Generation-KW
Morris Street Pump Station	275 Morris Street	3	1000	Fairbanks Morse	150	500
Green Valley Pump Station (aka Valley View PS)	8401 Bodega Highway	2	500	Flygt	20	60

Table IV – 5: Force Main Locations and Descriptions

Name of Pump Station Associated with Force Main	Year Constructed	Force Main Asset Information		
		Length (linear feet)	Size (inches)	Material Type*
Morris Street Pump Station Force Main		10,500	14	HDPE, PVCC905

Name of Pump Station Associated with Force Main	Year Constructed	Force Main Asset Information		
		Length (linear feet)	Size (inches)	Material Type*
Green Valley Pump Station Force Main		3,756	8	ACP
Totals		**14,256**		

IV-3.1.4: Sewer Lateral Inspection/Repair Program

As a result of the recent settlement agreement with Riverwatch, the City is required to review, evaluate and conduct a public process to consider the adoption of a private sewer lateral inspection and repair program or the establishment of revolving loan fund to assist property owners in the repair or replacement of private sewer laterals.

IV-4: Rehabilitation and Replacement Program

The City's Capital Improvement Plan for the next five (5) years was developed from the CCTV inspection program that evaluates the condition of all gravity sewers and assigns a PACP condition assessment rating to each pipe segment inspected. The information gathered during the condition assessment was used to select gravity sewers and manholes for repair/rehabilitation/replacement and/or for additional smoke testing to define I/I potential.

The City has a sewer rehabilitation and replacement program to rehabilitate or replace the portions of its wastewater collection system where conditions warrant. The projects that are included in the City's Capital Improvement Program are listed in **Supplement IV – 2**. The funds that support the Capital Improvement Program come from the City's Sewer Fund. The sewer fund is an enterprise fund and sewer fees are established to meet projected needs.

IV-5: Training

The City uses a combination of in-house classes; on the job training; and conferences, seminars, and other training opportunities to train its wastewater collection system staff. The City highly encourages its wastewater collection system employees to be certified in Collection System Maintenance by the California Water Environment Association (CWEA). The certification process requires employees to demonstrate that they have participated in 12 hours of training every two years in order to renew their certificates. As of the date of this SSMP, eight of thirteen Public Works employees hold various levels of certification.

The City will annually train its wastewater collection system and Public Works employees on both the SSMP and OERP. This training may include field exercises in the estimation of SSO volumes and SSO containment.

The City's standard service and construction contract language requires all contractors working in or near the wastewater collection system to respond appropriately should an SSO occur in or around their work area. The City has included in its standard specifications, Part II General Conditions, Section 48 language and proper procedures for the contractor's response to causing or

witnessing a sanitary sewer overflow. Additional provisions are also included in Element 6, OERP, and Section VI-14.4

IV-6: Outreach to Service Contractors

The City participates with the Santa Rosa Subregional Water Reclamation System region-wide outreach program and has posted brochures on the City website to aid and educate contractors & residents. The City SSMP is available on the Engineering/Water and Wastewater web page along with all references as required by the MRP

IV-7: Equipment and Replacement Parts

The list of the major equipment that City uses in the operation and maintenance of its sewer system is included in **Supplement IV – 3**.

The City has developed a Critical Replacement Parts List in **Supplement IV – 4**. It has also developed a Replacement Parts Inventory procedure.

IV-8: References

The data used in this section were taken from the following references:

- Settlement Agreement and Release, California River Watch dated June 12, 2020

Supplement IV – 1: Pump Station and Force Main Assessment Checklist

Inspection Information	
Inspection date	
Inspection participants	
Facility name	
Facility address	
Comments	

Background Information (Prior 12 Months)	
SSOs	
Equipment failures	
Alarm history (attach copy)	
Major maintenance activities (attach list if applicable)	
Pending work orders (attach copies)	
Operating problems (attach copy of operating log)	
Comments	

Security Features	
Fence and gate	
External lighting	
Visibility from street	
Doors and locks	
Intrusion alarm(s)	
Signs with emergency contact information	
Other security features	
Comments	

Safety Features and Equipment	
Signage (confined space, automatic equipment, hearing protection, etc.)	
Fall protection	
Emergency communication	
Equipment hand guards	
Handrails and kickboards	
Platforms and grating	
Tag out and lock out equipment	
Hearing protection	
Eye wash	
Chemical storage	
Comments	

External Appearance	
Fence	
Landscaping	
Building	
Control panels	
Other external features	
Comments	

Building/Structure	
Pump Station building	
Control room	
Dry well	
Wet well	
Other structures	
Comments	

Instrumentation and Controls (including SCADA Facilities)	
Control panel	
Run time meters	
Flow meter	
Wet well level	
Alarms	
SCADA HMI/PLC	
Other instrumentation & controls	
Comments	

Electrical and Switch Gear	
Power drop	
Transformers	
Transfer switches	
Emergency generator and generator connection	
Starters	
Variable frequency drives	
Electrical cabinets	
Conduit and wireways	
Other electrical	
Comments	

Motors	
Lubrication	
Insulation	
Operating current	
Vibration and alignment	
Other	
Comments	

Pumps	
Lubrication	
Vibration and alignment	
Seals	
Indicated flow and discharge pressure	
Shutoff head	
Corrosion and leakage evidence	
Drive shaft	
Other	
Comments	

Valves and Piping	
Valve operation	
Valve condition	
Pipe condition	
Pipe support	
Force Main Alignment	
Discharge Manhole Condition	
Other	
Comments	

Other	
Lighting	
Ventilation	
Support systems (air, water, etc.)	
Signage	
Employee facilities	
Sump pump	
Overhead crane	
Portable pump connections	
Portable pumps	
Comments	

Supplement IV – 2: Capital Improvement Program, $1000*

Project Title	2019/20	2020/21	2021/22	2022/23	2023/24	Total
Update Sewer Line Maps	45	0	0	0	0	45
Zimpher Creek: Construction: Sewer Relocation Part 1 Covert	0	250	0	0	0	250
Zimpher Creek: Construction: Sewer Relocation West End per Study	0	0	325	300	0	625
Zimpher Creek: Construction: Sewer Repair East	0	100	175	0	0	275
Florence Repair South	0	0	0	200	445	645
Florence Repair North	0	0	0	100	225	325
Total	**$45**	**$350**	**$500**	**$600**	**$665**	**$2,165**

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Supplement IV – 3: Major System Equipment Inventory*

Equipment Number	Equipment Description	Year Purchased
11PW	Ford 250 w/Scelzi Utility Body	2019
12PW	Ford 350 4X4 Pickup	2016
13PW	Ford 350, Flat Bed Dump Truck	2002
15PW	Ford 250 w/Scelzi Utility Body	2014
17PW	Ford 250 w/Scelzi Utility Body	2014
18PW	Ford F250, Pick-up Corp Yard	1998
19PW	Ford F350, w/ Dump Body	2014
20PW	Ford Pick-up	1997
22PW	Ford F650 5-yd Dump	2010
23PW	International 5-yd Dump	1994
25PW	Ford 250 w/Scelzi Utility Body	2017
87PW	John Deere 310E Backhoe Corp Yard	2002
88PW	Case 570XLT Loader/Grader	2002
89PW	John Deere 310L Backhoe	2015
95PW	Vactor 2103 Vacuum/Hydro Combo Truck	2009
97PW	Vactor 2103 Vacuum/Hydro Combo Truck	2017
MS-	Fairbanks Morris 5", C5416 Pumps X3	2012
MS-	Flygt CP3068.090 Morris Street Sump Pump	2012
MS-	CAT C15, S/N C5E02502 Morris Street Generator	2012
MS-	T20" Morris Street Dimminuter	2012
MS-	Whipps Inc./Rotork Morris St Sluice gate w/ Rotork Operator	2012
VV-	Flygt 3152, 454, 20HP Valley View Pumps X3 2 in service, 1 backup	2008 - 2014
VV-	Onan-Cummings 3.9L, S/N 45302029, Valley View Generator	1995

**Source: City supplied equipment inventory August 2020*

Supplement IV – 4: Critical System Replacement Parts Inventory*

Part Description	Number in Stock	Location
4” Sewer repair couplings	25	East Shop
6” Sewer repair couplings	20	East Shop
8” Sewer repair couplings	5	East Shop
10” Sewer repair couplings	4	East Shop
6” Romar dresser couplings	4	East Shop
8” Romar dresser couplings	2	East Shop
10” Romar dresser couplings	3	East Shop
4” SDR 35 PIPE	100	Pipe Rack
6” SDR 35 PIPE	20	Pipe Rack
8” SDR 35 PIPE	20	Pipe Rack
10” SDR 35 PIPE	20	Pipe Rack
12” SDR 35 PIPE	32	Pipe Rack
14” SDR 35 PIPE	12	Pipe Rack
6” C900 PIPE	40	Pipe Rack
10” C900 PIPE	40	Pipe Rack
3” SCH40 PIPE	20	Pipe Rack
6” SCH40 PIPE	80	Pipe Rack

**Source: City supplied inventory September 2020*

Element V: Design and Performance Provisions

Design and Performance Provisions:

(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.

V-1: Design Criteria for Installation, Rehabilitation and Repair

The City's Wastewater Collection System Design Criteria are:

V-1.1: General

The City of Sebastopol's current City Standard Details and Specifications were formally adopted by the City Council by Resolution 4798 on September 1, 1998. The standards are available from the City Engineering Department or can be located on the Engineering Department web page titled "Engineering Contractors and Consultants". In addition, the latest edition of the State of California Department of Transportation Standard Specifications supplements these standards.

V-1.2: Main, Manholes, Clean Outs and Laterals

Section 3 and 4 of the Standard Details and Specifications provides the details and specifications for the installation of new and rehabilitated mains, manholes, cleanouts and laterals within the public right-of-way.

V-1.3: Pump Station

The City strives to minimize the need for sewer pumping stations by the use of gravity systems as a first alternative. If pumping facilities are determined by the part time City Engineer to be required, then these designs are prepared and signed by a professional engineer upon approval of the City Engineer.

V-1.4: City Sewer System – Authorized Materials

The authorized materials for the City Sewer System are shown below in **Table V – 1**.

Table V – 1: Acceptable Pipe Materials for New Gravity Sewers

Material	Designation	Standard
Ductile Iron Pipe (DIP)	Cement mortar lined and coated	ANSI A21.51 (AWWA C151)
Polyvinylchloride Pipe (PVC)	SDR-35	ASTM D3034
Vitrified Clay Pipe (VCP)	Extra Strength	ASTM C700- 71T

V-1.5: Private Sewer Systems

All private sewer systems are to be designed, approved and installed pursuant to the City Building and Safety Department construction codes and regulations after review and approval by the City Engineer.

V-2: Inspection and Testing Criteria

The City's Sanitary Sewer Lines Inspection and Testing Criteria are based on the City Standard Details and Specifications on the City webpage under Engineering Contractors and Consultants or as required by the City Engineer. The City's inspection and testing criteria are:

V-2.1: New and Rehabilitated Gravity Sewers

a. Inspection during Construction

   All new gravity and rehabilitated sewers will be periodically inspected during construction to ensure that the sewer is constructed using the specified materials and methods.

b. Leakage

   All new gravity sewers will be air tested to verify that they have been properly constructed immediately following pipe cleaning. The contractor shall supply all necessary equipment to air test a new segment of pipeline. The air test shall be conducted at an internal pressure of 4 psi at the required time based upon pipe length and size. See City Standard Specifications for further details. Gravity sewers that fail the test shall be repaired and retested until they pass.

c. Deflection

   Deflections between any two successive pipe sections shall not exceed 80 percent (80%) of the maximum deflection as recommended in writing by the pipe manufacturer. In addition, PVC pipe will be tested for pipe deflection thirty days (30) following backfill and compaction for ring deflection per City Standard Specifications.

d. CCTV Inspection

   All new gravity sewers will be inspected using a CCTV to verify that the pipe is free from defects/damage, that the joints have been correctly constructed, and that the sewer is free from sags that will cause future operational problems. Gravity sewers shall be cleaned prior to inspection and shall be flushed with water so that sags can be readily identified. Defects shall be recorded following the City of Sebastopol standards. Sags that exceed one inch in depth shall be repaired.

e. Warranty Inspection

   All new gravity sewers will be inspected using CCTV prior to the end of the warranty period, bond release and final acceptance by the City Council to ensure that there are no latent defects. Repairs shall be completed at Contractor's expense.

V-2.2: New and Rehabilitated Manholes

a. Inspection during Construction

All new and rehabilitated manholes will be periodically inspected during construction to ensure that the sewer is constructed using the specified materials and methods. Unusual conditions and special features will be recorded for future reference.

b. Leakage

All new and rehabilitated manholes will be water tested to verify that the joints, connections, and frame/cover are tight. Each manhole shall be tested for leakage by plugging the sewer line between the manhole and the first joint. The manhole shall be filled with water and any drop in water level over a four-hour period shall be carefully measured. A leakage rate in excess of 10 gallons per day shall be cause for rejection and the contractor shall repair the manhole until leakage is within the limits specified.

V-2.3: New and Rehabilitated Pump Stations

a. Inspection during Construction

All new and rehabilitated pump stations will be periodically inspected during construction to ensure that they are constructed using the specified materials and methods. Unusual conditions and special features will be recorded for future reference.

b. Functional Test

All systems in new and rehabilitated pump stations will be tested to ensure they function as intended.

c. Performance Test

All new and rehabilitated pump stations will be required to pass an extended performance test to ensure that they are capable of reliably meeting the design performance for a period of at least 120 hours of continuous operation without failure or alarms. The results of these performance tests will be recorded for use as a basis for evaluating future pump station.

V-3: References

- Sebastopol Standard Details and Specifications, Sections 3 and 4, September 1, 1998

Element VI: Overflow Emergency Response Plan

Overflow Emergency Response Plan - Each Enrollee shall develop and implement an overflow emergency response plan that identifies measures to protect public health and the environment. At a minimum, this plan must include the following:

(a) Proper notification procedures so that the primary responders and regulatory agencies are informed of all SSOs in a timely manner;

(b) A program to ensure an appropriate response to all overflows;

(c) Procedures to ensure prompt notification to appropriate regulatory agencies and other potentially affected entities (e.g. health agencies, Regional Water Boards, water suppliers, etc.) of all SSOs that potentially affect public health or reach the waters of the State in accordance with the MRP. All SSOs shall be reported in accordance with this MRP, the California Water Code, other State Law, and other applicable Regional Water Board WDRs or NPDES permit requirements. The SSMP should identify the officials who will receive immediate notification;

(d) Procedures to ensure that appropriate staff and contractor personnel are aware of and follow the Emergency Response Plan and are appropriately trained;

(e) Procedures to address emergency operations, such as traffic and crowd control and other necessary response activities; and

(f) A program to ensure that all reasonable steps are taken to contain and prevent the discharge of untreated and partially treated wastewater to waters of the United States and to minimize or correct any adverse impact on the environment resulting from the SSOs, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the discharge.

Sanitary Sewer Overflow Emergency Response Plan

(ref. SWRCB Order No. 2006-0003-DWQ Element VI) City of Sebastopol Overflow Emergency Response Plan dated September 2020 by DKF Solutions Group, LLC.

VI-1: Purpose

The purpose of the City's Overflow Emergency Response Plan (OERP) is to support an orderly and effective response to Sanitary Sewer Overflows (SSOs). The OERP provides guidelines for City personnel to follow in responding to, cleaning up, and reporting SSOs that may occur within City's service area. This OERP satisfies the SWRCB Statewide General Waste Discharge Requirements (GWDR), which require wastewater collection agencies to have an Overflow Emergency Response Plan.

VI-2: Policy

The City's employees are required to report all wastewater overflows from public sewer infrastructure including from the manholes included in the Collection System Inundation Mitigation Project and to take the appropriate action to secure the wastewater overflow area, properly report to the appropriate regulatory agencies, relieve the cause of the overflow, and ensure that the affected area is cleaned as soon as possible to minimize health hazards to the public and protect the environment. City's goal is to respond to sewer system overflows as soon as possible following notification. City will follow reporting procedures in regard to sewer spills as set forth by the North Coast Regional Water Quality Control Board (*NCRWQCB)* and the California State Water Resources Control Board (*SWRCB)***.**

VI-3: Goals

City's goals with respect to responding to SSOs are:

- Work safely;
- Respond quickly to minimize the volume of the SSO;
- Eliminate the cause of the SSO;
- Prevent sewage system overflows or leaks from entering the storm drain system or receiving waters to the maximum extent practicable;
- Contain the spilled wastewater to the extent feasible;
- Minimize public contact with the spilled wastewater;
- Mitigate the impact of the SSO;
- Meet the regulatory reporting requirements;
- Evaluate the causes of failure related to certain SSOs; and
- Revise response procedures resulting from the debrief and failure analysis of certain SSOs.

VI-4: Full Overflow Emergency Response Plan

The full copy of City Overflow Emergency Response Plan effective September 2020 can be found in Appendix E along with copies of all instructions and forms in response packets referred to below. All SSO sampling and testing shall be conducted per City Water Quality Monitoring Plan (WQMP) included in Appendix F.

VI-5: Authority and References

- Health & Safety Code Sections 5410-5416
- CA Water Code Section 13271
- Fish & Wildlife Code Sections 5650-5656

- State Water Resources Control Board Order No. 2006-0003-DWQ
- State Water Resources Control Board Order 2013-009-DWQ effective September 9, 2013
- City Overflow Emergency Response Plan September 2020
- City of Sebastopol Water Quality Monitoring Report dated September 2020

Element VII: Fats, Roots, Oils, and Grease (FROG) Control Program

FROG Control Program: Each Enrollee shall evaluate its service area to determine whether a FROG control program is needed. If an Enrollee determines that a FROG program is not needed, the Enrollee must provide justification for why it is not needed. If FROG is found to be a problem, the Enrollee must prepare and implement a FROG source control program to reduce the amount of these substances discharged to the sanitary sewer system. This plan shall include the following as appropriate:

(a) An implementation plan and schedule for a public education outreach program that promotes proper disposal of FROG;

(b) A plan and schedule for the disposal of FROG 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 FROG 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 FROG;

(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 Enrollee has sufficient staff to inspect and enforce the FROG ordinance;

(f) An identification of sanitary sewer system sections subject to FROG blockages and establishment of a cleaning maintenance schedule for each section; and

(g) Development and implementation of source control measures for all sources of FROG discharged to the sanitary sewer system for each section identified in (f) above.

VII-1: Nature and Extent of FROG Problem

The FOG Source Control Program is intended to work in conjunction with the City's preventive maintenance program to prevent FOG-related SSOs. It remains an essential component in meeting and maintaining its projected SSO reduction performance goals. The City currently lists 43 food service establishments (FSE) within the City service area.

The elements of the City's FOG Source Control Program include:

- Requirement for the installation of grease removal devices (GRDs);
- Permitting food service establishments (FSE);

- Requirement for proper operation and maintenance of GRDs
- Verification of grease handling and disposal practices
- FSE inspections
- Public Education and Outreach and
- Enforcement.

The Santa Rosa Director of Utilities is responsible for administering the City's Pretreatment Program that includes the FOG Source Control Program. The Santa Rosa Environmental Compliance Section at the Sub regional Plant conducts all activities related to FOG. The level of staffing is considered adequate for all of the Sub regional FOG programs.

The legal authority to implement, monitor and enforce the elements of the FOG Program in the service area is governed under the City Municipal Code and the codes and procedures of the City of Santa Rosa Environmental Compliance Section. These codes and procedures provide the legal authority to prohibit FOG discharges to the sanitary sewer system.

FSEs subject to the FOG Program are required to install GRDs consistent with the recommended procedures for design, construction and installation based on the current adopted California Plumbing Code. Plan check review for grease removal device installation is coordinated with the Building Division during the building permit application process.

FSEs subject to the FOG Program are required to obtain a wastewater discharge permit, which provides the legally enforceable framework to enforce the elements of the FOG Program. The discharge permit contains specific permit conditions, which require FSEs to implement FOG Best Management Practices including:

- Proper GRD operation and maintenance
- Documentation and retention of GRD pumping/cleaning activities
- Employee training on FOG handling BMPs, proper equipment cleaning, spill response clean up and control procedures
- Prohibition on the installation and use of food waste disposal grinder
- Proper disposal of grease, oils, and meat fat
- Prohibition on the use or addition of chemical or biological agent for the maintenance of GRD

The discharge permit also provides information on facility specifics relating to local limits, inspection requirements and rights of entry, reporting requirements relating to spill or accidental discharges, records retention, confidential information, limit or permit transfer, perjury clause, fees, permit duration and renewal process. In sum discharge permits issued to FSEs under the FOG Program are similar and consistent with a discharge permit typically issued to establishments covered under the Pretreatment Program. Staff from the Office of Environmental

Compliance is currently evaluating whether to adopt a streamlined permit format similar to those issued and used by neighboring agencies to enforce and comply with the FOG Program required by the Sanitary Sewer Order. Any changes made to the FSE permitting program will be reported on the next SSMP audit or update.

The City of Santa Rosa FOG Enforcement Response Policy (ERP) available at the Environmental Compliance office was developed and approved for use to enforce the Pretreatment Program is also utilized to enforce the FOG Program. The ERP serves as a guidance document to ensure inspection staff takes consistent actions to achieve timely and effective compliance. The ERP contains procedures and progressive enforcement actions for various field violation scenarios that include verbal and written notices of violations, cleanup requirements, administrative and criminal penalties. Each level of corrective action includes a schedule to achieve timely compliance. Enforcement actions are coordinated and communicated with applicable city staff to ensure timely resolution.

Public education and outreach remain an integral element of the FOG Program and information is available at the following Santa Rosa website https://srcity.org/1232/Pollution-Prevention. Outreach is provided to FSE staff and management during routine inspections. Regional bilingual FOG BMP pamphlets and posters are distributed to staff and management to increase their knowledge on proper management of grease waste. Other materials distributed may include grease scrapers, list of grease haulers and cooking oil recyclers, and general technical information on grease removal devices. Inspectors strive to provide educational information to ensure FSE staff and management to ensure continued compliance with their discharge permit. Outreach targeting the general public is primarily achieved through distribution of FOG brochures and scrapers during city- sponsored events. Collection crews provide additional outreach by distributing FOG door hangers and brochure to homeowners during service calls and routine preventative maintenance activity. FOG related brochures are available on the City website. .

VII-2: Response to GWDR Requirements

Requirement (a):

An implementation plan and schedule for a public education outreach program that promotes proper disposal of FOG. All public education and outreach are conducted for the City by the Santa Rosa Utilities Department

Response:

The Santa Rosa Utilities Department has performed significant public outreach and education on the subject of grease control for both residential and commercial/industrial customers. Utility bill inserts have been sent to resident's multiple times within the past few years. The City participates annually at the Water Fair and at the Cinco de Mayo celebrations. Other examples of public education materials may be found on the City website at: http://ci.santa-rosa.ca.us/departments/utilities/treament/environmental_compliance/Pges/FOGSourceControlProgram.aspx

Requirement (b):

A plan and schedule for the disposal of FROG 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 FROG generated within a sanitary sewer system service area.

Response:

The responsibility for grease disposal is placed upon the business owner as a condition of its Wastewater Discharge Permit (WWDR). The Environmental Compliance Section informs the user of possible grease disposal providers and requires a certification of grease disposal at varying intervals. The nearest grease disposal site is EBMUD in Oakland, CA. The FOG Source Control Program on the Utilities Department website lists possible grease haulers.

Requirement (c):

The legal authority to prohibit discharges to the system and identify measures to prevent SSOs and blockages caused by FROG.

Response:

The Sebastopol Municipal Code Section 13.08.030 provides the legal basis and authority (see Element 3) for the City's FOG Control Program. This code section transfers full authority for the program to the City of Santa Rosa Director of Utilities and the Santa Rosa Subregional Water Reclamation Facility.

Requirement (d):

Requirements to install grease removal devices (such as traps or interceptors), design standards for the grease removal devices, maintenance requirements, BMP requirements, record keeping and reporting requirements.

Response:

The City's FOG Control Program is defined in Municipal Code Sections 13.08.290 and 15.04.070 and is managed by the Santa Rosa Director of Utilities.

Requirement (e):

Authority to inspect grease producing facilities, enforcement authorities, and determination of whether the collection system has sufficient staff to inspect and enforce the FROG ordinance.

Response:

Enforcement of the FOG program is included in Municipal Code Section 13.08210 to 13.08.230 and is administered by the Director of Utilities on behalf of the City of Sebastopol.

The Environmental Compliance Section permits, inspects, and implements compliance activities for sources of grease discharged to the wastewater collection system within the Subregional service area. New water account lists, plan check identification and local trade magazines are used to identify new food service establishments (FSE). The FSEs are permitted every six years and inspected annually, biannually, or triennially dependent on the record of inspection,

documentation of grease removal, and compliance status. Should local crews find grease buildup in sanitary sewer lines then area sweeps of surrounding FSEs are implemented to look for the source of the increased grease accumulation.

Compliance enforcement actions consist of Notice of Violations and Administrative Orders when necessary. Escalation supported by the City of Santa Rosa Code Title 15 – Sewers has termination of service as a final resort to end a non-compliant situation. The Enforcement Response Plan section has six Environmental Compliance Inspectors and a half time administrative person for the implementation of the whole pretreatment program. Job duties of the plan check, grease removal devise sizing, site inspection and enforcement account for two employee equivalents in the section. The inspectors also work with the Environmental Crimes Unit in the Police Department. The Unit investigates and acts in cases where there have been illegal or unauthorized discharges to the collection system.

The Master Agreement with the Sub regional Partners including the City of Sebastopol, requires each User Agency to collect and convey sewage to the Sub regional System in such a manner as to comply with all applicable laws, rules and regulations. They also mutually agreed that the User Agencies will enact Sewer Use Ordinances addressing specific limitations and prohibitions of discharges. The Sub regional Environmental Compliance Inspectors enforce the rules and regulations applied to non-domestic discharge and industrial users for the Sub regional Partners

Requirement (f) and (g):

Requirement (f) is an identification of sewer system sections subject to FROG blockages and the establishment of a cleaning maintenance schedule for each section, and

Requirement (g) is the development and implementation of source control measures, for all sources of FROG discharged to the sewer system.

Response:

The City's preventive maintenance program is currently targeted on the problematic grease dischargers and the FOG "high frequency" areas identified either from system cleaning, CCTV assessments or from the results and reports of the City of Santa Rosa from FSE inspections and evaluations and annual reports

VII-3: References

The data used in this section were taken from the following references:

- City of Santa Rosa Fats, Oils and Grease (FOG) Enforcement Response Policy January 2010

Element VIII: System Evaluation and Capacity Assurance Plan

System Evaluation and Capacity Assurance Plan: The Enrollee shall prepare and implement a capital improvement plan (CIP) that will provide hydraulic capacity of key sanitary sewer system elements for dry weather peak flow conditions, as well as the appropriate design storm or wet weather event. At a minimum, the plan must include:

(a) **Evaluation**: Actions needed to evaluate those portions of the sanitary sewer 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:** The 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:** The Enrollee shall develop 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 requirements as described in Section D. 14.

VIII-1: System Evaluation – Collection System Master Plan

The City completed a Sanitary Sewer Utility Master Plan in December 2005 (Master Plan). The master planning effort included selection of peaking factors for wet weather, flow monitoring, hydraulic modeling, smoke testing, manhole inspection, and CCTV inspection. The Master Plan utilized the 2003 Sebastopol updated General Plan and the wastewater levels of service standards from the General Plan. The Master Plan included hydraulic modeling of the collection system based upon the distribution of infiltration and inflow over the entire service area. This effort was used to locate areas where lines were deficient or undersized for both the then current and future build-out state of the collection system.

The Master Plan identified twelve (12) deteriorated sewer lines that needed additional capacity or replacement in order to handle the flows associated with build-out. In addition, the plan identified

several required improvements in the Gravenstein Highway system that were needed for ultimate build-out of the system. The City updated the capacity information subsequent to the 2015 CCTV and condition assessment program. This work will also inform the City if an update to the current Master Plan is warranted or desirable.

Subsequent to the completion of the Master Plan, City staff determined that the pumping capacity of the Morris Street Pump Station had been discovered to have errors in the original design and construction. The City has since developed a separate report titled "Future Wastewater Pumping Capacity for the Morris Street Pimping Station and Associated 14-inch Laguna Force Main. The report prepared by Green Valley Consulting Engineers determined that major upgrades to both the Morris Street Pump Station capacity and the discharge force main were required to accommodate peak wet weather flows at build out. The recommended improvements have now been completed to these two infrastructure elements and have significantly reduced the available funds for future system improvements and replacements.

A new capital improvement program five (5) year plan will be developed from the condition assessment work identified above. The City has also increased sewer service charges to accommodate future capital work resulting from the pipeline assessment efforts.

VIII-2: Evaluation – Hydraulic Model

The Master Plan included the development of a hydraulic model utilizing peak hourly flows by discharge classification, peaking factors from historical records, inflow/infiltration rates as assigned to pipe lengths and the then most current general plan growth estimates. The model and Master Plan analyzed "ultimate build-out" development. The final Plan identified several capacity improvements along the Gravenstein Highway South Study area and at the Morris Street Pump Station.

The Master Plan contained construction estimates for all required improvements identified. All of these improvements have now been completed.

VIII-3: Design Criteria

The capacity-related design criteria, including base wastewater flow and peaking factors, are included in Element V- 1Design Criteria and must be designed by a professional engineer and approved by the City Engineer and Building Official prior to construction and acceptance per the City standards and specifications.

VIII-4: City Enhancement Measures – Capital Improvement Program

The City prepares and the City Council adopts an annual capital improvement plan (CIP) that includes projects to address known wastewater collection system capacity issues. Engineering Staff, working with the Public Works Department, prioritize and select the projects to be included on the annual list. The City's Capital Improvement Program Sanitary Sewer System Detailed Budget for 2019/20 through 2023/24 is included in Appendix IV-C.

VIII-5: Schedule

The current schedule for the City's capacity enhancement projects are included in the City's Capital Improvement Program detailed budget in Appendix IV-C. However, this list will be revised, as necessary, based upon future condition assessments and maintenance results from the collection system operations and the recent River Watch Settlement Agreement.

VIII-6: References

The data used in this section were taken from the following references:

- City of Sebastopol Five-Year Capital Improvement Plan 2015-2020
- City of Sebastopol 2019/2020 Budget, Pages 164, CIP pages 36 to 42
- River Watch Settlement Agreement dated June 12, 2020

Element IX: Monitoring, Measurement, and Program Modifications

Monitoring, Measurement, and Program Modifications:

The Enrollee shall:

(a) Maintain relevant information that can be used to establish and prioritize appropriate SSMP activities;

(b) Monitor the implementation and, where appropriate, measure the effectiveness of each element of the SSMP;

(c) Assess the success of the preventative 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.

IX-1: Performance Measures

The indicators that City uses to measure the performance of its sanitary sewer collection system and the effectiveness of its SSMP are:

- Number of SSOs per year
- Number of SSOs per year by cause (e.g., roots, grease, pipe failure, I/I,
- Pump failure or other deficiency, etc.)
- SSO Rate per 100 miles per year.
- Portion of sewage recovered compared to total volume spilled: and
- Volume of spilled sewage discharged to surface water.
- Collection system performance results.

IX-2: Baseline Performance

City has performance measures in place and evaluates its performance annually following the fiscal year. The historical performance is shown below starting in calendar 2008 through June 2020. These performance results will be used to assist City to evaluate the effectiveness of the sewer collection system program as part of the biannual internal audit.

IX-3: Mains, Pump Stations, and Force Mains

The baseline performance and SSO trends for the City sewer program are shown by calendar year on the following pages and the data is from CIWQS for the City WDID 1SSO10017 through June 2020.

Figure IX – 1: SSOs per Calendar Year

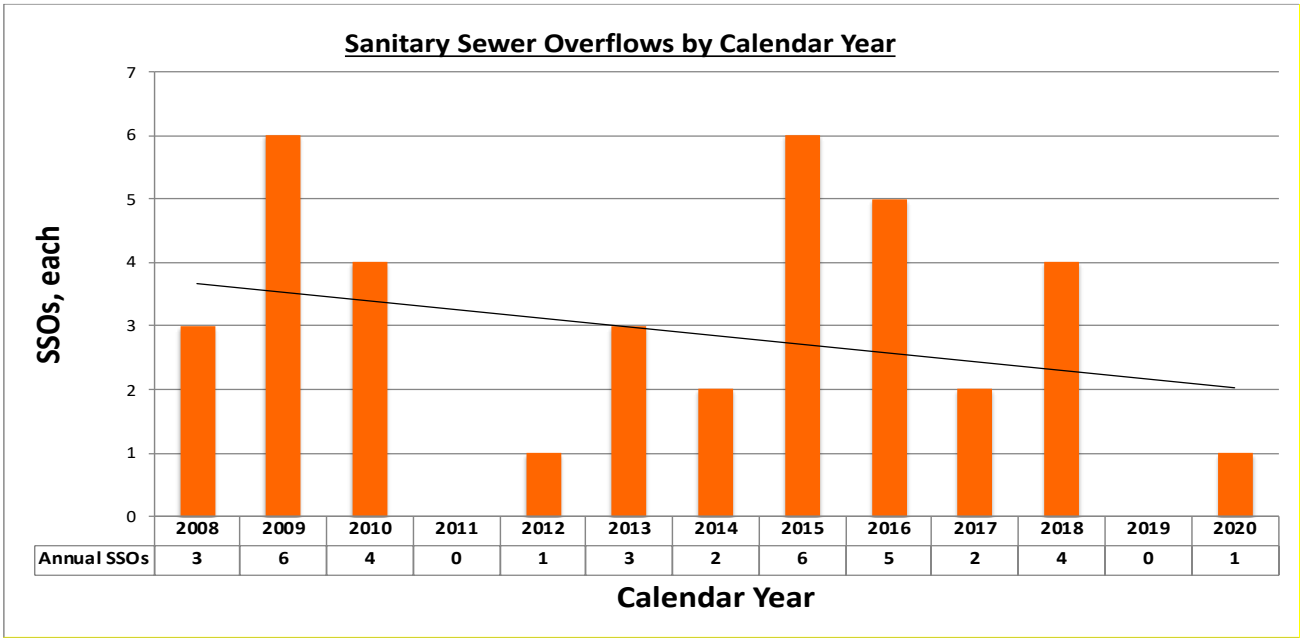


Figure IX – 2: Trend in SSOs by Cause

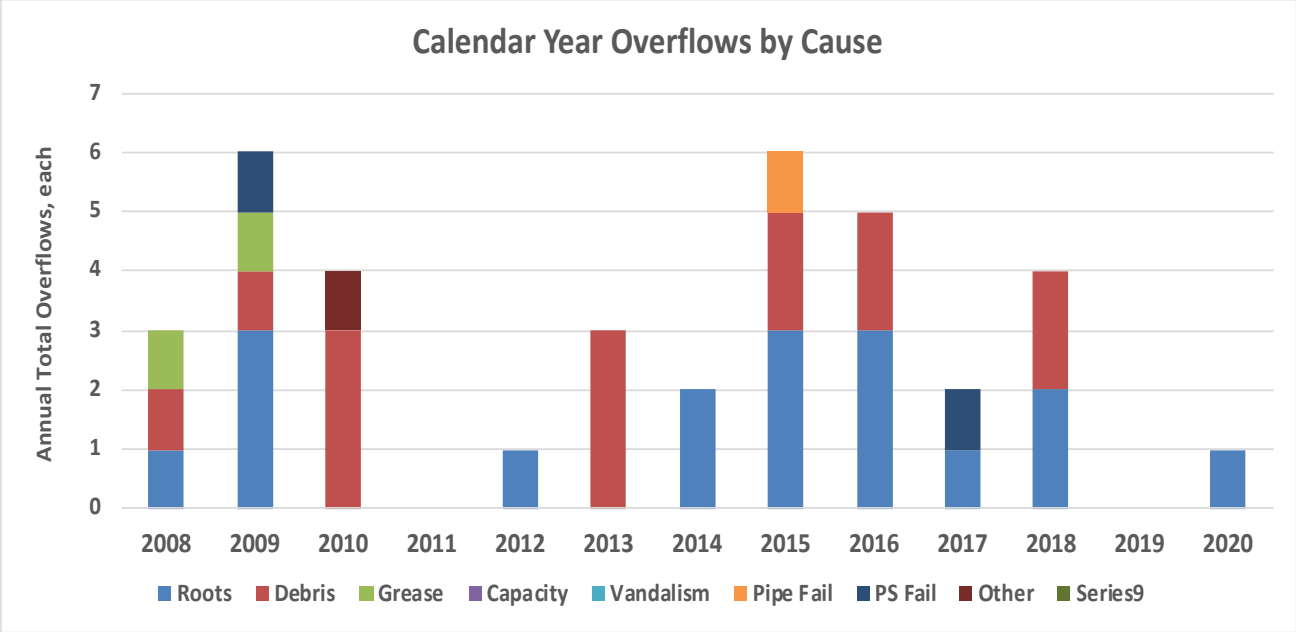
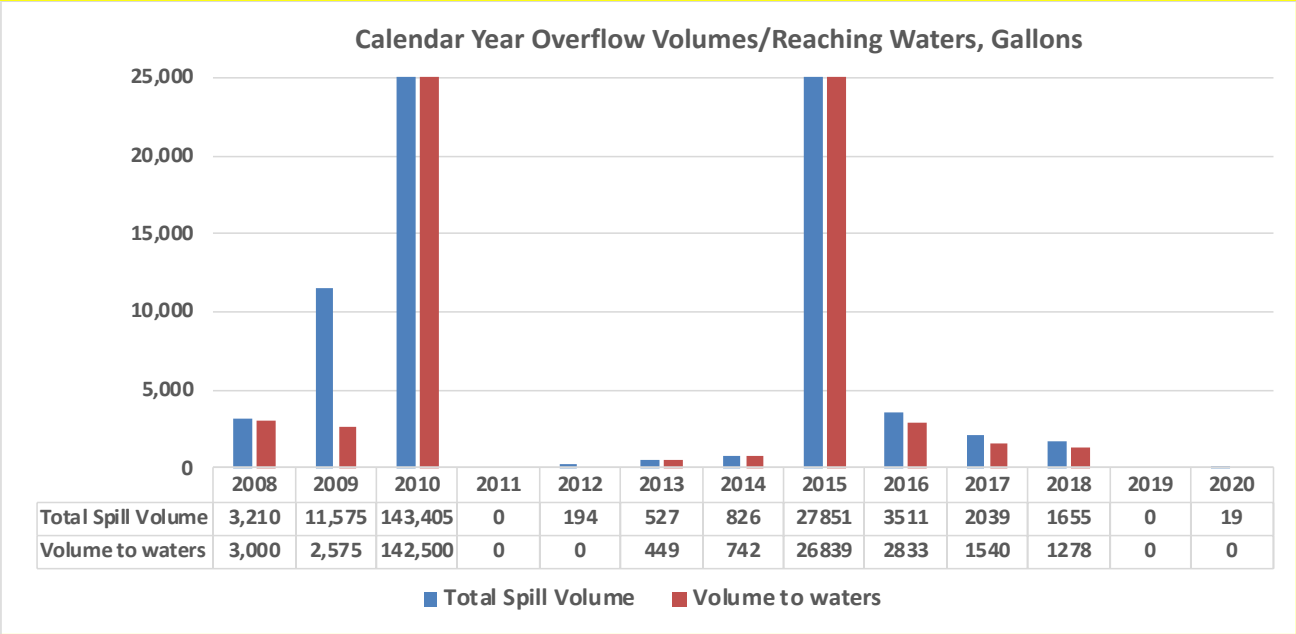


Figure IX – 3: Historical Spill and Recovered Volumes by Calendar Year



	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Total Spill Volume	3,210	11,575	143,405	0	194	527	826	27851	3511	2039	1655	0	19
Volume to waters	3,000	2,575	142,500	0	0	449	742	26839	2833	1540	1278	0	0

Figure IX – 4: Overflows by SWRCB Categories per Calendar Year

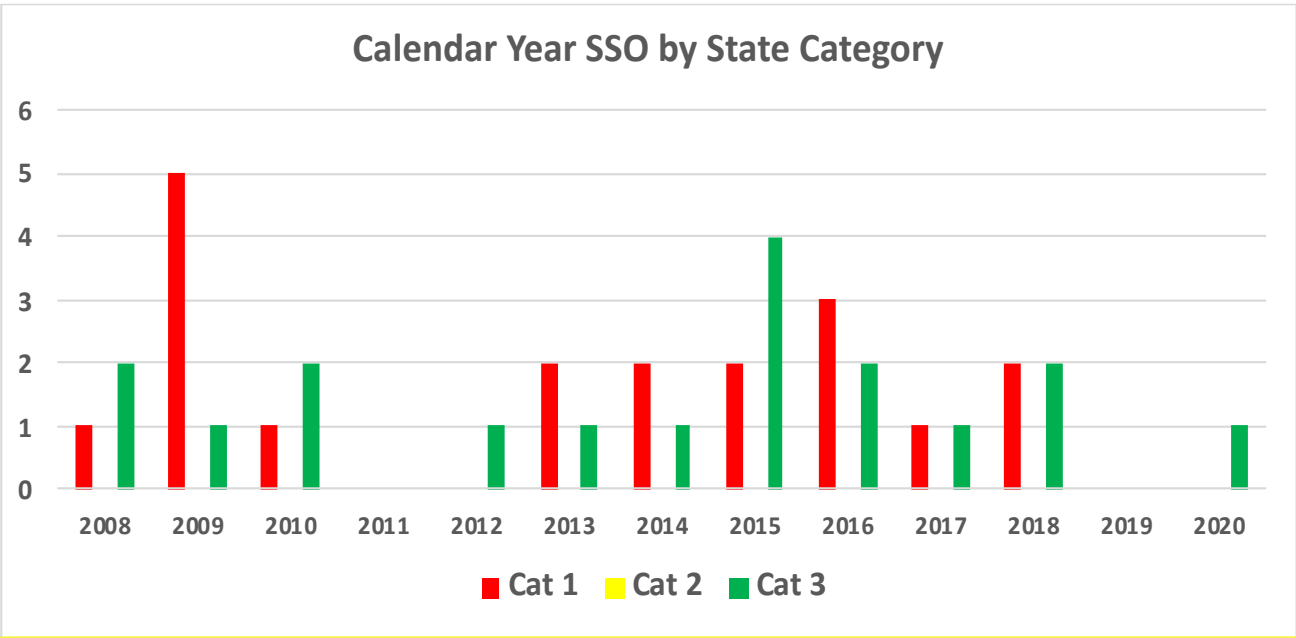
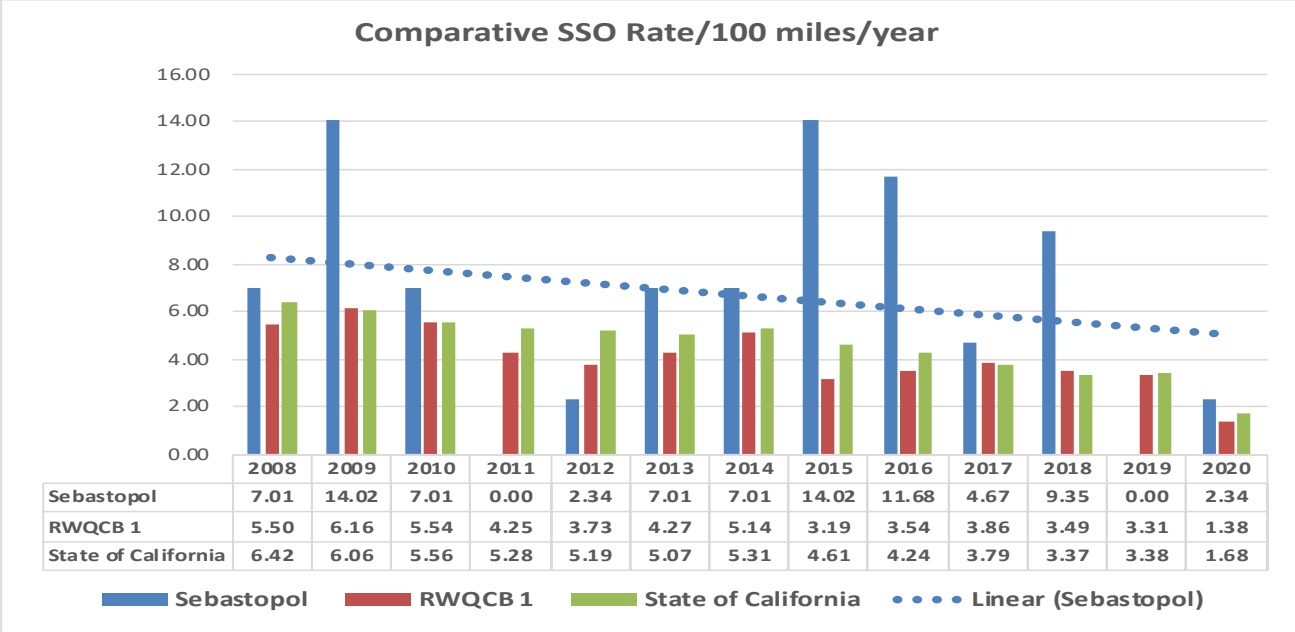


Figure IX – 5: Comparison of SSO Rate per 100 Miles of Sewers



	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Sebastopol	7.01	14.02	7.01	0.00	2.34	7.01	7.01	14.02	11.68	4.67	9.35	0.00	2.34
RWQCB 1	5.50	6.16	5.54	4.25	3.73	4.27	5.14	3.19	3.54	3.86	3.49	3.31	1.38
State of California	6.42	6.06	5.56	5.28	5.19	5.07	5.31	4.61	4.24	3.79	3.37	3.38	1.68

Figure IX – 6: Historical Line Cleaning Summary

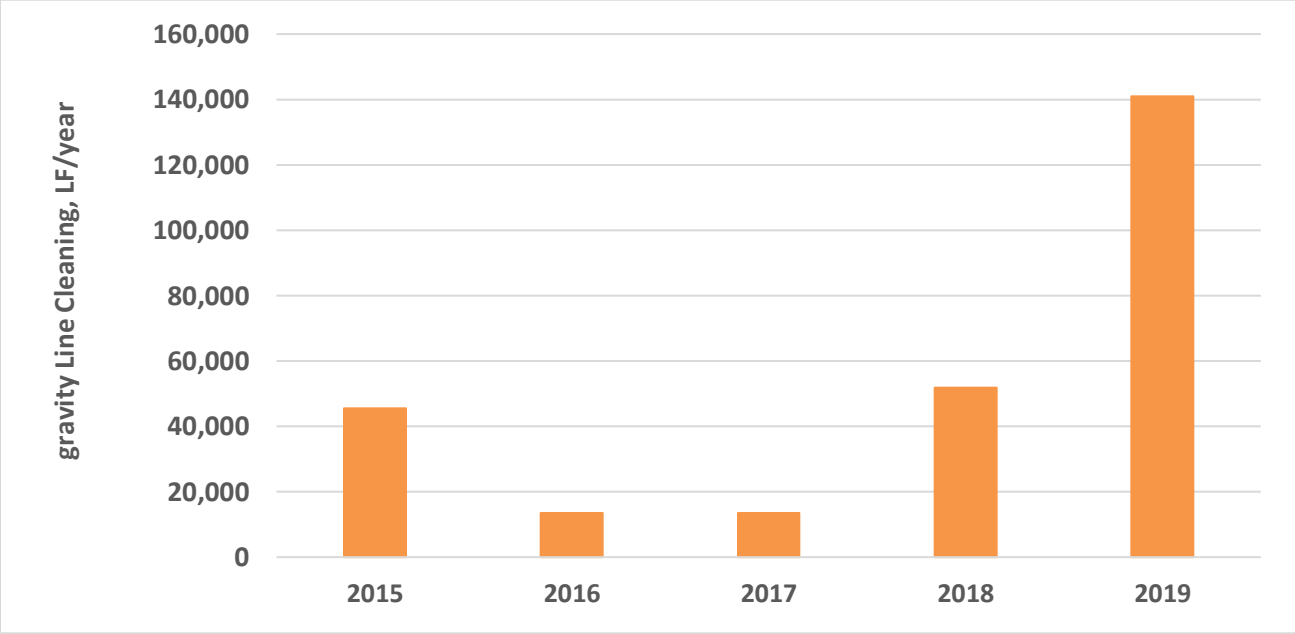
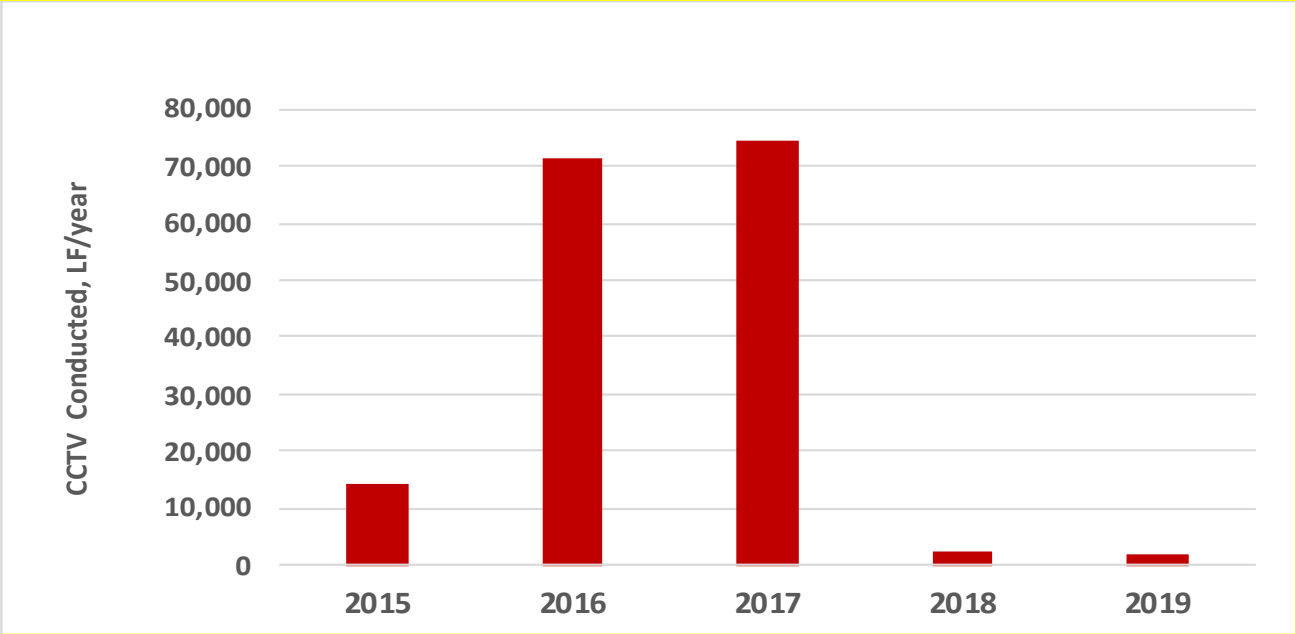


Figure IX –7: Historical CCTV Performance



IX-4: Performance Monitoring and Program Changes

The City will evaluate the performance of its sewer collection system at least annually using the performance measures identified in this Element. The City will update the data and analysis at the time of the annual evaluation and will place an Annual Performance Report on a Council agenda and after approval on the SSMP webpage.

The City may use other performance measures in its evaluations. The City will prioritize its actions and initiate changes to this SSMP, its operations and maintenance practices and procedures, and any related programs based on the results of these evaluations. This will be done as part of the biannual internal audit (see Element X).

IX-5: References

The data used in this section were taken from the following references:

- CIWQS SSO data as of 6/30/20 for WDID 1SSO10017
- City collection system performance records available in the Public Works offices.

Element X: SSMP Program Audits

SSMP Program Audits - As part of the SSMP, the Enrollee shall conduct periodic internal audits, appropriate to the size of the system and the number of SSOs. At a minimum, these audits must occur every two years and a report must be prepared and kept on file. This audit shall focus on evaluating the effectiveness of the SSMP and the Enrollee's compliance with the SSMP requirements identified in this subsection (D.13), including identification of any deficiencies in the SSMP and steps to correct them.

X-1: Audits

The City will audit its implementation, effectiveness, and compliance with the provisions of this SSMP and GWDR at least every two years from the original SSMP adoption date of August 3, 2010. A team consisting of City Staff selected from the Public Works Department and the Engineering Department will conduct the audit. The audit team may include members from other areas of the City, outside agencies, or contractors and will involve discussions and evaluation of the City of Santa Rosa's handling of the FOG and industrial pretreatment program pursuant to Element 7 of this SSMP.

It is also recommended that along with the audit the City conduct a recordkeeping audit of its SSO files to assure that that the files are complete, contain all required records as stated in the MRP and that the files contain no extraneous or conflicting documents that are not adequately reviewed and explanations provided. It is also recommended that the City staff review all data submitted to the SWRCB CIWQS database regularly to assure compliance with the regulations and to confirm that all required data has been submitted and certified as required and that there are no mistakes in the certified data.

The Sewer System Management Plan Audit Report Checklist (Appendix C) is used to guide the audit process and includes the GGWDR requirements for each SSMP element. The results of the audit, including the identification of any deficiencies and the actions taken or planned to correct them will be included in a certified Audit Report along with the designation of the persons responsible for completing the identified actions. Upon completion of the audit, the City will include a copy of the Audit Report in Appendix B, Sewer System Annual Reports of this SSMP. Modifications and changes to the SSMP will be identified and tracked in Appendix D, SSMP Change Log.

The audit can contain information about successes in implementing the most recent version of the SSMP and identify revisions to enhance the effectiveness of the City program. Information collected as part of Element IX above should be used in preparing the audit. Tables and figures or charts can be used to summarize information about these indicators. An explanation of the SSMP implementation, and effectiveness in improving the sewer system, should be included in the audit, including:

- How the City implemented SSMP elements in the past year;
- The effectiveness of implementing SSMP elements;
- A description of the additions and improvements made to the sanitary sewer collection system operations and system rehabilitation in the past reporting period; and
- A description of the additions and improvements planned for the upcoming audit period or recertification period with an estimated schedule and cost estimates for implementation of the changes

X-2: SSMP Updates

The City will update and seek recertification with the City Council of its SSMP at least every five years from the original adoption date of August 2010 or when substantial changes are made in the SSMP that increases the overall collection system budget.

The City will determine the need to update its SSMP more frequently based on the results of the biannual audit and the performance of its wastewater collection system using information from Element IX, Monitoring and Measurement and Modification Program. In the event that the City decides that an update is warranted, the process and schedule to complete the update will be identified. The City will complete the SSMP update within one year of identifying the need for the update.

X-3: References:

None.

Element XI: Communication Program

Communication Program – The Enrollee shall communicate on a regular basis with the public on the development, implementation, and performance of its SSMP. The communication system shall provide the public the opportunity to provide input to the Enrollee as the program is developed and implemented.

The Enrollee shall also create a plan of communication with systems that are tributary and/or satellite to the Enrollee's sanitary sewer system.

XI-1: Communication during SSMP Implementation and Performance

The City makes the SSMP and all critical supporting documents available on the City website and copies can be obtained from the Public Works Superintendents office. Hard copies are available to the City Council and will be considered and recertified as required by the GWDR at least every five (5) years from the original adoption date by the City Council or when substantial changes are implemented. The public can obtain copies either from the Utilities webpage or by purchase at the Department of Public Works

In addition, the City website will include a link to the Santa Rosa Subregional Water Reclamation FOG Control Program for residential and commercial customers' information and use. Finally, the City staff will communicate regularly with the Director of Utilities at the City of Santa Rosa regarding the FOG programs performance and FOG communications.

XI-2: Communicating Sanitary Sewer System Performance

Annually, no later than November of each year, the City Council will receive a report of the sanitary sewer system performance results at a regularly scheduled meeting and the performance information will be included in the minutes of that public meeting and placed on the website for public information. The performance information will include the results of each of the performance measures listed in Element IX: Monitoring, Measurement, and Program Modifications.

The City has also included website link to the State Water Resources Control Board CIWQS SSO Public Reports website where interested parties can find information regarding the City collection system utilizing the City WDID of 1SSO10017. In addition, the City also has a 24-hour,7 days per week emergency hotline on the City's website that can be used to report sewer related issues. The phone contact number is 707-829-4400.

XI-3: Source Control Systems

The City works closely with the Santa Rosa Subregional Water Reclamation staff and participates in all outreach programs related to FOG source control and industrial waste.

XI-4: References:

None.

Appendices

Appendix A: Sewer System Management Plan Adoption Documents

Resolution No. 5812

RESOLUTION OF THE CITY OF SEBASTOPOL ADOPTING A SEWER SYSTEM MANAGEMENT PLAN FOR THE CITY OF SEBASTOPOL IN COMPLIANCE WITH STATE WATER RESOURCES CONTROL BOARD ORDER 2006-2003-DWQ DATED MAY 2, 2006

WHEREAS, the State Water Resources Control Board enacted Board Order No. 2006-0003-DWQ on May 2, 2006, establishing Waste Discharge Requirements for all public agencies that own or operate sanitary sewer systems greater than one mile in length; and

WHEREAS, the City of Sebastopol, in partial compliance with Order No. 2006-0003-DWQ, enrolled for coverage under Statewide General Waste Discharge Requirements for Sanitary Sewer Systems on October 6, 2006; and

WHEREAS, among other provisions of Order 2006-0003, is a requirement for the City to develop and adopt a Sewer System Management Plan, containing certain provisions detailed in the Board Order; and

WHEREAS, a final Sewer System Management Plan has been prepared containing all of the required components as enumerated in the Board Order;

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Sebastopol hereby approves and adopts the Sewer System Management Plan for the City of Sebastopol.

IN COUNCIL DULY PASSED this 3rd day of August, 2010

APPROVED: Sarah Glade Gurney
MAYOR SARAH GLADE GURNEY

AYES: Councilmembers Robinson, Shaffer, Kelley, Vice Mayor Wilson and Mayor Gurney
NOES: None
ABSENT: None
ABSTAIN: None

ATTEST: Mary C Gourley
(City Clerk Mary Gourley)

Resolution No. 6031

RESOLUTION OF THE CITY COUNCIL OF THE CITY OF SEBASTOPOL ACCEPTING AND CERTIFYING THE CITY OF SEBASTOPOL SEWER SYSTEM MANAGEMENT PLAN

WHEREAS, the State Water Resources Control Board enacted Board Order No. 2006-0003-DWQ on May 2, 2006, establishing Waste Discharge Requirements for all public agencies that own or operate sanitary sewer systems greater than one mile in length that collect or convey untreated wastewater to a publicly owned treatment facility; and

WHEREAS, the City of Sebastopol, in partial compliance with Order No. 2006-0003-DWQ, enrolled for coverage under Statewide General Waste Discharge Requirements for Sanitary Sewer Systems on October 6, 2006; and

WHEREAS, effective September 9, 2013 the WDR Monitoring and Reporting requirements were modified and amended by Executive Order No. WQ2013-0058-EXEC changing reporting and record keeping requirements and modified the categories of sanitary sewer overflows; and

WHEREAS, the WDR requires agencies to prepare a Sewer System Management Plan with specific Elements; and

WHEREAS, the City Council approved Resolution No. 5812 on August 3, 2010, adopting a Sewer System Management Plan (SSMP) for the City of Sebastopol; and

WHEREAS, the WDR requires the governing body to consider revising as necessary and recertifying the SSMP after any changes, revisions or amendments;

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Sebastopol hereby approves this Resolution accepting and certifying the Sewer System Management Plan for the City of Sebastopol dated March 17, 2015.

IN COUNCIL DULY PASSED this 17th day of March, 2015.

APPROVED: _____
PATRICK SLAYTER, MAYOR

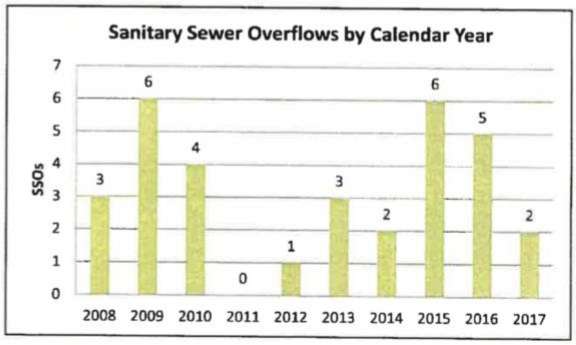
AYES: Councilmembers Eder, Glass, Vice Mayor Gurney and Mayor SLayter
NOES: None
ABSENT: Councilmember Jacob
ABSTAIN: None

ATTEST: _____
Mary Gourley, CMC, City Clerk

Appendix B: Sewer System Management Audit Reports

Calendar Year	Gravity Sewer SSOs	Pump Station SSOs	Force Main SSOs	Total Volume Spilled (Gallons)	Portion Contained and Returned to Sewers (%)	Total Volume Entering Surface Waters (Gallons)
2008	N/A	N/A	N/A	3,210	6	3,000
2009	5	1	0	11,575	78	2,575
2010	3	0	1	143,405	1	142,500
2011	0	0	0	0	0	0
2012	1	0	0	194	100	0
2013	3	0	0	527	11	449
2014	2	0	0	826	1	742
2015	6	0	0	28,341	12	24,579
2016	5	0	0	1,310	328	982
2017	1	1	0	2039	0	2039

CY	Roots	Debris	Grease	Cap./ Infil.	Vndl.	Pipe Failure	PS Failure	Force Main Failure	Other	Total
2008	1	1	1	0	0	0	0	0	0	3
2009	3	1	1	0	0	0	1	0	0	6
2010	0	3	0	0	0	0	0	1	0	4
2011	0	0	0	0	0	0	0	0	0	0
2012	1	0	0	0	0	0	0	0	0	1
2013	0	3	0	0	0	0	0	0	0	3
2014	2	0	0	0	0	0	0	0	0	2
2015	2	3	0	0	0	0	1	0	0	6
2016	3	1	1	0	0	0	0	0	0	5
2017	1	0	0	0	0	0	1	0	0	2
Total	**13**	**12**	**3**	**0**	**0**	**0**	**3**	**1**	**0**	**32**



Agenda Item Number: _____

Agenda Report Reviewed by:
City Manager: _____

CITY OF SEBASTOPOL
CITY COUNCIL
Agenda Item

Meeting Date:	August 6, 2019
To:	Honorable Mayor and City Councilmembers
From:	Public Works Superintendent, Dante Del Prete
Subject:	Annual Performance Report on Sanitary Sewer System
Recommendation:	City Council Receive Report of Annual Performance on Sanitary Sewer System (No action required)
Funding:	Currently Budgeted: _____ Yes _____ No __X__ N/A Net General Fund Cost: $0.00

INTRODUCTION:

This informational report to City Council is one of the required components of the approved Sewer System Management Plan (SSMP).

BACKGROUND:

In March of 2015, the City Council accepted and certified a revised Sewer System Management Plan for the City of Sebastopol. One element of this plan is an annual review of system performance.

DISCUSSION:

The SSMP consists of eleven elements, one of which is the annual performance report to the City Council.
Per the SSMP Element XI, staff is to present annually to the City Council the following for calendar year 2018:

- Number of Sanitary Sewer Overflows (SSOs) in the past year
- Number of SSOs per cause
- SSO rate per year per 100 miles of sewer mains compared to the average for California Region 1
- Portion of sewage recovered compared to total volume spilled
- Collection system performance results

The attachment to this report provides the information described above, except for the SSO rate per year per 100 miles of sewer mains and the comparison to the California Region 1 agencies' average.

During the calendar year 2018, the City had **4** SSOs for the **32.3** miles of sewer mains in Sebastopol, which equates to **12.38** SSOs per 100 miles of sewer mains. This is above the average for California Region 1 system size comparison, which was **9.32** SSOs per 100 miles of sewer mains.

Out of the four total SSOs in 2018, two were determined to be debris/wipes/not-disposables, and two were determined to be root intrusion.

RECOMMENDATION:

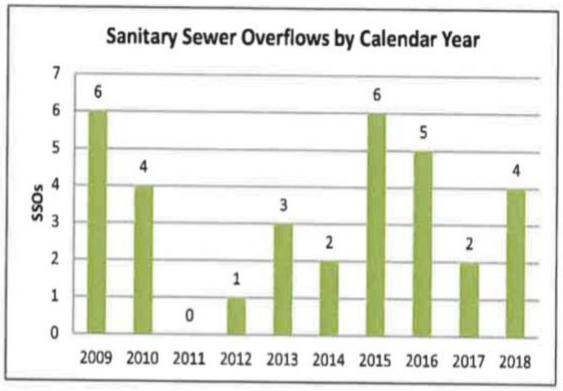
Staff recommends that the City Council receive this annual performance report on the City of Sebastopol's sanitary sewer system information. No action is required.

ATTACHMENT:

Sanitary Sewer Overflows shown in tables and graph

Calendar Year	Gravity Sewer SSOs	Pump Station SSOs	Force Main SSOs	Total Volume Spilled (Gallons)	Portion Contained and Returned to Sewers (Gallons)	Total Volume Entering Surface Waters (Gallons)
2009	5	1	0	11,575	78	11,497
2010	3	0	1	143,405	1	143,404
2011	0	0	0	0	0	0
2012	1	0	0	194	100	94
2013	3	0	0	527	11	516
2014	2	0	0	826	1	825
2015	6	0	0	28,341	12	28,329
2016	5	0	0	1,310	328	982
2017	1	1	0	2,039	0	2,039
2018	4	0	0	1,926	271	1,655

CY	Roots	Debris	Grease	Cap./ Infil.	Vndl.	Pipe Failure	PS Failure	Force Main Failure	Other	Total
2009	3	1	1	0	0	0	1	0	0	6
2010	0	3	0	0	0	0	0	1	0	4
2011	0	0	0	0	0	0	0	0	0	0
2012	1	0	0	0	0	0	0	0	0	1
2013	0	3	0	0	0	0	0	0	0	3
2014	2	0	0	0	0	0	0	0	0	2
2015	2	3	0	0	0	0	1	0	0	6
2016	3	1	1	0	0	0	0	0	0	5
2017	1	0	0	0	0	0	1	0	0	2
2018	2	2	0	0	0	0	0	0	0	4
Total	**14**	**13**	**2**	**0**	**0**	**0**	**3**	**1**	**0**	**33**



Agenda Report Reviewed by:
City Manager: _____

CITY OF SEBASTOPOL
CITY COUNCIL
AGENDA ITEM

Meeting Date:	August 4, 2020
To:	Honorable Mayor and City Councilmembers
From:	Public Works Superintendent, Dante Del Prete
Subject:	Annual Performance Report on Sanitary Sewer System
Recommendation:	City Council Receive Report of Annual Performance on Sanitary Sewer System (No action required)

Funding: Currently Budgeted: _____ Yes _____ No __X__ N/A

Net General Fund Cost: N/A

Amount: $0

Account Code/Costs authorized in City Approved Budget (if applicable) _____ (verified by Administrative Services Department)

INTRODUCTION:

This informational report to City Council is one of the required components of the approved Sewer System Management Plan (SSMP).

BACKGROUND:

In March of 2015, the City Council accepted and certified a revised Sewer System Management Plan for the City of Sebastopol. One element of this plan is an annual review of system performance.

DISCUSSION:

The SSMP consists of eleven elements, one of which is the annual performance report to the City Council. Per the SSMP Element XI, staff is to present annually to the City Council the following for calendar year 2019:

- Number of Sanitary Sewer Overflows (SSOs) in the past year
- Number of SSOs per cause
- SSO rate per year per 100 miles of sewer mains compared to the average for California Region 1
- Portion of sewage recovered compared to total volume spilled
- Collection system performance results

The attachment to this report provides the information described above, except for the SSO rate per year per 100 miles of sewer mains and the comparison to the California Region 1 agencies' average.

During the calendar year 2019, the City had **0 (Zero) SSOs** for the **32.3** miles of sewer mains in Sebastopol, which equates to **0** SSOs per 100 miles of sewer mains. This is below the average for California Region 1 system size comparison, which was **3.31** SSOs per 100 miles of sewer mains.

While the city did not have any sewer overflows for the 2019 calendar year the sewer pump stations continue to require significant additional maintenance due the use of personal sanitary wipes that do not breakdown in water throughout our collection system. This creates a very labor-intensive manual removal process.

PUBLIC COMMENT:

As of the writing of this staff report, the City has not received any public comment. However, staff anticipates receiving public comment from interested parties following the publication and distribution of this staff report. Such comments will be provided to the City Council as supplemental materials before or at the meeting. In addition, public comments may be offered during the public hearing.

PUBLIC NOTICE:

This item was noticed in accordance with the Ralph M. Brown Act and was available for public viewing and review at least 72 hours prior to schedule meeting date.

FISCAL IMPACT:

None

RECOMMENDATION:

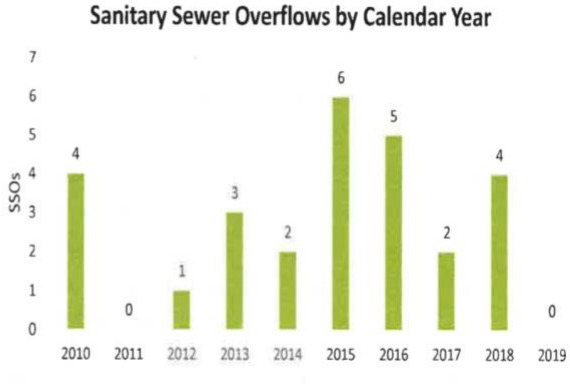
Staff recommends that the City Council receive this annual performance report on the City of Sebastopol's sanitary sewer system information. No action is required.

Attachments:

Sanitary Sewer Overflows shown in tables and graph

Calendar Year	Gravity Sewer SSOs	Pump Station SSOs	Force Main SSOs	Total Volume Spilled (Gallons)	Portion Contained and Returned to Sewers (Gallons)	Total Volume Entering Surface Waters (Gallons)
2010	3	0	1	143,405	1	143404
2011	0	0	0	0	0	0
2012	1	0	0	194	100	94
2013	3	0	0	527	11	516
2014	2	0	0	826	1	825
2015	6	0	0	28,341	12	28329
2016	5	0	0	1,310	328	982
2017	1	1	0	2,039	0	2039
2018	4	0	0	1,655	271	1384
2019	0	0	0	0	0	0

CY	Roots	Debris	Grease	Cap./ Infil.	Vndl.	Pipe Failure	PS Failure	Force Main Failure	Other	Total
2010	0	3	0	0	0	0	0	1	0	4
2011	0	0	0	0	0	0	0	0	0	0
2012	1	0	0	0	0	0	0	0	0	1
2013	0	3	0	0	0	0	0	0	0	3
2014	2	0	0	0	0	0	0	0	0	2
2015	2	3	0	0	0	0	1	0	0	6
2016	3	1	1	0	0	0	0	0	0	5
2017	1	0	0	0	0	0	1	0	0	2
2018	2	2	0	0	0	0	0	0	0	4
2019	0	0	0	0	0	0	0	0	0	0
Total	**11**	**12**	**1**	**0**	**0**	**0**	**2**	**1**	**0**	**27**



Appendix C: Sewer System Management Audit Checklist

City of Sebastopol
SSMP Audit Checklist
Report Form

The purpose of the SSMP Audit is to evaluate the effectiveness of the City SSMP and sanitary sewer program and to identify any needed for improvement. The information identified here will be used to inform the possible findings and necessary information to be evaluated during the biannual Internal Audit of the City SSMP.

Directions: Please rank each item below utilizing the following sufficiency ranking system and add any comments to explain the ranking to the Comment Section of each SSMP Element:

- *Complies (C) – complies with all WDR objectives*
- *Substantially Complies (SC) – complies mostly with all WDR objectives*
- *Partially Complies (PC) – complies with basic WDR objectives*
- *Marginal Compliance (MC) – complies minimally with basic objectives of the WDR*
- *Does Not Comply – does not comply with WDR objectives*

Element 0 – Introduction/Executive Summary	
A.	
B.	
C.	
D.	
Element I – Goals	**Rating**
A. Are the goals stated in the SSMP Element I still appropriate and accurate?	
Discussion:	
Element II – Organization	**Rating**
A. Is the List of Staff Responsible for SSMP Elements current?	
B. Is the Sanitary Sewer Overflow Responder List current?	
C. Is the Organization Chart current?	
D. Are the Staff position descriptions an accurate portrayal of staff responsibilities? Are the LRO and DSs properly identified in the position descriptions?	

E. Is the Chain of Communication for Reporting and Responding to SSOs section/flow chart accurate and up to date?	
Discussion:	
Element III – Legal Authority	**Rating**
Does the SSMP contain current references to the Gilroy Municipal Code documenting City's legal authority to:	
A. Prevent illicit discharges?	
B. Require proper design and construction of sewers and connections?	
C. Ensure access for maintenance, inspection, or repairs for portions of the lateral owned or maintained by the City?	
D. Limit discharges of fats, oils, and grease?	
E. Enforce any violation of its sewer ordinances?	
F. Were any changes or modifications made in the past year to Sewer Ordinances, Regulations, or standards?	
Discussion:	
Element IV – Operations & Maintenance	
Collection System Maps	**Rating**
A. Does the SSMP reference the current process and procedures for maintaining City's wastewater collection system maps?	
B. Are the wastewater collection system maps complete, current, and sufficiently detailed?	
C. Are storm drainage facilities of the City and County identified in the City service area on the collection system maps? If not, are SSO responders able to determine locations of storm drainage inlets and pipes for possible discharge to waters of the state?	
Prioritized Preventive Maintenance	**Rating**
D. Does the SSMP describe current preventive maintenance activities and the system for prioritizing the cleaning of sewers?	
E. Based upon information in the Annual SSO Report, are the City's preventive maintenance activities sufficient and effective in minimizing SSOs and blockages?	

Scheduled Inspections and Condition Assessments	Rating
F. Is there an ongoing condition assessment program sufficient to develop a capital improvement plan addressing the proper management and protection of infrastructure assets? Are the current components of this program documented in the SSMP?	
Contingency Equipment and Replacement Inventory	**Rating**
G. Does the SSMP list the major equipment currently used in the operation and maintenance of the collection system and documents the procedures of inventory management?	
H. Are contingency and replacement parts sufficient to respond to emergencies and properly conduct regular maintenance?	
Training	**Rating**
I. Does the SSMP document current training expectations and programs for staff and contractors?	
Outreach to Plumbers and Building Contractors	**Rating**
J. Does the SSMP document current outreach efforts to plumbers and building contractors?	
Discussion:	

Element V – Design and Performance Standards	Rating
A. Does the SSMP reference current design and construction standards for the installation for new sanitary sewer systems, pump stations and other appurtenances and for the rehabilitation and repair of existing sanitary sewer systems?	
B. Does the SSMP document current procedures and standards for inspecting and testing the installation of new sewers, pumps, and other appurtenances and the rehabilitation and repair of existing sewer lines?	
Discussion:	

Element VI – Overflow and Emergency Response Plan	Rating
A. Does the City Sanitary Sewer Overflow Emergency Response Plan establish procedures for the emergency response, notification, and reporting of SSOs?	
B. Are staff and contractor personnel appropriately trained on the procedures of the Sanitary Sewer Overflow Emergency Response Plan?	

C.	Considering SSO performance data, is the Sanitary Sewer Overflow Emergency Response Plan effective in handling SSOs in order to safeguard public health and the environment?	
D.	Are all SSO and claims reporting forms current or do they require revisions or additions?	
E.	Does all SSO event recordkeeping meet the SSS GWDR and MRP requirements? Are all SSO event files complete and certified in the CIWQS system?	
F.	Is all information in the CIWQS system current and correct? Have periodic reviews of the data been made during the year to assure compliance with SSS GWDR? Have all Technical Report and Water Quality Sampling requirements been met and uploaded to the CIWQS data management system?	
Discussion:		

Element VII – Fats, Oils and Grease (FROG) Control Program		**Rating**
A.	Does the FROG Control Program include efforts to educate the public on proper handling and disposal of FROG?	
B.	Does the FROG Control Program identify sections of the collection system subject to FROG blockages, establish a cleaning schedule and address source control measures to minimize these blockages?	
C.	Are requirements for grease removal devices, best management practices (BMP), record keeping, and reporting established in the FROG Control Program?	
D.	Does City have sufficient legal authority to implement and enforce the FROG Control Program?	
E.	Is the current FROG program effective in minimizing blockages of sewer lines resulting from discharges of FROG to the system	
F.	Was required training on SSMP and OERP completed and documented? Were field exercises with field staff on SSO volume estimation conducted and documented?	
G.	Did all public improvement plans and specifications that could impact collection system operations include requirements for OERP training or were contractor OERP programs at least as stringent as the City OERP? Were regular items included in project meeting agendas to discuss emergency response procedures and communications?	
Discussion:		

Element VIII – System Evaluation and Capacity Assurance Plan		Rating
A.	Does the City Sewer System Master Plan evaluate hydraulic deficiencies in the system, establish sufficient design criteria and recommend both short and long-term capacity enhancement and improvement projects?	
B.	Does the City Capital Improvement Plan (CIP) establish a schedule of approximate completion dates for both short and long- term capacity improvements and is the schedule reviewed and updated to reflect current budgetary capabilities and activity completed?	
Discussion:		

Element IX – Monitoring, Measurement and Program Modifications		Rating
A.	Does the SSMP accurately portray the methods of tracking and reporting selected performance indicators?	
B.	Is City able to sufficiently evaluate the effectiveness of the SSMP elements based on relevant information?	
C.	Do the performance metrics properly support the Goals in Element 1?	
Discussion:		

Element X – SSMP Audits		Rating
A.	Will the SSMP Audit be completed, reviewed and filed in Appendix B based upon the required time intervals since the original SSMP adoption date?	
B.	Was the last Audit Report certified by the City LRO as required?	
C.	Was the final Audit Report presented to the governing body at a publicly noticed meeting?	
D.	Was the last Audit Report placed in the SSMP Appendix and added to the SCWD SSMP webpage.	
Discussion:		

Element XI – Community Program		Rating
A.	Does City effectively communicate with the public and other agencies about the implementation of the SSMP and continue to address any feedback?	
B.	Did the City receive and review the Annual Sewer System Report?	

C.	Was the annual report uploaded to the City Sewer Section website and added to Appendix C?	
D.	Did staff conduct and document meetings with the Pebble Beach Community Services City's satellite collection systems?	
E.	Are all agreements with satellite systems current or are changes necessary to these agreements?	
Discussion:		

Change Log		**Rating**
A.	Is the SSMP Change Log current and up to date?	
Discussion:		

Audit Team: _____ **Date:** _____

Prepared By: _____ **Date:** _____

Reviewed By: _____ **Date:** _____

Certified By: _____ **Date:** _____

Approved for Filing On **Date:** _____

Appendix D: Sewer System Management Plan Change Log

LOG OF SSMP CHANGES			
Date	**SSMP Element #**	**Description of Change / Revision Made**	**Person Authorizing Change**

Appendix E: Overflow Emergency Response Plan (OERP)

Appendix F: Water Quality Monitoring Plan

City of Sebastopol

Overflow Emergency Response Plan

Effective Date: _____

Revised Date: _____

Approved by: _____

Signature: _____

Date: _____

Prepared by David Patzer, DKF Solutions Group
(707) 373-9709 dpatzer@dkfsolutions.com

Table of Contents

Sanitary Sewer Overflow Emergency Response Plan (OERP)

Sanitary Sewer Overflow Emergency Response Plan

1. Purpose

The purpose of the Overflow Emergency Response Plan (OERP) is to support an orderly and effective response to Sanitary Sewer Overflows (SSOs). The OERP provides guidelines for City personnel to follow in responding to, cleaning up, and reporting SSOs that may occur within the City's service area. This OERP satisfies the SWRCB Statewide General Waste Discharge Requirements, which require wastewater collection agencies to have an Overflow Emergency Response Plan.

2. Policy

The City's employees are required to report all wastewater overflows found and to take the appropriate action to secure the wastewater overflow area, properly report to the appropriate regulatory agencies, relieve the cause of the overflow, 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 overflows as soon as possible following notification. The City will follow reporting procedures in regards to sewer spills as set forth by the North Coast Regional Water Quality Control Board (*NCRWQCB)* and the California State Water Resources Control Board (*SWRCB)*.

3. Definitions as Used in This OERP

CALIFORNIA INTEGRATED WATER QUALITY SYSTEM (CIWQS): Refers to the State Water Resources Control Board online electronic reporting system that is used to report SSOs, certify completion of the SSMP, and provide information on the sanitary sewer system.

FOG – Fats, Oils, and Grease: Refers to fats, oils, and grease typically associated with food preparation and cooking activities that can cause blockages in the sanitary sewer system.

LEGALLY RESPONSIBLE OFFICIAL (LRO): Refers to an individual who has the authority to certify reports and other actions that are submitted through CIWQS.

MAINLINE SEWER: Refers to City wastewater collection system piping that is not a private lateral connection to a user.

MAINTENANCE HOLE OR MANHOLE: Refers to an engineered structure that is intended to provide access to a sanitary sewer for maintenance and inspection.

MAJOR SPILL: A spill of whatever size that, based on a reasonable assessment of the spill size, location, and potential impacts, is deemed to pose an imminent and substantial endangerment to public health or the environment.

NOTIFICATION OF AN SSO: Refers to the time at which the City becomes aware of an SSO event through observation or notification by the public or other source.

NUISANCE - California Water Code section 13050, subdivision (m), defines nuisance as anything that meets all of the following requirements:

a. Is injurious to health, or is indecent or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property.

b. Affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal.

c. Occurs during, or as a result of, the treatment or disposal of wastes.

PREVENTATIVE MAINTENANCE: Refers to maintenance activities intended to prevent failures of the wastewater collection system facilities (e.g. cleaning, CCTV, inspection).

PRIVATE LATERAL SEWAGE DISCHARGES – Sewage discharges that are caused by blockages or other problems within a privately-owned lateral.

SANITARY SEWER OVERFLOW (SSO) - Any overflow, spill, release, discharge or diversion of untreated or partially treated wastewater from a sanitary sewer system. SSOs include:

(i) Overflows or releases of untreated or partially treated wastewater that reach waters of the United States;

(ii) Overflows or releases of untreated or partially treated wastewater that do not reach waters of the United States; and

(iii) Wastewater backups into buildings and on private property that are caused by blockages or flow conditions within the publicly owned portion of a sanitary sewer system.

SSOs that include multiple appearance points resulting from a single cause will be considered one SSO for documentation and reporting purposes in CIWQS.

NOTE: Wastewater backups into buildings caused by a blockage or other malfunction of a building lateral that is privately owned are not SSOs.

SSO Categories:

Category 1: Discharges of untreated or partially treated wastewater of **any volume** resulting from an enrollee's sanitary sewer system failure or flow condition that:

- Reach surface water and/or reach a drainage channel tributary to a surface water; or
- Reach a Municipal Separate Storm Sewer System (MS4) and are not fully captured and returned to the sanitary sewer system or not otherwise captured and disposed of properly. Any volume of wastewater not recovered from the MS4 is considered to have reached surface water unless the storm drain system discharges to a dedicated storm water or groundwater infiltration basin (e.g., infiltration pit, percolation pond).

Category 2: Discharge of untreated or partially treated wastewater greater than or equal to 1,000 gallons resulting from a sanitary sewer system failure or flow condition that either:

- Does not reach surface water, a drainage channel, or an MS4, or
- The entire SSO discharged to the storm drain system was fully recovered and disposed of properly.

Category 3: All other discharges of untreated or partially treated wastewater resulting from a sanitary sewer system failure or flow condition.

SANITARY SEWER SYSTEM: Any publicly-owned system of pipes, pump stations, sewer lines, or other conveyances, upstream of a wastewater treatment plant headworks used to collect and convey wastewater to the publicly owned treatment facility. Temporary storage and conveyance facilities (such as vaults, temporary piping, construction trenches, wet wells, impoundments, tanks, etc.) are considered to be part of the sanitary sewer system, and discharges into these temporary storage facilities are not considered to be SSOs.

SENSITIVE AREA: Refers to areas where an SSO could result in a fish kill or pose an imminent or substantial danger to human health (e.g. parks, aquatic habitats, etc.)

SEWER SERVICE LATERAL: Refers to the piping that conveys sewage from the building to the City's wastewater collection system.

UNTREATED OR PARTIALLY TREATED WASTEWATER: Any volume of waste discharged from the sanitary sewer system upstream of a wastewater treatment plant headworks.

WATERS OF THE STATE*:* Waters of the State (or waters of the United States) means any surface water, including saline waters, within the boundaries of California. In case of a sewage spill, storm drains are considered to be waters of the State unless the sewage is completely contained and returned to the wastewater collection system and that portion of the storm drain is cleaned.

4. State Regulatory Requirements for Element 6, Overflow Emergency Response Plan

GWDR Requirement

The collection system agency shall develop and implement an overflow emergency response plan that identifies measures to protect public health and the environment. At a minimum, this plan must include the following:

(a) Proper notification procedures so that the primary responders and regulatory agencies are informed of all SSOs in a timely manner;
(b) A program to ensure appropriate response to all overflows;
(c) Procedures to ensure prompt notification to appropriate regulatory agencies and other potentially affected entities (e.g. health agencies, regional water boards, water suppliers, etc.) of all SSOs that potentially affect public health or reach the waters of the State in accordance with the Monitoring and Reporting Program (MRP). All SSOs shall be reported in accordance with this MRP, the California Water Code, other State Law, and other applicable Regional Water Board Waste Discharge Requirements or National Pollutant Discharge Elimination System (NPDES) permit requirements. The Sewer System Management Plan should identify the officials who will receive immediate notification;
(d) Procedures to ensure that appropriate staff and contractor personnel are aware of and follow the Emergency Response Plan and are appropriately trained;
(e) Procedures to address emergency operations, such as traffic and crowd control and other necessary response activities; and
(f) A program to ensure that all reasonable steps are taken to contain untreated wastewater and prevent discharge of untreated wastewater to Waters of the United States and minimize or correct any adverse impact on the environment resulting from the SSOs, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the discharge.

The City complies with the requirement to make the Sewer System Management Plan publically available by posting it on the City's website: https://ci.sebastopol.ca.us.

5. Goals

The City's goals with respect to responding to SSOs are:

- Work safely;
- Respond quickly to minimize the volume of the SSO;
- Eliminate the cause of the SSO;
- Prevent sewage system overflows or leaks from entering the storm drain system or receiving waters to the maximum extent practicable;
- Contain the spilled wastewater to the extent feasible;
- Minimize public contact with the spilled wastewater;
- Mitigate the impact of the SSO;
- Meet the regulatory reporting requirements;
- Evaluate the causes of failure related to certain SSOs; and
- Revise response procedures resulting from the debrief and failure analysis of certain SSOs.

6. SSO Detection and Notification

ref. SWRCB Order No. 2006-0003-DWQ D.13vi(a)

The processes that are employed to notify the City of the occurrence of an SSO include: observation by the public, receipt of an alarm, or observation by City staff or other public employees during the normal course of their work.

6.1 PUBLIC OBSERVATION

Public observation is the most common way that the City is notified of blockages and spills. Contact numbers and information for reporting sewer spills and backups are in the phone book and on the City's website: http://www.ci.Sebastopol.ca.us. The City's telephone number for reporting sewer problems is (707) 823-5331.

Normal Work Hours
When a report of a sewer spill or backup is made during normal work hours, City staff receives the call, takes the information from the caller, and communicates it to the City Maintenance Workers.

After Hours
When customers call the sewer problem reporting telephone number, they hear a voicemail recording that directs them to call Police dispatch at (707) 829-4400. Dispatch then receives the call and notifies the Standby Employee.

When calls are received, either during or after normal work hours, the individual receiving the call will collect the following information:

- Time and date of call
- Specific location of potential overflow or incident
- Nature of call
- In case of SSO, estimated start time of overflow and how long it has been occurring
- Caller's name, telephone number, and address
- Caller's observations (e.g., odor, duration, location on property, known impacts, indication if surface water impacted, appearance at cleanout or manhole)
- Other relevant information

If the overflow/backup is not in the City's service area they provide the customer with the contact information for the responsible agency, and then notify that agency.

If the overflow/backup is in the City's service area, City Maintenance Workers are dispatched and instructed to complete the Sanitary Sewer Overflow/Backup Response Workbook.

6.2 CITY STAFF OBSERVATION

City staff conducts periodic inspections of its sewer system facilities as part of their routine activities. Any problems noted with the sewer system facilities are reported to appropriate City staff that, in turn, responds to emergency situations. Work orders are issued to correct non-emergency conditions.

6.3 CONTRACTOR OBSERVATION

The following procedures are to be followed in the event that a contractor causes or witnesses a Sanitary Sewer Overflow. If the contractor causes or witnesses an SSO they will:

1. Immediately notify the City by calling (707) 823-5331 during business hours or (707) 829-4400 after hours.
2. Protect storm drains.
3. Protect the public.
4. Provide information to City Maintenance Workers such as start time, appearance point(s), suspected cause, weather conditions, etc.
5. Direct ALL media and public relations requests to the City Manager at (707) 823-1153.

Appendix F includes a handout for Contractors with a flowchart of the above procedures.

6.4 NO OBSERVATION

If there are no witnesses or no call was received for an SSO, the City staff will contact nearby residents or business owners in the vicinity of the SSO, in an attempt to obtain information that brackets a given start time that the SSO began. This information will be collected and placed with records for the specific SSO.

6.4 SMARTCOVERS

The city has placed smartcovers, also known as smart manhole lids, in strategic locations in an effort to detect stoppages or blockages in parts of the system that may be prone to flow problems. The smart manhole lids will detect rising levels in the manholes allowing the city to respond prior to the occurrence of an SSO.

7. SSO Response Procedures

ref. SWRCB Order No. 2006-0003-DWQ D.13vi(b)

7.1 Sewer Overflow/Backup Response Summary

The City will respond to SSOs as soon as feasible following notification of an overflow/backup or unauthorized discharge.

If it is not possible that the overflow/backup is due to a failure in the City-owned/maintained sewer lines the City Maintenance Workers perform the following:

- Follow the instructions in the Sanitary Sewer Overflow/Backup Response Workbook.
- If the customer is not home the City Maintenance Workers complete the Door Hanger and leave it on the customer's door.
- If the customer is home the City Maintenance Workers:
    - Explain that the blockage is in the customer's lateral and the City does not have legal authority to maintain or perform work on privately owned laterals.
    - Recommend to the customer that they hire a contractor to clear their line.
    - Give the customer the Sewer Spill Reference Guide pamphlet.

If it is possible that the overflow/backup is due to a failure in the City-owned/maintained sewer lines the City Maintenance Workers:

- Notify the Public Works Superintendent or designee of the incident.
- Follow the instructions in the Sanitary Sewer Overflow/Backup Workbook.
- Relieve blockage and clean impacted areas.
- Forward the completed Sanitary Sewer Overflow Workbook to the Public Works Superintendent or designee.

The Public Works Superintendent or designee performs required regulatory reporting in accordance with the Sanitary Sewer Overflow/Backup Workbook's Regulatory Reporting section and notifies the City Clerk.

If the overflow has impacted private property, the City Maintenance Workers:

- Follow the instructions in the Sanitary Sewer Overflow/Backup Workbook.
- Provide the customer with forms and information as indicated in the Sanitary Sewer Overflow/Backup Workbook.
- Telephone Chris Carmona, REMIF Liability Claims Administrator.
- Forward the completed Sanitary Sewer Overflow/Backup Workbook to the Public Works Superintendent or designee.
- The Public Works Superintendent or designee notifies the City Clerk of incident.

The City Clerk:

- Reviews incident reports, claim form and other incident information and forwards, as appropriate, to:

  REMIF
  Attention: Chris Carmona, Liability Claims Administrator
  Address: PO Box 885
  Sonoma CA 95476
  Mobile: (530) 524-2626
  Office: (707) 938-2388, ext. 100
  (Administrative Assistant)
  Fax: (707) 938-0374
  Email: liabilityadmin@remif.com

- Communicates with claimant as appropriate.
- Communicates with REMIF to adjust and administer the claim to closure.

7.2 First Responder Priorities

The first responder's priorities are:

- To follow safe work practices.
- To respond promptly with the appropriate and necessary equipment.
- To contain the spill wherever feasible.
- To restore the flow as soon as practicable.
- To minimize public access to and/or contact with the spilled sewage.
- To promptly notify the Public Works Superintendent or designee in event of major SSO.
- To return the spilled sewage to the sewer system.
- To restore the area to its original condition (or as close as possible).
- To photograph and document affected and unaffected areas from a spill.

7.3 Safety

The first responder is responsible for following safety procedures at all times. Special safety precautions must be observed when performing sewer work. There may be times when City personnel responding to a sewer system event are not familiar with potential safety hazards peculiar to sewer work. In such cases it is appropriate to take the time to discuss safety issues, consider the order of work, and check safety equipment before starting the job.

7.4 Initial Response

The first responder must respond to the reporting party/problem site and visually check for potential sewer stoppages or overflows.

The first responder will:

- Note arrival time at the site of the overflow/backup.
- Verify the existence of a sewer system spill or backup.
- Identify and assess the affected area and extent of spill.
- Contact caller if time permits.

- If the spill is large or in a sensitive area, document conditions upon arrival with photographs. Decide whether to proceed with clearing the blockage to restore the flow or to initiate containment measures. The guidance for this decision is:
    - Small spills (i.e., spills that are easily contained) – proceed with clearing the blockage.
    - Moderate or large spill where containment is anticipated to be simple – proceed with the containment measures.
    - Moderate or large spills where containment is anticipated to be difficult – proceed with clearing the blockage; however, whenever deemed necessary, call for additional assistance and implement containment measures.
- Take steps to contain the SSO. For procedures refer to the Sanitary Sewer Overflow/Backup Response Workbook.

7.5 Initiate Spill Containment Measures

The first responder should attempt to contain as much of the spilled sewage as possible using the following steps:

- Determine the immediate destination of the overflowing sewage.
- Plug storm drains using air plugs, sandbags, and/or plastic mats to contain the spill, whenever appropriate. If spilled sewage has made contact with the storm drainage system, attempt to contain the spilled sewage by plugging downstream storm drainage facilities.
- Contain/direct the spilled sewage using dike/dam or sandbags.
- Pump around the blockage/pipe failure/pump station.

For procedures refer to the Sanitary Sewer Overflow/Backup Response Workbook.

7.6 Restore Flow

Using the appropriate cleaning equipment, set up downstream of the blockage and hydro-clean upstream from a clear manhole. Attempt to remove the blockage from the system and observe the flows to ensure that the blockage does not recur downstream. If the blockage cannot be cleared within a reasonable time from arrival, or sewer requires construction repairs to restore flow, then initiate containment and/or bypass pumping. If assistance is required, immediately contact other employees, contractors, and equipment suppliers.

7.7 Equipment

This section provides a list of specialized equipment that is required to support this Overflow Emergency Response Plan.
Closed Circuit Television (CCTV) Inspection Unit – A CCTV Inspection Unit is required to determine the root cause for all SSOs from gravity sewers.

- *Camera* -- A digital or disposable camera is required to record the conditions upon arrival, during clean up, and upon departure.
- *Emergency Response Trucks* -- A utility body pickup truck, or open bed is required to store and transport the equipment needed to effectively respond to sewer emergencies. The equipment and tools should include containment and clean up materials.
- *Portable Generators, Portable Pumps, Piping, and Hoses* – Equipment used to bypass pump, divert, or power equipment to mitigate an SSO.

- *Combination Sewer Cleaning Trucks* -- Combination high velocity sewer cleaning trucks with vacuum tanks are required to clear blockages in gravity sewers, vacuum spilled sewage, and wash down the impacted area following the SSO event.

Standard operating procedures are stored as follows:

- Vactor Truck: In truck
- Spill Kit: East Public Works Shop
- Bypass Pump: West Shed

7.8 Continued Response Efforts

The City shall, following the initial response and reporting required by the State Water Resources Control Board's Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (SSS WDR), continue response efforts based on the risk posed by the SSO at issue, taking into account: (1) the volume of the SSO; (2) the proximity of the SSO to high risk areas, which shall include sensitive populations, specifically public and private schools, parks, recreational areas, and surface waters, especially during the recreation season from May to September; and (3) the timing and/or seasonality of the SSO event (e,g., an SSO to surface waters during low flow, acid conditions of late summer). The City further agrees to provide training to its response crews regarding implementation of the risk assessment. The City shall augment the SSMP and OERP, as necessary, to document this practice.

8. Recovery and Cleanup

ref. SWRCB Order No. 2006-0003-DWQ D.13vi(e)

The recovery and cleanup phase begins immediately after the flow has been restored and the spilled sewage has been contained to the extent possible. The SSO recovery and cleanup procedures are:

8.1 Estimate the Flow and Volume of Spilled Sewage

To estimate the flow rate, crew members will use the SSCSC Manhole Overflow Gauge if the same style of manhole cover is observed overflowing. A variety of approaches exist for estimating the volume of a sanitary sewer spill. Crew members should use the method most appropriate to the sewer overflow in question and reference the Sanitary Sewer Overflow/Backup Response Workbook which provides four (4) methods:

- Eyeball Estimation Method
- Duration and Flow Rate Calculation Method
- Area/Volume Method
- Lower Lateral Estimation Method

Where safe and possible, the City shall take photographs of an SSO event before and during the recovery operation to help aid in establishing and justifying spill volume. Such photographs will preserve data such as the date and time for when City staff took the photograph.

8.2 Recovery of Spilled Sewage

Vacuum up and/or pump the spilled sewage and rinse water, and discharge it back into the sanitary sewer system.

8.3 Clean-up and Disinfection

Clean up and disinfection procedures will be implemented to reduce the potential for human health issues and adverse environmental impacts that are associated with an SSO event. The procedures described are for dry weather conditions and will be modified as required for wet weather conditions. Where cleanup is beyond the capabilities of City staff, a cleanup contractor will be used.

Private Property
City crews are responsible for the cleanup when the property damage is minor in nature and is outside of private building dwellings. In all other cases, affected property owners can call a water damage restoration contractor to complete the cleanup and restoration. If the overflow into property is the definite cause of City system failure, the property owner can call out a water damage restoration contractor to complete the cleanup and restoration. In both cases, City claim forms may be issued if requested by the property owners.

Hard Surface Areas
Collect all signs of sewage solids and sewage-related material either by protected hand or with the use of rakes and brooms. Wash down the affected area with clean water until the water runs clear. Take reasonable steps to contain and vacuum up the wastewater. Allow area to dry. Repeat the process if additional cleaning is required.

Landscaped and Unimproved Natural Vegetation
Collect all signs of sewage solids and sewage-related material either by protected hand or with the use of rakes and brooms. Wash down the affected area with clean water until the water runs clear. The flushing volume should be approximately three times the estimated volume of the spill. Either contain or vacuum up the wash water so that none is released. Allow the area to dry. Repeat the process if additional cleaning is required.

Natural Waterways
The Department of Fish and Wildlife will be notified by CalOES for SSOs greater than or equal to 1,000 gallons.

Wet Weather Modifications
Omit flushing and sampling during heavy storm events (i.e., sheet of rainwater across paved surfaces) with heavy runoff where flushing is not required and sampling would not provide meaningful results.

8.4 Public Notification

If necessary, signage will be posted at creeks and streams that have been contaminated as a result of an SSO and at visible access locations until the risk of exposure has subsided to water quality standards or background levels. Major spills warrant broader public notice. For such major spills, the City shall contact local media when significant areas may have been contaminated by sewage and may pose a danger to public health. The signs and other public notices will not be removed until the City has determined there is no further risk to public health and the environment.

When contact with the local media is deemed necessary by regulating agencies, the City Manager or their designee will provide the media with all revelvant information.

9. Water Quality

ref. SWRCB Order No. 2006-0003-DWQ D.13vi(f)

9.1 Waters of the State

The following Waters of the State are in the City of Sebastopol's service area. In the event that these waters are impacted by a sanitary sewer overflow, we have identified the following response measures. The indicated equipment and/or vendors will be utilized as necessary.

Water Body	Equipment	Vendors
Russian River		Rain for Rent Pac Machine
Calder Creek	Bypass Pump Spill Kit	
Zimpher Creek	Bypass Pump Spill Kit	

9.2 Water Quality Sampling and Testing

Water quality sampling and testing will be performed for Category 1 SSOs whenever there is a major spill to determine the extent and impact of the SSO. The water quality sampling procedures must be implemented within 48 hours and include the following:

- The first responders will collect samples as soon as possible after the discovery and mitigation of the SSO event.
- The water quality samples will be collected from upstream of the spill, from the spill area, and downstream of the spill in flowing water (e.g. creeks). The water quality samples will be collected near the point of entry of the spilled sewage.
- The samples shall then be brought to the City of Santa Rosa Treatment Plant.

The City will conduct sampling based on the risk assessment set forth in Section 7.8. Where sampling is performed, the City will sample surface waters, where feasible, upstream from the SSO, at the point of entry, and downstream from the SSO, and test for ammonia, fecal coliform, and E, coli.

Water quality sampling results shall be reported in an appropriate category on the California Integrated Water Quality System (CIWQS) reporting form or as required by the State Water Resources Control Board. Feasibility for obtaining a sample will depend on whether sufficient flow exists to collect a representative, uncontaminated sample, and whether dangerous conditions exist that would preclude City staff from safely obtaining a sample (i.e., City staff will not be placed at risk for injury in severe weather or other dangerous condition).

9.3 Water Quality Monitoring Plan

The City Water Quality Monitoring Plan will be implemented immediately upon discovery of any Category 1 SSO whenever there is a major spill in order to assess impacts from SSOs to surface waters. The SSO Water Quality Monitoring Program will:

1. Contain protocols for water quality monitoring.

2. Account for spill travel time in the surface water and scenarios where monitoring may not be possible (e.g. safety, legal right to access, etc.)

3. Require water quality analyses for ammonia, biochemical oxygen demand, dissolved oxygen, and bacterial indicators to be performed by an accredited or certified laboratory.

4. Require monitoring instruments and devices used to implement the SSO Water Quality Monitoring Program to be properly maintained and calibrated, including any records to document maintenance and calibration, as necessary, to ensure their continued accuracy.

5. Within 48 hours of the City becoming aware of the SSO, require water quality sampling for fecal coliform, E. Coli, biochemical oxygen demand (BOD), and ammonia.

6. Observe proper chain of custody procedures.

7. If the City's current standard operating procedures (SOP's) cannot fully mitigate an SSO and if it is determined that the SSO may pose an imminent and substantial endangerment to public health or the environment, the City shall consult a qualified biologist, health care specialist or equivalent professional to assist.

9.4 SSO Technical Report

The City Public works Superintendent and/or Assistant Public Works Superintendent will submit an SSO Technical Report in the CIWQS Online SSO Database within 45 calendar days of the SSO end date for any SSO in which 50,000 gallons or greater are spilled to surface waters. This report, which does not preclude the Water Boards from requiring more detailed analyses if requested, shall include at a minimum, the following:

<u>Causes and Circumstances of the SSO:</u>

- Complete and detailed explanation of how and when the SSO was discovered.
- Diagram showing the SSO failure point, appearance point(s), and final destination(s).
- Detailed description of the methodology employed and available data used to calculate the volume of the SSO and, if applicable, the SSO volume recovered.
- Detailed description of the cause(s) of the SSO.
- Copies of original field crew records used to document the SSO.
- Historical maintenance records for the failure location.

<u>City's Response to SSO:</u>

- Chronological narrative description of all actions taken by the City to terminate the spill.
- Explanation of how the SSMP Overflow Emergency Response Plan was implemented to respond to and mitigate the SSO.
- Final corrective action(s) completed and/or planned to be completed, including a schedule for actions not yet completed.

Water Quality Monitoring:

- Description of all water quality sampling activities conducted including analytical results and evaluation of the results.
- Detailed location map illustrating all water quality sampling points.

10. Sewer Backup Into/Onto Private Property Claims Handling Policy

It is the policy of the City that a claims form shall be offered to anyone wishing to file a claim. The following procedures will be observed for all sewer overflows/backups into/onto private property:

- City staff will offer a City claim form irrespective of fault whenever it is possible that the sanitary sewer backup may have resulted from an apparent blockage in the City-owned sewer lines or whenever a City customer requests a claim form. The claim may later be rejected if subsequent investigations into the cause of the loss indicate the City was not at fault.

- It is the responsibility of the Maintenance Workers to gather information regarding the incident and notify the Public Works Superintendent or his/her designee.

- It is the responsibility of the City Clerk to review all claims and to oversee the adjustment and administration of the claim to closure.

11. Notification, Reporting, Monitoring and Recordkeeping Requirements

ref. SWRCB Order No. 2006-0003-DWQ D.13vi(c)

In accordance with the Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (SSS GWDRs), the City of Sebastopol maintains records for each sanitary sewer overflow. Records include:

- Documentation of response steps and/or remedial actions
- Photographic evidence to document the extent of the SSO, field crew response operations, and site conditions after field crew SSO response operations have been completed. The date, time, location, and direction of photographs taken will be documented.
- Documentation of how any estimations of the volume of discharged and/or recovered volumes were calculated including all assumptions made.

Regulator required notifications are outlined in Section 11.1 on the following page.

11.1 Regulator Required Notifications

ELEMENT	REQUIREMENT	METHOD
NOTIFICATION	Within two hours of becoming aware of any Category 1 SSO 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, the City will notify the California Office of Emergency Services (CalOES) and obtain a notification control number.	Call Cal OES at: **(800) 852-7550**
REPORTING	• Category 1 SSO: The City will submit draft report within three business days of becoming aware of the SSO and certify within 15 calendar days of SSO end date. • Category 2 SSO: The City will submit draft report within 3 business days of becoming aware of the SSO and certify within 15 calendar days of the SSO end date. • Category 3 SSO: The City will submit certified report within 30 calendar days of the end of month in which SSO the occurred. • SSO Technical Report: The City will submit within 45 calendar days after the end date of any Category 1 SSO in which 50,000 gallons or greater are spilled to surface waters. • "No Spill" Certification: The City will certify that no SSOs occurred within 30 calendar days of the end of the month or, if reporting quarterly, the quarter in which no SSOs occurred. • Collection System Questionnaire: The City will update and certify every 12 months	Enter data into the CIWQS Online SSO Database[1] (http://ciwqs.waterboards.ca.gov/) certified by the Legally Responsible Official(s)[2]. All information required by CIWQS will be captured in the Sanitary Sewer Overflow Report. Certified SSO reports may be updated by amending the report or adding an attachment to the SSO report within 120 calendar days after the SSO end date. After 120 days, the State SSO Program Manager must be contacted to request to amend an SSO report along with a justification for why the additional information was not available prior to the end of the 120 days.
WATER QUALITY MONITORING	The City will conduct water quality sampling within 48 hours after initial SSO notification for Category 1 SSOs in which 50,000 gallons or greater are spilled to surface waters.	Water quality results will be uploaded into CIWQS for Category 1 SSOs in which 50,000 gallons or greater are spilled to surface waters.
RECORD KEEPING	The City will maintain the following records: • SSO event records. • Records documenting Sanitary Sewer Management Plan (SSMP) implementation and changes/updates to the SSMP. • Records to document Water Quality Monitoring for SSOs of 50,000 gallons or greater spilled to surface waters. • Collection system telemetry records if relied upon to document and/or estimate SSO Volume.	Self-maintained records shall be available during inspections or upon request.

[1] In the event that the CIWQS online SSO database is not available, the Public Works Superintendent or designee will notify SWRCB by phone in accordance with the time schedules identified above. In such an event, the City will submit the appropriate reports using the CIWQS online SSO database when the database becomes available. A copy of all documents that certify the submittal in fulfillment of this section shall be retained in the SSO file.

[2] The City always has at least one LRO. Any change in the LRO(s) including deactivation or a change to contact information, will be submitted to the SWRCB within 30 days of the change by calling (866) 792-4977 or emailing help@ciwqs.waterboards.ca.gov.

For reporting purposes, if one SSO event of whatever category results in multiple appearance points in a sewer system, a single SSO report is required in CIWQS that includes the GPS coordinates for the location of the SSO appearance point closest to the failure point, blockage or location of the flow condition that cause the SSO, and descriptions of the locations of all other discharge points associated with the single SSO event.

11.2 Complaint Records

The City maintains records of all complaints received whether or not they result in sanitary sewer overflows. These complaint records include:

- Date, time, and method of notification
- Date and time the complainant or informant first noticed the SSO or occurrence related to the call
- Narrative description describing the complaint
- A statement from the complainant or informant, if they know, of whether or not the potential SSO may have reached waters of the state
- Name, address, and contact telephone number of the complainant or informant reporting the potential SSO (if not reported anonymously)
- Follow-up return contact information for each complaint received (if not reported anonymously)
- Final resolution of the complaint with the original complainant
- Work service request information used to document all feasible and remedial actions taken

The City Water/Sewer/Storm Drain form is used to record all complaints whether or not they result in an SSO. This form is completed and maintained by the Public Works Superintendent or Assistant Public Works Superintendent.

Records will be maintained for a minimum of five years.

12. Post SSO Event Debriefing

ref. SWRCB Order No. 2006-0003-DWQ D.13vi(d)

Every SSO event is an opportunity to evaluate the City response and reporting procedures. Each overflow event is unique, with its own elements and challenges including volume, cause, location, terrain, climate, and other parameters.

As soon as possible after Category 1 and Category 2 SSO events, all of the participants, from the person who received the call to the last person to leave the site, will meet to review the procedures used and to discuss what worked and where improvements could be made in preventing or responding to and mitigating future SSO events. The results of the debriefing will be documented and tracked to ensure the action items are completed as scheduled.

13. Failure Analysis Investigation

ref. SWRCB Order No. 2006-0003-DWQ D.13vi(d)

The objective of the failure analysis investigation is to determine the "root cause" of the SSO and to identify corrective action(s) needed that will reduce or eliminate future potential for the SSO to recur or for other SSOs to occur.

The investigation will include reviewing all relevant data to determine appropriate corrective action(s) for the line segment. The investigation will include:

- Reviewing and completing the Sanitary Sewer Overflow Report (in Appendix B and in Appendix C) and any other documents related to the incident
- Reviewing the incident timeline and other documentation regarding the incident
- Reviewing communications with the reporting party and witness
- Reviewing volume estimate, volume recovered estimate, volume estimation assumptions and associated drawings
- Reviewing available photographs
- Interviewing staff that responded to the spill
- Reviewing past maintenance records
- Reviewing past CCTV records,
- Conducting a CCTV inspection to determine the condition of all line segments immediately following the SSO and reviewing the video and logs,
- Reviewing any Fats, Oils, Roots and Grease (FROG) related information or results
- Post SSO debrief records
- Interviews with the public at the SSO location

The product of the failure analysis investigation will be the determination of the root cause and the identification and scheduling of the corrective actions. The Collection System Failure Analysis Form (in Sanitary Sewer Overflow/Backup Response Workbook) will be used to document the investigation.

14. SSO Response Training

ref. SWRCB Order No. 2006-0003-DWQ D.13vi(d)

This section provides information on the training that is required to support this Overflow Emergency Response Plan.

14.1 Initial and Annual Refresher Training

All City personnel who may have a role in responding to, reporting, and/or mitigating a sewer system overflow will receive training on the contents of this OERP. All new employees will receive training before they are placed in a position where they may have to respond. Current employees will receive annual refresher training on this plan and the procedures to be followed. The City will document all training.

Affected employees will receive annual training on the following topics by knowledgeable trainers:

- The City's Overflow Emergency Response Plan and Sanitary Sewer Management Plan
- Sanitary Sewer Overflow Volume Estimation Techniques
- Researching and documenting Sanitary Sewer Overflow Start Times
- Impacted Surface Waters: Response Procedures
- State Water Resources Control Board Employee Knowledge Expectations

- Employee Core Competency Evaluations on Sanitary Sewer Operations
- Water Quality Sampling Plan

The City will verify that annual safety training requirements are current for each employee, and that employees are competent in the performance of all core competencies. This will be verified through electronic testing, interviews and observations. The City will address, through additional training/instruction, any identified gaps in required core competencies.

Through SWRCB Employee Knowledge Expectations training the employee will be able to answer the following:

1. Please briefly describe your name and job title.
2. Please describe for us approximately when you started in this field and how long you have worked for your agency.
3. Please expand on your current position duties and role in responding in the field to any SSO complaints.
4. Please describe your SOPs used to respond/mitigate SSOs when they occur.
5. Describe any training your agency provides or sends you to for conducting spill volume estimates.
6. We are interested in learning more about how your historical SSO response activities have worked in the field. We understand from discussions with management earlier that you use the OERP from the SSMP. Please elaborate on how you implement and utilize the procedures in the plan.
7. Historically, before any recent changes, can you please walk us through how you would typically receive and respond to any SSO complaints in the field?
8. Can you tell us who is responsible for estimating SSO volumes discharged? If it is you, please describe how you go about estimating the SSO volume that you record on the work order/service request forms?
9. What other information do you collect or record other than what is written on the work order form?
10. Describe if and when you ever talk with people that call in SSOs (either onsite or via telephone) to further check out when the SSO might have occurred based on what they or others know? If you do this, can you tell us where this information is recorded?
11. We understand you may be instructed to take pictures of some sewer spills/backups into structures. Other than these SSOs, when else would you typically take any pictures of an SSO?
12. Please walk us through anything else you'd like to add to help us better understand how your field crews respond and mitigate SSO complaints.

14.2 SSO Response Drills

Periodic training drills or field exercises will be held to ensure that employees are up to date on these procedures, equipment is in working order, and the required materials are readily available. The training drills will cover scenarios typically observed during sewer related emergencies (e.g. mainline blockage, mainline failure, and lateral blockage). The results and the observations during the drills will be recorded and action items will be tracked to ensure completion.

14.3 SSO Training Record Keeping

Records will be kept of all training that is provided in support of this plan. The records for all scheduled training courses and for each overflow emergency response training event will include date, time, place, content, name of trainer(s), and names and titles of attendees.

14.4 Contractors Working On City Sewer Facilities

All construction contractors working on City sewer facilities will be required to develop a project-specific OERP, will provide project personnel with training regarding the content of the contractor's OERP and their role in the event of an SSO, and to follow that OERP in the event that they cause or observe an SSO. Emergency response procedures shall be discussed at project pre-construction meetings, regular project meetings and after any contractor involved incidents.

All service contractors will be provided, and required to observe contractor procedures.

15. Authority

- Health & Safety Code Sections 5410-5416
- CA Water Code Section 13271
- Fish & Wildlife Code Sections 5650-5656
- State Water Resources Control Board Order No. 2006-0003-DWQ
- State Water Resources Control Board Order No. WQ 2013-0058-EXEC effective September 9, 2013

16. Appendices

- Appendix A: Customer Service Request Form
- Appendix B: Bubbled Toilets Letter
- Appendix C: Sewer Spill Reference Guide Pamphlet
- Appendix D: Door Hanger
- Appendix E: Warning Sign
- Appendix F: Contractor Orientation
- Appendix G: Smartcovers
- Appendix H: Sanitary Sewer Overflow/Backup Response Workbook

APPENDIX A:
Customer Service Request Form

City of Sebastopol, CA

CUSTOMER SERVICE REQUEST FORM

TYPE OF SYSTEM BEING REPORTED:	☐ Sewer ☐ Storm ☐ Water

EMERGENCY RESPONSE NEEDED: ☐ YES ☐ Residential ☐ Commercial ☐ Industrial

Date: _____ Time: _____ Call taken by: _____

Reporting Party: _____ Phone(s): _____

☐ Check box if party has requested to remain anonymous.

Address: _____ Cross Street: _____

Problem: _____

_____

_____

At what date and time did you first notice the problem? _____

Staff person(s) notified: _____ Time called: _____

FIELD REPORT

☐ MAINLINE ☐ LATERAL: ☐ City/ ☐ Customer ☐ CATCH BASIN ☐ OTHER(S)

Was there sewage overflow? ☐ Yes ☐ No If yes, refer to SSO & Backup Response Plan.

	Yes	No		Yes	No
Proper Curbside Cleanout?	☐	☐	TV's / Rodded Lateral	☐	☐
Recommended Cleanout/Doorhanger	☐	☐	Sewer repair needed?	☐	☐
Jetted Mainline / Lateral	☐	☐			

Amount Done: Jetted: _____ft TV'd/Rodded: _____ Catch Basin: _____yd

	Please Print Name	Vehicle(s)	Time Arrived:	Time Completed:	Hours:
	_____	_____	_____	_____	_____
Person(s)	_____	_____	_____	_____	_____
Doing work:	_____	_____	_____	_____	_____

ACTION TAKEN: _____

_____

_____

_____

APPENDIX B:
Bubbled Toilets Letter

Bubbled Toilets Letter

Dear City of Sebastopol Customer,

Thank you for informing us that your toilet bubbled while our crews were working in proximity of your property. We apologize for the inconvenience and hope that this letter will answer some of your questions about bubbling toilets.

1. **Is this a health risk?**
   The water that came out of your toilet is potable water from the toilet bowl. Unless your toilet was in use when this occurred, this water is no different than that encountered while cleaning your toilet.

2. **What is the City doing in the street?**
   In order to insure reliable sewer service, the City inspects, cleans, and repairs its sewer system on a continuous basis.

3. **How does sewer cleaning cause my toilet to bubble?**
   Typical industry cleaning equipment uses high-pressure water to clean sewers. The first step is to use the high-pressure water jets to propel the hose and cleaning nozzle upstream as far as 800 feet. During this process, air within the main pipe is displaced and sometimes goes up the private lateral pipe and releases though the toilet. This can also happen during the cleaning phase, when high-pressure water is pulled downstream to the cleaning truck.

4. **What causes the air to come from my toilet?**
   Over the years, City crews have found that the bubbling of toilets have many causes, some of which are:
   - Obstructed vent pipes;
   - Vent pipes that are positioned too far from the toilet;
   - Lateral pipes that may be in use as the crew is cleaning (e.g. draining washing machine, draining bathtub, etc.);
   - Lateral pipes that may have obstructions that are causing them to hold water (e.g. roots, grease, etc.).

5. **What does City staff do, once informed of a bubbling toilet?**
   Once notified of a bubbling toilet, the crew leader explains to the customer what has happened, and checks to see if there is a clean-out in the customer's yard that could be opened in the future during cleaning. The crew leader then makes notes and completes paperwork that puts the address on the City's computerized notification list. In the future, crews will notice that this address was "bubbled" at one time, and, before commencing the cleaning, they will notify the occupant of the possibility of bubbling toilets. In the event the occupant is not present when the cleaning begins, the crews will attempt to open clean-outs and/or lower water pressure to avoid bubbling.

6. **What can I do to prevent my toilet from bubbling?**
   When a sewer begins to drain slowly, it may be a sign that it needs to be cleaned or repaired. Trees and shrubs may have root structures that are entering the lateral pipe. The homeowner needs to make sure to have a clean-out for accessing the line. It is the homeowner's responsibility to keep the sewer lateral pipe in good working condition.

It is always a good idea to keep the toilet lid down when not in use, and not install carpets in the bathroom unless they can be easily removed and cleaned. For more information please call the City Public Works Department at (707) 823-5331.

Sincerely,

City of Sebastopol

Carta de Inodoros Burbujeados

Estimado Cliente de la Ciudad de Sebastopol:

Gracias por habernos informado que su lavabo burbujeó mientras que nuestros empleados estaban trabajando en proximidad a su propiedad. Le pedimos perdón por la inconveniencia y esperamos que esta carta le contestará algunas de sus preguntas acerca de inodoros burbujeantes.

1. **¿Es riesgo de salud esto?**
   El agua que salió de su inodoro es agua potable de la taza del inodoro. Menos que su inodoro estaba en uso cuando esto ocurrió, esa agua no es diferente de aquella encontrada mientras que limpia su inodoro.
2. **¿Qué está haciendo la Ciudad en la calle?**
   Para asegurar servicio de alcantarilla confiable, la Ciudad inspecciona, limpia, and repara su Sistema de alcantarillado en una forma continua.
3. **¿Cómo causa la limpieza de la alcantarilla que burbujee mi inodoro?**
   El equipamiento industrial de limpieza típico usa agua de alta presión para limpiar alcantarillas. La primer medida es de usar chorros de agua de alta presión para propulsar a la manguera y a la boquilla de limpieza contracorriente tan lejos como ochocientos (800) pies. Durante este proceso, el aire dentro la tubería principal es desplazada y a veces camina para arriba de la tubería lateral privada y se libera por el inodoro. Esto también puede ocurrir durante la fase de limpieza, cuando agua de alta presión es jalada corriente abajo al camión de limpieza.
4. **¿Qué causa al aire que venga de mi inodoro?**
   A lo largo de los años, los empleados de la Ciudad han encontrado que el burbujeo de inodoros tiene muchas causas, algunas de cuales son:
   - Tubería de ventilación obstruida;
   - Tubería de ventilación que está posicionada muy lejos del inodoro;
   - Tubería lateral que pueda estar en uso mientras que los empleados estén limpiando (por ej., vaciando la máquina de lavar, vaciando el baño, etcétera);
   - Tubería lateral que podrá tener obstrucciones que están causándola a contener agua (por ej., raíces, grasa, etcétera).
5. **¿Qué hace el personal de la Ciudad, una vez informados de un inodoro burbujeante?**
   Una vez notificado de un inodoro burbujeante, el líder de nuestros empleados le explica al cliente lo que ha ocurrido, y hace un chequeo para ver si hay una limpieza general en el patio del cliente que se pudiera abrir en el futuro durante la limpieza. El líder de personal luego toma apuntes y completa papeleo que pone a la dirección en la lista de notificación computarizada de la Ciudad. En el futuro, los empleados tomarán nota que hubo un tiempo en que esta dirección fue «burbujeada», y, antes de empezar la limpieza, ellos le avisarán al ocupante de la posibilidad de inodoros burbujeantes. En el evento que el ocupante no esté presente cuando la limpieza empiece, los empleados tratarán de abrir las limpiezas generales y/o rebajar la presión del agua para impedir la ocurrencia de burbujeo.
6. **¿Qué puede hacer para impedir a mi inodoro de burbujeando?**
   Cuando una alcantarilla empieza a desaguar lentamente, puede que sea un indicio que se necesita limpiar o reparar. Puede que los árboles y arbustos tengan estructuras de raíces que estén entrando a la tubería lateral. El dueño/la dueña de casa necesita asegurar de tener una limpieza general para acceder la línea. Es la responsabilidad del dueño/la dueña de mantener la tubería de alcantarilla lateral en buena condición operativa.

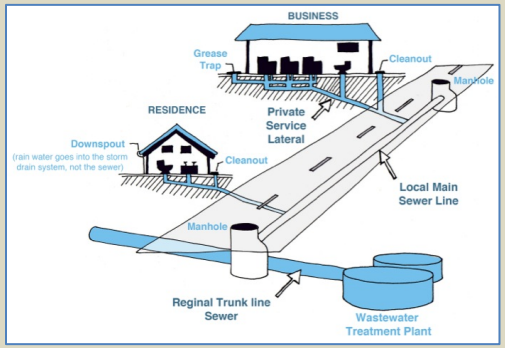
Siempre es buena idea de mantener la tapa del inodoro bajada cuando no esté el inodoro en uso, y no instalar alfombra en el cuarto de baño menos que esa se pueda quitar y limpiar. Para más información, por favor llame el Departamento de Obras Públicas de la Ciudad al (707) 823-5331.

Atentamente,
La Ciudad de Sebastopol

APPENDIX C:
Sewer Spill Reference Guide Pamphlet

How a Sewer System Works

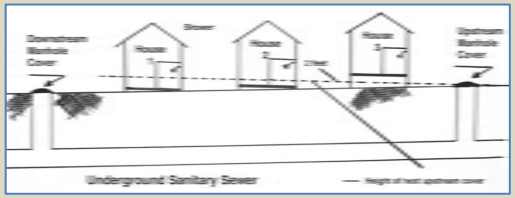
A property owner's sewer pipes are called ***service laterals*** and are connected to larger local main and regional trunk lines.
Service laterals run from the connection at the home to the connection with the public sewer. These laterals are the responsibility of the property owner and must be maintained by the property owner.



Is my home required to have a backflow prevention device?

Section 710.1 of the Uniform Plumbing Code (U.P.C.) states: *"Drainage piping serving fixtures which have flood level rims located below the elevation of the next upstream manhole cover or private sewer serving such drainage piping **shall** be protected from backflow of sewage by installing an approved type of backwater valve."* The intent of Section 710.1 is to protect the building interior from mainline sewer overflows or surcharges.

Additionally, U.P.C. 710.6 states: *"Backwater valves **shall** be located where they will be accessible for inspection and repair at all times and, unless continuously exposed, shall be enclosed in a masonry pit fitted with an adequately sized removable cover."*



If you have a sewage spill from your private sewer line that impacts storm drains, waterways or public property, contact:

City of Sebastopol (707) 823-5331

Discharge of untreated or partially treated sewage is prohibited by law. If you would like more information on this prohibition, please contact any of the following:

Sonoma County Department of Health Services Environmental Health and Safety Programs (707) 565-6565
California Health and Safety Code, Sections 5410-5416 requires:

- No person shall discharge raw or treated sewage or other waste in a manner that results in contamination, pollution, or a nuisance.
- Any person who causes or permits a sewage discharge to any state waters:
  - Must immediately notify the local health agency of the discharge.
  - Shall reimburse the local health agency for services that protect the public's health and safety.
  - Who fails to provide the required notice to the local health agency is guilty of a misdemeanor and shall be punished by a fine (between $500–$1,000) and/or imprisonment for less than one year.

North Coast Regional Water Quality Control Board:
(707) 576-2220
Requires the prevention, mitigation, response to, and reporting of sewage spills.

California Governor's Office of Emergency Services (CalOES): (800) 852-7550
California Water Code, Article 4, Chapter 4, Sections 13268-13271 & California Code of Regulations, Title 23, Division 3, Chapter 9.2, Article 2, Sections 2250-2260 require:

- Any person who causes or permits sewage in excess of 1,000 gallons to be discharged to state waters shall immediately notify the Office of Emergency Services.
- Any person who fails to provide the notice required by this section is guilty of a misdemeanor and shall be punished by a fine (less than $20,000) and/or imprisonment for not more than one year.

Sewer Spill Reference Guide

Your Responsibilities as a Private Property Owner

Provided to you by:

City of Sebastopol
Public Works Department
714 Johnson Street
Sebastopol, CA 95472
(707) 823-5331

How do sewage spills happen?

Sewage spills occur when the wastewater in underground pipes overflows through a manhole, cleanout, or broken pipe. Most spills are relatively small and can be stopped and cleaned up quickly, but left unattended they can cause health hazards, damage to homes and businesses, and threaten the environment, local waterways, and beaches.

CAUTION!

When trying to locate a sewer problem, never open manholes or other public sewer structures. Only our crews are allowed to open & inspect these structures.

Call for assistance: (530) 832-4216

Common causes of sewage spills

- Grease build-up
- Tree roots
- Broken/cracked pipes
- Missing or broken cleanout caps
- Undersized sewers
- Groundwater/rainwater entering the sewer system through pipe defects and illegal connections

Prevent most sewage backups with a Backflow Prevention Device

This type of device can help prevent sewage backups into homes and businesses. If you don't already have a Backflow Prevention Device, contact a professional plumber or contractor to install one as soon as possible.

Protect the environment!

If you let sewage from your property discharge to a gutter or storm drain, you may be subject to penalties and/or out-of-pocket costs for clean-up and enforcement efforts. A property owner may be charged for costs incurred by agencies responding to spills from private properties.

What to look for:

Sewage spills can be a very noticeable gushing of water from a manhole or a slow water leak that may take time to be noticed. Don't dismiss unaccounted-for wet areas. Look for:

- Drain backups inside the building.
- Wet ground and/or water leaking around manhole lids onto your street.
- Leaking water from cleanouts or outside drains
- Unusual odorous wet areas: sidewalks, external walls, ground/landscape around a building.

The following are indicators of a possible obstruction in your sewer line:

- Water comes up in floor drains, showers or toilets.
- Toilets, showers or floor drains below ground level drain very slowly.

What to do if there is a spill:

Immediately notify the City of Sebastopol. Our crews locate the blockage and determine if it is in the public sewer; if it is the crew removes the blockage and arranges for cleanup. If the backup is in your private internal plumbing or in the private service laterals, you are required to immediately:

- Control and minimize the spill by shutting off or not using the water
- Keep sewage out of the storm drain system using sandbags, dirt and/or plastic sheeting
- Call a plumbing professional to clear blockages and make repairs as needed. Look in the yellow pages under "Plumbing Drain & Sewer Cleaning" or "Sewer Contractors."
- Always notify your sewer/public works department or public sewer district of sewage spills.

Spill cleanup inside the home:

For large clean ups, a professional cleaning firm should be contacted to clean up impacted areas. If you hire a contractor, it is recommended to get estimates from more than one company. Sometimes, homeowner's insurance will pay for the necessary cleaning due to sewer backups. Not all policies have this coverage, so check with your agent.

If you decide to clean up a small spill inside your home, protect yourself from contamination by observing the following safety measures. Those persons whose resistance to infection is compromised should not attempt this type of clean up.

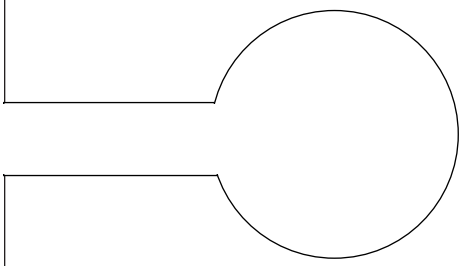
Other Tips:

- Keep children and pets out of the affected area until cleanup has been completed.
- Turn off heating/air conditioning systems
- Wear rubber boots, rubber gloves, and goggles during cleanup of the affected area.
- Discard items that cannot be washed and disinfected (such as: mattresses, rugs, cosmetics, baby toys, etc.)
- Remove and discard drywall and insulation that has been contaminated with sewage or flood waters.
- Thoroughly clean all hard surfaces (such as flooring, concrete, molding, wood and metal furniture, countertops, appliances, sinks and other plumbing fixtures) with hot water and laundry or dish detergent.
- Help the drying process with fans, air conditioning units, and dehumidifiers.
- After completing cleanup, wash your hands with soap and water. Use water that has been boiled for 1 minute (allow the water to cool before washing your hands) OR use water that has been disinfected (solution of 1/8 teaspoon of household bleach per 1 gallon of water). Let it stand for 30 min. If water is cloudy, use ¼ teaspoon of household bleach per 1 gallon of water.
- Wash clothes worn during cleanup in hot water and detergent (wash apart from uncontaminated clothes).
- Wash clothes contaminated with sewage in hot water and detergent. Consider using a Laundromat until your onsite wastewater system has been professionally inspected and serviced.
- Seek immediate attention if you become injured or ill.

Spill cleanup outside the home:

- Keep children and pets out of the affected area until cleanup has been completed.
- Wear rubber boots, rubber gloves, and goggles during cleanup of affected area.
- Clean up sewage solids (fecal material) and place in properly functioning toilet or double bag and place in garbage container.
- On hard surfaces areas such as asphalt or concrete, it is safe to use a 2% bleach solution, or ½ cup of bleach to 5 gallons of water, but don't allow it to reach a storm drain as the bleach can harm the environment.
- After cleanup, wash hands with soap and water. Use water that has been boiled for 1 minute (allow to cool before washing your hands) OR use water that has been disinfected (solution of 1/8 teaspoon of household bleach per 1 gallon of water). Let it stand for 30 min. If water is cloudy, use ¼ teaspoon of household bleach per 1 gallon of water.
- Wash clothes worn during cleanup in hot water and detergent (wash apart from uncontaminated clothes).
- Wash clothes contaminated with sewage in hot water and detergent. Consider using a Laundromat until your onsite wastewater system has been professionally inspected and serviced.
- Seek immediate attention if you become injured/ill.

APPENDIX D:
Door Hanger



On (date) _____, at

(location) _____,
we responded to a reported blockage of the sanitary sewer service to your property.

We discovered a blockage in:

- ☐ The sanitary sewer main and cleared the line
- ☐ The City-maintained portion of your sanitary sewer lateral and cleared the line.
- ☐ Your portion of the sanitary sewer lateral, which is your responsibility to maintain. We also found the City's portion of the lateral and the main to be flowing normally.

If you require assistance to clear your portion of the lateral you can search the internet for "Sewer Contractors" or "Plumbing Drains & Sewer Cleaning." If you plan to hire a contractor we recommend getting estimates from more than one company.

City of Sebastopol representative notes:

_____

_____

_____

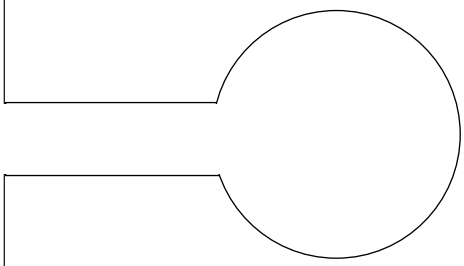
City of Sebastopol Representative:

_____

For questions or comments, please call:

City of Sebastopol
Public Works Department

Business Hours
(707) 823-5331
After hours
(707) 829-4400



On (date) _____, at

(location) _____,
we responded to a reported blockage of the sanitary sewer service to your property.

We discovered a blockage in:

- ☐ The sanitary sewer main and cleared the line
- ☐ The City-maintained portion of your sanitary sewer lateral and cleared the line.
- ☐ Your portion of the sanitary sewer lateral, which is your responsibility to maintain. We also found the City's portion of the lateral and the main to be flowing normally.

If you require assistance to clear your portion of the lateral you can search the internet for "Sewer Contractors" or "Plumbing Drains & Sewer Cleaning." If you plan to hire a contractor we recommend getting estimates from more than one company.

City of Sebastopol representative notes:

_____

_____

_____

City of Sebastopol Representative:

_____

For questions or comments, please call:

City of Sebastopol
Public Works Department

Business Hours
(707) 823-5331
After hours
(707) 829-4400

APPENDIX E:
Warning Sign

Overflow Emergency Response Plan
Public Posting

DANGER

RAW SEWAGE • AVOID CONTACT

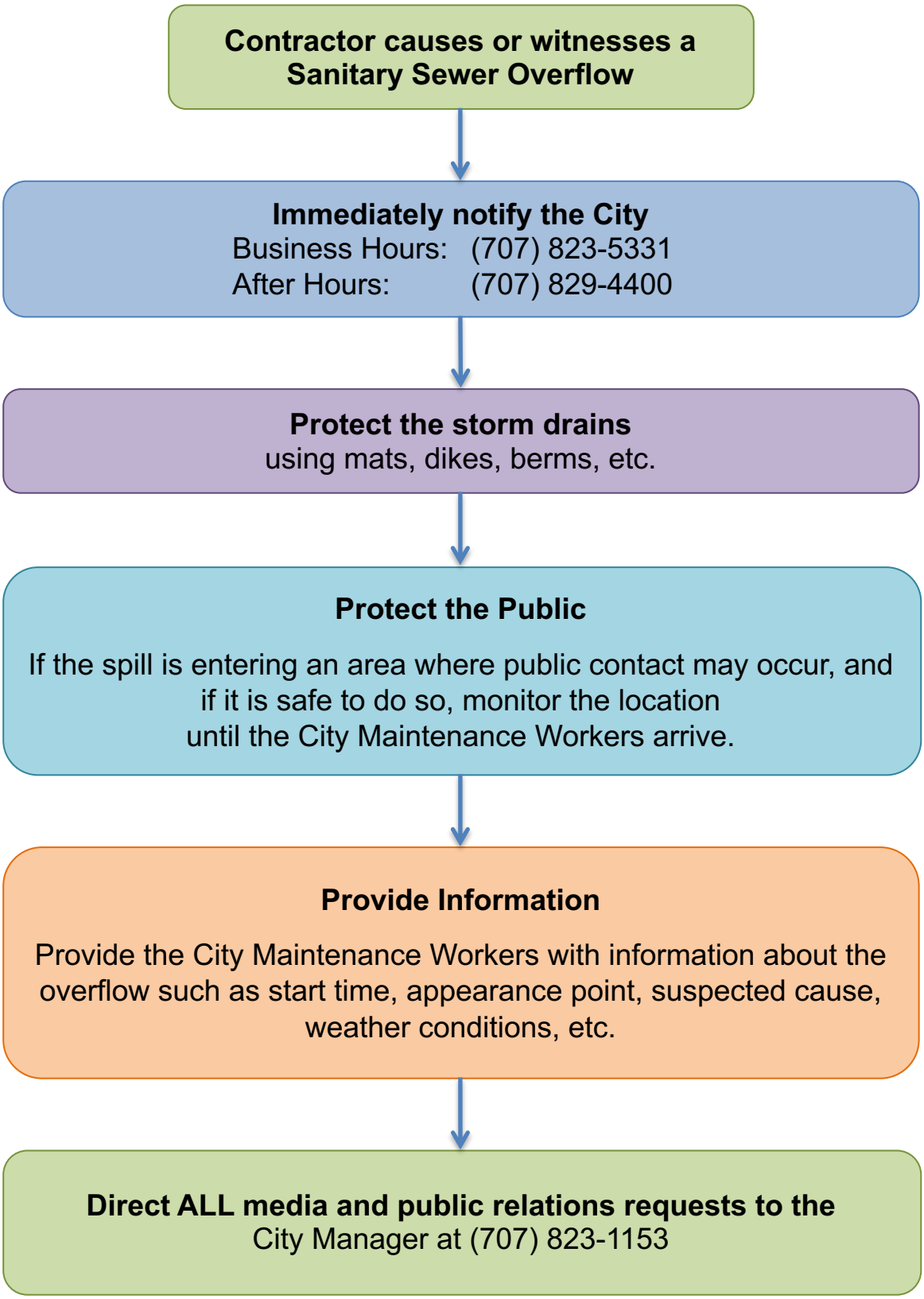
PELIGRO

AGUA CONTAMINADA • EVITE TODO CONTACTO

City of Sebastopol

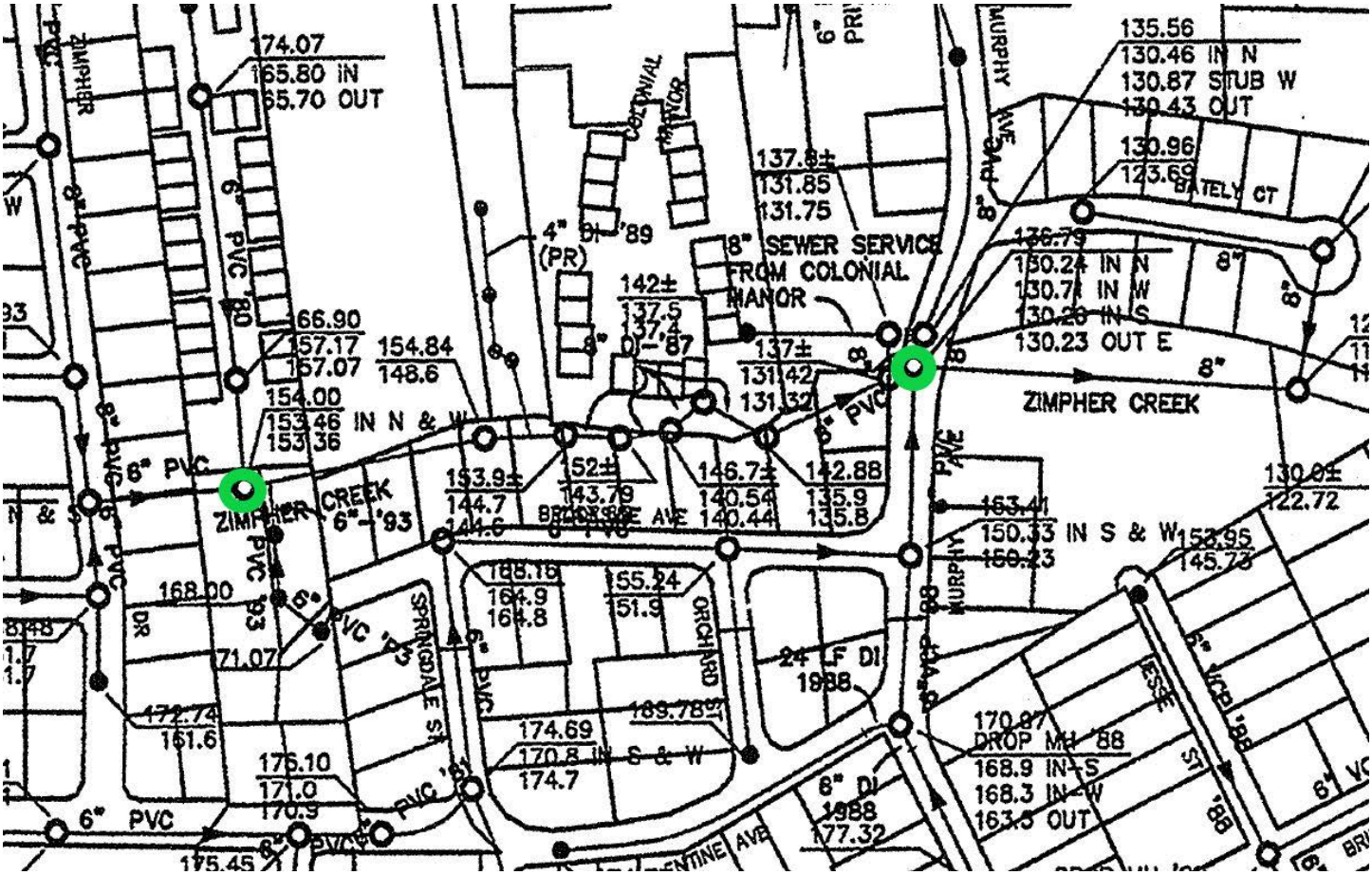
(707) 823-5331

APPENDIX F:
Contractor Orientation

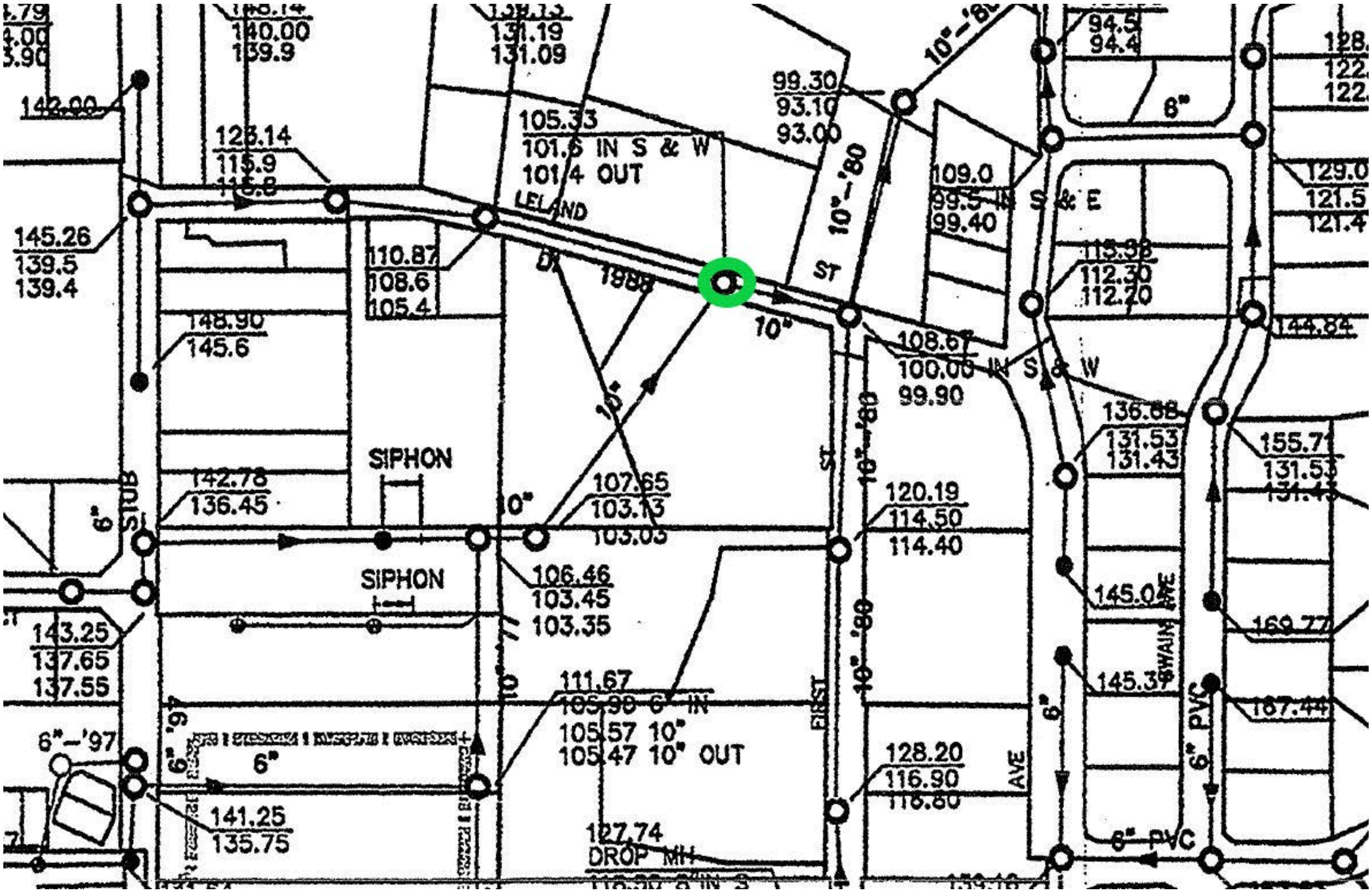

Contractor causes or witnesses a Sanitary Sewer Overflow
Immediately notify the City
Business Hours: (707) 823-5331
After Hours: (707) 829-4400
Protect the storm drains
using mats, dikes, berms, etc.
Protect the Public
If the spill is entering an area where public contact may occur, and if it is safe to do so, monitor the location until the City Maintenance Workers arrive.
Provide Information
Provide the City Maintenance Workers with information about the overflow such as start time, appearance point, suspected cause, weather conditions, etc.
Direct ALL media and public relations requests to the City Manager at (707) 823-1153

APPENDIX G:
Smartcovers

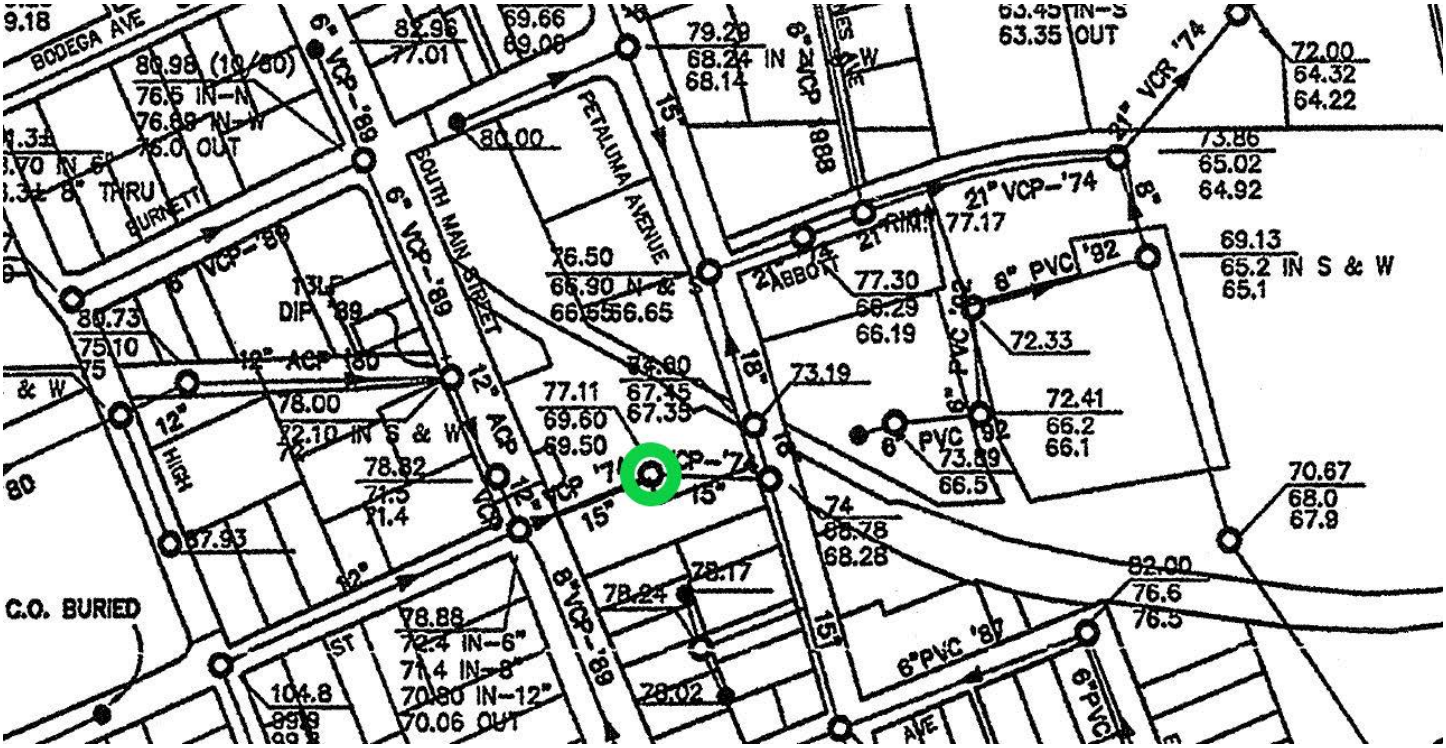
Smartcover Locations 1 and 2:
Zimpher Creek Upstream and Downstream



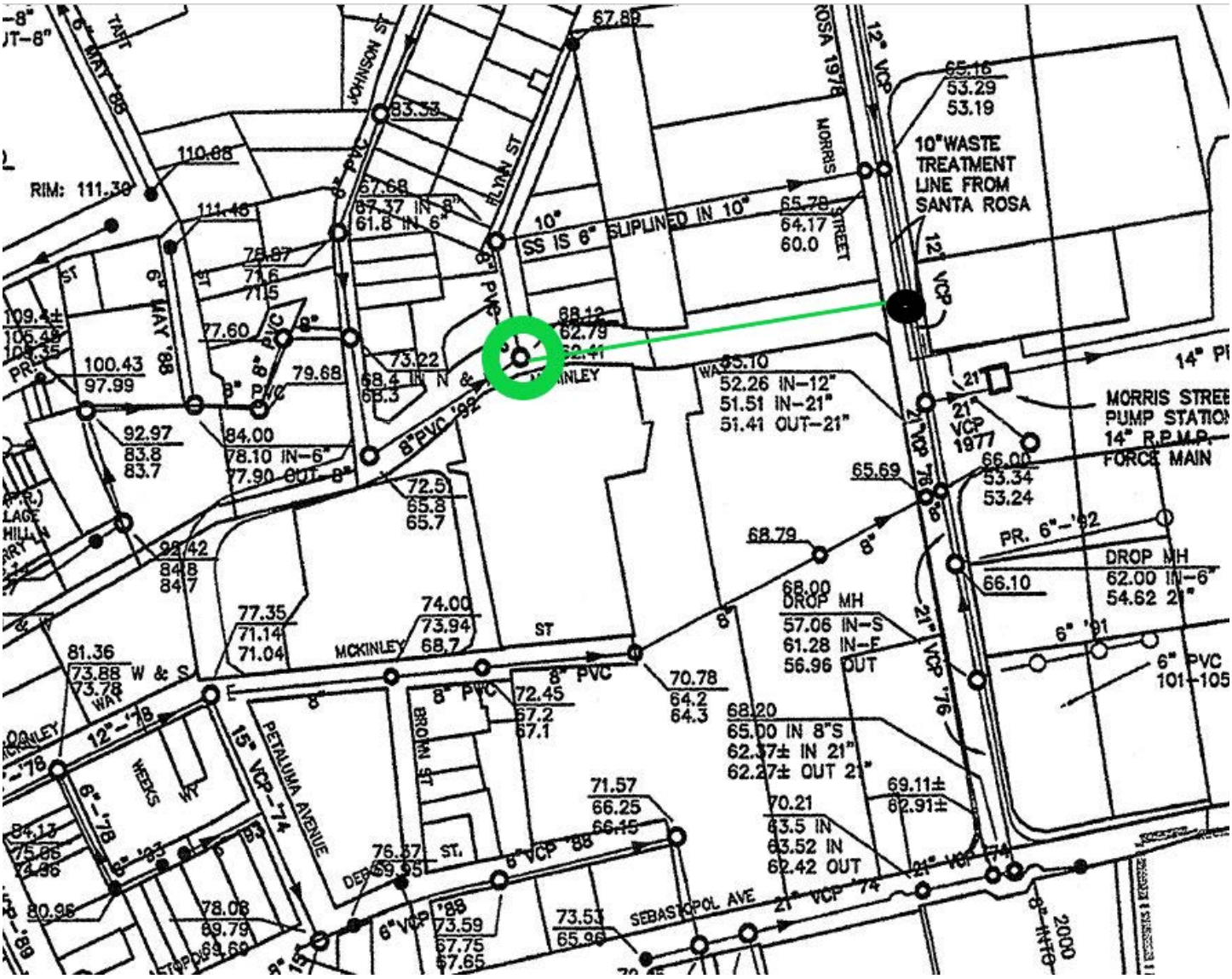
Smartcover Location 3:
Leland Robinson Collector



Smartcover Location 4:
Chamber Parking Lot Collector



Smartcover Location 5:
Flynn Street and McKinley



APPENDIX H
Sanitary Sewer Overflow/Backup Response Workbook

City of Sebastopol

Overflow Emergency Response Plan

Sanitary Sewer Overflow and Backup Response Workbook

INSERT TAB:
Start Here

Workbook Instructions

- ❑ If this is a Category 1 SSO greater than or equal to 1,000 gallons, **immediately call CALOES** at (800) 852-7550 within 2 hours.
- ❑ **Refer to the Regulatory Reporting Guide** for additional reporting requirements.
- ❑ **If there is a backup into a residence or business:**
  - o Public Works Superintendent (707) 823-5331, and
  - o Chris Carmona, REMIF Liability Claims Administrator (530) 524-2626 or (707) 938-2388 ext. 100
- ❑ **For Restoration/Remediation:** Redwood Restoration (707) 513-6485
  ServiceMaster (800) 480-8439
- ❑ **For Water Sample Analysis:** City of Santa Rosa Treatment Plant 4300 Llano Road, Santa Rosa, (707) 543-3350 or (707) 543-3364
- ❑ **For any media inquiries/requests:** City Manager (707) 823-1153

Don't forget to take photos!

Maintenance Workers:	Print Name: _____ Initial: _____ Date: _____ Time: _____
❑ Follow the instructions on the Overflow/Backup Response Flowchart and complete forms in this workbook as indicated. ❑ Complete the chain of custody record (to the right) and deliver this workbook to the Public Works Superintendent	

Public Works Superintendent:	Print Name: _____ Initial: _____ Date: _____ Time: _____
❑ Review the SSO Event Checklist and the forms in this booklet. Contact the Maintenance Workers for additional information if necessary. ❑ Confirm that all required regulatory notifications have been made. ❑ If this was a Sewer Backup, complete the Backup Forms Checklist. ❑ Complete the Collection System Failure Analysis Form. ❑ Enter data into CIWQS. ❑ Complete the Chain of Custody record (right) and file this booklet	

SSO Event Checklist

Date of SSO: _____ SSO Location/Name: _____

CIWQS Event ID #: _____ Category? ☐ 1 ☐ 2 ☐3 OES#: _____

Property Damage? ☐ Yes ☐ No Service Request #: _____

- ☐ Effort made to contain and return a portion/all to the sanitary sewer
- ☐ Pictures/video taken of overflow
- ☐ Pictures taken of affected/unaffected area
- ☐ If property damage, start that process
- ☐ Pictures taken of containment efforts
- ☐ If Cat 1 > 1000 gals:
  OES Control #_____
- ☐ Impacted waters identified?
- ☐ No impacted waters?
- ☐ SSO Report Form Complete (includes fields for all required fields in CIWQS, and a sketch of SSO)
- ☐ Volume Estimation Worksheet(s) done
- ☐ Start Time Determination Form done
- ☐ Initial review of forms is complete (ensure consistency with dates, times, volumes, and other data)
- ☐ Review of photos and videos (label/date)
- ☐ Start Folder for all documentation for this SSO event. Put everything in it (SR, Field Reports, Worksheets/Forms, follow-up work orders, notes, pics, drawings, etc. CIWQS print outs and emails)
- ☐ Failure Analysis
  - o TV to determine cause
  - o Review Asset History
- ☐ Determine next steps to prevent recurrence
- ☐ Document findings and next steps on SSO Report
- ☐ Submit Draft in CIWQS w/in 3 business days (for Categories 1 and 2 only)
- ☐ Print CIWQS Draft hard copy and email
- ☐ Review CIWQS, SSO Report, Worksheets, CMMS, and any other documentation to ensure data is consistent (e.g. dates, times, volumes, cause, follow-up action, etc.
- ☐ Attach photos, forms etc. to CIWQS
- ☐ Submit Ready to Certify in CIWQS (with sufficient time for LRO review)
- ☐ Print CIWQS Ready to Certify and email
- ☐ Hand folder to LRO
- ☐ LRO review folder and CIWQS verify accurate and consistent data
- ☐ Certify in CIWQS (within 15 calendar days for Categories 1 & 2, 30 days after the month for Category 3)
- ☐ Print Certified CIWQS and email
- ☐ Any changes? Change in CIWQS and hard copies and explain changes, print our current version
- ☐ Move completed folder to SSO Binder
- ☐ For 50, 000 gallons or larger
  - □ Follow Water Quality Monitoring and Sampling procedures
  - □ Map of where samples were taken
  - □ Sampling results
  - □ Write Technical Report
  - □ Attach to CIWQS
  - □ Add to SSO Folder/Binder
- ☐ If any changes are made to SSMP
  - □ Update SSMP and link on CIWQS to SSMP
  - □ Add change to SSMP Change Log
  - □ If change is substantive, re-certify SSMP

INSERT TAB:
Regulatory Reporting

Reporting Instructions				
Deadline	**See next page for definitions of the categories** of spills of untreated or partially treated wastewater from publicly owned sanitary sewer system			**Spill from Private Lateral**
	Category 1 SSO	**Category 2 SSO**	**Category 3SSO**	
2 hours after awareness of SSO	If SSO is greater than or equal to 1,000 gallons, call CalOES at (800) 852-7550. If spill impacts the Russian River, also notify: • Sonoma County Water Agency (707) 526-5370 business hours (707) 523-1070 after hours • Russian River Utility (707) 887-7735 • Sweet Water Springs Water District (707) 869-4000	-	-	-
48 hours after awareness of SSO	If 50,000 gal or more were not recovered, begin water quality sampling and initiate impact assessment	-	-	-
3 business days after awareness of SSO	Submit Draft Spill Report in the CIWQS database.	Submit Draft Spill Report in the CIWQS database.	-	-
15 days after response conclusion	Certify Spill Report in CIWQS. Update as needed until 120 days after SSO end date.	Certify Spill Report in the CIWQS database. Update as needed until 120 days after SSO end time.	-	-
30 days after end of calendar month in which SSO occurred	-	-	Certify Spill Report in CIWQS. Update as needed until 120 days after SSO end date.	-
45 days after SSO end date	If 50,000 gal or more were not recovered, submit SSO Technical Report in CIWQS.	-	-	-

In the event that the CIWQS online SSO database is not available, make notifications to the State Water Resources Control Board (SWRCB) by phone until the CIWQS online SSO database becomes available.

For reporting purposes, if one SSO event results in multiple appearance points, complete one SSO report in the CIWQS SSO Online Database, and report the location of the SSO failure point, blockage or location of the flow condition that caused the SSO, including all the discharge points associated with the SSO event.

Authorized Personnel:

All City personnel are authorized to perform regulatory reporting.

The City's Legally Responsible Officials (LROs) are authorized to electronically sign and certify SSO reports in CIWQS:

LRO Name	Job Title	Telephone
Dante Del Prete	Superintendent	(707) 823-5331
Nathan Sutton	Assistant Superintendent	(707) 823-5331
Larry McLaughlin	City Manager/City Attorney	(707) 823-1153

Contact Information:

Contact	Telephone/Email
CalOES	(800) 852-7550 / (916) 845-8911
Sonoma County Water Agency	(707) 526-5370 business hours (707) 523-1070 after hours
Russian River Utility	(707) 887-7735
Sweet Water Springs Water District	(707) 869-4000
State Water Resources Control Board Walter Mobley	(916) 323-0878 Walter.Mobley@waterboards.ca.gov

Definitions of SSO Categories:

Category	Definition
1	Discharges of untreated or partially treated wastewater of any volume resulting from an enrollee's sanitary sewer system failure or flow condition that: - Reach surface water and/or reach a drainage channel tributary to a surface water; or - Reach a Municipal Separate Storm Sewer System (MS4) and are not fully captured and returned to the sanitary sewer system or not otherwise captured and disposed of properly. Any volume of wastewater not recovered from the MS4 is considered to have reached surface water unless the storm drain system discharges to a dedicated storm water or groundwater infiltration basin (e.g., infiltration pit, percolation pond).
2	Discharges of untreated or partially treated wastewater of 1,000 gallons or greater resulting from an enrollee's sanitary sewer system failure or flow condition that do not reach surface water, a drainage channel, or a MS4 unless the entire SSO discharged to the storm drain system is fully recovered and disposed of properly.
3	All other discharges of untreated or partially treated wastewater resulting from an enrollee's sanitary sewer system failure or flow condition.
Private Lateral Sewage Discharge (PLSD)	Discharges of untreated or partially treated wastewater resulting from blockages or other problems **within a privately-owned sewer lateral** connected to the enrollee's sanitary sewer system or from other private sewer assets. PLSDs that the enrollee becomes aware of may be **voluntarily** reported to the California Integrated Water Quality System (CIWQS) Online SSO Database.

NOTIFICATIONS Enter details about notifications as applicable.	
CAL OES (800) 852-7550	
Notification Date/Time:	
Name of Who You Spoke To:	
OES Control Number:	
Sonoma County Water Agency	
Notification Date/Time:	
Name of Who You Spoke To: Left Message: ☐	
Russian River Utility	
Notification Date/Time:	
Name of Who You Spoke To: Left Message: ☐	
Sweet Water Springs Water District	
Notification Date/Time:	
Name of Who You Spoke To: Left Message: ☐	

INSERT TAB:
Flowchart

Overflow/Backup Response Flowchart

Start Here

Was this a toilet burp or similar due to City activities?

YES → Provide the Customer with the Bubbled Toilets Letter.

NO

Does the SSO/backup appear to be due to a problem in the City-owned/maintained sewer line?

NO →

This is a Private Lateral Sewage Discharge (PLSD)

1. Notify the property owner that the blockage is in their lateral and that the City does not have legal authority to maintain or perform work on privately-owned laterals.
2. Give customer the "Your Responsibilities as a Private Property Owner" pages.
3. Recommend to customer they hire a contractor to clear their line.
4. If customer is not home:
   - Complete Door Hanger and leave on customer's door.
   - Leave a message on the customer's voicemail.
5. If the property owner is unable or unwilling to address the cause of the overflow, immediately contact your supervisor and discuss whether Code Enforcement, the County Department of Environmental Health or Regional Water Quality Control Board should be notified.
6. If you are directed to break the stoppage and clean up the PLSD, Be sure to document City staff time and equipment used for potential billing purposes, and take pictures.

1. Document the service call according to City procedures.

2. STOP. Do not continue to PAGE 2

YES

1. Document arrival time.
2. Consider the need to call out additional staff, contractor or mutual aid assistance.
3. Contact the Public Works Superintendent or designee:
   - Provide all known information about this incident.
   - Advise to make the 2-hour notification to CalOES if appropriate.

BEGIN DIVERSION AND CONTAINMENT, AS NECESSARY

1. DIVERT AWAY FROM SENSITIVE AREAS:

a. Cover unplugged storm drains w/mats, or use dirt/other material to divert sewage away from sensitive areas (e.g., schools, playgrounds, intersections, etc.)

b. ENSURE PUBLIC CONTACT DOES NOT OCCUR. Use cones/barricades to isolate area. Consider posting WARNING signs.

2. CONTAIN SSO & RETURN TO SYSTEM, IF POSSIBLE:

a. Plug storm drain catch basins and divert flow to catch basin or use rubber mats to cover basin inlet.

b. Build/excavate a berm to channel flow to downstream sanitary sewer manhole (*barricade manhole if left open)*

c. Use bypass pumps to pump around blockage until it can be removed

d. Divert to low area of ground where it can be collected later

3. PHOTOGRAPH HOW THE SSO WAS DIVERTED/CONTAINED, AS APPROPRIATE

ADDRESS CAUSE OF SSO/BACKUP ASAP

1. For pump station related SSO/Backups refer to that station's Emergency Response Plan.
2. For SSO/Backups not related to a pump station, relieve the stoppage. Note the distance from the manhole and catch/remove debris that could cause another stoppage. After flow has returned to normal, clean the pipe thoroughly.
3. Photograph staff activities while clearing the blockage, as appropriate.

Go to PAGE 2

Overflow/Backup Response Flowchart

Continue from PAGE 1

Has the SSO reached surface waters?

YES

1. Consider the need to sample surface waters the SSO may have reached:
   - If preliminary volume estimates of the SSO are 50,000 gallons or greater, begin collecting as soon as possible but no later than 48 hours after becoming aware of the SSO.
   - If people are fishing or swimming in the waters, collect samples regardless of the volume of the SSO.
2. Refer to and follow the sampling standard operating procedure (SOP).

NO

Is it feasible/practical to contain/recover any of the SSO from the surface waters?

NO

YES

Contain/recover/clean up as much of the SSO in the waters and shoreline as possible. Contact Assistant Public Works Superintendent to request outside assistance, as appropriate.

Were storm drains impacted?

YES

STORM DRAIN CLEANING SOP

1. Seal or berm the storm drain immediately downstream of point the SSO reached
2. Photograph impacted storm drain catch basins before cleaning
3. Vacuum any visible sewage – *Record the volume of sewage recovered*
4. Using dechlorinated water, flush impacted sections of storm drain with 3X amount of SSO, if possible – *Record volume of flush water*
5. Ensure all visible signs of sewage have been removed
6. Return flush water to sanitary sewer – *Record volume of flush water recovered*
7. Photograph storm drain catch basins after cleaning is completed

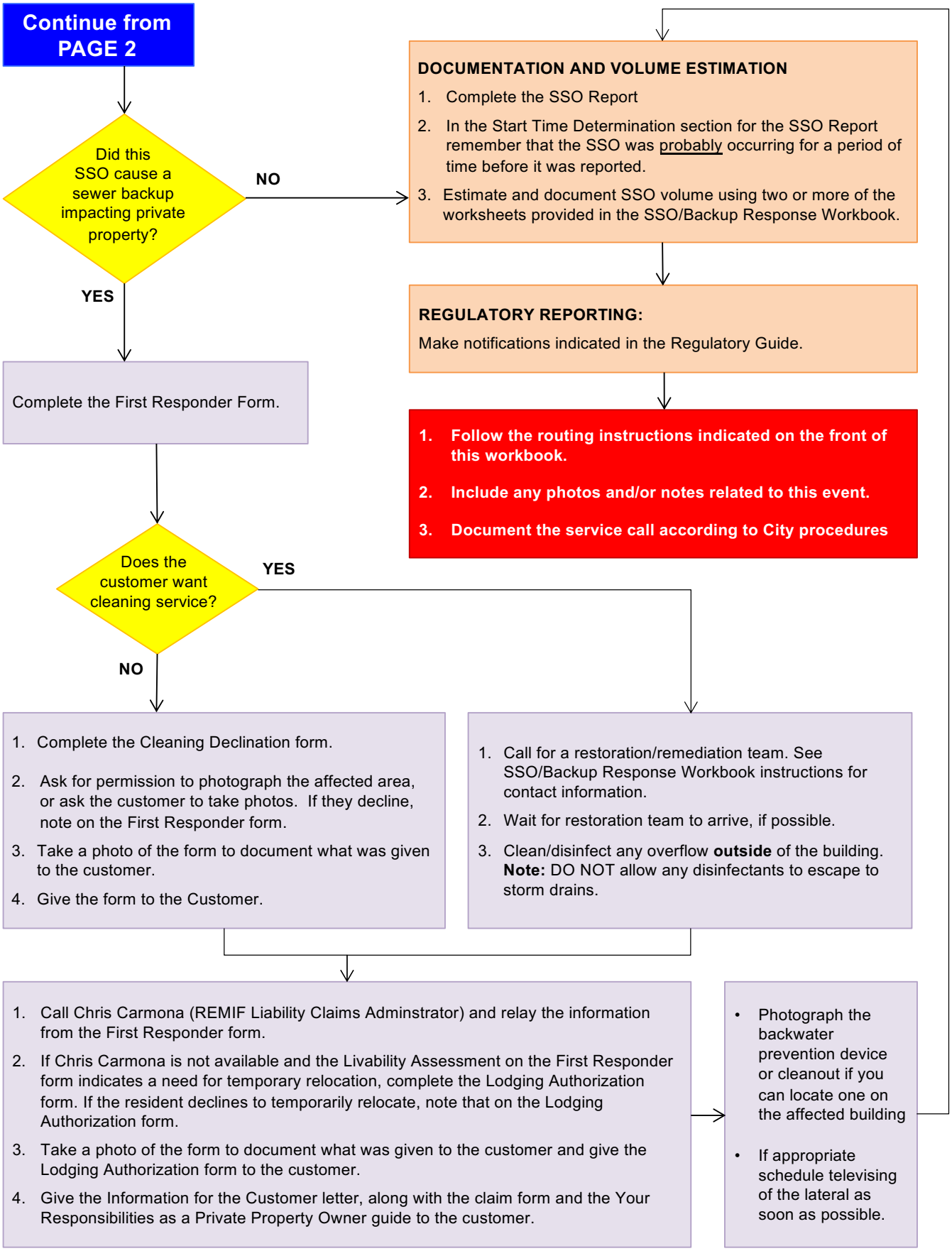
NO

IMPACTED AREA CLEANUP, AS NECESSARY

1. **Assign staff to begin cleanup.** If you might use the area measured volume method to estimate the volume, draw a sketch of the SSO footprint and capture dimensions before washing it down.
2. **Remove all signs of gross pollution** with a shovel, broom, and bucket. (toilet paper, solids, grease, etc.)
3. **Flush area w/dechlorinated water – Unless raining.** (*3X amount of SSO, if possible)*
   a. Setup berm/other means to contain all water so it can be returned to sewer
   b. Don't use disinfectants if they may enter storm drain system and not be fully recovered or if they may enter a water body
4. **Address saturated soil** with removal and/or in-place treatment, depending on the extent of the contamination, the location, and land use. Take measures to prevent accidental contact by the public. NOTE: addressing saturated soil may involve returning to the site one or more days after the SSO event.
5. **Photograph the area when cleanup operations are complete**

Go to PAGE 3

Overflow/Backup Response Flowchart



INSERT TAB:
SSO Report

PHYSICAL LOCATION DETAILS	
Spill location name	
Latitude of spill location	
Longitude of spill location	
County	
Regional Water Quality Control Board	

VOLUMES BY DESTINATION	Volume Spilled (Gallons)	Volume Recovered (Gallons)
2.a/2.b Estimated spill volume that reached a separate storm drain that flows to a surface body of water? (If not all recovered, this is a Category 1)		
2.c/2d Estimated spill volume that directly reached a drainage channel that flows to a surface water body? (Any volume spilled is a Category 1)		
2.e/2.f Estimated spill volume discharged directly to a surface water body? (Any volume spilled is a Category 1)		
2.g/2.h Estimated spill volume discharged to land? (Includes discharges directly to land, and discharges to a storm drain system or drainage channel that flows to a storm water infiltration/retention structure, field, or other non-surface water location. Also, includes backups to building structures).		
	Volume Spilled	**Volume Recovered**
Total Volume Spilled (Verify this matches the table in between 2.h and 3 in CIWQS)		

Information that was relied on to estimate the volume that reached surface waters (if applicable):

DATE/TIME DETERMINATIONS		
	DATE	**TIME**
Start of SSO (Use Start Time Determination/Notes Below)		
Agency Notified		
Collection System Operator Dispatched		
Collection System Operator Arrived		
End of SSO		
End of Spill Response		

Start Time Determination/Notes

Don't forget to take photos!

Witness 1: _____
Name Contact Information

Where did you see sewage spill from?

☐ Manhole ☐ Inside Building ☐ Vent/Clean Out ☐ Catch Basin ☐ Wet Well/Lift Station ☐ Other: _____

Last Time Witness Observed **NO Spill** occurring: _____ AM / PM Date _____ /_____ /_____

Comments: _____

_____

Witness 2: _____
Name Contact Information

Where did you see sewage spill from?

☐ Manhole ☐ Inside Building ☐ Vent/Clean Out ☐ Catch Basin ☐ Wet Well/Lift Station ☐ Other: _____

Last Time Witness Observed **NO Spill** occurring: _____ AM / PM Date _____ /_____ /_____

Comments: _____

_____

Witness 3: _____
Name Contact Information

Where did you see sewage spill from?

☐ Manhole ☐ Inside Building ☐ Vent/Clean Out ☐ Catch Basin ☐ Wet Well/Lift Station ☐ Other: _____

Last Time Witness Observed **NO Spill** occurring: _____ AM / PM Date _____ /_____ /_____

Comments: _____

_____

Start Time Determination/Notes continued

If the volume of the SSO and rate of flow are known, divide volume by rate of flow to get duration of SSO event.

_____Gallons ÷ _____GPM = Minutes (SSO Duration).

Subtract the Duration from the SSO End Date/Time to establish the SSO Start Date/Time.

Other Efforts to Determine Start Time: _____

_____

_____

_____

_____

Other Comments Regarding Spill Start Time: _____

_____

_____

_____

_____

Estimated SSO Start Time: _____ AM / PM Date: _____ / _____ / _____

SSO End Time: _____ AM / PM Date: _____ / _____ / _____

SSO FIELD REPORT
Spill location description:
Number of appearance points:
Spill appearance points: (Check all that apply) ☐ Backflow Prevention Device ☐ Force Main ☐ Gravity Mainline ☐ Inside Building/Structure ☐ Lateral Clean Out (Private/Public) ☐ Lower Lateral (Private/Public) ☐ Manhole Pump Station ☐ Upper Lateral (Private/Public) ☐ Other Sewer System Structure
Spill appearance point explanation. (Enter information here if "Other" or multiple appearance points were selected):
Description of terrain surrounding the point of discharge/overflow, including the direction of the flow:
Final spill destination: (Check all that apply) ☐ Building/Structure ☐ Combined Storm Drain ☐ Drainage Channel ☐ Other (Specify Below) ☐ Paved Surface ☐ Separate Storm Drain ☐ Street/Curb and Gutter ☐ Surface Water ☐ Unpaved Surface
Explanation of final spill destination (Enter information if "Other" was selected):

SSO FIELD REPORT
Spill cause: (Check One) ☐ Air Relief Valve (ARV)/Blow Off Valve (BOV)/Backwater Valve Failure ☐ Construction Diversion Failure ☐ CS Maintenance Caused Spill/Damage ☐ Damage by Others Not Related to CS Construction/Maintenance (Specify Below) ☐ Debris from Construction ☐ Debris from Lateral ☐ Debris-General ☐ Debris-Rags ☐ Debris Wipes/Non-Dispersible ☐ Flow Exceeded Capacity (Separate CS Only) ☐ Grease Deposition (FOG) ☐ Inappropriate Discharge to CS ☐ Natural Disaster ☐ Operator Error ☐ Other (Specify Below) ☐ Pipe Structural Problem/Failure ☐ Pipe Structural Problem/Failure – Installation ☐ Pump Station Failure – Controls ☐ Pump Station Failure – Mechanical ☐ Pump Station Failure – Power ☐ Rainfall Exceeded Design, I and I (Separate CS Only) ☐ Root Intrusion ☐ Siphon Failure ☐ Surcharged Pipe (Combined CS Only) ☐ Vandalism
Spill cause explanation: (Required if Spill Cause is “Other”)

SSO FIELD REPORT		
Where did failure occur? ☐ Air Relief Valve (ARV)/Blow Off Valve (BOV) Failure ☐ Force Main ☐ Gravity Mainline ☐ Lower Lateral (Public) ☐ Manhole ☐ Other (Specify Below) ☐ Pump Station Failure – Controls ☐ Pump Station Failure – Mechanical ☐ Pump Station Failure – Power ☐ Siphon ☐ Upper Lateral (Public)		
Explanation of where failure occurred: (Required if Where Failure Occurred is "Other")		
Was spill associated with a storm event?	☐ YES	☐ NO
Diameter of sewer pipe at the point of blockage or failure:	inches	
Material of sewer pipe at the point of blockage or failure:		
Estimated age of sewer asset at the point of blockage or failure (if applicable):	years	
Spill Response Activities. (Check all that apply) ☐ Cleaned-Up ☐ Mitigated Effects of Spill ☐ Contained All or Portion of Spill ☐ Other (Specify Below) ☐ Restored Flow ☐ Returned All Spoil to Sanitary Sewer System ☐ Property Owner Notified ☐ Other Enforcement Agency Notified		
Explanation of spill response activities: (Required if spill response activities is "Other"):		

SSO FIELD REPORT		
Spill corrective action taken: (Check all that apply) ☐ Add location to, or increase frequency check, in Preventive Maintenance Program ☐ Adjusted Schedule/Method of Preventive Maintenance ☐ Enforcement Action Against FOG Source ☐ Inspected Sewer Using CCTV to Determine Cause ☐ Other (Specify Below) ☐ Plan Rehabilitation or Replacement of Sewer ☐ Repaired Facilities or Replaced Defect		
Explanation of corrective action taken: (Required if spill corrective action is “Other”)		
Is there an ongoing investigation?	☐ YES	☐ NO
Health warnings posted?	☐ YES	☐ NO
Did spill result in beach closure?	☐ YES	☐ NO
Name of Impacted Beach(es): (Enter N/A if none)		
Name of impacted surface waters:		
Information relied on to determine whether any portion of the spill reached a surface water:		

SSO FIELD REPORT
Water quality samples analyzed for: (Check all that apply) ☐ Dissolved Oxygen ☐ Other Chemical Indicators(s) – Specify Below ☐ Biological Indicator(s) – Specify Below ☐ No Water Quality Samples Taken ☐ Not Applicable to the Spill ☐ Other (Specify Below)
Explanation of water quality samples analyzed for: (Required if water quality samples analyzed for is "Other chemical indicator(s)", "Biological indicator(s)", or "Other")
Water quality samples analyzed for: (Check all that apply) ☐ Dissolved Oxygen ☐ Other Chemical Indicators(s) – Specify Below ☐ Biological Indicator(s) – Specify Below ☐ No Water Quality Samples Taken ☐ Not Applicable to the Spill ☐ Other (Specify Below)
Explanation of water quality sample results reported to: (Required if water quality sample results reported to is “Other”)
Method and explanation of volume estimation methods used: (Check all that apply) ☐ Eyeball Estimate ☐ Measured Volume ☐ Duration and Flow Rate ☐ Counting Upstream Connections ☐ Other (Explain):

INSERT TAB:
Volume Estimation

Volume Estimation Computations & Examples

Miscellaneous Computations & Examples

To convert inches to feet (NOTE: for the purposes of this worksheet, the unit of measurement will be in feet for formula examples)	Divide the inches by 12 or use the chart on the right. **Example 1:** 27" ÷ 12 = 2.25' **Example 2:** 1¾" = ?' 1" (0.08') + ¾" (0.06') = 0.14'
Volume of one cubic foot	7.48 gallons of liquid
Area: Two-dimensional measurement represented in square feet (SQ/FT or ft^2)	Square/rectangle: Area = Length x Width Circle: Area = π x r^2 (where π ≈ 3.14 and r = radius = ½ diameter) Triangle: Area = ½ (Base x Height)
Volume: Three-dimensional measurement represented in cubic feet (CU/FT or ft^3)	Rectangle/square footprint: Volume = Length x Width x Depth Circle footprint (cylinder): Volume = π x r^2 x Depth (where π ≈ 3.14 and r = radius = ½ diameter) Triangle footprint: Volume = ½ (Base x Height) x Depth
Depth: Wet Stain on Concrete or asphalt surface	If the depth is not measurable because it is only a wet stain, use the following estimated depths: Depth of a wet stain on concrete surface: 0.0026' (1/32") Depth of a wet stain on asphalt surface: 0.0013' (1/64") These were determined to be a reasonable depth to use on the respective surfaces through a process of trial and error. One gallon of water was poured onto both asphalt and concrete surfaces. Once the area was determined as accurately as possible, different depths were used to determine the volume of the wetted footprint until the formula produced a result that (closely) matched the one gallon spilled. This process was repeated several times.
Depth: Contained or "Ponded" sewage	Measure actual depth of standing sewage whenever possible. When depth varies, measure several representative sample points and determine the average. Use that number in your formula to determine volume.

Convert Inches to Feet

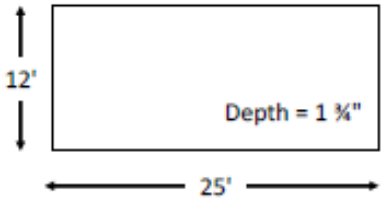
Inches	Feet
1/8"	0.01'
1/4"	0.02'
3/8"	0.03'
1/2"	0.04'
5/8"	0.05'
3/4"	0.06'
7/8"	0.07'
1"	0.08'
2"	0.17'
3"	0.25'
4"	0.33'
5"	0.42'
6"	0.50'
7"	0.58'
8"	0.67'
9"	0.75'
10"	0.83'
11"	0.92'
12"	1.00'

Miscellaneous Computations & Examples (continued)

Convert Inches to Feet	
Inches	Feet
1/8"	0.01'
1/4"	0.02'
3/8"	0.03'
1/2"	0.04'
5/8"	0.05'
3/4"	0.06'
7/8"	0.07'
1"	0.08'
2"	0.17'
3"	0.25'
4"	0.33'
5"	0.42'
6"	0.50'
7"	0.58'
8"	0.67'
9"	0.75'
10"	0.83'
11"	0.92'
12"	1.00'

Area/Volume of a Rectangle or Square

Formula: Length x Width x Depth = Volume in **cubic feet**



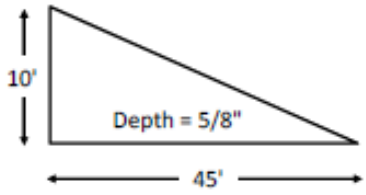
25'	X	12'	X	0.14'	=	**42 Cubic Feet**
Length		Width		Depth		Volume

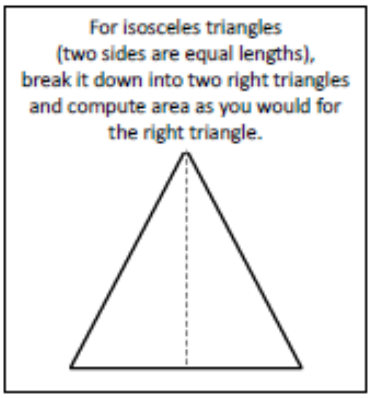
Multiply the volume by 7.48 gallons to determine the volume in **gallons**:

42 ft^3	X	7.48	=	**314.16 gallons**
Volume		gal/ft^3		Volume

Area/Volume of a Right Triangle

Formula: Base x Height x Depth = Volume in **cubic feet**



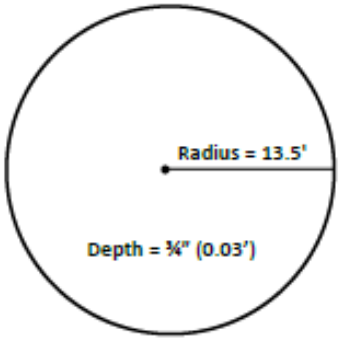


45'	X	10'	X	0.5	X	0.05'	x	7.48	=	84.15 gallons
Base		Height				Depth		gal/ft^3		Volume

Area/Volume of a Circle

Formula: $\pi \times r^2 \times$ Depth = Volume in **cubic feet**

The diameter is a straight line passing from side to side through the center of a circle.



13.5'	X	13.5'	X	3.14	X	0.03'	x	7.48	=	128.42 gallons
Radius		Radius		π		Depth		gal/ft^3		Volume

City of Sebastopol Overflow Emergency Response Plan

Volume Estimation: Eyeball Estimation Method (for ≤100 gallons) E-2

STEP 1: Position yourself so that you have a vantage point where you can see the entire SSO.

STEP 2: Imagine one or more buckets or barrels of water tipped over. Depending on the size of the SSO, select a bucket or barrel size as a frame of reference. It may be necessary to use more than one bucket/barrel size.

STEP 3: Estimate how many of each size bucket or barrel it would take to make an equivalent spill. Enter those numbers in Column A of the row in the table below that corresponds to the bucket/barrel sizes you are using as a frame of reference.

STEP 4: Multiply the number in Column A by the multiplier in Column B. Enter the result in Column C.

	A	B	C
Size of bucket(s) or barrel(s)	**How many of this size?**	**Multiplier**	**Estimated SSO Volume (gallons)**
1 gallon water jug		x 1 gallons	
5 gallon bucket		x 5 gallons	
32 gallon trash can		x 32 gallons	
55 gallon drum		x 55 gallons	
Other: _____ gallons		x _____ gallons	
Estimated Total SSO Volume:			

STEP 5: Is rainfall a factor in the SSO? ☐ Yes ☐ No

If yes, what volume of the observed spill volume do you estimate is rainfall? _____ gallons

If yes, describe how you determined the amount of rainfall in the observed spill?

STEP 6: Calculate the estimated SSO volume by subtracting the rainfall from the SSO volume:

_____ gallons – _____ gallons = _____ gallons

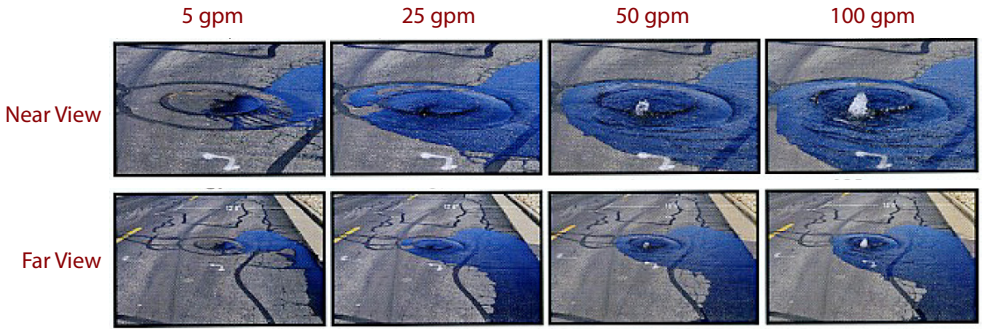
Estimated SSO Volume – Rainfall = **Total Estimated SSO Volume**

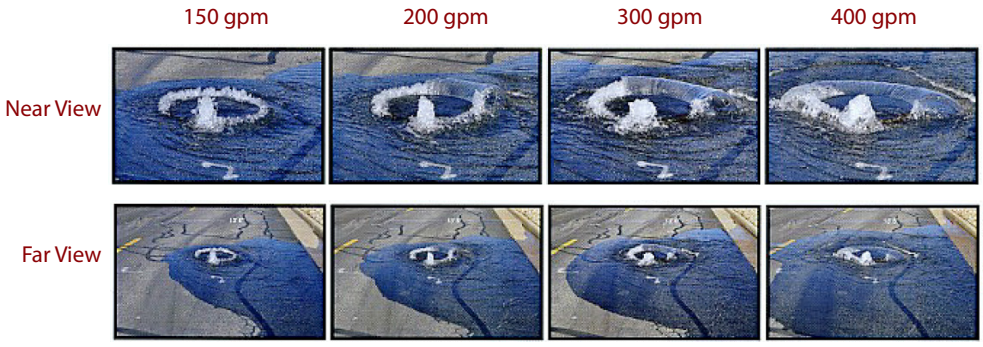
City of Sebastopol Overflow Emergency Response Plan

Volume Estimation: Duration and Flow Rate Comparison Method E-3

Compare the SSO to reference images below to estimate flow rate of the current overflow. **NOTE: If the manhole cover in your picture has vent holes or more than one pry hole, do not use these pictures for comparison.**

Describe which reference photo(s) were used and any additional factors that influenced applying the reference photo data to the actual SSO:





SSCSC Manhole Overflow Gauge: CWEA Southern Section Collections Systems Committee
Overflow Simulation courtesy of Eastern Municipal Water District

Flow Rate Based on Photo Comparison: _____ gallons per minute (gpm)

Start Date and Time	1.
End Date and Time	2.
SSO Event Total Time Elapsed (subtract Line 1 from Line 2. Show in minutes.)	3.
Average Flow Rate GPM (Account for diurnal flow pattern)	4.
Total Volume Estimated Using Duration and Flow Method (Line 3 x Line 4)	5.

City of Sebastopol Overflow Emergency Response Plan

Volume Estimation: Area/Volume Method

SSO Date: _____ Location: _____

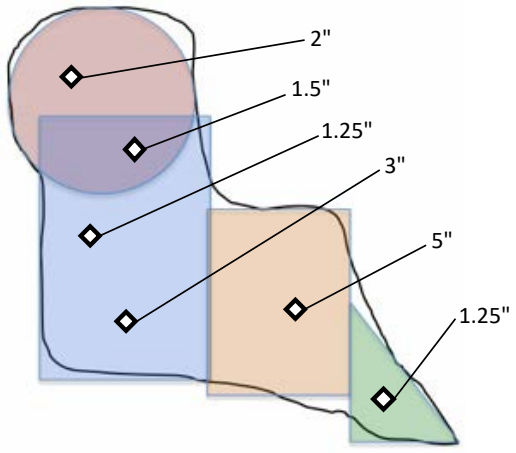
STEP 1: Describe spill area surface: ☐ Asphalt ☐ Concrete ☐ Dirt ☐ Landscape ☐ Inside Building

☐ Other: _____

STEP 2: Draw/sketch the outline (footprint) of the spill. Then break the footprint down into recognizable shapes. See example below.

1. Sketch the outline of the spill (black line)
2. Break the sketch down into recognizable shapes (circles, squares, etc.) as well as you can.
3. Determine the volume of each shape. (note: in this example, after the volume of the cirle is determined, multiply it by approximately 65% so that the overlap area won't be counted twice.
4. If the spill is of varying depths, take several measurements at different depths and find the average. If the spill affects a dry unimproved area such as a field or dirt parking lot, determine the aread of the wetted ground in the same manner as you would on a hard surface. Using a round-point shovel, dig down into the soil until you find dry soil. Do this in several locations within the wetted area and measure the depth of the wet soil. Average the measurement/thicknes of the wet soil and determine the average depth of the wet soil.

Example (right): 2" + 1.5" + 1.25" + 3" + 5" + 1.25" = 14.0"
14.0" ÷ 6 measurements = 2.33"
Average Depth = 2.33" (0.194')



Volume Estimation: Area/Volume Method

STEP 3: Calculate the area of the footprint by completing the table below for each shape in Step 2.

If two shapes overlap, select one of the two shapes and estimate the percentage of that shape that does not overlap. Enter that percentage in the % Not Overlapping column. This will ensure that the overlap area is only counted once. Refer to the example on the previous page.

	Length	X	Width	X	% Not Overlapping*	=	Area	X	Depth	=	Volume
Rectangles	ft	X	ft	X	%	=	ft^2	X	ft	=	ft^3
	ft	X	ft	X	%	=	ft^2	X	ft	=	ft^3
	ft	X	ft	X	%	=	ft^2	X	ft	=	ft^3

	Base	X	Height	÷	X	% Not Overlapping*	=	Area	X	Depth	=	Volume
Triangles	ft	X	ft	÷ 2	X	%	=	ft^2	X	ft	=	ft^3
	ft	X	ft	÷ 2	X	%	=	ft^2	X	ft	=	ft^3
	ft	X	ft	÷ 2	X	%	=	ft^2	X	ft	=	ft^3

	π	X	Radius	X	Radius	X	% Not Overlapping*	=	Area	X	Depth	=	Volume
Circles	3.14	X	ft	X	ft	X	%	=	ft^2	X	ft	=	ft^3
	3.14	X	ft	X	ft	X	%	=	ft^2	X	ft	=	ft^3
	3.14	X	ft	X	ft	X	%	=	ft^2	X	ft	=	ft^3

Total Spill Volume (sum of all three tables above): _____ **ft^3**

STEP 4: Convert from cubic feet to gallons by multiplying by 7.48.

_____ ft^3 x 7.48 gallons = _____ gallons

spill volume in cubic feet — **Total estimated volume**

Volume Estimation: Upstream Connections Method E-5

SSO Date: _____ Location: _____

STEP 1: Determine the number of Equivalent Dwelling Units (EDUs) for this SSO: _____ EDUs
NOTE: A single-family residential home = 1 EDU. For commercial buildings, refer to agency documentation.

STEP 2: This volume estimation method utilizes daily usage data based on flow rate studies of several jurisdictions in California. Column A shows how an average daily of usage of 180 gallons per day is distributed during each 6-hour period. Adjust the table as necessary to accurately represent the actual data.

Complete Column E by entering the number of minutes the SSO was active during each 6-hour time period. Multiply column D times Column E to calculate the gallons spilled during each time period. Add the numbers in Column F together for the Total Estimated SSO Volume per EDU.

	Flow Rate Per EDU				SSO	
	A	**B**	**C**	**D**	**E**	**F**
Time Period	Gallons per Period	Hours per period	A ÷ B = Gallons per Hour	C ÷ 60 = Gallons per Minute	Minutes SSO was active during period	D × E = Gallons spilled per period
6am-noon	72	6	12	0.20		
noon-6pm	36	6	6	0.10		
6pm-midnight	54	6	9	0.15		
midnight-6am	18	6	3	0.05		
Total Estimated SSO Volume per EDU:						

STEP 3: Multiply the Estimated SSO Volume per EDU from Step 2 by the number of EDUs from Step 1.

_____ gallons	X	_____	=	_____ gallons
Volume per EDU		# of EDUs		Estimated SSO Volume

STEP 4: Adjust SSO volume as necessary considering other factors, such as activity that would cause a fluctuating flow rate (doing laundry, taking showers, etc.). Explain rationale below and indicate adjusted SSO estimate (attach a separate page if necessary).

Total Estimated SSO Volume: _____ gallons

Drawing Worksheet E-6

INSERT TAB:
Backup Forms

City of Sebastopol Overflow Emergency Response Plan

Backup Forms Checklist (Backup Only) F-1

Complete this form only if there is a backup into a residence or business.

Instructions to Maintenance Workers:

1. Take photo of each form before giving it to the customer for documentation.
2. Tear forms listed below out of this workbook and hand to customer. *Leave the First Responder Form in this workbook, do not give to Customer.*
3. Check each item that was provided to the customer.
4. Have customer sign below.

Forms/Documents:

☐ Form F-3: Declination of Cleaning Services

☐ Form F-4: Lodging Authorization

☐ Form F-5: Customer Information Letter

☐ Form F-6: Your Responsibilities as a Private Property Owner

Forms Provided to: _____
Customer Name

_____
Customer Signature

_____
Date

Check here if customer declines to sign: ☐

Forms Provided by: _____ _____
Employee Name Initial

Instruction to Pubic Works Superintendent:

Send photos, including the photo of the Declination of Cleaning Services, and a copy of the First Responder form to the City Clerk.

City of Sebastopol Overflow Emergency Response Plan

First Responder Form (Backup Only)

Complete this form only if there is a backup into a residence or business.

Fill out this form as completely as possible.
Ask customer if you may enter the home. If so, take photos of all damaged and undamaged areas.

PERSON COMPLETING THIS FORM: Name: _____ Title: _____	PHONE: DATE: TIME:
TIME STAFF ARRIVED ON-SITE:	

DOES THE CUSTOMER WANT THE CITY TO CALL FOR CLEANING SERVICE? ☐ Yes ☐ No
If no, give the customer the Cleaning Declination Form and have them sign here: _____
If customer called a cleaning contractor, provide name and contact number:

RESIDENT NAME: ☐ Owner ☐ Renter ADDRESS: PHONE:	IF RENT, PROPERTY MANAGER(S): OWNER: ADDRESS: PHONE:

# OF PEOPLE LIVING AT RESIDENCE:		
Approximate Age of Home:	# of Bathrooms:	# of Rooms Affected:

Numbers of Photographs or Videos Taken: ☐ Photographs ☐ Video ☐ Customer did not provide or allow photographs	Where are photos/video stored?

Is nearest upstream manhole visibly higher than the drain/fixture that overflowed? ☐ Yes ☐ No

Does property have a Property Line Cleanout or BPD? ☐ Cleanout ☐ BPD ☐ Neither ☐ Unknown

If yes, was the Property Line Cleanout/BPD operational at the time of the overflow? ☐ Yes ☐ No ☐ Unknown

Have there ever been any previous spills at this location? ☐ Yes ☐ No ☐ Unknown

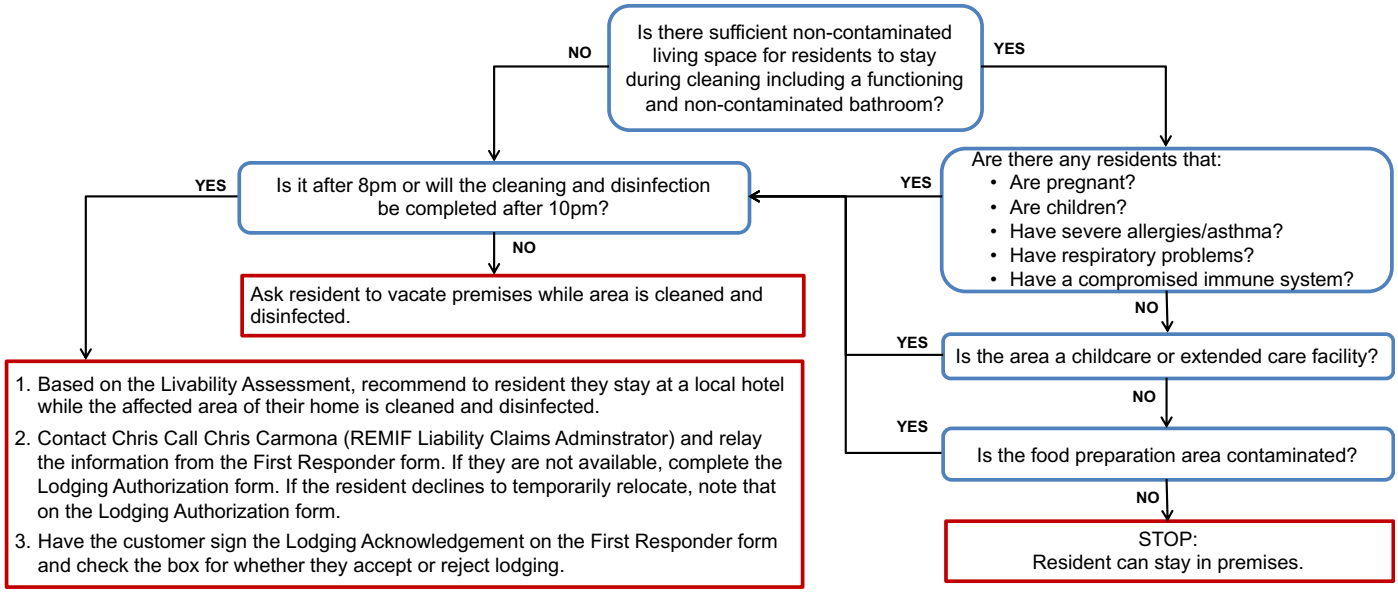
Has the resident had any plumbing work done recently? ☐ Yes ☐ No ☐ Unknown
If YES, please describe:

GO TO Page 2

City of Sebastopol Overflow Emergency Response Plan

First Responder Form (Backup Only)

LIVABILITY ASSESSMENT

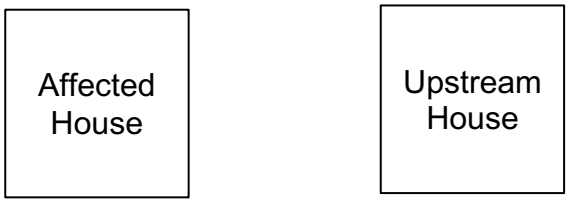


Temporary lodging was offered by the City and either (check one): ☐ Accepted ☐ Rejected

SANITARY SEWER LINE BLOCKAGE LOCATION

PLEASE CHECK THE BOXES THAT DESCRIBE YOUR OBSERVATIONS:	
Customer Cleanout Was: ☐ Non-Existent ☐ Full ☐ Empty	Agency Owned/Maintained Cleanout was: ☐ Non-Existent ☐ Full ☐ Empty

On the diagram below, indicate the location of the sewer line and where the problem occurred.



Recommended Follow-Up Action(s):

Did sewage go under buildings? ☐ Yes ☐ No ☐ Unsure

City of Sebastopol Overflow Emergency Response Plan

Declination of Cleaning Services (Backup Only) F-3

Customer Information		
NAME:	ADDRESS:	TELEPHONE:

ON (date)	AT (time)	Approximately (quantity)	GALLONS OF:
			☐ Sewage ☐ Grey Water ☐ Toilet Bowl Water ☐ Odor ☐ Other (describe):

Overflowed from (or odor emanating from)	The overflow affected the following areas *(check one):*
☐ Toilet ☐ Shower/Tub ☐ Washer ☐ Other (describe):	☐ Bathroom ☐ Bedroom ☐ Hallway ☐ Garage ☐ Kitchen ☐ Crawlspace ☐ Other (specify):

The overflow affected the following flooring:		and/or additional materials:	
☐ Tile	☐ Wood Flooring	☐ Area Rugs	☐ Towels
☐ Linoleum	☐ Carpet	☐ Clothing	☐ Other (specify):
☐ Other (specify):			

This Form Completed By: Name: _____ **Date:** _____

(Write legibly) Title: **Time:**

CUSTOMER, please read the following and sign below. I/We acknowledge that City of Sebastopol (*City)* has offered to provide professional cleaning and decontamination services to remediate the sewage backup and/or overflow described above and that we declined the offer. We further understand and acknowledge that because we have declined, any necessary remediation activities will be conducted without City assistance, and that the City will not accept responsibility for work performed by persons other than those engaged by the City. The City will also not accept responsibility for any charges related to this incident that are not usual and customary.

Customer Signature*:		**Date:**
The information above was explained to the customer by the following employee:	**Name:**	**Title:**
	Signature:	**Date:**

**Note to responders: if customer declines to sign this form, then have a co-worker sign here as a witness:*

Name: _____ *Signature:* _____ *Date:* _____

Recommendations to customer to clean up the spill:

- Keep pets and children out of the affected area
- Turn off heating/air conditioning systems
- Wear rubber boots, rubber gloves, and goggles during cleanup of the affected area.
- Remove and discard items that cannot be washed and disinfected (such as: mattresses, rugs, cosmetics, baby toys, etc.)
- Remove and discard drywall and insulation that has been contaminated with sewage or flood waters.
- Thoroughly clean all hard surfaces (such as flooring, concrete, molding, wood and metal furniture, countertops, appliances, sinks and other plumbing fixtures) with hot water and laundry or dish detergent.
- Help the drying process with fans, air conditioning units, and dehumidifiers.
- After completing cleanup, wash your hands with soap and water. Use water that has been boiled for 1 minute (allow water to cool before washing your hands.) OR use water that has been disinfected (solution of 1/8 teaspoon of household bleach per 1 gallon of water). Let it stand for 30 min. If water is cloudy, use ¼ teaspoon of household bleach per 1 gallon of water.
- Wash all clothes worn during the cleanup in hot water and detergent (wash separately from uncontaminated clothes).
- Wash clothes contaminated with flood or sewage water in hot water and detergent. Use a laundromat for washing large quantities of clothes and linens until your onsite wastewater system has been professionally inspected and services.
- Seek immediate attention if you become injured or ill.

Lodging Authorization (Backup Only) F-4

INSTRUCTIONS TO MAINTENANCE WORKERS:

1. **Only complete this form if temporary lodging is necessary AND you are unable to reach Chris Carmona (REMIF Liability Claims Administrator).**
2. Explain the circumstances of the backup. If the Livability Assessment indicates that a hotel is needed, offer alternate lodging to the customer. If they agree, ask the customer which hotel identified below they prefer. Contact the Public Works Superintendent who will make the necessary arrangements.
3. Review this form with the customer and instruct them to read the Instructions to Resident section below.
4. Instruct the customer that this emergency authorization is for LODGING ONLY – NO FOOD, MINIBAR, MOVIE, PHONE or Other Charges).
5. Explain to customer that if circumstances require additional nights' lodging and other incidentals, the City Clerk will address them.
6. Have the customer sign the Acknowledgement section of this form.
7. Complete this Authorization Form and sign.
8. Give the bottom copy of this form to the customer.

INSTRUCTIONS TO RESIDENT:

City of Sebastopol recommends that you temporarily relocate to one of the hotels listed below for your safety and convenience while your residence is being cleaned. Please note that this emergency authorization is granted under the following conditions:

1. This authorization provides for one (1) night's lodging at one of the hotels listed below.
2. The authorization is good for **room and tax ONLY**. Phone, food, mini-bar and other incidental charges will be your responsibility.
3. Additional nights and/or other allowances/incidentals may be discussed by contacting the City Clerk at (707) 823-1153.

VOUCHER

Fairfield Inn
1101 Gravenstein Hwy S
Sebastopol, CA 95472
(707) 829-6677

Good for one (1) night's stay on (date): _____ Number of affected residents: _____

Customer's Name: _____

Field Supervisor's Name: _____ Phone Number: _____

Dear Property Owner:

We recognize that sewer backup incidents can be stressful and require immediate response while all facts concerning how an incident occurred are still unknown. Rest assured that we do all we can to prevent this type of event from occurring in the first place. Nevertheless, occasionally tree roots or other debris in the sewer lines causes a backup into homes immediately upstream of the blockage. At this time the City is investigating the cause of this incident.

If the City is found to be responsible for the incident, we are committed to cleaning and restoring your property, and to protecting the health of those affected during the remediation process.

The cleaning contractor provided by the City has been selected because of their adherence to established protocols that are designed to assure to all parties thorough, cost-effective and expeditious cleaning services. You also have the right to select your own cleaning contractor, but the City does not guarantee payment of fees/expenses incurred and reserves the right to dispute fees/expenses deemed not usual and customary.

To discuss this matter, contact the City Public Works Department at (707) 823-5331. To submit a claim for damages, complete the Claim Form and submit it to the City Clerk at 7120 Bodega Avenue, PO Box 1776, Sebastopol, CA 95473.

Sincerely,
The City of Sebastopol

WHAT YOU NEED TO DO NOW

- Minimize the impact of the loss by responding promptly to the situation.
- Do not attempt to clean the area yourself, let the cleaning and restoration company handle this.
- Keep people and pets away from the affected area(s) until cleanup has been completed.
- Turn off any appliances that use water.
- Turn off heating/air conditioning systems.
- Do not remove items from the area – the cleaning and restoration company will handle this.
- If you had recent plumbing work done, contact your plumber or contractor and inform them of this incident.

Estimado propietario:

Reconocemos que los incidentes de respaldo de alcantarillado pueden ser estresantes y requieren una respuesta inmediata, mientras que aún se desconocen todos los hechos sobre cómo ocurrió un incidente. Tenga la seguridad de que hacemos todo lo posible para evitar que este tipo de evento ocurra en primer lugar. Sin embargo, ocasionalmente las raíces de los árboles u otros escombros en las líneas de alcantarillado provocan un retroceso en las casas inmediatamente aguas arriba del bloqueo. En este momento, la Ciudad está investigando la causa de este incidente.

Si se determina que la Ciudad es responsable del incidente, nos comprometemos a limpiar y restaurar su propiedad y a proteger la salud de los afectados durante el proceso de remediación.

El contratista de limpieza proporcionado por la ciudad ha sido seleccionado debido a su adherencia a los protocolos establecidos que están diseñados para asegurar a todas las partes servicios de limpieza completos, rentables y rápidos. También tiene derecho a seleccionar su propio contratista de limpieza, pero la Ciudad no garantiza el pago de las tarifas / gastos incurridos y se reserva el derecho de disputar las tarifas / gastos que se consideren no habituales y habituales.

Para discutir este asunto, comuníquese con el Departamento de Obras Públicas de la Ciudad al (707) 823-5331. Para presentar un reclamo por daños, complete el Formulario de reclamo y envíelo al Secretario de la Ciudad en 7120 Bodega Avenue, PO Box 1776, Sebastopol, CA 95473.

Sinceramente,
La Ciudad de Sebastopol

QUÉ DEBES HACER AHORA

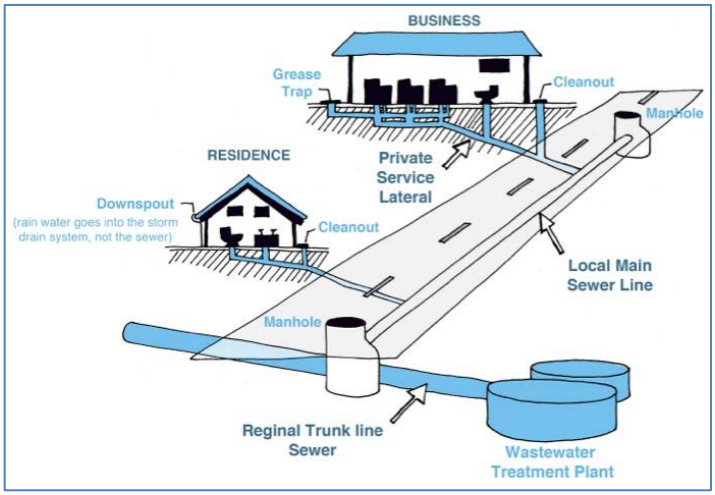
- Minimice el impacto de la pérdida respondiendo rápidamente a la situación.
- No intente limpiar el área usted mismo, deje que la empresa de limpieza y restauración se encargue de ello.
- Mantenga a las personas y las mascotas alejadas de las áreas afectadas hasta que se haya completado la limpieza.
- Apague cualquier aparato que use agua.
- Apague los sistemas de calefacción / aire acondicionado.
- No retire elementos del área; la empresa de limpieza y restauración se encargará de esto.
- Si recientemente le hicieron trabajos de plomería, comuníquese con su plomero o contratista e infórmeles de este incidente.

How a Sewer System Works

A property owner's sewer pipes are called ***service laterals*** and are connected to larger local main and regional trunk lines. Service laterals run from the connection at the home to the connection with the public sewer. These laterals are the responsibility of the property owner and must be maintained by the property owner.

How do sewage spills happen?

Sewage spills occur when the wastewater in underground pipes overflows through a manhole, cleanout, or broken pipe. Most spills are relatively small and can be stopped and cleaned up quickly, but left unattended they can cause health hazards, damage to homes and businesses, and threaten the environment, local waterways, and beaches. Common causes of sewage spills include grease build-up, tree roots, broken/cracked pipes, missing or broken cleanout caps, undersized sewers, and groundwater/rainwater entering the sewer system through pipe defects and illegal connections.



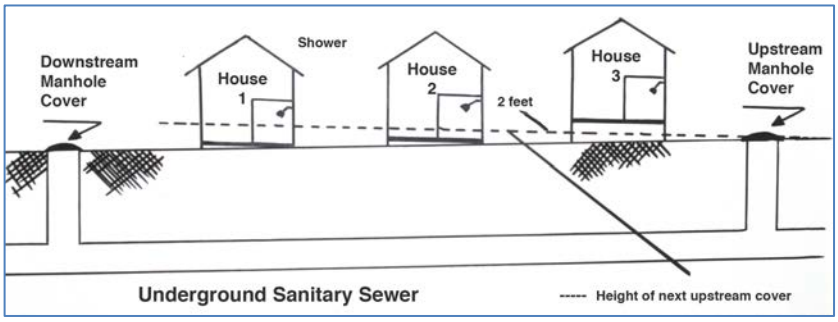
Prevent most sewage backups with a Backflow Prevention Device

This type of device can help prevent sewage backups into homes and businesses. If you don't already have a Backflow Prevention Device, contact a professional plumber or contractor to install one as soon as possible.

Is my home required to have a backflow prevention device?

Section 710.1 of the Uniform Plumbing Code (U.P.C.) states: *"Drainage piping serving fixtures which have flood level rims located below the elevation of the next upstream manhole cover or private sewer serving such drainage piping **shall** be protected from backflow of sewage by installing an approved type of backwater valve."* The intent of Section 710.1 is to protect the building interior from mainline sewer overflows or surcharges.

Additionally, U.P.C. 710.6 states: *"Backwater valves **shall** be located where they will be accessible for inspection and repair at all times and, unless continuously exposed, shall be enclosed in a masonry pit fitted with an adequately sized removable cover."*



Spill cleanup inside the home:

For large clean ups, a professional cleaning firm should be contacted to clean up impacted areas, If you hire a contractor, it is recommended to get estimates from more than one company. Sometimes, homeowner's insurance will pay for the necessary cleaning due to sewer backups. Not all policies have this coverage, so check with your agent.

If you decide to clean up a small spill inside your home, protect yourself from contamination by observing the following safety measures. Those persons whose resistance to infection is compromised should not attempt this type of clean up.

Seek immediate attention if you become injured or ill during or after the cleanup process.

Other Tips:

- Keep children and pets out of the affected area.
- Turn off heating/air conditioning systems
- Wear rubber boots, rubber gloves, and goggles during cleanup.
- Discard items that cannot be washed and disinfected (such as: mattresses, rugs, cosmetics, toys, etc.)
- Remove and discard drywall and insulation that has been contaminated with sewage or flood waters.
- Thoroughly clean all hard surfaces (such as flooring, concrete, molding, wood and metal furniture, countertops, appliances, sinks and other plumbing fixtures) with hot water and laundry or dish detergent.
- Help the drying process with fans, air conditioning units, and dehumidifiers.
- After completing cleanup, wash your hands with soap and water. Use water that has been boiled for 1 minute (allow the water to cool before washing your hands) OR use water that has been disinfected (solution of 1/8 teaspoon of household bleach per 1 gallon of water). Let it stand for 30 min. If water is cloudy, use ¼ teaspoon of household bleach per 1 gallon of water.
- Wash clothes worn during cleanup in hot water & detergent (wash apart from uncontaminated clothes).
- Wash clothes contaminated with sewage in hot water and detergent. Consider using a Laundromat until your onsite wastewater system has been professionally inspected and serviced.

Spill cleanup outside the home:

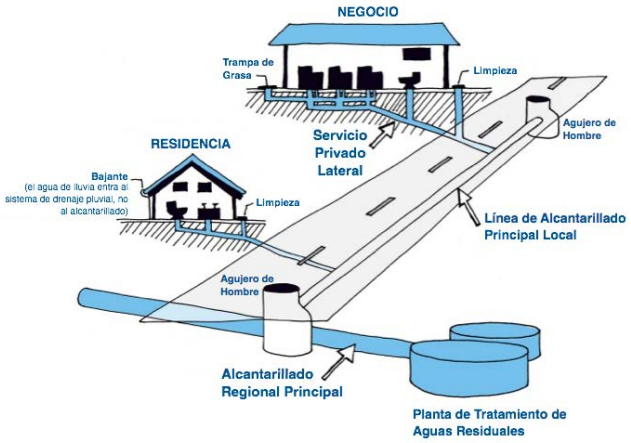
- Keep children and pets out of the affected area until cleanup has been completed.
- Wear rubber boots, rubber gloves, and goggles during cleanup of affected area.
- Clean up sewage solids (fecal material) and place in properly functioning toilet or double bag and place in garbage container.
- On hard surfaces areas such as asphalt or concrete, it is safe to use a 2% bleach solution, or ½ cup of bleach to 5 gallons of water, but don't allow it to reach a storm drain as the bleach can harm the environment.
- After cleanup, wash hands with soap and water. Use water that has been boiled for 1 minute (allow to cool before washing your hands) OR use water that has been disinfected (solution of 1/8 teaspoon of household bleach per 1 gallon of water). Let it stand for 30 min. If water is cloudy, use ¼ teaspoon of household bleach per 1 gallon of water.
- Wash clothes worn during cleanup in hot water and detergent (wash apart from uncontaminated clothes).
- Wash clothes contaminated with sewage in hot water and detergent. Consider using a laundromat until your onsite wastewater system has been professionally inspected and serviced.

Cómo funciona un sistema de alcantarillado

Las tuberías de alcantarillado de un propietario se denominan servicios laterales y están conectadas a líneas troncales principales y regionales locales más grandes. Los servicios laterales se ejecutan desde la conexión en el hogar hasta la conexión con el sistema de alcantarillado del Distrito. Estos laterales son responsabilidad del propietario y deben ser mantenidos por el propietario.

¿Cómo ocurren los derrames de aguas residuales?

Los derrames de aguas residuales ocurren cuando las aguas residuales en las tuberías subterráneas se desbordan a través de un pozo de acceso, limpieza o tubería rota. La mayoría de los derrames son relativamente pequeños y se pueden detener y limpiar rápidamente, pero si se los deja desatendidos, pueden causar riesgos para la salud, dañar viviendas y negocios y amenazar el medio ambiente, las vías fluviales locales y las playas. Las causas comunes de derrames de aguas residuales incluyen acumulación de grasa, raíces de árboles, tuberías rotas / agrietadas, tapas de limpieza faltantes o rotas, alcantarillas de tamaño insuficiente y aguas subterráneas / pluviales que ingresan al sistema de alcantarillado a través de defectos en las tuberías y conexiones ilegales.



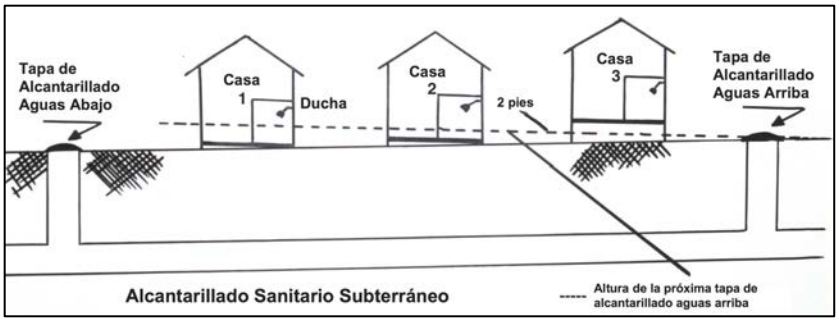
Prevenga la mayoría de las copias de seguridad de aguas residuales con un dispositivo de prevención de reflujo

Este tipo de dispositivo puede ayudar a prevenir las copias de seguridad de aguas residuales en hogares y empresas. Si aún no tiene un dispositivo de prevención de reflujo, comuníquese con un plomero o contratista profesional para instalar uno lo antes posible.

¿Se requiere que mi hogar tenga un dispositivo de prevención de reflujo?

La Sección 710.1 del Código Uniforme de Plomería (UPC) establece: “Los accesorios de tuberías de drenaje que tienen llantas de nivel de inundación ubicadas debajo de la elevación de la siguiente boca de alcantarilla corriente arriba o la alcantarilla privada que atiende dicha tubería de drenaje deben protegerse contra el reflujo de aguas residuales al instalar un tipo de válvula de evacuación ”. La intención de la Sección 710.1 es proteger el interior del edificio de los desagües o sobrecargas de alcantarillado de la línea principal.

Adicionalmente, U.P.C. 710.6 dice: Las válvulas de aguas residuales deben ubicarse donde puedan ser inspeccionadas y reparadas en todo momento y, a menos que estén continuamente expuestas, deben estar encerradas en un pozo de mampostería equipado con una cubierta removible del tamaño adecuado.



Limpieza de derrames dentro de la casa:

Para grandes limpiezas, se debe contactar a una empresa de limpieza profesional para limpiar las áreas afectadas. Si contrata a un contratista, se recomienda obtener estimaciones de más de una compañía. A veces, el seguro del propietario de vivienda pagará la limpieza necesaria debido a las reservas de alcantarillado. No todas las pólizas tienen esta cobertura, así que consulte con su agente.

Si decide limpiar un pequeño derrame dentro de su casa, protéjase de la contaminación observando las siguientes medidas de seguridad. Aquellas personas cuya resistencia a la infección esté comprometida no deben intentar este tipo de limpieza.

Busque atención inmediata si se lesiona o se enferma durante o después del proceso de limpieza.

Otros consejos:

- Mantenga a los niños y mascotas fuera del área afectada.
- Apague los sistemas de calefacción / aire acondicionado
- Use botas de goma, guantes de goma y gafas durante la limpieza.
- Deseche los artículos que no se puedan lavar y desinfectar (como: colchones, alfombras, cosméticos, juguetes, etc.)
- Retire y deseche los paneles de yeso y el aislamiento contaminado con aguas residuales o aguas de inundación.
- Limpie a fondo todas las superficies duras (como pisos, concreto, molduras, muebles de madera y metal, mostradores, electrodomésticos, fregaderos y otros accesorios de plomería) con agua caliente y ropa o detergente para platos.
- Ayude al proceso de secado con ventiladores, unidades de aire acondicionado y deshumidificadores.
- Después de completar la limpieza, lávese las manos con agua y jabón. Use agua que haya sido hervida por 1 minuto (deje que el agua se enfríe antes de lavarse las manos) O use agua que haya sido desinfectada (solución de 1/8 cucharadita de lejía doméstica por 1 galón de agua). Dejar reposar durante 30 min. Si el agua está turbia, use ¼ cucharadita de lejía de uso doméstico por 1 galón de agua.
- Lave la ropa usada durante la limpieza con agua caliente y detergente (lave aparte de la ropa no contaminada).
- Lavar la ropa contaminada con aguas residuales en agua caliente y detergente. Considere usar una lavandería hasta que su sistema de aguas residuales en el sitio haya sido inspeccionado y reparado profesionalmente.

Limpieza de derrames fuera de la casa:

- Mantenga a los niños y las mascotas fuera del área afectada hasta que se haya completado la limpieza.
- Use botas de goma, guantes de goma y gafas protectoras durante la limpieza del área afectada.
- Limpie los sólidos de alcantarillado (material fecal) y colóquelos en un inodoro o bolsa doble que funcione correctamente y colóquelos en un contenedor de basura.
- En áreas de superficies duras como el asfalto o el concreto, es seguro usar una solución de lejía al 2%, o ½ taza de lejía a 5 galones de agua, pero no permita que llegue a un drenaje de tormenta ya que la lejía puede dañar la ambiente.
- Después de la limpieza, lávese las manos con agua y jabón. Use agua que haya sido hervida por 1 minuto (deje enfriar antes de lavarse las manos) O use agua que haya sido desinfectada (solución de 1/8 cucharadita de cloro por 1 galón de agua). Dejar reposar durante 30 min. Si el agua está turbia, use ¼ cucharadita de lejía de uso doméstico por 1 galón de agua.
- Lave la ropa usada durante la limpieza con agua caliente y detergente (lave aparte de la ropa no contaminada).
- Lavar la ropa contaminada con aguas residuales en agua caliente y detergente. Considere usar una lavandería hasta que su sistema de aguas residuales en el sitio haya sido inspeccionado y reparado profesionalmente.

File with:
Office of the City Manager/City Clerk
City of Sebastopol
7120 Bodega Avenue
Sebastopol, CA 95472

Date Received:

CLAIM FOR MONEY OR DAMAGES AGAINST THE CITY OF SEBASTOPOL

A claim must be presented, as prescribed by the Government Code of the State of California, by the claimant or a person acting on his/her behalf and shall show the following:

If additional space is needed to provide your information, please attach sheets, identifying the paragraph(s) being answered.

1. Name and Address of the Claimant:

   Name of Claimant:_____
   Address: _____
   _____
   Mailing Address (if different than above):_____
   _____
   Telephone Number: _____

2. Address to which the person presenting the claim desires notices to be sent:

   Name of Addressee:_____
   Mailing Address (if different than above):_____
   _____
   Telephone Number: _____

3. The date, place and other circumstances of the occurrence or transaction which gave rise to the claim asserted.

Date of Occurrence: _____ Time of Occurrence: _____
Location: _____

Circumstances giving rise to this claim:
_____
_____
_____

4. General Description of the indebtedness, obligation, injury, damage or loss incurred so far as it may be known at the time of the presentation of the claim.

_____
_____

5. The name or names of the public employee or employees causing the injury, damage, or loss, if known.

_____
_____

6. a. If the amount claimed totals less than $10,000: The amount claimed if it totals less than ten thousand dollars ($10,000) as of the date of the presentation of this claim, including the estimated amount of any prospective injury, damage, or loss, insofar as it may be known at the time of the presentation of the claim, together with the basis of computation of the amount claimed.

Amount Claimed and basis for computation:

_____

_____

b. If the amount claimed exceeds $10,000: If the amount claimed exceeds ten thousand dollars ($10,000), no dollar amount shall be included in the claim. However, it shall indicate whether the claim would be a limited civil case. A limited civil case is one where the recovery sought, exclusive of attorney fees, interest and court costs does not exceed $25,000. An unlimited civil case is one in which the recovery sought is more than $25,000. (See CCP § 86)

☐ LIMITED CIVIL CASE ☐ UNLIMITED CIVIL CASE

You are required to provide the information requested above, plus your signature on page 3 of this form, in order to comply with Government Code §910. In addition, in order to conduct a timely investigation and possible resolution of your claim, the City requests that you answer the following questions.

7. Claimant(s) Date(s) of Birth:

_____

_____

8. Name, address and telephone number of any witness(es) to the occurrence or transaction which gave rise to the claim asserted:

_____

_____

_____

9. If the claim involves medical treatment for a claimed injury, please provide the name, address and telephone number of any doctors or hospitals providing treatment.

_____

_____

_____

If applicable, please attach any medical bills or reports or similar documents supporting your claim.

10. If the claim relates to an automobile accident:

Claimant (s) Auto Insurance Company: _____ Telephone:_____

Address:

_____

_____ Insurance Policy Number: _____

Insurance Broker/Agent: _____ Telephone: _____

Address:

_____

_____

Claimant's Vehicle License Number: _____ Vehicle Make/Year:_____

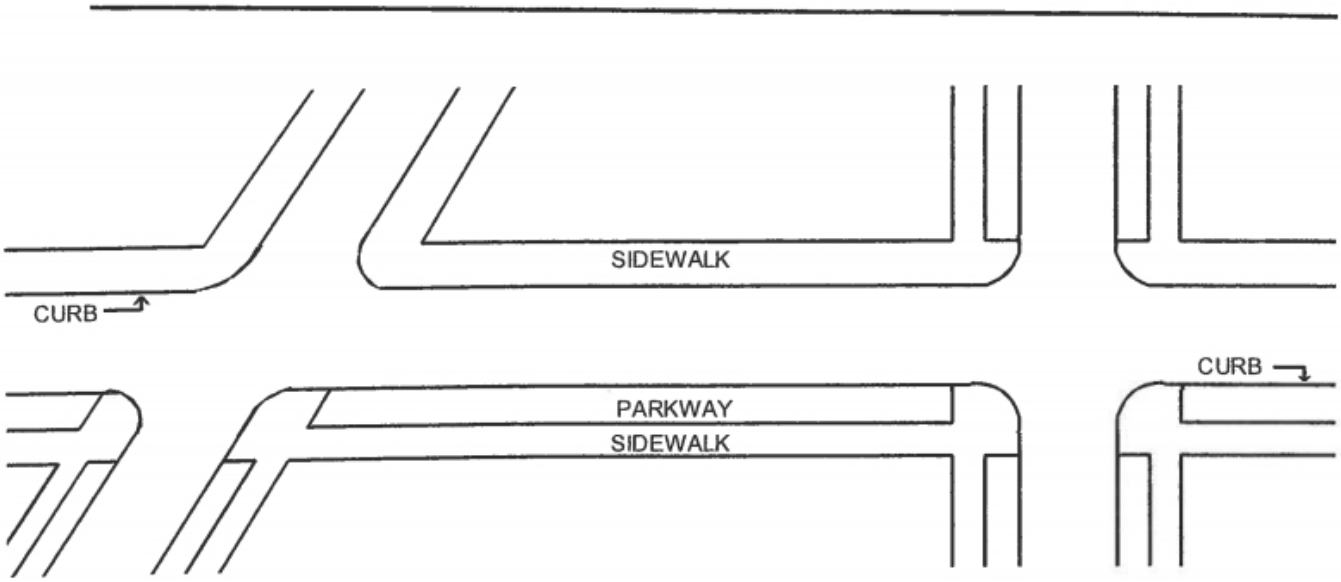
Claimant's Driver License Number: _____ Expiration: _____

If applicable, please attach any repair bills, estimates, or similar documents supporting your claim.

READ CAREFULLY

For all accident claims, place on following diagram name of streets, including North, East, South and West; indicate place of accident by "X" and by showing house numbers or distances to street corners. If City/Agency Vehicle was involved, designate by letter "A" location of City/Agency Vehicle when you first saw it, and by "B" location of yourself of your vehicle when you first saw City/Agency Vehicle; location of City/Agency vehicle at time of accident by "A-1" and location of yourself or your vehicle at the time of the accident by "B-1" and the point of impact by "X".

NOTE: If diagrams below do not fit the situation, attach hereto a proper diagram signed by claimant.



WARNING: Presentation of a false claim with the intent to defraud is a felony (Penal Code § Pursuant to CCP § 1038, the City/Agency may seek to recover all costs of defense in the event an action is filed which is later determined not to have been brought in good faith and with reasonable cause.

Signature: _____ Date: _____

Printed Name: _____

INSERT TAB:
Field Sampling Kit

City of Sebastopol Overflow Emergency Response Plan

Field Sampling Kit: Table of Contents

The Field Sample Kit contains:

- Cooler w/ice pack
- Latex gloves
- Safety glasses
- 2 ammonia-nitrogen sample bottles (1pt bottle w/H2SO4)
- 20 Sample bottle labels
- Waterproof Pen (i.e. Sharpie®)
- 10 Enterococcus sample bottles (100ml sterilized bottle)
- Combination temperature/pH meter
- Extra batteries for temperature/pH meter
- Chain of Custody form

City of Sebastopol Overflow Emergency Response Plan

Field Sampling Kit: Procedures for Sampling Receiving Waters G-1 page 1

Get Field Sampling Kit → Get ice pack or ice and place in cooler → Determine point spill entered waterway – photograph this location (*include a reference point in the photo)* → Don the PPE from the Sampling Kit

- Collect all samples against the direction of the water flow! (face upstream)
- Collect upstream sample first!
- Collect samples well away from the bank (preferably where water is visibly flowing) & 6" below the surface
- Avoid sampling debris or scum layer from the surface.
- Photograph evidence of dead fish!

SAMPLING STEPS

Move far enough upstream of point where spill entered waterway to ensure the waters have not been impacted by the SSO (reference sample)

Remove the seal from the fecal coliform sample container (100ml) just prior to collecting your sample. A chemical has been added to the sample container. Leave the chemical in the bottle and do not rinse.

1. Remove the cap immediately before collecting each sample.
2. Avoid allowing the inside of the cap to touch anything.
3. Holding the bottle in one hand, face upstream and lower the bottle 6" below the water surface. Then sweep the bottle upstream and out of the water. Be careful not to disturb the bottom sediment. Pour a little water out so that bottle is filled to the line. Immediately replace the cap.

Open the ammonia-nitrogen sample container and follow collection process above (steps 1-3) to fill to just below the neck of the jar. NOTE: The ammonia-nitrogen sample bottle contains sulfuric acid – LEAVE THE ACID IN THE BOTTLE AND DO NOT ALLOW IT TO TOUCH YOUR SKIN!

Label all of the samples with their location and note the date and time collected. → Place samples in cooler on the ice pack → Take a photo of this sample location (include a reference point in the photo)

Move at least 10' downstream of point where spill entered waterway and repeat sampling steps (red boxes) → Complete the Chain of Custody form.

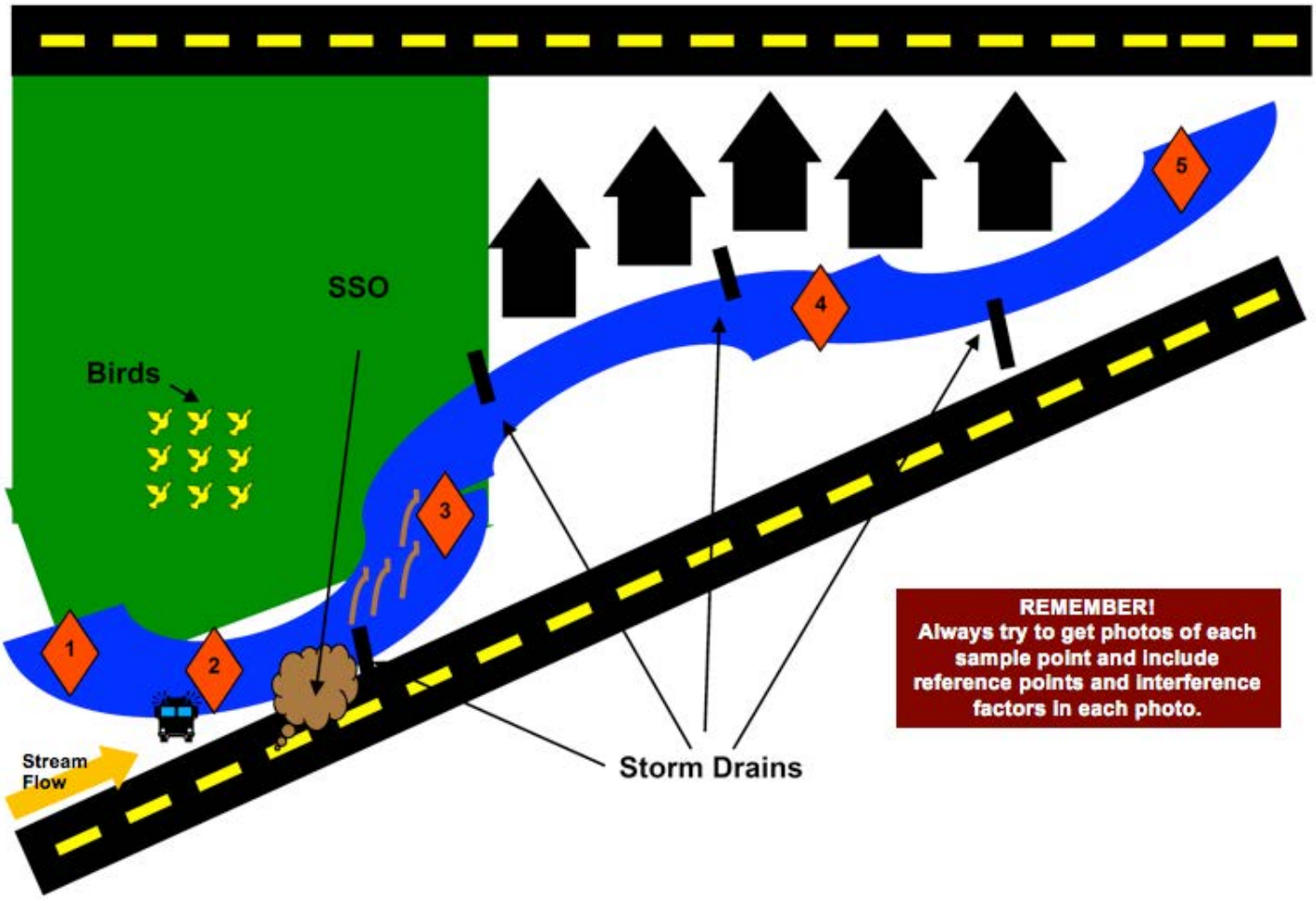
Immediately contact: The City of Santa Rose Treatment Plan at (707) 543-3350 or (707) 543-3364 and inform them that the following samples require processing: Ammonia-Nitrogen and Enterococcus.

Take cooler containing the samples and completed chain of custody to 4300 Llano Road, Santa Rosa. Samples should be taken to lab within 6 hours of collection time.

Post warning signs as directed by the County Environmental Health Department or the Public Works Superintendent. (Remove Warning Signs and lift restrictions when authorized by County Environmental Health.)

Repeat sampling daily from time the spill is known until the results of two consecutive sets of samples indicate the return to the normal level or cessation of monitoring is authorized by the County Environmental Health Department.

Field Sampling Kit: Procedures for Sampling Receiving Waters G-1 page 2



1. **Sample Location 1: Baseline Sample, *no* observable interference from birds, animals, runoff, etc**
2. **Sample Location 2: Baseline Sample, *observable* interference from birds, animals, runoff, etc**
   NOTE: Only collect this sample if you observe any possible interfering factors upstream from the spill location
3. **Sample Location 3: Immediately downstream of SSO entry point**
4. **Sample Location 4: Further downstream of SSO entry point – note any possible interfering factors**
5. **Sample Location 5: Further downstream of SSO entry point – note any possible interfering factors**

NOTE: This example is provided for illustrative purposes *only!* Base each sampling event on the geography, drainage and interference factors (*i.e. birds, animals, runoff, etc.)* of the area impacted.

Sample Chain of Custody Record

G-2

Customer Name				☐	**Hazardous Waste**	**PO#**	
Customer Address				☐	**Unknown Material**	**WO#**	
Customer Telephone		**Mail Code**		**CONTRACT LAB INFORMATION**		**Turnaround Requirement**	
Program Name				Ship to:		☐ Normal (21 days)	
Lab Program Coordinator		**Phone #**		Ship Date:		☐ Rush: _____	
Sampled By				Courier:		☐ Other:	

LIMS# (Issued by Lab)	SAMPLE COLLECTION INFORMATION									Analysis Requested					QA/QC Requirements
	Date	Time	Type: Composite	Type: Grab	Sample Location	Field pH	Field Temp	# Containers	Matrix*	Ammonia	Enterococcus				☒ Lab Standard ☐ Special (see attached) Remarks/Notes
			☐	☒	Upstream			2	A	☒	☒	☐	☐	☐	
			☐	☒	Entry Point			2	A	☒	☒	☐	☐	☐	
			☐	☒	Downstream			2	A	☒	☒	☐	☐	☐	
			☐	☐				2		☐	☐	☐	☐	☐	
			☐	☐				2		☐	☐	☐	☐	☐	
			☐	☐				2		☐	☐	☐	☐	☐	
			☐	☐				2		☐	☐	☐	☐	☐	

*Matrix: P = Potable Water, W = Wastewater, A = Ambient Water, G = Groundwater, S = Soil, B = Biosolids, I = Industrial, O = Other (specify in remarks)

Relinquished	Date	Time

Relinquished to	Date	Time

Transport/Shipping Information		
☐ USPS	☐ UPS	☐ FedEx
Tracing #:		
☐ Other:		

Sample Receiving Documentation

Container intact? ☐ Yes ☐ No	Correct container? ☐ Yes ☐ No	Field preserved? ☐ Yes ☐ No	Custody tape intact? ☐ Yes ☐ No
Cooled? ☐ Yes ☐ No	Temp. Blank? ☐ Yes ☐ No (°C)	Comments:	
Sample distribution: ☐ Lab bench ☐ Ice chest ☐ Walk-in cooler shelf #		Disposal Date:	Disposed by: (inits.)
C-O-C Distribution Date: By:		☐ Lab Admin File ☐ Prog/proj Mgr. ☐ Lab Prog. Coord.	☐ Delivery courier ☐ Pick-up courier

INSERT TAB:
Failure Analysis

Collection System Failure Analysis

OFFICE USE ONLY

Incident Report #		Prepared By	
SSO/Backup Information			
Cause			
Summary of Historical SSOs/Backups/Service Calls/Other Problems			
Date	Cause	Date Last Cleaned	Crew
Records Reviewed By:		Record Review Date:	
Summary of CCTV Information			
CCTV Inspection Date		Tape Name/Number	
CCTV Tape Reviewed By		CCTV Review Date	
Observations			

Go to Side B

Recommendations					
✓	Type	Specific Actions	Who is Responsible?	Completion Deadline	Who Will Verify Completion?
	No Changes or Repairs Required	n/a	n/a	n/a	n/a
	Repair(s)				
	Construction				
	Capital Improvement(s)				
	Change(s) to Maintenance Procedures				
	Change(s) to Overflow Response Procedures				
	Training				
	Misc.				
Comments/Notes:					
Reviewed by:			Review Date:		

City of Sebastopol

Water Quality Monitoring Plan

December 11, 2014

Revised August 25, 2020

Table of Contents

1. PURPOSE OF PROGRAM PLAN

The purpose of this Water Quality Monitoring Program Plan (WQMP or Plan) is to implement the recent requirements for sampling of sanitary sewer overflows (SSOs) greater than 50,000 gallons that reach surface waters. This plan conforms to the State Water Resources Control Board Waste Discharge Requirements Order No. 2006-0003-DWQ, Section D.7(v) and Monitoring and Reporting Program (MRP) Section D, Water Quality Monitoring Requirements issued by executive order number WQ 2013-0058-EXEC effective on September 9, 2013. This WQMP provides the City of Sebastopol (City) policies and procedures to assure consistent conformance to the regulatory requirements and to establish procedures for City staff and contractors in their responses to large releases of sanitary sewage that reach surface waters. This WQMP is consistent with and supplemental to the Sebastopol Overflow Emergency Response Plan, Element VI of its SSMP. Finally, this document will be used to coordinate training for the City's new employees and regular refresher training for existing employees.

Additionally this Plan is also used as a guideline for monitoring and sampling requirements that may be imposed upon the City from citizen suits under the Clean Water Act (CWA) resulting in settlement agreements, stipulated orders or consent decrees that can require monitoring and sampling of sanitary sewer overflows of any kind or size. This Plan establishes procedures for the identification of sampling locations, protocols for the proper collection of samples, the chain of custody for sample collections, the handling of samples, the reporting and recordkeeping to assure the legal integrity of monitoring for compliance with regulatory requirements. The plan will also establish policies and procedures that will be used to assure proper coordination between the taking and testing of samples, as well as assure that samples taken will satisfy the local regulatory agency's Basin Plan and the unique character of the City's local service area and surface waters.

This Program Plan is intended to establish protocols for all sampling including when, where and how: establish the required water quality sample analyses that will be conducted; identify the access and safety requirements related to sampling considerations; and identify any local concerns that this monitoring plan should address. In addition, the Plan establishes the requirements for equipment calibration, notification requirements related to an overflow, recordkeeping requirements, staff training issues and requirements for the regular reviews and audits of the WQMP. Finally, all City forms used for water quality monitoring are included and available for use in any SSO incident.

2. DEFINITIONS

The following definitions and acronyms are used in this Program Plan:

BACTERIA Probaryotic microorganisms typically a few micrometers in length, with shapes from spheres to rods and spirals

CalOES State of California Office of Emergency Services

CALOSHA California Division of Occupational Safety and Health

CFR Code of Federal Regulations

CFS Cubic feet per second

CIWQS California Integrated Water Quality System

CSRMA California Sanitation Risk Management Association

CWA	Clean Water Act
DH2O	Distilled Water
DEET	N,N-Diethyl-meta-toluamide
DOHS	California Department of Health Services
E. Coli	Escherichia coli (bacteria)
ELAP	Environmental Laboratory Accreditation Program
EPA	Environmental Protection Agency
Field QC	Field Quality Control
GPM	Gallons per minute
GWDR	General Waste Discharge Requirements or WDR
GIS	Geographic Information System
LIMS	Laboratory Information Management System
LRO	Legally Responsible Official
mg/l	Milligrams per liter
ml	Milliliter
MPN	Most probable number
MRP	Monitoring and Reporting Program
NH3	Ammonia
NH3-N	Ammoniacal Nitrogen
NPDES	National Pollution Discharge and Elimination System
OERP	Overflow Emergency Response Plan
OES	See CalOES
PPE	Personal Protective Equipment
ppm	Parts per million
QA/QC	Quality Assurance/Quality Control
RWQCB	Regional Water Quality Control Board

SOP Standard Operating procedure

SSC Sewer Service Charge

SSMP Sanitary Sewer Management Plan

SSO Sanitary Sewer Overflow

SSO GWDR Sanitary Sewer Overflow General Waste Discharge Requirements

SURFACE WATER
All waters whose surface is naturally exposed to the atmosphere; for example, rivers, lakes, reservoirs, ponds, streams, seas, estuaries, etc., and all springs, wells, or other collectors directly influenced by surface water.

SWRCB State Water Resources Control Board

WQMP Water Quality Monitoring Program Plan

WQ Water Quality

WDR Waste Discharge Requirements

VOC Volatile Organic Compound

3. RESPONSIBILITY

The City shall designate responsibility for all WQMP roles to appropriate classifications in the City to assure conformance of all activities for the monitoring of SSOs greater than 50,000 gallons reaching surface waters (Category 1 SSO), to reduce potential liability, protect public health, and to assure those responsible for this Plan are trained in their roles and responsibilities for the performance of proper protocols. It is further recognized that the proper application of this Plan will assure that all monitoring can withstand regulatory or legal scrutiny of the State, Regional Board, or from the actions of a citizen lawsuit. These roles and responsibilities are intended to be compliant with WDR Sections D.13 (vi), G and Section C.5 and D of the September 9, 2013 MRP.

The following table contains the roles and responsibilities as assigned by the City to individual classifications or service contractors of the City:

Roles and Responsibility	Responsible Classification
Provide and document regular training on WQMP for all City classifications that have a role or responsibility in the WQMP and identified herein	Sebastopol Public Works Department -Safety Representative
Identification and assessment of potential impacts to local areas with surface waters that may require WQMP (i.e. aerial crossings, creeks, waterways, rivers, bays, estuaries, etc.)	Sebastopol Public Works and Engineering Departments

Determination of specific sampling protocols and analytic methods to be used for the City-required testing	Sebastopol Public Works Department -Public Works Superintendent
Determination of appropriate bacterial indicators for sampling	Sebastopol Public Works Department -Public Works Superintendent
Annual review of all standard operating procedures related to this WQMP especially the Sample Collection procedures	Sebastopol Public Works Department -Public Works Superintendent
Decision to invoke a WQMP and direct the monitoring program to conclusion	City of Sebastopol -City Manager
Selection of sampling locations	Sebastopol Public Works Department -Public Works Superintendent
Coordination of field sampling	Sebastopol Public Works Department -Public Works Assistant Superintendent
Conduct field sampling per City protocols	Sebastopol Public Works Department -Public Works Maintenance Staff
Authorization and direction for placement of public notifications and signage	Sebastopol Public Works Department -Public Works Supervisor
Photographs of sampling and signage placed to protect public health and safety	Sebastopol Public Works Department -Public Works Maintenance Staff
Preparation of Chain of Custody for all samples taken including proper labeling	Sebastopol Public Works Department -Public Works Maintenance Staff
Determination of spill travel time, if applicable.	Sebastopol Public Works Department -Public Works Maintenance Staff
Review and evaluate lab results for termination of sampling and to determine the nature and impact of the release	Sebastopol Public Works Department -Public Works Assistant Superintendent
Decision to terminate sampling	Sebastopol Public Works Department -Public Works Superintendent
Preparation of detailed sampling location map	Sebastopol Public Works Department -Public Works Assistant Superintendent
Conduct sample analysis	*Laguna Environmental Laboratory,* *ELAP Cert #1126* *4300 Llano Rd, Santa Rosa, CA 95407* *707 543-3365*
Preparation of water quality sampling activities narrative for Technical Report	Sebastopol Public Works Department -Public Works Assistant Superintendent
Review and Approval of Technical Report	Sebastopol Public Works Department -Public Works Superintendent
Certification and placement of Technical report in the CIWQS spill reporting system.	Sebastopol Public Works Department -Public Works Superintendent
Failure Analysis Investigation of all water quality monitoring from the SSO event to determine all necessary changes or modifications to the WQMP	Sebastopol Public Works Department -Public Works Superintendent
Audits of the WQMP as required by City SSMP Element 10, Audit.	Sebastopol Public Works Department -Public Works Superintendent
Management of Change responsibilities for the WQMP and all associated forms and documents required for use during an incident	Sebastopol Public Works Department -Public Works Superintendent

It is recommended that this list of responsibilities be placed on a laminated card and kept in the Sampling Kit for easy access during an SSO sampling incident.

4. AUTHORITY AND REFERENCES

The authority for the monitoring and sampling of sanitary sewer overflows are contained in the following regulations:

1. State Water Resources Control Board Waste Discharge Requirements Order No. 2006-0003-DWQ, Section D.7(v).
2. State Water Resources Control Board Monitoring and Reporting Program (MRP) Sections C.5 D, Executive Order number WQ 2013-0058-EXEC effective September 9, 2013
3. Standard Methods for the Examination of Water and Wastewater, 22nd Edition, American Public Health Organization et al.
4. Clean Water Act Sections 301(a), 304(h), and 501(a).
5. Code of Federal Regulations, Title 40, Part 136.

There are a number of applicable references that are available to assist with the a proper Water Quality Monitoring Program as follows:

A. Basin Plan of the Regional Water Quality Control Board
B. Best Management Practices for Sanitary Sewer Overflow (SSO) Reduction Strategies, Central Valley Clean Water Associates and Bay Area Clean Water Agencies, December 2009
C. City Overflow Emergency Response Plans
D. Field Guide for Surface Water Sample and Data Collection, Air Program, USDA Forest Service, June 2001.
E. Standard Operating Procedures for Surface Water Quality Sampling, Arizona Department of Environmental Quality, Surface Water Section, September 2012.
F. Surface Water Sampling_AF.R3, Document Number SESDPROC-201-R3, Region 4, Environmental Protection Agency, Science and Ecosystem Support Division, Athens, Georgia, February 28, 2013.

5. IDENTIFICATION OF LOCAL SURFACE WATERS AND CHARACTERISTICS

An important element of any water quality monitoring program is the proper and thorough understanding of the service area and the various challenges the geography and sanitary sewer infrastructure of the service area present for the potential of wastewater reaching surface waters or storm water facilities. By evaluating the areas of concern in a service area such as lakes, rivers, dry creeks, aerial pipeline crossings over water ways and all storm water related infrastructure, the City can be better prepared to timely respond to any SSO reaching surface waters and to minimize the impacts of an SSO in or around local surface waters and storm water infrastructure.

A. <u>Surface Waters of Concern</u>

For the purposes of this Plan, surface waters are defined as all waters whose surface is naturally exposed to the atmosphere, for example, rivers, lakes, reservoirs, ponds, streams, seas, estuaries, etc., and all springs, wells, or other collectors directly influenced by surface water. In addition, the City will also identify and evaluate areas where collection system pipelines and force mains cross over or under waterways as these crossings can require additional resources and equipment to properly address any SSO from these collection system assets.

Surface waters of concern are those surface waters with the City's service area that may be impacted by a sanitary sewer overflow from the City's sanitary sewer collection system. Prior planning, review and evaluation of potential failure mechanisms can help minimize any potential impacts to surface waters or storm water infrastructure when and if the WQMP must be invoked. Any review of these important areas of potential surface water contamination in advance of an SSO should allow the City to be better prepared to respond to an SSO with the proper equipment and a better understanding of the procedures that may need to be invoked during the SSO such as flow rate of a creek or stream, and potential areas of significant environmental concern such as shell fish beds or fish habitats. In addition, having all storm water infrastructure located on the collection system field maps will help the City's responders quickly determine if SSOs may flow into storm drains reach and impact surface waters.

The following (Table 5.1) are the surface waters of concern within the City's jurisdiction:

Table 5.1: Surface Waters of Concern					
Name	Type (see legend, below)	Map Location	Background Monitoring?	Access Considerations	Safety Considerations
Laguna de' Santa Rosa	Stream	See Maps in Attachment (Att.) F	No	No special considerations	Exercise caution, may be slippery in wet weather
Calder Creek	Brook	See Maps in Att. F	No	"	"
Zimpher Creek	Brook	See Maps in Att. F	No	"	"
Atascadero Creek	Brook	See Maps in Att. F	No	"	"
Witter Creek	Brook	See Maps in Att. F	No	"	"
Morris Outfall	Culvert	See Maps in Att. F	No	"	"

Bog: Freshwater wetlands that are poorly drained and characterized by a buildup of peat.

Brackish Water: Generally, water containing dissolved minerals in amounts that exceed normally acceptable standards for municipal, domestic, and irrigation uses. Considerably less saline than sea water. Also, Marine and Estuarine waters with Mixohaline salinity (0.5 to 30 due to ocean salts). Water containing between 1,000-4,000 parts per million (PPM) Total Dissolved Solids TDS). The term brackish water is frequently interchangeable with Saline Water. The term should not be applied to inland waters.

Brook: A natural stream of water, smaller than a river or creek; especially a small stream or rivulet which breaks directly out of the ground, as from a spring or seep; also, a stream or torrent of similar size, produced by copious rainfall, melting snow and ice, etc.; a primary stream not formed by tributaries, though often fed below its source, as by rills or runlets; one of the smallest branches or ultimate ramifications of a drainage system.

Canal: A constructed open channel for transporting water.

Channel: An area that contains continuously or periodically flowing water that is confined by banks and a stream bed.

Culvert: A buried pipe that allows streams, rivers, or runoff to pass under a road.

Ditch: A long narrow trench or furrow dug in the ground, as for irrigation, drainage, or a boundary line.

Diversion channel: (1) An artificial channel constructed around a town or other point of high potential flood damages to divert floodwater from the main channel to minimize flood damages. (2) A channel carrying water from a diversion dam.

Drainage Channel: For the purposes of complying with the Statewide Sanitary Sewer Order, (1) a man-made canal used to transport storm water as part of a municipal separate storm sewer system, or (2) an intermittent or perennial stream bed.

Dry Wash: A streambed that carries water only during and immediately following rainstorms.

Ephemeral Streams: Streams which flow only in direct response to precipitation and whose channel is at all times above the water table.

Freshwater marsh: Open wetlands that occur along rivers and lakes.

Intermittent stream: Any nonpermanent flowing drainage feature having a definable channel and evidence of scour or deposition. This includes what are sometimes referred to as ephemeral streams if they meet these two criteria.

Perennial streams: Streams which flow continuously.

Pipe crossing: Crossing of a pipe or force main over or under a surface water body.

Riverine: Relating to, formed by, or resembling a river including tributaries, streams, brooks, etc.

Slough: A shallow backwater inlet that is commonly exposed at low tide.

Stream: A general term for a body of flowing water; natural water course containing water at least part of the year. In Hydrology, the term is generally applied to the water flowing in a natural channel as distinct from a canal. More generally, as in the term Stream Gaging, it is applied to the water flowing in any channel, natural or artificial.

For additional definitions refer to the glossary at http://www.streamnet.org/glossarystream.html.

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6. LAB SELECTION

A. Analytical Lab

Samples collected for SSO response and background monitoring purposes pursuant to Section 5.0 will be analyzed at the Laguna Environmental Laboratory in Santa Rosa. This lab is accredited through California's Department of Public Health Environmental Laboratory Accreditation Program (ELAP). ELAP provides evaluation and accreditation of environmental testing laboratories to ensure the quality of analytical data used for regulatory purposes to meet the requirements of the State's drinking water, wastewater, shellfish, food, and hazardous waste programs. The State agencies that monitor the environment use the analytical data from these accredited labs. The ELAP-accredited laboratories have demonstrated capability to analyze environmental samples using approved methods.

B. Getting Samples to the Lab

At all times, sample hold times identified below will be observed in accordance with Section 7.0. Once samples are collected, they will be transported to the lab as follows:

1. During Business Hours: Public Works Maintenance staff taking samples will deliver to Lab. 707-543-3350, 8-5 M-F

2. After Hours: Public Works Maintenance staff taking samples will deliver to Lab.

C. Lab Contact Info

Name: Laguna Environmental Lab

Address: 4300 Llano Road, Santa Rosa

Hours Samples Are Accepted: 24 hours

Phone: 707-543-4369, Shirley Johnson (normal hours Supervisor)

Alternate or After Hours Phone: 707-543-3364 (need to call ahead if after hours)

Emergency contact information: 707-543-3364

7. SAMPLING PARAMETERS

A. Required Sampling Parameters

The RWQCB Basin Plan and/or NPDES permit set the water quality standards against which one can judge the levels of impacts of an SSO on surface waters.

In accordance with the SWRCB Revised MRP WQ 2013-0058, the following parameters will be sampled:

1. Ammonia

Ammonia-N, is a key indicator of the extent of the gross pollution of the receiving water from a SSO. Untreated wastewater or partially-treated wastewater is generally high in ammonia-N (typical 20-30 mg/L), In comparison the natural background concentration in the surface water is low, typically, less than 0.5 mg/L. Therefore, the elevated concentration of ammonia of the

surface water downstream or at the site of the SSO, as compared to that upstream of the site is a reasonable indication of the extent of gross contamination from the SSO.

2. Bacteriological Indicator as specified in the local Basin Plan

   Total coliform, fecal coliform and enterococci count are indicators of potential public health impacts of an SSO on the receiving waters. If the concentrations of these groups of bacteria are elevated above and beyond the natural background and/or above the RWQCB Basin Plan Water Quality Standards (objective), public notification and posting may be necessary.

   It should be noted that there may be non SSO-related causes of elevated bacteria in surface water, for example, animal sources or storm drain discharge. The upstream and or other samples may reflect the extent of bacterial contamination from these other sources. Sometimes the extent of the SSO may be indistinguishable from the other natural sources beyond the City's control. This is particularly true when taking Source samples based on an estimated downstream location of the SSO plume (reference Section 7F).

   Generally, if the concentrations of these groups of bacteria at the downstream or at the site of impact are within the range of the non-impacted site (i.e. upstream) or levels indicated in historical background monitoring levels, the water quality impacts of the SSO are considered insignificant.

   The surface water quality objectives of these groups of bacteria are shown in Table 7.1 and 7.2, below.

Table 7.1: Water Quality Objectives for Coliform Bacteria[a]		
Beneficial Use	**Fecal Coliform (MPN/100ml)**	**Total Coliform (MPN/100ml)**
Water Contact Recreation	Geometric mean < 200 90th percentile < 400	Median < 240 No sample > 10,000
Shellfish Harvesting[b]	Median < 14 90th percentile < 43	Median < 70 90th percentile < 230
Non-contact Water Recreation[d]	Mean < 2000 90th percentile < 4000	
Municipal Supply: • Surface Water[c] • Groundwater	Geometric Mean < 20	Geometric Mean < 100 < 1.1[e]

NOTES:

a. Based on a minimum of five consecutive samples equally spaced over a 30-day period.

b. Source: National Shellfish Sanitation Program.

c. Based on a five-tube decimal dilution test or 300 MPN/100ml when a three-tube decimal dilution test is used.

d. Source: Report of the Committee on Water Quality Criteria, National Technical Advisory Committee, 1968.

e. Based on multiple tube fermentation technique; equivalent test results based on other analytical techniques, as specified in the National Primary Drinking Water Regulation, 40 CFR, Part 1421.21 (f), revised June 10, 1992, are acceptable.

Source: San Francisco Bay Basin (Region 2)
Water Quality Control Plan (Basin Plan)
California RWQCB, San Francisco Bay Region
Dec. 31, 2010

Table 7.2 – U.S. EPA Bacteriological Criteria for Water Contact Recreation[1, 2]
(in colonies per 100 ml)

Steady State (all areas)	Fresh Water		Salt Water
	Enterococci	E. Coli	Enterococci
	33	126	35
Maximum at:			
• Designated beach	61	235	104
• Moderately used area	89	298	124
• Lightly used area	108	406	276
• Infrequently used area	151	576	500

NOTES:

1. The criteria were published in the Federal Register, Vol. 51, No. 45 / Friday, March 7, 1986 / 8012-8016. The criteria are based on:
   a. Cabelli, V.J. 1983. Health Effects Criteria for Marine Recreational Waters, U.S. EPA, EPA 600/1-80-031, Cincinnati, Ohio, and
   b. Dufour, A.P. 1984, Health Effects Criteria for Fresh Recreational Waters, U.S. EPA, EPA 600/1-84-004, Cincinnati, Ohio.

2. The U.S. EPA criteria apply to water contact recreation only. The criteria provide for a level of production based on the frequency of usage of a given water contact recreation area. The criteria may be employed in special studies within this region to differentiate between pollution sources or to supplement the current coliform objectives for water contact recreation.

B. Sampling Parameters for City of Sebastopol

1. Ammonia
   - Discussion: See Section 7A
   - Sample Container: Plastic/glass
   - Sample Type: Grab
   - Sample Volume Required: 200 ml. minimum
   - Hold Time: 28 days
   - Preservative: Sulfuric acid
   - Analytical Method: Method 4500-XX R and C, Standard Methods for the Examination of Water or Wastewater, 21st Edition

2. Total Coliform/Fecal
   - Discussion: See Section 7A.2
   - Sample Container: Plastic (sterile)
   - Sample Type: Grab
   - Sample Volume Required: 100 ml. minimum
   - Hold Time: 8 hours
   - Preservative: None if waters are not chlorinated
   - Analytical Method: Method 9221 B, C and E, Standard Methods for the Examination of Water or Wastewater, 21st Edition

3. Enterococcus (not currently used by City)
   - Discussion: See Section 7A.2
   - Sample Container: Plastic (sterile)
   - Sample Type: Grab
   - Sample Volume Required: 100 ml. minimum
   - Hold Time: 48 hours
   - Preservative: None if waters are not chlorinated
   - Analytical Method: Method 9230D, Standard Methods for the Examination of Water or Wastewater, 21st Edition

4. Biological Oxygen Demand (BOD)
   - Discussion: Added 2020 (settlement agreement with Riverwatch)
   - Sample Container: Plastic (sterile)
   - Sample Type: Grab
   - Sample Volume Required: 100 ml. minimum
   - Hold Time: 8 hours
   - Preservative: None if waters are not chlorinated
   - Analytical Method: Method 5210-B 5-day test, Standard Methods for the Examination of Water or Wastewater, 21st Edition

5. Dissolved Oxygen
   - Discussion: Added 2020 (settlement agreement with Riverwatch)
   - Sample Container: Plastic (sterile)
   - Sample Type: Grab
   - Sample Volume Required: 100 ml. minimum
   - Hold Time: NA

- Preservative: None if waters are not chlorinated
- Analytical Method: Method 4500-O Membrane electrode, Standard Methods for the Examination of Water or Wastewater, 21st Edition

8. SAMPLING EQUIPMENT AND CALIBRATION

A. Sampling Equipment Used At City of Sebastopol

The following are the sampling equipment used by the City

- Sampling pole with fixed container
- Sampling pole with removable container
- Sampling pail and rope
- Grab-n-Go Sample Kit containing:
    - Ice pack
    - Waterproof pen
    - Sample labels
    - Camera
    - Sample bottles
    - Dissolved oxygen meter

B. Calibration and Record Keeping (Informational only, Sebastopol currently has no equipment that requires calibration)

Each piece of equipment is required to have an up-to-date calibration and maintenance logbook. The logbook will be maintained to have consecutively numbered pages and shall contain at least the following:

- Date
- Calibration Results
- Calibration comments
- Initials of the individual calibrating the instrument

Each instrument must be clearly identified (*e. g.,* the make, model, serial and/or ID number) to differentiate among multiple meters.

The appropriate calibration procedure must be followed pursuant to City standard calibration operating procedure and if the instrumentation does not have an electronic program that maintains a running calibration log, then the results must be recorded in the logbook each time a piece of field equipment is used, along with the date and name/initials of the person performing the calibration.

If difficulty is encountered in calibrating an instrument, or if the instrument will not hold calibration, this information must also be recorded. Malfunctioning equipment should not be used to collect data. Steps should be taken to correct the problem as soon as possible. All equipment maintenance should be recorded in the logbook indicating what was done to correct the problem, along with the date and signature/initials of the staff person that corrected the problem.

9. Sampling Procedures

A. Sample Location and Identification Procedures:

Samples will be collected by the City of Sebastopol Maintenance Staff. The most precise and accurate analytical measurements are worthless and even detrimental if performed on a sample that was improperly collected and stored, or was contaminated in the process. The purpose of sampling and analysis is to provide data that can be used to interpret the quality or condition of the water under investigation.

Unfortunately, water quality characteristics are not spatially or temporally uniform from one effluent to another. A sampling program must recognize such variations and provide a basis for compensations for their effects. The sample must be:

1. Representative of the material being examined;
2. Uncontaminated by the sampling technique or container;
3. Of adequate size for all laboratory examinations;
4. Properly and completely identified;
5. Properly preserved, and
6. Delivered and analyzed within established holding times.

These six requirements are absolutely necessary for a proper assessment of water quality.

It is impossible to establish hard and fast rules concerning sampling locations. However, the following general guidelines should be applied whenever City personnel conduct surface water sampling:

1. The sampling location should be far enough upstream or downstream of confluences or point sources so that the surface water and SSO volume is well mixed. Natural turbulence can be used to provide a good mixture.
2. Samples should be collected at a location where the velocity is sufficient to prevent deposition of solids, and to the extent practical, should be in straight reach having uniform flow. All flow in the reach should be represented, so divided flow areas should be avoided and samples should be taken towards the middle of the reach where feasible.
3. Sampler must always stand downstream of the collection vessel, and sample “into the current”. Care must be taken to avoid introducing re-suspended sediment into the sample.

B. Sample Types:

Grab samples are appropriate for the characterization of surface waters at a particular time and place, to provide information about minimum and maximum concentrations, to allow for the collection of variable sample volume.

Grab samples may be collected directly into the sample container, or a clean decontaminated intermediate container may be used if a wading sample is not possible or safe. If an intermediate container is used, when in the field, double rinse the sampling device (bucket, automatic sampler) with sample water prior to collecting the sample and be sure to discard rinse water downstream of where sample will be collected. If samples are collected in a bucket and distributed a consolidation collection container, swirl the contents of the bucket as it is being poured into the consolidation collection container to avoid settling of solids (and pour in back and forth pattern – *e.g.*, 1-2-3-3-2-1).

Grab Sample: A grab sample is defined as an individual sample collected at a given time. Grab samples represent only the condition that exists at the time the sample is collected (US EPA 1977).

Surface Grab Sample: A sample collected at the water surface (i.e. skimming) directly into the sample container or into an intermediate container such as a clean bucket. A single or discrete sample collected at a single location.

Field Blanks are used to evaluate the potential for contamination of a sample by site contaminants from a source not associated with the sample collected (e.g., airborne dust, etc.). Sterile, deionized water is taken into the field in a sealed container. This is the stock water. The stock water is then poured into the sample container. The containers and sample submission forms are labeled as "Field Blank". The same template selected for the test samples should be used. Field blanks are subject to the same holding time limitations as samples. The appropriate FIELD QC box on the sample Chain of Custody form should be checked.

C. Decontamination Procedures

Removing or neutralizing contaminants from sampling equipment minimizes the likelihood of sample cross contamination, reduces or eliminates transfer of contaminants to clean areas, and prevents the mixing of incompatible substances.

Gross contamination can be removed by physical decontamination procedures. These abrasive and non-abrasive methods include the use of brushes, air and wet blasting, and high and low pressure water cleaning.

The decontamination procedure described above may be summarized as follows:

1. Physical removal
2. Non-phosphate detergent wash
3. Tap water rinse
4. Distilled/deionized water rinse
5. 10% nitric acid rinse
6. Distilled/deionized water rinse
7. Solvent rinse (pesticide grade)
8. Air dry
9. Distilled/deionized water rinse

D. Sample Labeling and Chain of Custody Procedures

A sample is a physical evidence of a facility or the environment. An essential part of all enforcement investigations is that evidence gathered be properly documented. To accomplish this, the following sample identification and chain of custody procedures are established.

1. The method of sample identification depends on the type of measurement or analyses performed. When in-situ measurements are made, the data are recorded directly in Field Data Worksheets with identifying information, field observations, and remarks. Examples of in-situ measurements are:

- pH
- Temperature
- Dissolved Oxygen
- Stream Flow Measurement

Samples other than in situ measurements must be identified by a sample label. These samples are removed from the sample location and transported to a laboratory for analyses. Before removal, however, a sample is often separated into portions depending upon the analyses to be performed. Each portion is preserved in accordance with applicable procedures and each sample container is identified by a sample label.

2. At a minimum, the following grab samples will be collected, in duplicate:
   - Field Blank: See Section 9.B for discussion.
   - Upstream: This sample will be collected far enough upstream of the SSO's point of entry into the surface water as to be free of contaminants from the SSO. Typically, 50-feet is sufficient, but this may vary on circumstances of the spill.
   - Source: Immediate vicinity where the SSO entered the surface water. This point will actually be downstream of the actual SSO entry point for SSO's that have stopped entering the surface water to be sampled. If the SSO has stopped, calculate the approximate downstream distance from the original SSO location by dividing the time since the SSO occurred by the estimated velocity. This is the approximate downstream distance from the SSO discharge point to the "source" sampling location.
     - Due to possible tidal action in the surface water or other factors, another method may be used to determine the "source" location at the discretion of any of the following LROs:
   - City Manager, Larry McLaughlin-LRO
   - Dante Del Prete, Public Works Superintendent-LRO/Data Submitter
   - Susan Kelly, Engineering Director-LRO/Data Submitter
   - "Downstream" of SSO: This sample will be collected far enough downstream to be representative of the water quality of the surface water after adequate mixing of the surface water and the SSO have occurred. Typically, this location will be 50-feet downstream of the Source sample, but this may vary on the size and velocity of the surface water to be sampled.
     - NOTE: The terms "upstream" and "downstream" may depend on the tidal cycle if the water body is tidally influenced. Check the tide chart(s) and table at the following link: http://tidesandcurrents.noaa.gov/noaatidepredictions/NOAATidesFacade.jsp?Stationid=9415623.

3. Sample labels shall be completed for each sample, using waterproof ink. The information recorded on the sample tag/label includes:
   - Date: a six digit number indicating the year, month, day of collection
   - Time: a four-digit number indicating military time of collection (e.g., 0954)
   - Sample Location: sampling location description as either Upstream, Source, or

Downstream

- Samplers: each sampler is identified
- Parameter/preservative: the analysis to be conducted for the sample /sample preservation

4. Photos or video of each sample location will be taken, properly labeled with date, time, and view direction and a map of the photo locations completed. Photos and videos shall include relevant landmarks to identify sampling locations and their surroundings.

   Due to the evidentiary nature of samples collected during enforcement investigations, possession must be traceable from the time the samples are collected until they are analyzed. To maintain and document sample possession, a Surface Water Sample Chain of Custody Record (Attachment C) must be completed. A sample is under your custody if:

   - It is in your possession, or
   - It is in your view, after being in your possession, or
   - It was in your possession and under your control to prevent tampering, or
   - It is in a designated secure area.

5. As few people as possible should handle samples. The person taking the samples is personally responsible for the care and custody of the samples collected until they are transferred or dispatched properly.

6. Samples are accompanied by a chain of custody record. When transferring the possession of samples, the individuals relinquishing and receiving will sign, date, and note the time on the record. This record documents sample custody transfer from the sampler, often through another person, to the analyst at the laboratory. The samples are typically transferred to the sample-receiving custodian at the laboratory.

E. Safety Considerations

Personal safety of staff engaged in any fieldwork activity (e.g., in transit, walking or hiking, and any field activities while at the sample site) is of primary importance. Staff should never place themselves in dangerous or risky situations. Any hazards that are known by field personnel should be communicated to other members of the field crew.

Fieldwork should be postponed if there is indication that engagement in the field activity could cause bodily harm. Working during lightning storms, at night, in heavy vegetation or poison oak, near aggressive wildlife or domestic animals, traversing steep or rugged terrain, unstable slopes or creek banks, near swiftly moving water or potential flash flood conditions, or during snowy weather is not considered "normal risk". If any member of the field crew is uncomfortable with a reasonable self-determined hazardous field condition, it is that person’s responsibility to bring this to the attention of the on site field supervisor or their supervisor. A “reasonable self-determined hazardous field condition” is defined as other than normal risk. Supervisors shall not dismiss any person’s spoken concerns that field conditions are too hazardous to complete the work assignment.

The person taking the samples must have adequate protection, including protective clothing. They must wear gloves, as protection against chemical and/or bacteriological hazards, while they are sampling or handling samples that are known or suspected to be hazardous (e.g. visible solids or sheens, downstream from sewage spills, etc.), or if hands have open wounds. The type of gloves worn shall be determined by the sampling circumstance and type of pollutants expected – for instance longer gloves are needed when samples must be taken well below the surface.

When in a boat or wading in a stream, a personal floatation device shall be worn at all times. Other protective measures shall be taken in accordance with Sebastopol safety procedures.

Upon arrival at a sampling site, safety equipment such as signs, cones, lights, etc. shall be set out as appropriate. Vehicles shall be parked in locations and directions to minimize traffic disruption and avoid sample contamination. Photos should be ultimately taken of the placement of all safety equipment and signage

The following guidelines apply to all fieldwork by City staff.

- No sample or measurement is worth the risk of injury.
- All staff shall use proper personnel protective gear as appropriate for the incident (e.g., life preservers, gloves, goggles, etc.)
- Field sampling crews should consist of at least two members unless otherwise approved by a supervisor.
- Be conscious of the whereabouts of rattlesnakes, mountain lions, and other dangerous animals.
- Open body wounds are entry sites for infection; take the necessary precautions for self-protection.
- If there is storm activity in the work area, wait for safer conditions to develop or postpone the sampling.
- Do not sample at night without approval from your supervisor.
- Do not trespass on private property, or posted restricted public lands without prior permission and written approval from property owner or administrator.
- If strange or suspicious looking people are in the work area, either wait for them to leave or postpone the work to a later time. Do not force confrontations with strangers and back away from any confrontations with the public. Be courteous and understanding of public concerns of the situation.
- Take the necessary precautions against exposure to harmful weather conditions such as heat, wind, snow, cold, rain, etc.
- Carefully evaluate a given on-site situation to determine if the task can be performed safely.
- Wear protective footwear when entering streams.
- Do not enter the stream if the water is flowing too fast.

F. Stream Velocity Measurements

If sampling is performed after the SSO has stopped, the velocity of the impacted surface water should be determined in order to estimate SSO travel time and select an accurate Source

sample location. One way to measure the SSO travel time is to use a velocity probe (such as a Global Water FP111-S Flow Probe) to determine the rate of flow in the water body. The City doesn't have one currently, but if a water velocity probe is used in the future, the manufacturer's instructions will be followed.

G. Grab-n-Go Sampling Kit

The City maintains a Grab-n-Go sampling kit located at the Public Works SCDAD West Office. The kit is inspected quarterly by the Public Works Assistant Superintendent. Additionally, any City staff utilizing the kit is responsible for decontaminating sampling equipment and field monitoring devices and replenishing the kit.

SSO Sample Collection Kit Inventory:

- Cooler
- Surface Water Sampling SOP (Attachment B)
- Ice Pack (stored in freezer)
- 5 Ammonia sample bottles, preserved (3 for samples, 1 for Field Blanks and 1 extra in the event of contamination, spillage of the preservative or other contingency)
- 5 sample bottles (3 for samples, 1 for Field Blanks and 1 extra in the event of contamination, or other contingency)
- Digital camera, with extra batteries
- Latex gloves
- Safety glasses/goggles
- Surface Water Sampling Worksheet (Attachment D)
- Sampling Pole
- Field Lights
- Waterproof Pen
- Minimum of 20 blank sample bottle labels
- Chain of Custody form (Attachment C)
- Boat and personal floatation device (if applicable)

H. Surface Water Maps
Maps of surface waters in the Sebastopol service area that may be impacted by an SSO are located in Attachment F.

I. Follow Up Sampling
1. Sampling will be repeated every 24 hours, or as directed by the RWQCB or Sonoma County Environmental Health Department, until such time as one of the following criteria have been met:
   - The County Environmental Health Department or the RWQCB indicates follow up sampling is no longer required, or
   - Both the ammonia and bacteria levels downstream are approximately equal to or less than the upstream levels; or
   - The concentration of ammonia is at or below that of the upstream sample, or the un-ionized ammonia is below 0.16 mg/L as N; and
     The concentration of fecal coliform levels is below the applicable water quality objective levels for fecal coliform shown in Table 9.1 below for the appropriate beneficial use.

Table 9.1 Excerpt of Table 3-1 of the June 2013 SF Bay Area Basin Plan

Beneficial Use	Fecal Coliform (MPN/100mL)	Total Coliform (MPN/100mL)	Enterococcus Bacteria (MPN/100mL)		E. coli (MPN/100mL)
			Estuarine and Marine	Fresh Water	Fresh Water
Water Contact Recreation	90th percentile < 400	no sample > 10,000	no sample > 104	Max at 89	Max at 298
Shellfish Harvesting	90th percentile < 43	90th percentile < 230	--	--	--
Non-contact Water Recreation	90th percentile < 4,000	--	--	--	--

J. Surface Water Sampling SOP
The Surface Water Sampling SOP, Attachment B, provides step-by-step procedures to collect samples and deliver them for analysis in accordance with Sections 6, 7 and 9.

10. NOTIFICATIONS OF SENSITIVE RECEPTORS AND REGULATORY AGENCIES

Table 10.1 describes regulatory and other notifications that must be made in accordance with the triggers indicated:

Table 10.1 Notifications of Sensitive Receptors and Regulatory Agencies

Contact	Trigger	Deadline	How	Person(s) Responsible
OES	If SSO is greater than or equal to 1,000 gallons and reaches or has potential to reach surface waters.	2 hours after awareness of SSO	Call CalOES at (800) 852-7550.	
County Environmental Health				
SWRCB	If 50,000 gal or more were not recovered.	45 days after SSO end time, Submit SSO Technical Report.	CIWQS*	
RWQCB				
Public Works Superintendent	Any reportable spill	With 24 hours	Phone Call	Public Works Staff
City Manager	Any reportable spill	3 Business days	email	Public Works Superintendent
Sonoma County Water Agency	If Spill Reaches the Russian River	2 Hours	Bus.Hrs. 707-526-5370 Aftr. Hrs 707-523-1070	
Russian River Utility	If Spill Reaches the Russian River	2 Hours	707-887-7735	
Sweet Water Springs	If Spill Reaches the Russian River	2 Hours	707-869-4000	

** In the event that the CIWQS online SSO database is not available, notify the State Water Resources Control Board (SWRCB) by phone or email and provide required information until the CIWQS online SSO database becomes available.*

11. TECHNICAL REPORT

The MRP requires that in the event of a 50,000 gal or greater overflow spilled to surface waters, the City must prepare and submit an SSO Technical Report that includes a description of all water quality sampling activities conducted, a location map of all water quality sampling points, and the analytical results and evaluation of the results, pursuant to Section B.5 of the MRP. In addition, this report must be submitted to the CIWQS Online SSO Database within 45 days of the end of the SSO and must be certified by the City's Legally Responsible Official, any one of the following:

City Manager, Larry McLaughlin-LRO

Richard Emig, Public Works Superintendent-LRO/Data Submitter

Susan Kelly, Engineering Director-LRO/Data Submitter

12. RECORDKEEPING

All sampling related records associated with this WQMP should be contained in the appropriate SSO Incident file designated with a specific locator record number. These records shall include at least the following documents related to the WQMP:

- A narrative description of water quality sampling activities associated with the event.
- Timeline of the sampling activities until sampling is terminated.
- All surface water sampling worksheets.
- Computations of spill travel time in surface waters, if appropriate.
- Chain of Custody for all samples.
- Sampling Map of all sample locations.
- All photos or video showing sampling activities.
- Final analytical results from the certified laboratory conducting the sample analysis along with an Agency evaluation of the results to determine the nature and impact of the release.
- Failure analysis reviews of the WQMP including recommendations for changes and modifications.
- Calibration records for specific equipment used in the sampling processes.
- Notification documentation for all public and private agencies involved with or requiring monitoring related to final sample results.

The City shall maintain all records including records from service contractors associated with this WQMP as part of the file records for an SSO as required by the WDR and MRP. These records shall be maintained for a minimum period of five-years from the end date of the SSO unless required by regulatory enforcement action, request of the State or Regional Board or as support for claims litigation resulting from the SSO. All records associated with the SSO shall be destroyed upon reaching the end of the file retention period or as otherwise required by the Regional or State Board.

Samples of all City forms and records used in this WQMP are included as attachments.

13. TRAINING

Training will be provided in accordance with Table 13.1.

Table 13.1 Sebastopol surface water sampling training program	
Who Is Trained To Collect Surface Water Samples?	PUBLIC WORKS MAINTENANCE STAFF
Trainer Qualifications	The trainer shall, by virtue of training, experience, education or a combination thereof demonstrate expertise in surface water sampling science, techniques and documentation.
Training Curriculum	at a minimum, training shall include: • The Sebastopol Water Quality Monitoring Plan • Sampling technique, including hands on practice • Sampling equipment calibration, use and decontamination procedures, including hands on practice • Sampling safety • Completion of the Sampling Equipment Calibration/Maintenance Log, Surface Water Sampling Report and Chain of Custody
Training Documentation	Attendees shall be required to sign-in to all training on the appropriate forms used by AGENCY.
Refresher Training Frequency	Annual
Who is Responsible for Ensuring Training Occurs?	PUBLIC WORKS ASSISTANT SUPERINTENDENT
Required Training Records	Employee training sign in log
Who is Responsible for Maintaining Records?	PUBLIC WORKS ASSISTANT SUPERINTENDENT

14. INTERNAL REVIEW AND UPDATE OF THE WQMP

The WQMP is a requirement of the WDR and MRP regulations and therefore the WQMP must be adopted by the City governing board when completed and thereafter at the same time as the new adoption of the SSMP every five years or when major changes to the SSMP are required. Internal reviews of the WQMP should be conducted at a minimum with City SSMP audits or with a failure analysis following a SSO event requiring the use of this WQMP. This latter evaluation should be used to determine if any procedures or program changes would improve the WQMP.

The internal review of the WQMP must include a thorough review of the then existing WQMP against actual performance by the agency staff and testing laboratory during and after the event. All documents associated with the water quality sampling should be reviewed and included in the SSO file and compared to the requirements in this Plan. Particular attention should be given to all dates and times associated with the monitoring, proper tests in support of the Regional Board Basin Plan, proper completion of the Chain of Custody, equipment calibration documentation of all equipment used for sampling and available photographs or video of the sampling processes, review and sign-offs by all responsible parties, review of the sampling locations map, final lab results and the certification report that the Technical Report was submitted within 45 calendar days of the end of the SSO to the CIWQS system.

In addition, the City should also conduct regular reviews of the WQMP at least annually or along with the bi-annual SSMP Audit required by the WDR. The review should be undertaken to determine that all information in the Program is current, that all classification responsibilities have not changed, that all forms are still appropriate and that all contract relationships with testing laboratories, if not associated with the agency, are still current and available 24 hours per day and 7 days per week. The review should also include a review of the Regional Board Basin Plan to assure continuing conformance with the Basin Plan.

This internal review should be conducted by senior management of the collection systems personnel, laboratory management and any outside contract laboratory services subsequent to any event or once per year if the WQMP has not had to be invoked during the preceding year.

Finally, a schedule and assignment of responsibility for completion of the recommended changes should be prepared along with additions to the SSMP Change Log for these changes and modifications of the WQMP.

CHANGE LOG

The new MRP, Section E.3 requires that all changes to the Sanitary Sewer Management Plan be recorded and documented using an SSMP Change Log indicating what section is being change, a description of the changes, and the person or persons authorizing the changes. Because the WQMP is required by the WDR and MRP, it is also necessary that changes to the WQMP be included in the documentation of changes to the SSMP. Any changes resulting from Section 14 above should be added to the Change Log of the SSMP upon implementation and adoption of the changes as required by the WDR.

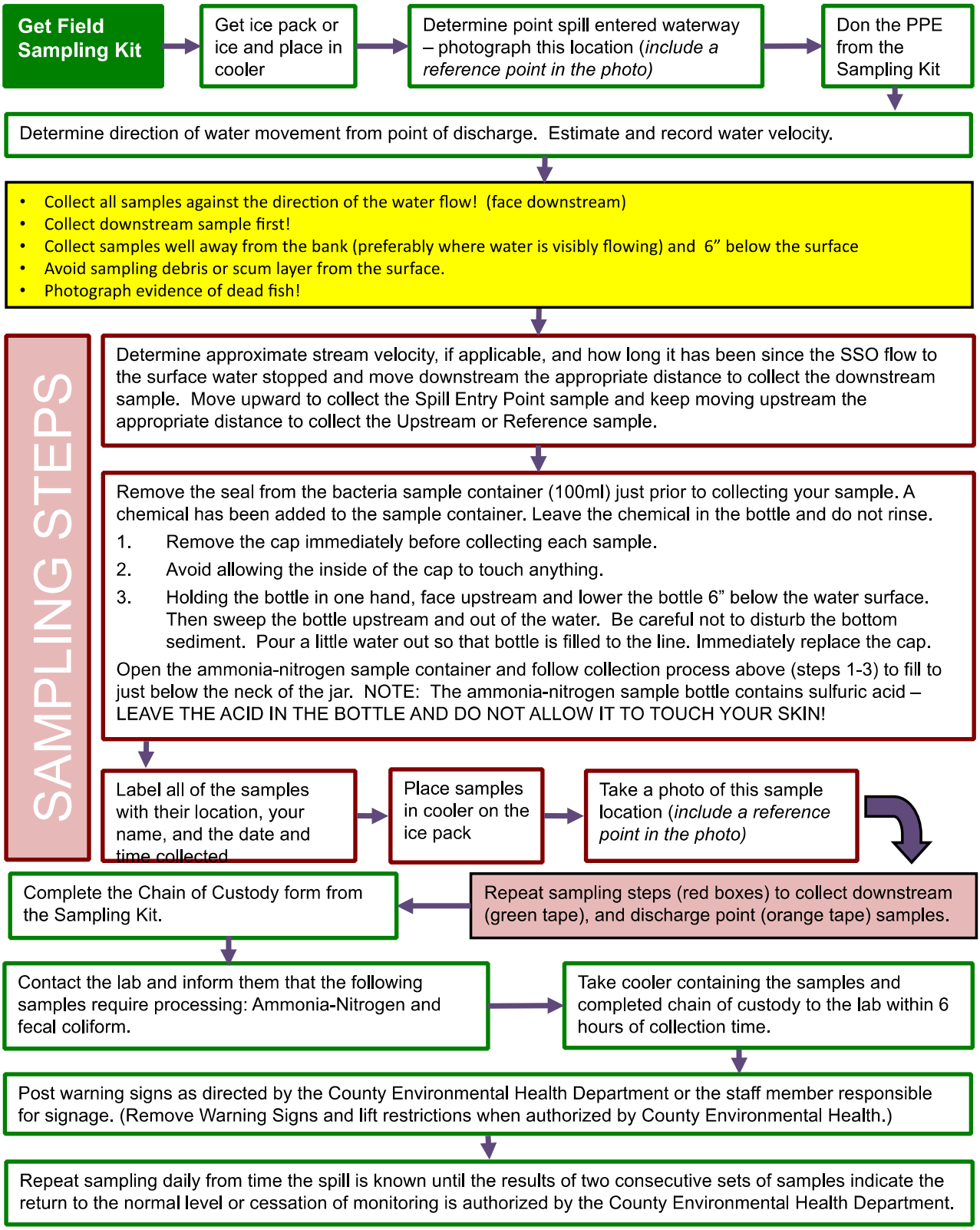
ATTACHMENT A
Water Quality Monitoring Plan Change Log

Water Quality Monitoring Plan Change Log

Date	Section(s) Changed	Summary of Change	Approved (signature)
8/25/20	7	Added BOD and dissolved oxygen to testing parameters as a result of settlement agreement with Riverwatch	

ATTACHMENT B
Surface Water Sampling SOP

Surface Water Sampling Standard Operating Procedure



ATTACHMENT C
Sample Collection Chain of Custody Record

Customer Name				☐	**Hazardous Waste**	**PO#**	
Customer Address				☐	**Unknown Material**	**WO#**	
Customer Telephone		**Mail Code**		**CONTRACT LAB INFORMATION**		**Turnaround Requirement**	
Program Name				Ship to:		☐ Normal (21 days) ☐ Rush: _____ ☐ Other:	
Lab Program Coordinator		**Phone #**		Ship Date:			
Sampled By				Courier:			

LIMS# (Issued by Lab)	SAMPLE COLLECTION INFORMATION								Analysis Requested					QA/QC Requirements	
	Date	Time	Type: Composite	Type: Grab	Sample Location	Field pH	Field Temp	# Containers	Matrix*	Ammonia	Enterococcus			☒ Lab Standard ☐ Special (see attached)	Remarks/Notes
			☐	☒	Upstream			2	A	☒	☒	☐	☐	☐	
			☐	☒	Entry Point			2	A	☒	☒	☐	☐	☐	
			☐	☒	Downstream			2	A	☒	☒	☐	☐	☐	
			☐	☐				2		☐	☐	☐	☐	☐	
			☐	☐				2		☐	☐	☐	☐	☐	
			☐	☐				2		☐	☐	☐	☐	☐	
			☐	☐				2		☐	☐	☐	☐	☐	

*Matrix: P = Potable Water, W = Wastewater, A = Ambient Water, G = Groundwater, S = Soil, B = Biosolids, I = Industrial, O = Other (specify in remarks)

Relinquished	Date	Time

Relinquished to	Date	Time

Transport/Shipping Information		
☐ USPS	☐ UPS	☐ FedEx
Tracing #:		
☐ Other:		

Sample Receiving Documentation

Container intact? ☐ Yes ☐ No	Correct container? ☐ Yes ☐ No	Field preserved? ☐ Yes ☐ No	Custody tape intact? ☐ Yes ☐ No
Cooled? ☐ Yes ☐ No	Temp. Blank? ☐ Yes ☐ No (°C)	Comments:	
Sample distribution: ☐ Lab bench ☐ Ice chest ☐ Walk-in cooler shelf #		Disposal Date:	Disposed by: (inits.)

C-O-C Distribution courier	Date:	By:	☐ Lab Admin File	☐ Prog/proj Mgr.	☐ Lab Prog. Coord.	☐ Delivery courier	☐ Pick-up	

ATTACHMENT D
Surface Water Sampling Worksheet

Sample Date:	Sample Time: ☐AM ☐PM	Sample Location:
Sampler(s)' Name(s):		
Sampler(s)' Signature(s):		

What is being sampled?
☐Stream ☐Pond ☐Lake ☐Lagoon
☐Bay/Estuary ☐Ocean ☐River ☐Other:

Weather at time of sampling: ☐Sunny ☐Overcast
☐Sprinkling ☐Raining ☐Snowing

Was the SSO actively entering the surface water during Sampling? ☐YES ☐NO
If no, complete A-D in the gray box to the right ➔

If the SSO was not actively entering the surface water during sampling:

A. Stream Velocity: _____CFS
B. How Long Has the SSO ***NOT*** Been Entering the Surface Water?
_____ minutes X 60sec/min = _____ seconds
C. How Far Downstream Did You Travel To Collect The SOURCE Sample?
(A X C = Feet): _____ feet
D. Explain why you travelled a different distance, if you did, to collect the source sample:

NOTE: Calibrate equipment prior to use and record in the Equipment Calibration/Maintenance Log

Sample Location	# of Samples*	pH	Temp. (°C)	DO (mg/l)	Photo ID# of Sample Location	Visual Observations and/or Interferences
Upstream						
Source						
Downstream						
Field Blank						

* Minimum of 2 per location

FINISH CHECKLIST	NOTES / OBSERVATIONS
☐ **All Samples Labeled with:** ☐ Date: a six-digit number indicating the year, month, day of collection ☐ Time: a four-digit number indicating military time of collection. e.g. 0954 ☐ Sample Location: Upstream, Source, or Downstream ☐ Samplers: each sampler is identified ☐ Parameter/preservative: analysis to be conducted for sample/sample preservation ☐ **Chain of Custody Completed** ☐ **Samples on Ice in Cooler** ☐ **Pictures Taken of Each Sample Location and the Photo ID/# Noted Above**	

☐ **All Sampling Equipment Collected**	

ATTACHMENT E
Technical Report

Technical Report
Outline

1. Introduction
   Agency/system description

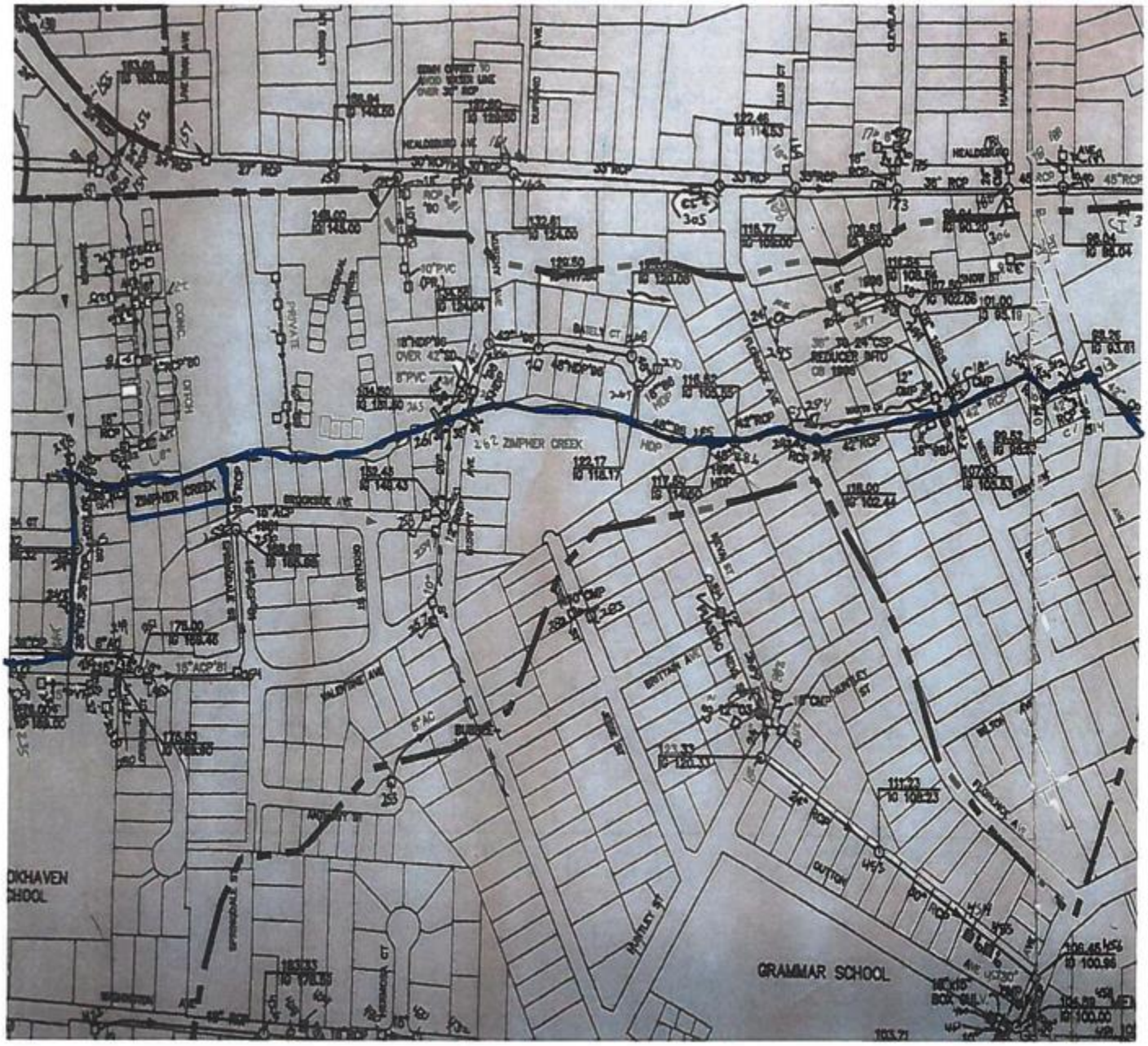
2. SSO Technical Report - Contents and Responses
   a. Causes and Circumstances of the SSO
      i. Detailed explanation of how and when SSO was discovered
      ii. Diagram indicating SSO "Cause point", appearance point, and final destination (use attachments, maps and diagrams as needed)
      iii. Detailed description of methodology employed and available data used to calculate the SSO volume and any volume recovered
      iv. Detailed description of the cause(s) of the SSO
      v. Copies of the original field crew records used to document the SSO (attachment)
      vi. Historical maintenance records for the lines involved in the cause of the SSO (attachment)

   b. Agency's Response to the SSO
      i. Chronological narrative description of actions taken by agency to terminate the SSO
      ii. Description of how the OERP was implemented to respond to and mitigate any impacts of the SSO
      iii. Final corrective action(s) completed and/or planned, including a schedule for actions not yet completed

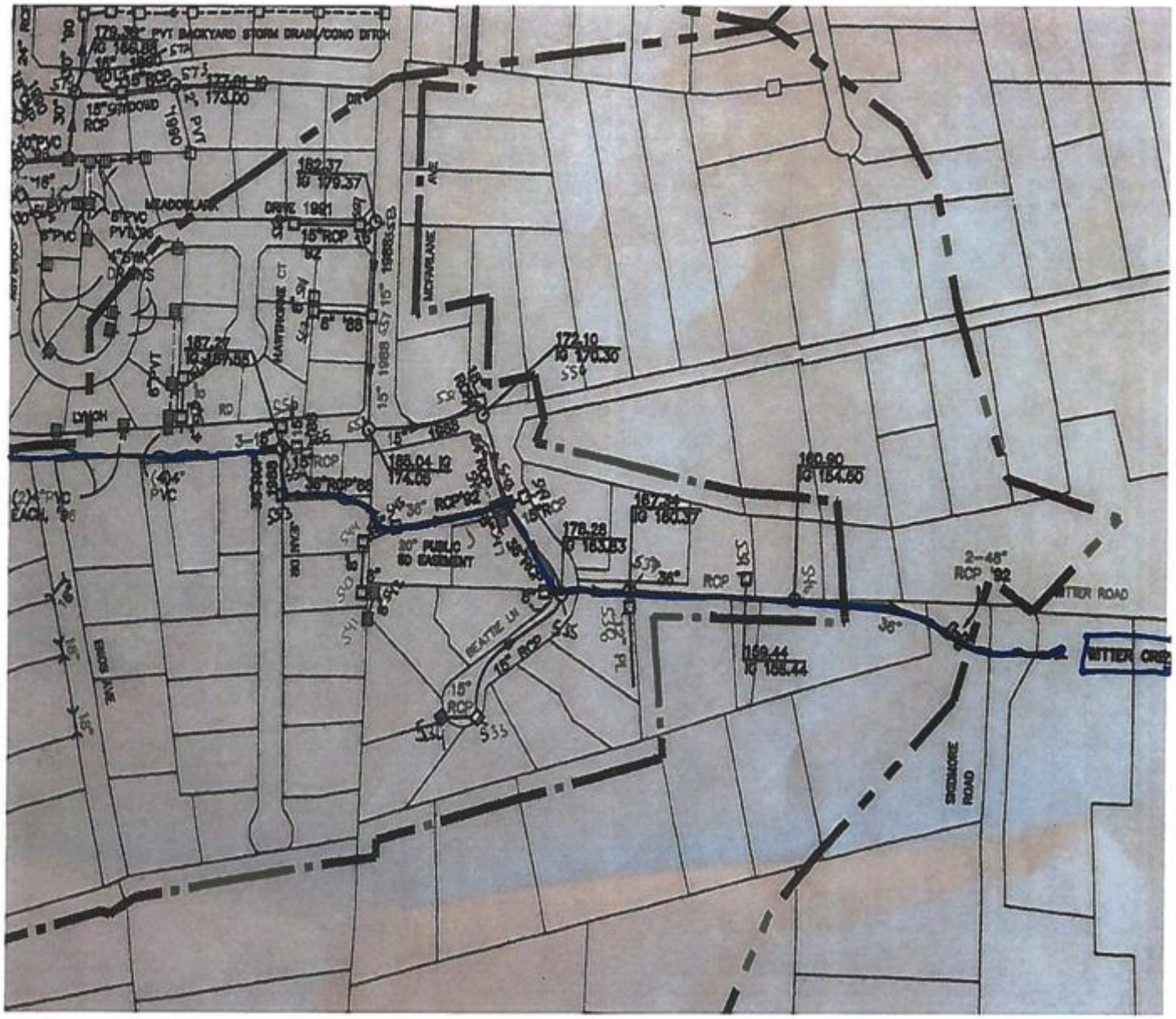
   c. Water Quality Monitoring
      i. Description of all water quality sampling activities conducted, including analytical results and evaluation of the results
      ii. Detailed location map illustrating all water quality sampling points

3. Conclusions

ATTACHMENT F
SURFACE WATER MAPS



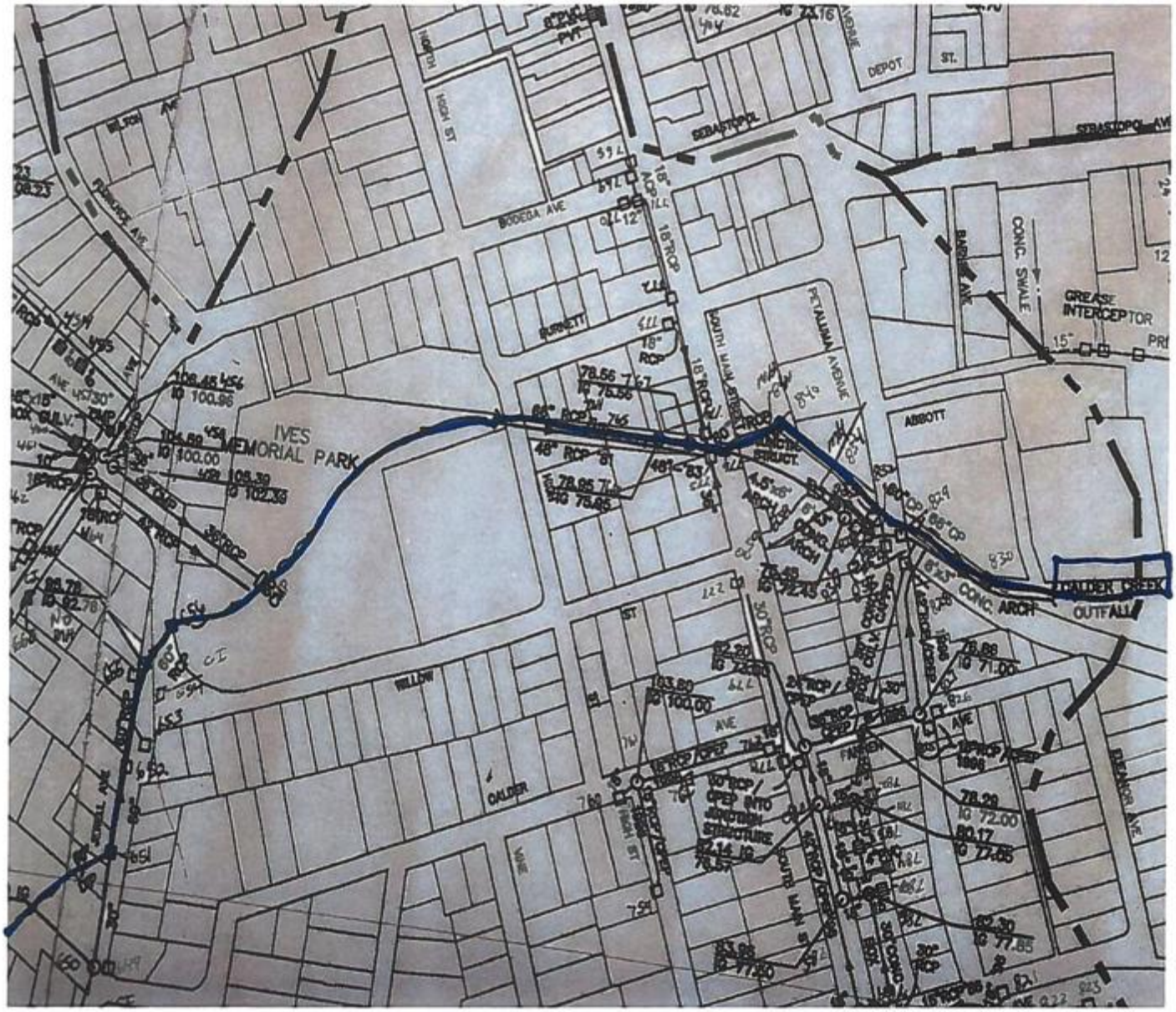
Zimpher Creek



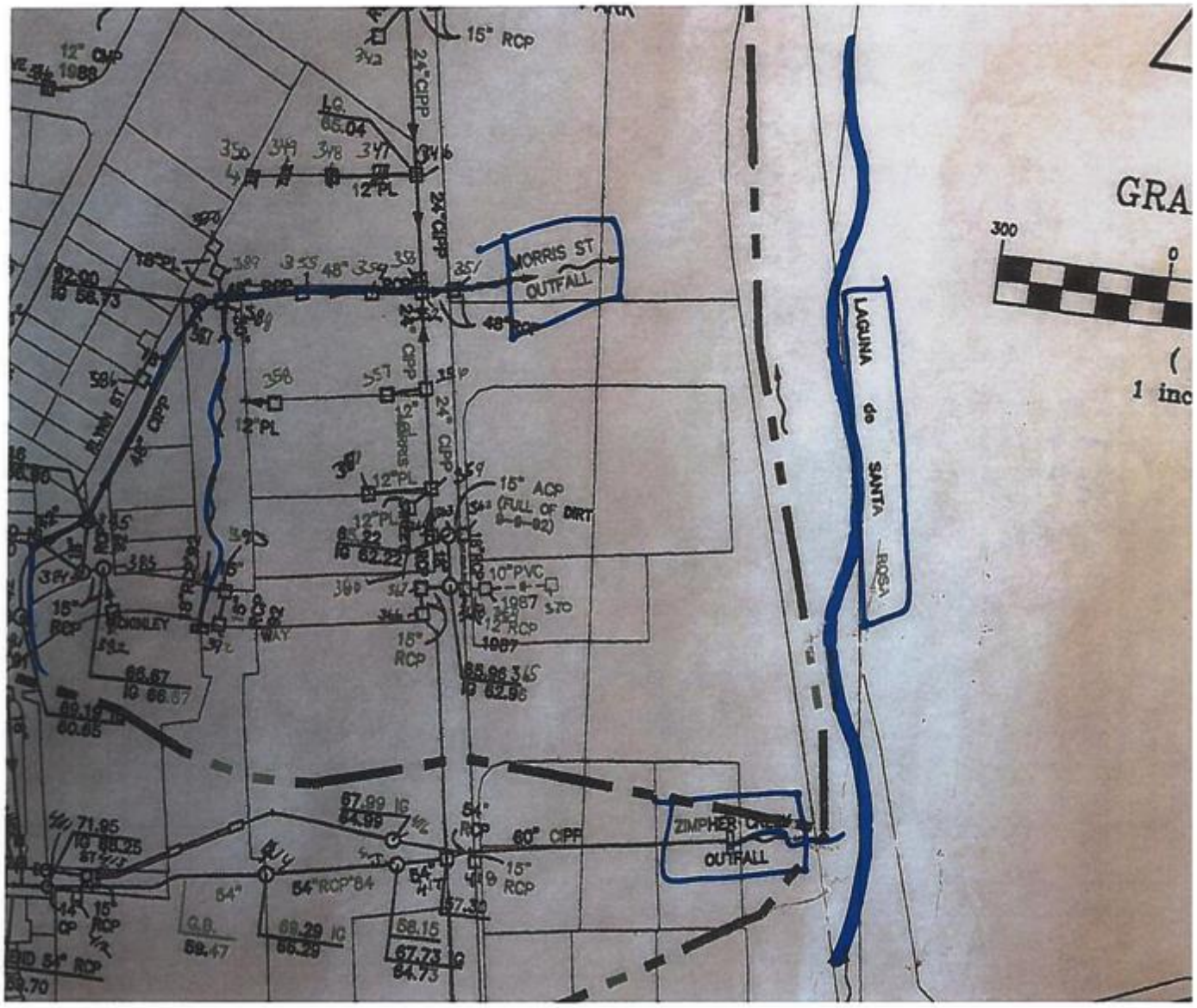
Witter Creek


ATASCADERO
CREEK
DAYLIGHT TO ROAD
VALLEY VIEW DR
MAY CT
HOLLY CT
EAGLE RD
4" PERFORATED PLASTIC PIPE
18" RCP
30" RCP '90

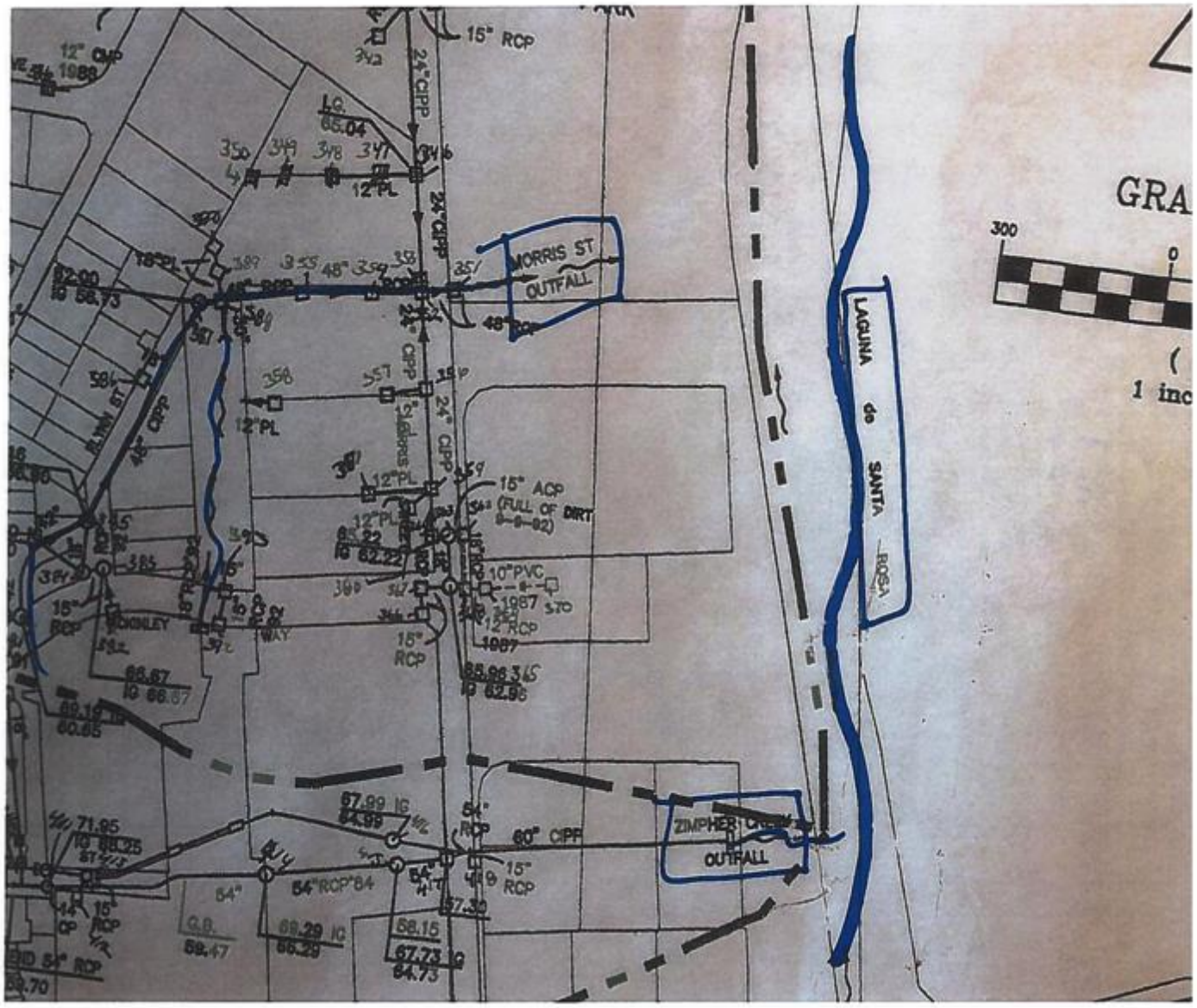
Atascadero Creek



Calder Creek



Laguna de Santa Rosa



Morris Outfall

Resolution No. _____

RESOLUTION OF THE CITY COUNCIL OF THE CITY OF SEBASTOPOL ACCEPTING AND CERTIFYING THE CITY OF SEBASTOPOL SEWER SYSTEM MANAGEMENT PLAN, OVERFLOW EMERGENCY RESPONSE PLAN AND THE WATER QUALITY MONITORING PLAN

WHEREAS, the State Water Resources Control Board enacted Board Order No. 2006-0003-DWQ on May 2, 2006, establishing Waste Discharge requirements for all public agencies that own or operate sanitary sewer systems greater than one mile in length that collect or covey intreated wastewater to a publicly owned treatment facility; and

WHEREAS, the City of Sebastopol, in partial compliance with Order No. 2006-003-DWQ, enrolled for coverage under the Statewide General Waste Discharge Requirements for Sanitary Sewer Systems on October 6, 2006; and

WHEREAS, effective September 9, 2013 the WDR Monitoring and Reporting requirements were modified and amended by Executive order No. WQ-2013-0058-EXEC changing reporting and recordkeeping requirements and modified the categories of sanitary sewer overflows; and

WHEREAS, the WDR requires agencies to prepare and governing boards to adopt Sewer System Management Plans with specific Elements at least every five years; and

WHEREAS, the WDR as amended also requires the agency to prepare and adopt Overflow Emergency Response Plans and Water Quality Monitoring Plans; and

WHEREAS, the City has also recently entered into a Settlement and release of Claims Agreement with California River Watch that requires the City update and the Council to adopt certain revisions to the City of Sebastopol sewer program in the Sewer System Management Plan, the Overflow Emergency Response Plans and the Water Quality Monitoring Plans; and

WHEREAS, the WDR requires the governing body to consider revising as necessary and recertifying the three Plans after any changes, revisions, or amendments to the City program resulting from operational changes, settlement agreements or enforcement actions; and

WHEREAS, the necessary changes, revisions and amendments have now been prepared and are ready for City Council consideration.

NOW, THEREFOR, BE IT RESOLVED that the City Council of the City of Sebastopol hereby approves this Resolution accepting and certifying the Sewer System Management Plan, the Overflow Emergency Response Plans and the Water Quality Monitoring Plans for the City Sebastopol dated September 15, 2020;

AND BE IT FURTHER RESOLVED, that the City's Legally responsible Official is directed to certify under penalty of perjury in the State of California CIWQS database System the adoption of the Sewer System Management Plan.

IN COUNCIL DULY PASSED this 15th day of September 2020.

APPROVED: _____
Patrick Slayter, Mayor

AYES:
NOES:
ABSENT:
ABSTAIN:

ATTEST: _____
Mary Gourley, CMC, City Clerk