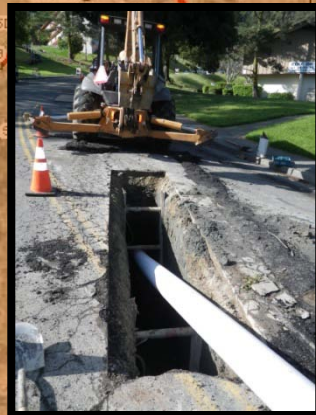




Sausalito-Marín City Sanitary District



Sewer System Management Plan



May 2019 - 2024

Sausalito-Marin City Sanitary District

Sewer System Management Plan

Prepared by:

HUMPHREY CONSULTING

May 2019

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List of Abbreviations

AO	Administrative Order of Compliance (EPA, 2008)
CalOES	California Office of Emergency Services
CCTV	Closed-Circuit Television
CIP	Capital Improvements Plan
CIPP	Cured-in-Place Pipe
City	City of Sausalito
CIWQS	California Integrated Water Quality System
CMMS	Computerized Maintenance Management System
District	Sausalito-Marín City Sanitary District
FOG	Fats, Oils, and Grease
FSE	Food Service Establishment
GGNRA	Golden Gate National Recreation Area
GIS	Geographic Information System
HDPE	High-Density Polyethylene
LF	Lineal Feet
MACP	Manhole Assessment and Certification Program
MRP	Monitoring and Reporting Program
NASSCO	National Association of Sewer Service Companies
OERP	Overflow Emergency Response Plan
PACP	Pipeline Assessment Certification Program
R&R	Renewal and Replacement Program
RWQCB	Regional Water Quality Control Board
SASM	Sewerage Agency of Southern Marin
SMCSD	Sausalito-Marín City Sanitary District
SSORP	Sanitary Sewer Overflow Response Plan
SSMP	Sewer System Management Plan
SSO	Sanitary Sewer Overflow
SSRAP	Sewage Spill Reduction Action Plan
SWRCB	State Water Resources Control Board
TCSD	Tamalpais Community Services District
VCP	Vitrified Clay Pipe
WDID	Waste Discharge Identification Number
WDR	Waste Discharge Requirements (SWRCB Order No. 2006-0003 Statewide General Waste Discharge Requirements for Sanitary Sewer Systems)
WWTP	Wastewater Treatment Plant

Introduction

This section describes the sewage discharge prohibitions and provisions as stated in the “Statewide General Waste Discharge Requirements for Sanitary Sewer Systems” (WDR). A copy of the WDR is also included in **Appendix A-1** of this Sewer System Management Plan (SSMP). Pursuant to California Water Code Section 13267(b), SMCSO will also comply with the SSO “Monitoring and Reporting Program No. 2006-0003 DWQ” (MRP) and all future revisions, included by reference in the WDR. Also, SMCSO will comply with Order No. WQ 2013-0058-EXEC (MRP) regarding the reporting of SSOs. A copy of the MRP is included in **Appendix A-2** of this SSMP.

I-1 Prohibitions

To meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, SMCSO is required to comply with the following prohibitions:

- Any SSO that results in a discharge of untreated or partially treated wastewater to waters of the United States is prohibited, and
- Any SSO that results in a discharge of untreated or partially treated wastewater that creates a nuisance as defined in California Water Code Section 13050(m) is prohibited.

I-2 Provisions

As stated in the WDR, SMCSO agrees to meet the following provisions:

1. SMCSO must comply with all conditions in the WDR. Any noncompliance with the WDR constitutes a violation of the California Water Code and is grounds for enforcement action.
2. Nothing in the WDR shall be:
 - (i) Interpreted or applied in a manner inconsistent with the Federal Clean Water Act, or supersede a more specific or more stringent state or federal requirement in an existing permit, regulation, or administrative/judicial order or Consent Decree;
 - (ii) Interpreted or applied to authorize an SSO that is illegal under either the Clean Water Act, an applicable Basin Plan prohibition or water quality standard, or the California Water Code;
 - (iii) Interpreted or applied to prohibit a Regional Water Board from issuing an individual National Pollutant Discharge Elimination System permit or waste discharge requirements, superseding this WDR, for a sanitary sewer system, authorized under the Clean Water Act or California Water Code; or
 - (iv) Interpreted or applied to supersede any more specific or more stringent waste discharge requirements or enforcement order issued by a Regional Water Board.
3. SMCSO shall take all feasible steps to eliminate SSOs. In the event that an SSO does occur, SMCSO shall take all feasible steps to contain and mitigate the impacts of an SSO.
4. In the event of an SSO, SMCSO shall take all feasible steps to prevent untreated or partially treated wastewater from discharging from storm drains into flood control channels or waters of the United States by blocking the storm drainage system and by removing the wastewater from the storm drains.

5. SMCSD shall report SSOs in accordance with Section G of the WDR and Order No. 2013-0058-EXEC.
6. SMCSD understands that in any enforcement action, the State and/or Regional Water Boards will consider the appropriate factors under the duly adopted State Water Board Enforcement Policy, and, consistent with this policy, must consider SMCSD's efforts to contain, control, and mitigate SSOs when considering the California Water Code 13327 factors. In assessing these factors, the State and/or Regional Water Boards will also consider additional factors listed in Provision 6 of the WDR.
7. SMCSD shall develop and implement a written SSMP and make it available to the State and/or Regional Water Board upon request. A copy of this document must be publicly available at SMCSD's office and/or available on the internet. This SSMP must be approved by SMCSD's governing board at a public meeting.
8. In accordance with the California Business and Professions Code sections 6735, 7835, and 7835.1, all engineering and geologic evaluations and judgments shall be performed by or under the direction of registered professionals competent and proficient in the fields pertinent to the required activities. Specific elements of the SSMP that require professional evaluation and judgments shall be prepared by or under the direction of appropriately qualified professionals, and shall bear the professional(s)' signature and stamp.
9. The SSMP must be updated every five (5) years, and must include any significant program changes. Re-certification by the governing board of SMCSD is required when significant updates to the SSMP are made. To complete the re-certification process, SMCSD shall enter the data in the Online SSO Database and mail the form to the State Water Board, as described in Section D.14 of the WDR.

I-3 Document Organization

This SSMP is intended to meet the requirements of the Statewide WDR and the organization of this document is consistent with the SWRCB guidelines. The SSMP includes eleven elements, as listed below. Each of these elements forms a section of this document.

1. Goals
2. Organization
3. Legal Authority
4. Operation and Maintenance Program
5. Design and Performance Provisions
6. Sanitary Sewer Overflow Emergency Response Plan
7. Fats, Oils and Grease (FOG) Control Program
8. System Evaluation and Capacity Management
9. Monitoring, Measurement, and Program Modifications
10. SSMP Program Audits
11. Communication Program

Each element section is organized into subsections, as follows:

1. Description of the SWRCB requirement for that element
2. Identification of associated appendix and list of supporting information included in the appendix.

3. Discussion of element. The discussion may be split into multiple sub-sections depending on length and complexity.

Supporting information for each element is included in an appendix associated with that section, as applicable. In general, information expected to require relatively frequent updates (such as names and phone numbers of staff) are included in appendices, as well as other supporting information, such as forms or schedules.

SMCSD has completed its SSMP as specified below in the SSMP - Schedule and Important Dates in **Table 0-1**.

Table 0-1: SSMP - Schedule & Important Dates

SSMP Task	Milestone Due/Completion Date
Application for Permit Coverage	April 3, 2006
Reporting Program	May 2, 2006
SSMP Development Plan and Schedule	January 17, 2008
Final SSMP, addressing all SSMP requirements	September 3, 2008
5-Year Update of SSMP	August 5, 2013
SSMP Audit	May 13, 2019
SSMP Update (5 Year)	May 13, 2019
Scheduled:	
SSMP Audit (Biennial)	September 3, 2020
SSMP Audit (Biennial)	September 3, 2022

I-4 District Sewer System and Service Area

The District is responsible for wastewater collection, conveyance, and treatment service to Marin City and other unincorporated areas within the District boundaries. The District operates and maintains this collection system as well as its interceptor system that conveys sewage from the City of Sausalito (City), a portion of Tamalpais Community Services District (TCSD), and from Golden Gate National Recreation Area (GGNRA) to the District Wastewater Treatment Plant (SMCSD WWTP). The District's collection system serves approximately 2,000 connections in Marin City and the unincorporated areas, services a population of approximately 18,000 throughout its service area (including the City population that utilizes the District interceptor system), and includes approximately 7.4 miles of gravity sewer pipes, 3.7 miles of

force main, and 7 pump stations. An additional 4 pump stations are owned by the City but operated and maintained by the District.

Element 1 Goal of SSMP

This section describes the goal of the SSMP.

1.1 Purpose

The purpose of the WDR is to prevent SSOs. SMCSDD has prepared and implemented an SSMP to support this purpose. SSMP Elements contain plans and actions that directly address the goal of the SSMP - the management, operation, and maintenance of the SMCSDD collection system is designed to prevent SSOs and mitigate and properly report any SSOs that do occur. SMCSDD will monitor the effectiveness of this SSMP and the SSMP implementation to determine if deficiencies exist in the SSMP or SSMP implementation and will take appropriate steps to correct them.

1.2 Regulatory Requirements for the Goal Element

The goal of the SSMP is to provide a plan and schedule to properly manage, operate, and maintain all parts of the SMCSDD sanitary sewer system to prevent SSOs and mitigate any SSOs that do occur.

A copy of the WDR and the certified SSMP is available to all personnel operating and maintaining the SMCSDD sanitary sewer system.

1.3 About This Document

This SSMP provides a general description of how SMCSDD complies with the various provisions of the WDR and provides references to supporting documents included in the Appendices. Some supporting materials may not be physically included in the SSMP. Examples of supporting materials not included in the SSMP include:

- Detailed sewer main, manhole, pump station, valves, and storm drainage geographical information system data.
- Standard Specifications: The District's Standard Specifications are available on the District website at:
 - <http://smcsdd.net> in "Permits, Standards & Specifications"

In these cases, the SSMP provides a reference indicating the type, owner, and location of these supporting materials.

Element 2 Organization

This section identifies the SMCSD authorized representatives and describes the organization of SMCSD staff, their chain of communication, and roles in implementation of the SSMP.

2.1 Regulatory Requirements for the Organization Element

The requirements for the Organization element of the SSMP are summarized below. The SSMP must identify:

- (a) *The name of the responsible or authorized representative;*
- (b) *The names and telephone numbers for management, administrative, and maintenance positions responsible for implementing specific measures in the SSMP program. Include lines of authority as shown in 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)).*

2.2 Authorized Representative

The duly authorized representatives or legally responsible officials (LRO) as defined in Section J of the WDR are the Lead Operator and the Operations Superintendent.

2.3 Positions Responsible for SSMP Implementation

Figure 2-1 below contains an organization chart summarizing management and authority within the District.

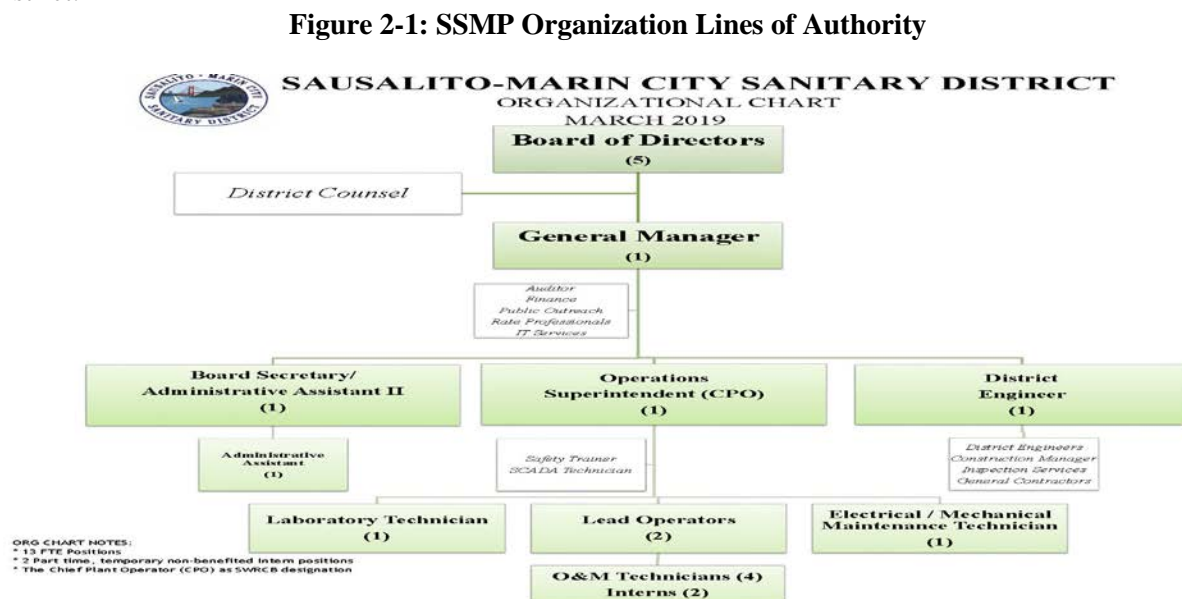


Table 2-1 below summarizes the roles and responsibilities of key positions within the District relevant to the sanitary sewer system infrastructure.

Table 2-1: Narrative Explanation of Responsibilities of SSMP Organization Positions

Position	Narrative Explanation
Board of Directors	Provides policy direction and appropriates funds to implement SSMP activities
General Manager	Authorized representative. Oversees the SSMP, including performance and budget. Supervises engineering, administrative, and O&M functions that include capital improvement activities. Acts as a regulatory agency liaison.
Administrative Assistant	Responsible for the overall office and business functions such as accounting, human resources, payroll, etc. The Administrative Assistant serves as the District Board Secretary.
District Engineer	Manages and oversees the work of engineering consultants and contractors in the repair/rehabilitation of sewers, pump stations and the treatment plant. Reviews sewer plans and inspects sewer installations for conformance with the District's Design and Construction Standards. Maintains the District's Capital Improvements Program prioritizing work and managing budget, scope and schedule of all projects.
Operations Superintendent (Superintendent)	Authorized representative. Manages day-to-day operations and maintenance. Updates the SSMP and CMMS. Oversees O&M staff, including SSO response. Receives and enters reports of SSO's in CIWQS and notifies other regulatory agencies. Oversees SSMP training. Manages non-routine SSO response activities. Regulatory agency liaison and acts as a LRO.
Lead Operator	Schedules and directs sewer cleaning and CCTV contractor. Investigates sewer overflow reports and with direction from Superintendent, manages mainline sewer overflow response. Participates in containment and SSO clean-up activities. Provides field reports of SSO containment and clean-up to the Superintendent. Performs in the capacity of the Superintendent in his absence. Acts as a LRO.
Laboratory Technician	Schedules, collects and analyzes water quality samples for regulatory reporting and process control. Provides guidance for water quality sampling to other staff members. Implements and coordinates the District's public outreach programs. Implements and coordinates the District's fats, oils, and grease and pollutant source control programs.
O&M Technicians	Perform sewer system inspection and monitoring. Assist in clean-up efforts and oversees sewer service contractor field work. Performs FOG control inspections and prepares reports. Administers the District's computerized maintenance management system (CMMS) including entering of maintenance data, generating of reports and printing of work orders.
Electrical/ Mechanical Maintenance Technician	Performs sewer system inspection and monitoring. Assists in clean-up efforts and oversees contractor sewer service field work. Performs electrical corrective and preventive maintenance activities.
Sewer Cleaning and CCTV Contractor	Performs sewer cleaning, maintenance and CCTV inspection services. Supports SSO containment and clean-up activities as directed by the District.

The maintenance positions responsible for implementing specific elements and measures of the SSMP are identified in **Table 2-2**

Table 2-2: Positions Responsible for SSMP Implementation

SSMP Element/Measure	Responsible Position
Goal	General Manager
Organization	General Manager
Legal Authority	General Manager
Operations and Maintenance Program – Mapping	District Engineer
Operations and Maintenance Program – Preventive and Routine Maintenance	Superintendent
Operations and Maintenance Program – Condition Assessment; Rehabilitation and Replacement Program	District Engineer
Operations and Maintenance Program - Training	Superintendent
Design and Performance Provisions	District Engineer
Overflow Emergency Response Plan	Superintendent
Fats, Oils, and Grease Control Program	Superintendent
System Evaluation and Capacity Assurance Plan	District Engineer
Monitoring, Measurement, and Program Modifications	General Manager
SSMP Program Audits	Superintendent
Communication Program	Superintendent

The names and telephone numbers for management, administrative, and maintenance positions responsible for implementing SSMP program measures is included in **Appendix C**.

2.4 Chain of Communication for Reporting Sewer Overflows

The process and responsibilities for communication during an overflow event are summarized in the Sanitary Sewer Overflow Response Plan (SSORP or OERP). Specifically, Section 6.3: Internal SSO Reporting Procedure and Section 6.4: External SSO Reporting Procedure, outline the chain of communication from receipt of a complaint through to the California Office of Emergency Services (CalOES). The OERP is provided in **Appendix G**.

The chain of communications during an SSO event consists of the following steps. These steps are illustrated in **Figure 2-2**:

1. The District is notified of a potential SSO event.
 - a. SCADA alarms are monitored by the On-Call Response Crew
 - b. Customer calls are answered by the District Board Secretary/Administrative Assistant during normal business hours and the District Answering Service at all other times.
2. The District responds to the event.
 - a. During normal business hours, the call is routed directly to the Operations Superintendent. The Operations Superintendent notifies the On-Call Response Crew to investigate and respond to the event.
 - b. After normal working hours, the District's Answering Service notifies the On-Call Response Crew to investigate and respond to the event.
3. The District notifies and reports appropriate agencies. The On-Call Response Crew provides the Superintendent and General Manager with timely information to perform notifications and reporting as required.

Figure 2-3 summarizes the external notification and reporting requirements for sewer overflows.

- a. For **Category 1 SSOs**: The Superintendent or designee will perform 2-hour notification to Cal OES.
- b. For all **Category 1 and Category 2 SSOs**: The Superintendent or designee will submit a draft report in CIWQS within 3 business days and will certify that report within 15 days after end of event.
- c. For all **Category 3 SSOs**: The Superintendent or designee will submit a certified report in CIWQS within 30 days after the end of the Calendar month within which the SSO occurred.

Figure 2-2 : Simplified Chain of Communications During an SSO Event

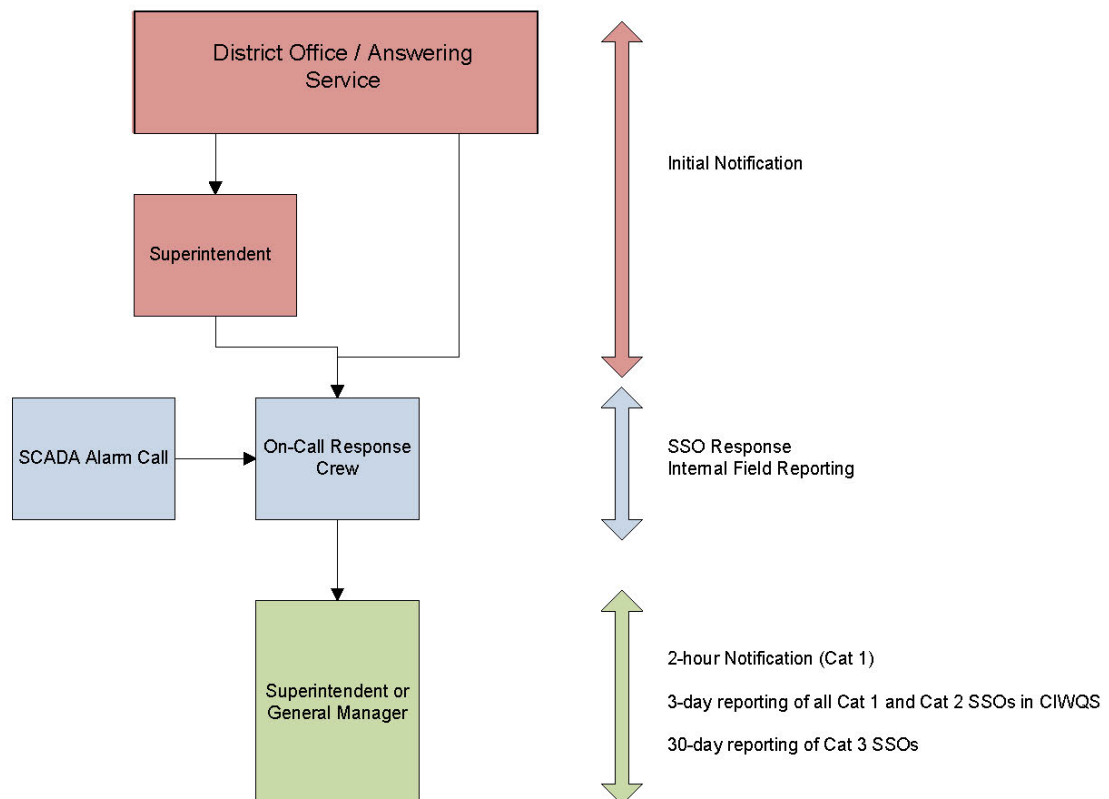
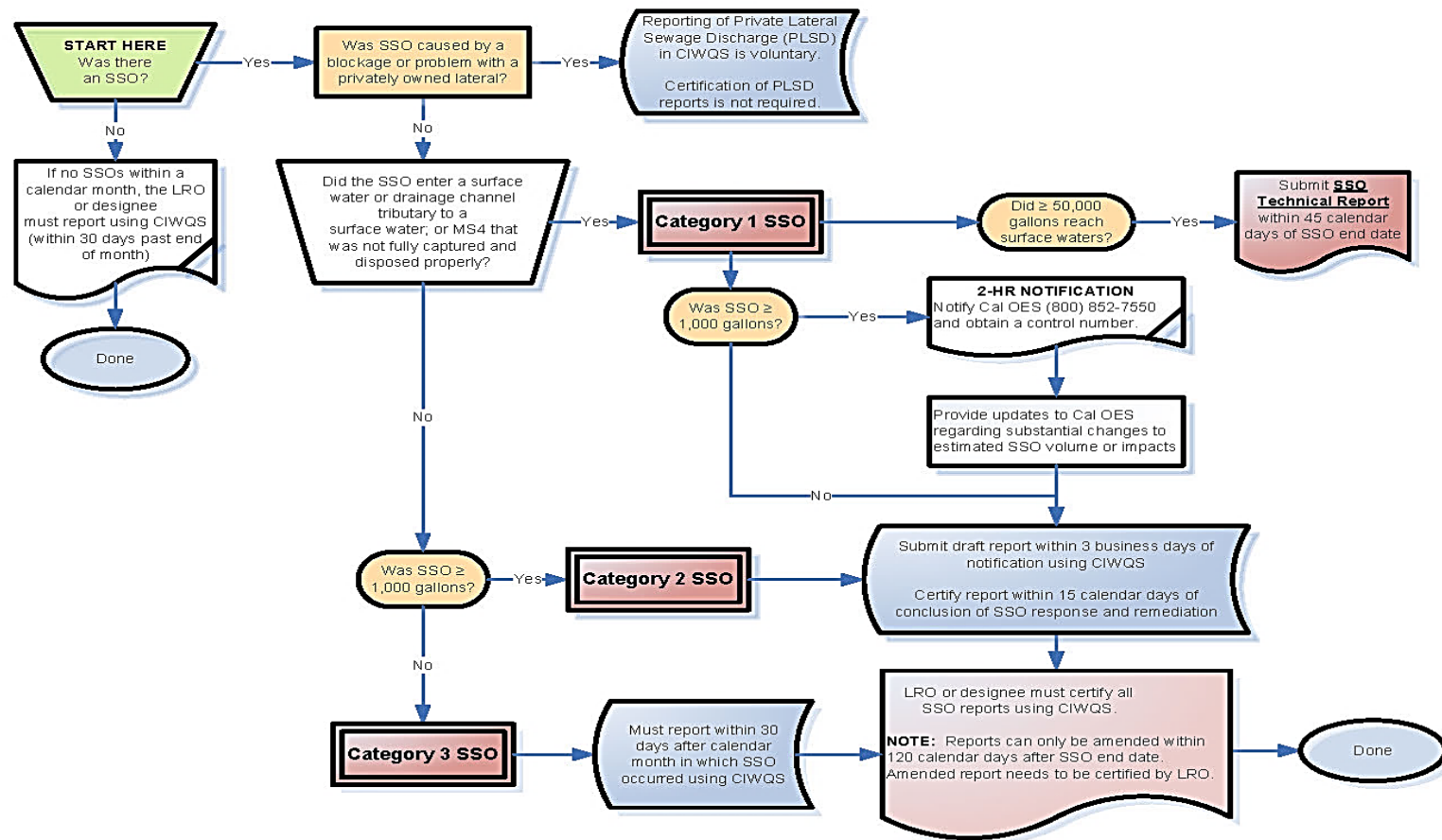


Figure 2-3: External Notification and Reporting Requirements for Sewer Overflows



Note: In the case of an SSO requiring 2-hour notification to CalOES, County Health and the RWQCB, the RWQCB is automatically notified by CalOES of the SSO and therefore does not need to be contacted directly by an agency during a 2-hour notification procedure.

Element 3 Legal Authority

This section of the SSMP discusses the District's legal authority to comply with the SSMP requirements, as provided in its Municipal Code and agreements with other agencies. SMCS D's agreements with other agencies are further discussed in Element 4.

3.1 Regulatory Requirements for the Legal Authority Element

The requirements for the Legal Authority element of the SSMP are summarized below:

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

- (a) Prevent illicit discharges into its wastewater collection system (examples may include infiltration and inflow (I/I), storm water, 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.*

3.2 Summary of Legal Authorities

The District's legal authority to prevent illicit discharges into the collection system, require proper design and construction of sewers and connections, and require proper installation, testing, and inspection of sewers is provided by the Sausalito-Marín City Sanitary District Code (District Code) adopted on May 2, 2016. The District Code is posted on the District's website in the "Documents" section. **Table 3-1** below provides a reference table summarizing the District's legal authorities as they pertain to the WDR requirements listed above.

Table 3-1: Summary of SMCSO Legal Authorities

Requirement	Chapter in District Code
ILLCIT DISCHARGES	
Prevent illicit discharges into the wastewater collection system	2.15
Limit the discharge of fats, oils, and grease and other debris that may cause blockages	2.40
Control infiltration and inflow (I/I) from private service laterals	2.40
PROPER DESIGN AND CONSTRUCTION	
Require that sewers and connection be properly designed and constructed	2.25, 2.30
Require proper installation, testing, and inspection of new and rehabilitated sewers	2.33, 2.35
ACCESS TO LATERALS	
Clearly define District responsibility and policies	2.33
Ensure access for maintenance, inspection, or repairs for portions of the service lateral owned or maintained by the District	2.33
FOG SOURCE CONTROL	
Requirements to install grease removal devices (such as traps or interceptors)	2.40
Design standards for the grease removal devices	2.25
Maintenance requirements, BMP requirements, record keeping and reporting requirements for grease removal devices	2.40
Authority to inspect grease producing facilities	2.10, 2.40
ENFORCEMENT	
Enforce any violations of its sewer ordinances	2.55

3.2.1 Prevent Illicit Discharges

Authorities to prevent illicit discharges are provided in the District Code, including additional ordinance language discussing permitting of select discharges and special agreements. This Code specifically bans discharges to the sewer system that may contain more than 100 parts per million (by weight) of fat, oil, or grease. Additional banned substances include liquids or vapors with a temperature higher than 150°F, chemical substances such as benzene, gasoline or explosive liquids, and organic materials such as ashes, mud, and sand.

The District's Wastewater Services Agreement with TCSD requires TCSD to take reasonable action to prevent the contribution of wastewater to the SMCSO wastewater system that would interfere with or degrade the condition and effectiveness of the SMCSO wastewater system. The agreement with TCSD also

requires the implementation of a Pollution Prevention Program and the implementation of capital improvement programs to reduce inflow and infiltration into the TCSD collection system.

3.2.2 Requirements for Proper Design and Construction of Sewer Facilities

The District Code requires that design and construction of new sewers in the District's jurisdiction meet the minimum standards of the District's Specifications for Sewer Construction (Standards and Specifications). The District may permit modifications or may require higher standards where unusual conditions are encountered. Lateral sewer design and construction are subject to the Uniform Plumbing Code and any other requirements such as the Specifications.

The District Engineer also oversees the design and construction of sewer pump stations, sewer force mains, and pipeline rehabilitation. Standards and specifications for the proper design, construction, inspection and testing of these facilities are developed by the engineering firm performing design services on behalf of the District for each project. The District Engineer ensures newly designed sewer pump stations, force mains, and pipeline rehabilitation projects are designed, constructed, and installed properly prior to acceptance into the sewer system. Proper design, construction, and installation of interceptors is required per the District Code.

The District Engineer, per District Code, is responsible for inspection of sewer mains and laterals. Connections between private laterals and public sewer main are required to be pre-approved and inspected by the District Engineer, per the District Code. Sewer completion requires full testing and compliance as documented in the Specifications and Standards and the District Code.

Per District Code, any portion of the collection system within the City of Sausalito limits shall be installed, altered or repaired under the jurisdiction of the City and not under the jurisdiction of the District.

3.2.3 Access to Laterals for Maintenance, Inspection, and Repair

Ordinance 89, Section 1.J defines "Private Sewer Lateral" (also meaning "Side Sewer" per the District Code) as:

That part of the sewer piping that extends from the end of the building drain, as defined by the County of Marin from outside the outer foundation wall of the structure, to the first encountered publicly owned sewer pipe.

The District Code discusses District responsibilities and policies regarding laterals including permit requirements and District presence required for connection of a lateral to a sewer main. Responsibility and standards for maintenance and repair of laterals is the responsibility of the property owner and must be conducted in accordance with District requirements as documented in Ordinance 89, Section 2. Ordinance 89, Section 5 requires testing of sewer laterals in the presence of District staff or authorized agents in order to obtain a compliance certificate. Additional testing and compliance requirements for laterals is documented in Ordinance 89, Sections 4-9.

3.2.4 Limit the Discharge of Fats, Oils, and Grease, and Other Potential Sources of Blockages

The District Code bans discharges to the sewer system that may contain more than 100 parts per million (by weight) of fat, oil, or grease. Other potential sources of blockages, such as un-shredded garbage, rags, plastics and woods, are also addressed in the section.

Ordinance 89, Section 2 addresses potential blockages in sewer laterals and requires maintenance by property owners to ensure laterals remain free from roots, grease deposits, and other solids which may impede or obstruct flow. Maintenance of interceptors to remove potential blockages such as grease, sand or other materials is documented in the District Code.

3.2.5 Ability to Enforce Violations of District Ordinances

The District Code provides the District with the authority to enforce violations of ordinances relating to sanitary sewerage facilities. Enforcement of interceptor requirements, through reporting of violations to the County Health Officer for purposes of enforcement, is also documented in the Code. Sewer lateral ordinance enforcement can be conducted by the General Manager or designated District representative and is documented in Ordinance 89, Section 10.

3.2.6 Authorities Included in Service Agreements

The District provides wastewater conveyance and treatment services for Tamalpais Community Services District (TCSD), pursuant to a 2001 agreement and predecessor agreement between TCSD and SMCSO. The District updated the agreement with TCSD on January 1, 2013. Based on the most recent agreement, TCSD shall conduct wastewater activities in conformance with all requirements of applicable law. A restatement of the 2013 agreement is currently under negotiation, as of May 2019.

Element 4 Operations and Maintenance Program

This section of the SSMP presents the District's wastewater collection system operations and maintenance (O&M) program.

4.1 Regulatory Requirements for Operation and Maintenance Program Element

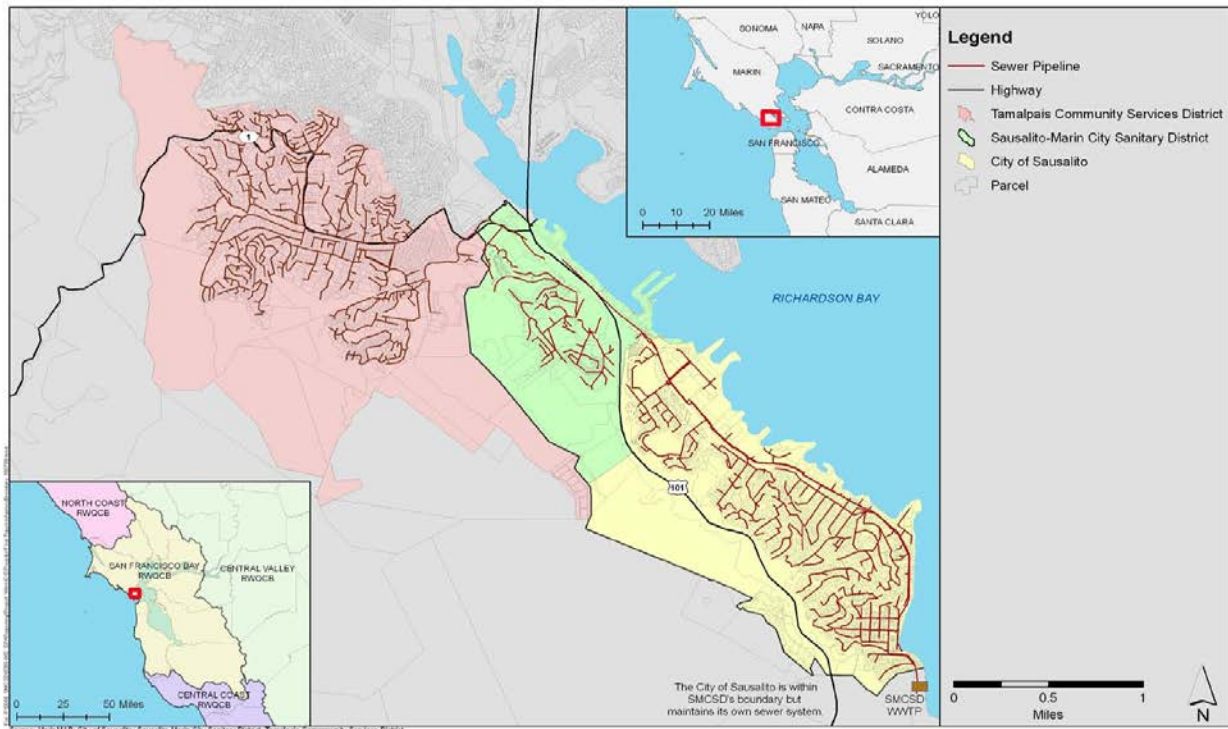
The summarized requirements for the O&M Program are:

- (a) *Maintain an up-to-date map of the sanitary sewer system, showing all gravity line segments and manholes, pumping facilities, pressure pipes and valves, and applicable storm water conveyance facilities;*
- (b) *Describe routine preventive operation and maintenance activities by staff and contractors, including a system for scheduling regular maintenance and cleaning of the sanitary sewer system with more frequent cleaning and maintenance targeted at known problem areas. The Preventative Maintenance (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.*

4.2 Background

The District is responsible for wastewater collection, conveyance, and treatment service to Marin City and other unincorporated areas within the District boundaries. The District operates and maintains this collection system as well as its interceptor system that conveys sewage from the City of Sausalito (City), a portion of Tamalpais Community Services District (TCSD), and from Golden Gate National Recreation Area (GGNRA) to the District Wastewater Treatment Plant (SMCSD WWTP). The District's collection system serves approximately 2,000 connections in Marin City and the unincorporated areas, services a population of approximately 18,000 throughout its service area (including the City population that utilizes the District interceptor system), and includes approximately 7.4 miles of gravity sewer pipes, 3.7 miles of force main, and 7 pump stations. An additional 4 pump stations are owned by the City but operated and maintained by the District. The District discharges treated wastewater from the SMCSD WWTP to San Francisco Bay. A map containing the SMCSD service area is shown in **Figure 4-1** below.

Figure 4-1: SMCSO Service Area



4.2.1 Marin City Collection System

The Marin City collection system consists of approximately 6.4 miles of sewers. Pipes within the system range from 6-inch to 16-inch in diameter with approximately 5 percent of those pipelines being installed in the 1950s, 60 percent in the 1960s and 1970s, and 35 percent in the 1990s. The average age of the pipe system was approximately 25 years prior to the District's Marin City Sewer Rehabilitation Project. This project rehabilitated 12,237 feet, or 38% of the entire collection system, in 2012. Approximately 78 percent of sewers are located in the public right-of-way with the remaining 22 percent located in easements. A portion of the pipelines located in sewer easements are not accessible by truck mounted sewer-cleaning equipment and requires portable machines. A summary of pipe diameter and length in the system is shown in **Table 4-1**. A map showing the Marin City Collection System is included in **Appendix E-1**.

Table 4-1: Summary of Marin City Pipe Diameters and Lengths

Pipe Diameter	Total Length (feet)	Sewers Located in Easement (feet) ^{a,b}	Percentage of Total Pipe Length
6-inch	13,367	4,246	39.7
8-inch	17,182	3,318	51.0
10-inch	342	0	1.0
12-inch	1,292	0	3.84
14-inch	201	0	0.6
15-inch	644	0	1.92
16-inch	646	0	1.92
Total	33,674	7,564	100

Notes:

- a. Easement sewer length is a subset of the Total Length and is approximate.
- b. Approximately 3,500 LF of sewer is located in easements that are not accessible to motorized sewer cleaning equipment and requires the use of a portable sewer cleaning machine/rod. These sewers are mostly in the steep, upper reaches of the Marin City collection system.

4.2.2 SMCSD Conveyance System (Interceptor)

The SMCSD conveyance system (Interceptor) includes approximately 8,100 feet of gravity interceptor sewers located within the City of Sausalito. The gravity interceptors include a 21- to 24-inch pipe extending from Gate 5 Road to the Locust Street Pump Station and a 24-inch pipe from south of Princess Street to the Main Street Pump Station. Most of the gravity interceptors are composed of vitrified clay pipe (VCP), much of which have been previously rehabilitated by cured-in-place pipe (CIPP) lining or high-density polyethylene (HDPE) slip-lining.

The Interceptor also includes approximately 19,500 feet of force mains extending from Shoreline Highway to Gate 5 Road, from the Locust Street Pump Station to south of Princess Street, and from the Main Street Pump Station to the SMCSD WWTP. There is also a force main that travels from Coloma's (Wet Weather) Pump Station parallel to the gravity interceptor from Coloma Street to the Locust Street Pump Station force main. A map showing the District's conveyance system is included in **Appendix E-3**.

4.2.3 City of Sausalito

The City of Sausalito operates and maintains a separate sanitary sewage collection system that collects sanitary sewage from approximately 6,200 connections servicing a population of approximately 7,500 in southern Marin County. Sewage collected by Sausalito's collection system is conveyed to SMCSD Interceptor and thereafter conveyed to SMCSD's WWTP for treatment.

4.2.4 Tamalpais Community Services District (TCSD)

TCSD operates a separate sanitary sewage collection system that collects sewage from approximately 2,500 connections, servicing a population of approximately 5,600. TCSD's collection system includes approximately 27 miles of sewage pipes, less than one mile of force main, and two pump stations. Sewage collected by TCSD's collection system, except that from the area known as Kay Park, is pumped to a sewage collection system operated by SMCSD via TCSD's Bell Lane Pump Station and Tennessee Valley Pump Station and thereafter conveyed through the SMCSD Interceptor to the SMCSDWWTP. Sewage from Kay Park flows to the sewage collection system operated by Sewerage Agency of Southern Marin (SASM).

4.3 Collection System Mapping

The District uses a Geographic Information System (GIS) and a computerized maintenance management system (CMMS) to manage its collection system mapping. ESRI Arcview GIS software is used to create, maintain, and manage maps and data sets associated with its wastewater collection system. The District uses the CMMS named NEXGEN, for utility assets, to track work orders, manage maintenance schedules, and to reference hard copy drawings (typically Computer-Aided Design, or CAD drawings) of the collection system.

4.3.1 Updates to Existing Drawings

Field crews use hard copy maps of the collection system, which are produced using GIS software. Any changes to the collection system, or inaccuracies found in the field by District staff and by contractors, are noted in forms and then entered into the NEXGEN CMMS, which maintains a constant updated set of asset data.

The District contracted with engineering consultants and land surveyors to provide GPS coordinates for all District manholes and wet wells. These coordinates have been uploaded to the District's GIS data for the entire SMCSD system. An Operations/Maintenance or Lead Operator is responsible for work order generation (given to the field staff or contractor) and data entry after the work is complete (entered back into the NEXGEN CMMS). Other staff members are currently being trained for this responsibility as well. Maps are also updated immediately after major project completion. Changes are first noted in the field drawings and then transferred into the NEXGEN CMMS.

4.4 Preventive Maintenance

The elements of the District's wastewater collection system O&M Program include proactive, preventive, and corrective maintenance of gravity sewers, manholes, and pump stations. Preventive maintenance focuses on portions of the collection system that are known to have problems and typically involves a more frequent cleaning and inspection schedule. Proactive maintenance typically involves cleaning and maintenance of portions of the collection system that do not have significant problems but on a less frequent schedule than the preventive maintenance. Corrective maintenance is conducted when a problem manifests in the collection system and a repair or replacement of infrastructure is needed. This section describes the District's preventive maintenance programs.

4.4.1 Maintenance Activities

The District is responsible for maintaining the Marin City collection system, the SMCSD Interceptor, and eleven pump stations. The District owns and maintains seven of the eleven pump stations. Four of the eleven pump stations are owned by the City of Sausalito but operated and maintained by the District.

Hot Spot Preventive Maintenance Program

Locations in the collection system with known recurring maintenance issues are defined as "hot spots" and are cleaned on a 4-month, or 12-month cleaning cycle as part of the Hot Spot Preventive Maintenance Program. Examples of system issues resulting in inclusion on the Hot Spot Preventive Maintenance Program include pipes having historical blockage-related sanitary sewer overflows (SSOs) or having historical root, grease, or debris accumulation. **Table 4-2** below provides a summary of the current Hot Spot cleaning schedule by zone and **Appendix E-2** has a map of the hot spot cleaning areas. Additionally, District staff conducts monthly checks of known trouble spot manholes that are typically located in the vicinity of hot spot cleaning areas. These checks generally are an assessment of manhole condition and their potential for problems. All potential problems are referred to the District's sewer cleaning contractor for further inspection. Confirmed defects are repaired by District staff or are contracted for repair.

Table 4-2: Annual Hot Spot Cleaning Schedule

Cleaning Cycle	Zone 1 (feet)	Zone 2 (feet)	Zone 3 (feet)	Total Annual Cleaning (feet)
Hot Spot 4-Month ^a	9,561	825	3,240	13,626
Hot Spot 12-Month ^b	1,449	1,941	0	3,390
Annual Cleaning	11,010	2,766	3,240	17,016

Notes:

- Length of pipeline cleaning documented in each zone accounts for multiple cleanings of the pipe within a year. For example, Zone 1 of the 4-month cycle has 3,187 feet of pipe cleaned 3 times per year (the 4-month cycle) such that 9,561 feet (3,187 x 3) of pipe are cleaned in Zone 1 per year.
- The 12-month hot spot cleaning involves cleaning pipes in this classification once per year for each zone. This cleaning cycle differs from Routine Cleaning in that the Routine Cleaning cycle cleans pipes in the routine cleaning classification once per the 3-year routine cleaning cycle, with one zone being cleaned each year, for example: Zone 1 the first year, Zone 2 the second year, Zone 3 the third year, and then starting again with Zone 1.
- Lengths of cleaning listed above are specific to the pipeline assessment at a certain point in time. As assessments continue, pipes are reclassified and the table above will be updated with respect to pipelines in each category.

Marin City Routine Cleaning Program

The District cleans all gravity sewer mains in the collection system over a three-year period as part of a Routine Cleaning Program (these pipelines differ from those in the Hot Spot Program in that they are in better condition and require less frequent maintenance). The District has delineated the Marin City sewer system into three zones. Each year a different zone is cleaned, resulting in a 3-year system-wide cleaning cycle. Most easement areas within each of the three zones need to be cleaned with non-truck mounted rodder equipment. **Table 4-3** below shows the cleaning cycle and the total length of sewer hydro flushed and rodded in each cycle.

Table 4-3: Routine Cleaning Schedule

Cleaning Cycle	Zone 1 (feet)	Zone 2 (feet)	Zone 3 (feet)	3-Year Cleaning Cycle Total (feet)
Routine Cleaning ^a	5,891	8,571	9,424	23,886

Notes:

- The Routine Cleaning program involves cleaning one zone per year such that each of the three zones are cleaned once over a 3-year cycle.

SMCSD Interceptor and Pump Stations Maintenance***Gravity Interceptor***

The District interceptor system consists of approximately 8,100 linear feet of 21-inch and 24-inch gravity pipeline. There are three sections of gravity interceptor line that are cleaned once every three years. In addition, there is one section of gravity hot spot cleaning that needs to be cleaned on an annual basis. The interceptor cleaning is a coordinated effort between the City and the District staff to operate the sewer

system in a manner to support the line cleaning. The line segments and amount of linear footage to clean are re-evaluated and adjusted by the District based on field information obtained as part of scheduled cleaning and/or completed sewer repair projects. The amount of cleaning currently performed on interceptor pipe segments is shown in **Table 4-4**.

Table 4-4: Current SMCS D Interceptor Cleaning Schedule for Gravity Pipes

Cleaning Cycle	Alignment	Length (feet)
Every 3 Years	Gate 5 Rd. to Harbor St.	2,419
	Napa St. to Locust St.	1,007
	Princess St. to Main St.	1,830
Every Year	Harbor St. to Napa St.	3,270

Force Mains

The District has conducted condition assessment of the force main along with rehabilitation of portions of the interceptor. The District has inspected and rehabilitated approximately 12,630 feet of the approximate 19,500 feet of force main since 1985. The District plans to re-inspect all of the force main pipelines in the future as determined to be necessary. Additional information on force main activities is included in Section 4.5.2.

Pump Stations

Cleaning and maintenance activities for pump stations are conducted through contractor services. **Table 4-5** provides a summary of the pump stations, activities, and frequencies for these activities.

Table 4-5: Current District Pump Station Maintenance Schedule

Pump Station	Activity	Frequency
Anchor ^a	Wet-well cleaning	Annual
Gate 5 ^a	Wet-well cleaning	Annual
Whiskey Springs ^a	Wet-well cleaning	Annual
Spinnaker ^a	Wet-well cleaning	Annual
Highway Booster	Wet-well cleaning	Annual
Locust Street	Wet-well cleaning	Annual
Princess	Wet-well cleaning	Bi-Annual
Coloma	Wet-well cleaning	Not Required
Drake	Wet-well cleaning	Annual
Marin City	Surface grease cleaning	Monthly
	Wet-well cleaning	Monthly
Main Street	Wet-Well Pumping	Weekly
	Cleaning and disposal of scrubber media	Annual
	Cleaning of rockcatcher	Bi-Annual

Notes: ^a Pump Station owned by City of Sausalito - shown for informational purposes.

Pump Stations

District staff maintains the pump stations regularly and inspects each location at least three times per week. Inspections are documented through a checklist. Any issues affecting pump stations are captured in the NEXGEN CMMS to allow for historical tracking of issues and modification of maintenance and activities.

when deemed necessary. Inspection for proper operation and maintenance is discussed in further detail in Section 4.4.1. Stations were also previously evaluated for reliability, the results of which are summarized in Volumes 2 and 3 of the “Sewage Spill Reduction Action Plan.”

The District's service contractor provides surface grease cleaning, transport and disposal services to the Marin City Pump Station on a monthly basis. The Main Street Pump Station scrubber media is also subject to an annual cleaning and disposal. Typically, the media cleaning will be requested during the late spring before the summer season. The rockcatcher, a piece of equipment used to filter debris to prevent it from entering pumps, is cleaned and serviced biannually, typically during the spring and fall season. **Table 4-5** provides a summary of the in-depth inspection and cleaning schedule of pump stations.

Electrical and Mechanical Equipment

Pump stations are monitored by a supervisory control and data acquisition system (SCADA) which allows for remote monitoring of pump station operations on a continual basis. A District Operator is assigned daily to evaluate SCADA signals for potential issues. SCADA alarms are also set to alert staff members if any critical components are operating in non-standard manners. Security alarms are also in place to alert staff to intrusion or illegal access to sensitive areas. Generators are regularly exercised and tested under load every other week.

An arc flash test was conducted in order to protect personnel from the possibility of being injured by an arc flash from energized components. The District has also conducted vibration testing and thermography on the most critical pumps and motors to test for life expectancy and operation within manufacturer recommended tolerances. These tests are specialized and are typically conducted by a non-District specialist.

The District has an Electrical/Mechanical Maintenance Technician on staff that works with Operators on the evaluation of pump station operations.

Sewer Collection Odor Control

The District has operated a sewer collection odor control system for many years. The system is installed at the Marin City Sewer pump station, which is at the upstream point of the collection system. There is also an additional booster system at the Gate 5 Pump Station. The odor control system includes chemical feed storage and pumps. Calcium nitrite (Bioxide) is flow metered into the system to control the production of hydrogen sulfide gas that can cause odors and pipe corrosion.

Manhole Surge Monitoring

The District has installed four “Smart Covers” which are networked flow level-sensing manhole covers capable of monitoring and alerting agencies for surcharge conditions. The Smart Covers were placed in specific areas in the collection system based on flow studies and historical surcharge issues. They are checked regularly and provide staff timely warning of surcharged flow conditions, allowing staff to respond quickly in order to avoid SSOs.

4.4.2 Maintenance Tracking System

The District utilizes the NEXGEN CMMS to schedule and complete preventive maintenance activities. The District creates work orders using the NEXGEN CMMS to manage contractor sewer cleaning activities. The work orders are provided to contractors and cleaning is then subsequently scheduled. Works orders are completed by the cleaning contractor and subsequently entered into the NEXGEN CMMS. Typical

information in completed cleaning work orders include manhole IDs, condition of the sewer main, method of cleaning, and a qualitative and quantitative evaluation of the material removed from the sewer.

4.4.3 Maintenance Schedule Adjustments

The cleaning contractor is responsible for reporting on conditions found during sewer cleaning operations, including the location of heavy grease deposits, roots, and physical defects. The District requires a written service report be submitted with each payment invoice. The service report includes a description of all work completed, a map mark-up if provided for service, footage cleaned, amount of roots/grease/debris removed, field observations and pipe defects. The District uses this information to adjust the cleaning cycle.

Schedule Modifications

Cleaning schedules are modified when information exists indicating risk of a blockage or SSO occurring prior to the next scheduled cleaning. In such cases, the District may choose to accelerate the next scheduled cleaning date, with or without a permanent change in the cleaning frequency. Information leading to schedule adjustment resulting in the acceleration of a cleaning schedule for a particular pipe can come from either a manhole inspection or CCTV inspection. The procedure for cleaning schedule adjustment based on CCTV inspection or manhole inspection results includes the following steps:

1. The inspection crew or contract inspection crew identifies a severe maintenance defect requiring removal or correction immediately. A severe maintenance defect is defined as a defect that blocks over 30 percent of the cross-sectional area of a pipe, or evidence of broken pipe or other conditions that are an imminent risk of potentially blocking sewage flow through the pipe.
2. The inspection crew or inspection contractor notifies the Superintendent of pipe, location, and nature of severe maintenance defect.
3. The Superintendent or their delegate reviews the current cleaning schedule for the pipe and determines if the defect warrants schedule modification.
4. If necessary, the Superintendent dispatches a cleaning crew to clean the pipe ahead of the current cleaning schedule.

Event-Driven Cleaning Frequency Adjustment

Hot spot cleaning frequencies and schedules are reviewed by the Superintendent after the following events:

- A sewer blockage or overflow caused by a potentially recurring maintenance issue
- A heavy number of roots, grease, or debris removed from the pipe during sewer cleaning
- A severe maintenance defect identified during CCTV inspection including roots, grease, or debris

The procedure for cleaning frequency adjustment following any of these events includes the following steps:

1. The cleaning crew, inspection crew, contract cleaning crew, or contract inspection crew notifies the Superintendent of the cause of an SSO, a heavy number of roots, grease, or debris removed from the pipe during cleaning, or a severe maintenance defect identified during CCTV inspection.
2. The Superintendent or their delegate analyzes the current cleaning frequency, the schedule for the next cleaning of the pipe, past history of maintenance, and available inspection data and, based on experience, recommends an appropriate change in cleaning frequency if it is determined that there is a risk of a blockage or SSO if the pipe remains at the current cleaning frequency.
3. The Superintendent approves any changes in cleaning frequency and oversees the modification of the cleaning frequency in the MMS.

Annual Cleaning Frequency Adjustment

The Superintendent oversees the analysis of the history of roots, grease, or debris removed from pipes during sewer cleaning along with analysis of available CCTV inspection data. This analysis is conducted in order to adjust cleaning frequencies and schedules to optimize the performance of the sewer cleaning program. The review occurs a minimum of one time per year. Cleaning frequencies are modified when recurring maintenance issues cannot be reliably controlled by cleaning at the current frequency or when evidence exists that the pipe is being cleaned too frequently. The procedure for annual cleaning frequency adjustment may include the following steps:

1. The Superintendent analyzes or oversees the analysis of the history of cleaning maintenance findings to evaluate trends in maintenance findings on an individual pipe basis.
 - a. Pipes with a trend of 2 to 3 consecutive cleanings that result in the removal of: light to no roots, grease, or debris are evaluated for a potential decrease in cleaning frequency.
 - b. Pipes with a trend of heavy to moderate roots, grease, or debris are evaluated for a potential increase in cleaning frequency.
 - c. Pipes with a trend of moderate to light roots, grease, or debris are evaluated for no change in cleaning frequency.
2. The Superintendent reviews the results of the analysis and approves changes to maintenance frequencies deemed necessary to optimize the performance of the maintenance program.
3. The Superintendent modifies or oversees the modification of the maintenance frequencies in the CMMS.

At the completion of the 3-year Routine Cleaning Program, all pipes with known maintenance issues, that are not already designated as such, will be assigned to the Hot Spot Preventive Maintenance Program along with an appropriate hot spot cleaning frequency. Thereafter, pipes that are not included in the Hot Spot Preventive Maintenance Program and found to be clear of maintenance issues when cleaned or televised will be cleaned on the 3-year Routine Cleaning Program Schedule.

4.4.4 Use of Contractor Resources

The District's sewer maintenance program is performed by contractors. The District has a long-standing working history with local sewer cleaning contractors to obtain sewer cleaning services, as well as a history of satisfactory performance of activities by those local sewer contractors. It is anticipated this will continue since it is the most cost-effective way to provide proper specialized services to maintain a very small wastewater collection system of slightly more than 10 miles in length.

4.5 Rehabilitation and Replacement Plan

An Administrative Order for Compliance (AO) was issued by the U.S. Environmental Protection Agency (EPA) in April 2008 to compel the District, TCSD, and the City to "consistently and substantially reduce the frequency and volume of sewage spills to waters of the United States". The AO included requirements to "complete improvements necessary to eliminate conditions in its collection system that cause or contribute to wastewater spills, bypasses, or effluent limit violations from SMCS D's collection system or wastewater treatment plant." In addition, the AO states that "SMCS D shall... achieve consistent compliance with its 2007 [NPDES] Permit" (CWA-309(a)-08-03). A formal Sewage Spill Reduction Action Plan was proposed in response to subsection VI.A of the AO and can be found in Sewage Spill Reduction Action Plan –Volume III (SSRAP –Volume III). The plan includes short- and long-term projects (<http://smcsd.net>).

The District's Rehabilitation and Replacement Program (R&R Program) is driven by the condition of its sewer system assets and is based on the initial condition assessment of gravity sewers and pump stations. The section summarizes the various aspects of the R&R Program.

4.5.1 CCTV Inspection Methodology

The District utilizes inspection contractors to collect all CCTV inspection data. When there are mains with manholes located in readily accessible locations, CCTV data is collected with the use of fully equipped CCTV vehicles. Each vehicle carries all of the inspection, video capture, and recording equipment needed to televise a sewer pipe. CCTV contractors use pan and tilt cameras, which allow an operator to remotely rotate the camera in the sewer pipe and focus directly on the object being observed. Pan and tilt cameras are preferred because they give the inspectors increased flexibility in identifying and assessing the main infrastructure as well as the service lateral connections.

For mains with maintenance holes that are located in remote or difficult to access areas, inspection contractors may need to utilize a portable push camera set up. This camera may not have a prehensile head, but will still be capable of viewing, recording and identifying defects located in the pipe

4.5.2 Inspection and Condition Assessment

The District has inspected all of its gravity pipelines since 2006 along with portions of its force mains. Contractors also inspect pipelines during construction projects and in addressing SSO reports. This section summarizes recent and planned inspections.

Marin City Collection System

The Marin City collection system includes approximately 32,000 feet of gravity sewer pipes and 190 manholes. The system was inspected by closed-circuit television (CCTV) in 2001, 2006, and 2009-10. All inspected sewers (a total of 31,841 feet) were evaluated using a condition rating system based on the National Association of Sewer Services Companies (NASSCO) Pipe Assessment Certification Program (PACP).

In addition to the CCTV inspections, 201 manholes in the Marin City collection system were inspected and assessed. The focus of the assessments was primarily on safety, infiltration, and obvious defects. Twenty-six manholes were identified as needing corrective action and were included in the R&R Program.

The condition of the Marin City collection system sewers was rated based on the NASSCO PACP formulas for structural, operation and maintenance (O&M), and overall condition. Under the PACP methodology, each observed defect is assigned a structural or O&M grade of 1 to 5 based on its type and severity, with a grade of 0 or 1 assigned to pipes in very good condition and a grade of 5 to pipes in severely damaged condition. **Table 4-6** summarizes pipe conditions for the Marin City collection system based on the highest structural defect grade in each manhole-to-manhole pipe segment.

Table 4-6: Marin City Collection System - Summary of Length of Pipe by Highest Structural Grade

Highest NASSCO PACP Structural Grade	Length of Pipe (ft.)	Percent
0	18,954	59.5%
1	2,408	7.6%
2	4,551	14.3%
3	2,600	8.2%
4	1,156	3.6%
5	2,172	6.8%
Total	31,841	100%

After the structural grades were established, the pipelines were prioritized for rehabilitation based on their overall condition rating, PACP quick rating, and status of being on the District's Hot Spot list. The District has rehabilitated over 15,000 feet of the higher priority pipes since the structural grades were assigned and will continue to use CCTV inspection and PACP ratings to assess pipe condition and address lower priority pipelines in the future.

SMCSD Conveyance System (Interceptor)

Table 4-7 summarizes pipe condition for the SMCSD gravity interceptors based on the highest structural defect grade in each manhole-to-manhole pipe segment.

Table 4-7: SMCSD Gravity Interceptors - Summary of Length of Pipe by Highest Structural Grade

Highest NASSCO PACP Structural Grade	Length of Pipe (ft.)	Percent
0	5,900	75.2%
1	0	0%
2	405	5.2%
3	976	12.4%
4	304	3.9%
5	259	3.3%
Total	7,844	100%

Similar to the process for the Marin City collection system, after the structural grades were established, the pipelines were prioritized for rehabilitation based on their overall condition rating, PACP quick rating, and knowledge of trouble spots in the gravity conveyance system. The District has subsequently rehabilitated the pipes in the worst condition, the section between Napa St. and Locust pump stations, which is all the structural grade 3, 4 and 5 footage.

Condition assessment of the force main has been conducted in the past along with rehabilitation projects along portions of the interceptor. The summary table below (**Table 4-8**) provides a brief history of the previously conducted condition assessment and rehabilitation activities on force mains.

Table 4-8: Summary of Force Main Condition Assessment and Rehabilitation

Period	Work Summary
1985	2,652 feet of 16-inch force main from the Marin City Pump Station to the intersection of Bridgeway Avenue and Gate 5 Road was replaced with new 16-inch HDPE Pipe
1995-1997	3,798 feet of 16-inch force main from the TCSD Force Main tie-in to the Marin City Pump Station was replaced with new 16-inch HDPE pipe.
1999	2,641 feet of 20-inch force main between the Main Street pump to the MCSD WWTP was replaced with new 20-inch DIP pipe.
2001	Condition assessment of 3,539 feet of 20-inch cast iron force main between the Locust Street Pump Station and Princess Street Pump Station. (a)

Notes:

- Results of the 2001 condition assessment indicated that the pipe wall thickness was reduced but that the thickness reduction did not compromise the structural integrity of the pipe enough to warrant a corrective action at the time.
- Summary based on "Technical Memorandum 2: Sausalito-Marín City Sanitary District—Summary of the Condition Assessment of the MCSD Conveyance System" (West Yost Associates; October 13, 2010).

The force main segments will be re-inspected periodically in the future, as determined to be necessary. The District will also inspect force mains when rehabilitation projects on the interceptor or at pump stations allow.

4.5.3 Capital Improvement Plan

Condition assessment and inspections inform the District's multi-year financial plan for its sewer pipeline rehabilitation and replacement program. Additional details can be found in the Sausalito-Marín City Sanitary District Fiscal Year 2018/2019 Budget.

Table 4-9 provides a summary of each of the projects and the improvements made to the collection and conveyance system by those projects.

**Table 4-9: Collection System Rehabilitation and Replacement Plans for 2019-2025
and Completed Work 2011-2017**

Scheduled Action	Project	System Component	Status
2011	Marin City Rehabilitation	Inspection of approximately 32,000 LF of sewers. Rehabilitation of priority 1, 2 & 3 pipe manhole inspection and repairs/sealing	Completed
2012	Locust Street Pump Station	Entire pump station replacement including (3) 35HP pumps. New station controls -Inspection and Rehabilitation of stationary backup generator	Completed
2013	Pump Station Reliability Improvements	Install bypass pumping connections to all critical pump stations to improve reliability	Completed
2014	Main Street Pump Station	Replacement of (2) 250HP wet weather sewage pumps New 185HP standby pump New station controls	Completed
2016	Beach Force Main and Gravity Sewer Cleaning and Inspection	Cleaned and inspected the Beach Force Main and prepared it for future lining that will provide redundancy and reliability	Completed
2017	Highway Booster Pump Station	Cleaning and inspection of force main Replacement of (2) 15HP sewage pumps Replacement of station piping and valves Addition of stationary backup generator	Completed
2019-2021	Coloma and Whiskey Springs Pump Station Improvements	Rehabilitation of stations to enhance wet weather reliability	Future
2019-2021	Generator Reliability Improvements	Replacement of aging backup generators to maintain pump station reliability	Future
2020-2022	Beach Force Main Rehabilitation	Reinstatement of the Beach Force Main through lining and pump station modification to support reliability and force main maintenance	Future
2022-2024	Marin City Pump Station Rehabilitation	Study and improvements to the Marin City Sewer Pump Station and force main	Future
2022-2025	Marin City Sewer Rehabilitation, Phase II	Inspection of entire collection system. Rehabilitation of priority 1,2 &3 pipe, inspection & repair of manholes to reduce I/I	Future

Capital Improvement Projects Program Funding

The District manages a reserve policy to maintain and improve its sewer infrastructure system. Long-term goals area also carefully planned for and tracked as the system is continually upgraded. The reserve funding is prioritized in the following order: Operating, Capital, and Renewal & Replacement Disaster recovery, and Self-Insurance. **Table 4-10** summarizes each fund, its purpose and reserve holdings. Additional details on reserve fund policies and planning can be found in the District's Fiscal Year 2018/2019 Budget, found on the District website at <http://smcsd.net> under "Documents".

Table 4-10: SMCS D Reserve Funds Status

Reserve Fund	Purpose	FY 18-19 Balance
Operating	Provide working capital for operating expense cash flow during the fiscal year.	\$2,057,263
Capital	Provide capital for major capital projects (expansions and upgrades) during year and from year to year.	\$4,029,752
Renewal & Replacement	Provide capital for renewal and replacement of equipment and appurtenant assets.	\$220,000
Disaster Recovery and Self-Insurance	Provide funds for contingencies, disasters, and claims.	\$2,600,000
Total		\$8,907,015

4.6 Training

This section discusses staff training opportunities, resources allocated to promote continuing education, and contractor training requirements.

4.6.1 Staff Training

The District uses a combination of on-the-job training, conferences, seminars, and other training opportunities to provide technical training and continuing education for its wastewater collection system staff. Vendors also provide training for new equipment. All O&M employees are certified at levels required by the State for their respective job functions. The District's Sewer Maintenance budget includes funds for technical training. The sources of technical training and training materials for the District's wastewater collection staff are listed in **Table 4-11**.

In addition to the training resources mentioned in **Table 4-11**, the District maintains an onsite library of O&M manuals and can provide access to videos and online training opportunities including classes in collections systems management through Sacramento State University's Water Programs.

Table 4-11: Training Resources (Conferences, Seminars, and Courses)

Sponsor	Event	Timeframe	References
California Water Environment Association	State Conference	April	www.cwea.org
	Northern Regional Safety Conference	October	
	Collection Systems Committee	Quarterly	
Northern California Pipe Users Group	Various Trainings	Varies	www.norcalpug.com
Water Environment Federation	Annual Conference	October	www.wef.org
	Specialty Collection Systems Conference	June	
	Seminars	Varies	
California Sanitation Risk Management Authority	Classes	Varies	www.csrma.org

Each annual budget includes funding for training activities to keep staff apprised of new regulatory requirements and O&M approaches.

4.6.2 Contractor Training

The District requires that contractors performing CCTV inspection are certified by NASSCO in their PACP as well as have a California C-36 state plumbing contractor license or C-42 state sanitation system contractor license. The District requires contractors working on the wastewater collection system to employ workers with experience in wastewater collection systems and/or to provide training regarding the impact of their project on the operation of the wastewater collection.

4.7 Equipment and Replacement Part Inventories

District staff members are the first responders for emergency response and typically direct other agencies on how to respond to an event. The District maintains a response trailer that is located in the City's maintenance yard; City employees and first responders are allowed access to the trailer and its equipment. All equipment and parts are carefully logged on an inventory checklist and immediately restocked if used. The trailer is stocked with piping, pumps, barricades, etc., materials necessary for an SSO response activity. Staff members are given an annual "refresher" training prior to wet weather season that reinforces the response procedures and importance of maintaining the equipment and parts inventory. The trailer is shared between the District, and the City. Each entity is responsible for maintaining the inventory list and replacing parts based on their own use.

4.7.1 Critical Replacement Parts

In addition to operating and maintaining seven of its own pump stations, the District operates and maintains four pump stations owned by the City. Each of the City's and District's pump stations contains an Emergency Response Plan (ERP), SSO Response Procedures, and a document on Lock-Out Tag-Out procedures. See **Table 4-12** below for a summary of what is contained in each of these documents and for a sample of these materials. Additional supplies and replacement parts include emergency materials for bypass pumping, pipe repairs, pump replacement, plugs for all sizes of pipe in the system, portable pumps, and portable generators. Most stations have redundant power sources. Princess, Anchor and Spinnaker utilize a portable generator, deployed by the District, in the event of a power loss.

Table 4-12: Pump Station Document Summary

Pump Station Document	Content Summary
Operations & Maintenance Instructions	Plan on inspection and maintenance protocol specific to the pump station including contact list for emergency or routine repairs.
Standard Operational Inspection Procedures	Acceptable procedures to operate the pump station under normal conditions; standards include start-up, shut-down, normal operations, and emergency-shut down procedures.
Lock-Out & Tag-Out Procedures	Safety procedures used to ensure that machinery is properly shut down and prevented from re-starting before required maintenance and servicing is performed.

Element 5 Design and Performance Provisions

This section of the SSMP discusses the District's use of established guidelines, standards and specifications for design, construction, rehabilitation, repair and inspection of sanitary sewer systems and appurtenances.

5.1 Regulatory Requirements for the Design and Performance Provisions Element

The requirements for the Design and Performance Provisions element of the SSMP are summarized below:

- (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.*

5.2 Design and Construction Standards and Specifications Documents

The District's Design and Construction Standards, paragraph 2.35.090 of the District's Code and the District's 2007 Standard Specifications, contain the minimum standards for the design and construction of new or repaired sewers that are within the jurisdiction of the District. The District Standards are posted on the District website at <http://smcsd.net> under the "Permits, Standards, and Specifications" section and consist of the following sections:

- Part A: General Information
 - General Information
 - Definitions and Terms
- Part B: Engineering and Design Requirements
 - Design Calculations and Plan Preparation
 - Design Standards
 - Plan Approval and Permit Issuance
 - Construction Engineering
 - District Permits, Licenses and Bonds
- Part C: General Construction Requirements
 - Control of Work
 - Control of Material
 - Legal Relations and Responsibility
 - Utilities, Obstructions and Concrete Removal
 - References to Standard Specifications
- Part D: Construction Requirements
 - Earthwork
 - Sewer Pipelines
 - Demolition and Abandonment of Lines and Structures
 - Manholes
 - Structural Concrete
 - Castings and Metal Fabrications

- Painting
 - Surface Restoration
- Part E: Standard Drawings
- Part F: Appendices
 - Confined Space Entry Program
 - Standards for the Design and Construction of Sewers in Bay Mud

The District may permit modifications to the Standards or require higher standards where unusual conditions are encountered. Specialty design projects, such as pump station rehabilitation, force main replacement, or pump station construction/repair, are typically designed by a contracted design engineering firm where the engineer of record provides a set of standards and specifications for the project. The standards and specifications provided by the firm are typically based on professional and industry standards and are reviewed and approved by the District.

District Standards also require that all project work must be inspected and tested prior to acceptance by the Board of Directors or prior to service placement.

5.3 Procedures and Standards for Inspection and Testing

Construction inspection and testing standards for gravity mains and trunk sewers are outlined in Section 14-11 of the Standards and Specifications. Testing options include conducting air tests, water tests, and infiltration tests prior to deflection testing and final television inspections. Standards for force mains and pump stations are provided in contract specifications by the design engineer of record for the specific project. Standards for connection and testing of rehabilitated pipelines is also provided by the design engineer of record.

Element 6 Overflow Emergency Response Plan

The purpose of the Overflow Emergency Response Plan (OERP) is to support an orderly and effective response to Sanitary Sewer Overflows (SSOs). This plan provides guidelines for the District to follow in responding to, cleaning up, and reporting SSOs that may occur within the District's service area.

6.1 Regulatory Requirements for the Overflow Emergency Response Plan Element

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. 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 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 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.*

6.2 Existing Overflow and Emergency Response Plan Documents

The District developed an OERP in 2008 (**Appendix G**) as part of the Sewage Spill Reduction Action Plan (SSRAP). The OERP contains detailed information on overflow response procedures and was developed to comply with the OERP SSMP requirements of the WDR as well as the requirements of the AO. Staff members are able to manage overflows because of their formalized procedures, knowledge of historical issues in the system (including locations of key low points in the gravity system), and from their monitoring of vulnerable areas through the use of SmartCovers.

The District does not have a combination jetter/vacuum truck or any in-house equipment to relieve sewer blockages. The District is the first responder for containment at an overflow event and has a mutual-aid agreement with the City. If a spill goes from the collection system to the City's storm drain system, the District will block the inlet, contact the City (the City owns a combination jetter/vacuum truck) and track the spill to document and minimize the extent of its travels. The District also utilizes its sewer service cleaning contractor for spill response in certain situations when it may be advantageous to the District to do so.

The OERP addresses the requirements of the WDR for an Overflow Emergency Response Plan. The table below (**Table 6-1**) summarizes the WDR requirements with the corresponding sections in each of the District's documents.

Table 6-1: Summary of WDR Requirements Met by OERP Documents

WDR Requirements	Information Contained in:	
	Overflow Emergency Response Plan	
A. Proper notification procedures	Chapters 2, 5	
B. Program to ensure appropriate response to all overflows	Chapters 2, 3, 6 Appendix 1	
C1. Procedures to ensure prompt notification to appropriate regulatory agencies and other potentially affected entities of SSO's	Chapters 2, 3, 5, 6 Appendix 1	
C2. Identification of officials who will receive immediate notification	Appendices 2, 3	
D. Procedures to ensure staff and contractor personnel are aware of and follow the ERP and are appropriately trained.	Chapter 8	
E. Procedures to address emergency operations, such as traffic and crowd control and other necessary response activities ^a	Chapters 3, 4 Appendices 1, 9	
F1. Program to ensure all reasonable steps are taken to contain and prevent SSO's to public waters	Chapter 3 Appendix 1	
F2. Program for accelerated or additional necessary monitoring to determine nature and impact of discharge.	Chapters 4, 6 Appendices, 4, 6, 7, 8	

Notes:

- a. The District utilizes a standard street work traffic control plan that has been approved by the City. The APWA Work Area Traffic Control Handbook is also used to address specific traffic control scenarios. The District owns all traffic control equipment that is needed except for a notice/arrow board which is rented on an as-needed basis. Any media relations issues are deferred by field staff to the general manager who can serve the role of a public information officer.

Water Quality Monitoring Plan (WQMP)

The SWRCB 2013 Order (Monitoring and Reporting Program, or "MRP") updated the requirements and timeframe (within 48 hours) for SSO reporting and water quality monitoring to assess impacts from SSOs to surface waters in which 50,000 gallons or greater are spilled to surface waters. The MRP also required the District to develop and implement a water quality monitoring plan (WQMP). Consequently, samples will be taken by sewer field staff in affected water bodies by District staff upstream and downstream of the site where SSOs that exceed 50,000 gallons enter the water bodies. Samples will be analyzed for ammonia nitrogen and bacteriological indicators (total coliform, fecal coliform, and enterococcus). Sampling will be performed in accordance with proper sampling techniques and protocols, and safety considerations. Sampling will continue once every 24 hours until County Environmental Health or Regional Board staff indicates it is no longer needed, or both ammonia and bacteria levels are approximately equal to or less than upstream levels, or ammonia is at or lower than upstream levels or unionized ammonia is below 0.4 mg/l as Nitrogen and total coliform levels are below the limit in Table 9.1 of the June 2013 SF Bay Area Basin

Plan (no sample > 10,000 MPN/100ml). Sampling may be conducted for SSOs that are less than 50,000 gallons, depending upon the specific circumstances of the SSO and at the discretion of District staff.

The MRP also requires that in the event of a 50,000 gal or greater overflow spilled to surface waters, the District 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 one of the District's LROs.

Element 7 FOG Control Program

This section of the SSMP discussed the District's approach to managing fats, oils, and grease accumulation in the collection system.

7.1 Regulatory Requirements for the FOG Control Program Element

The collection system agency shall evaluate its service area to determine whether a FOG control program is needed. If the collection system agency determines that a FOG program is not needed, the collection system agency must provide justification for why it is not needed. If FOG is found to be a problem, the collection system agency must prepare and implement a FOG source control program to reduce the amount of these substances discharged to the sanitary sewer system. The FOG source control program shall include the following as appropriate:

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

7.2 Nature and Extent of FOG Problem

The District has experienced only one FOG-related SSO since May 2, 2007, and that occurred on August 4, 2015. Based on this data and that the District continues to have no on-going blockage or SSO issues related to FOG, the District has decided to utilize sewer cleaning as the primary means to control FOG in the sewer system. Even with the primary focus on sewer cleaning to address FOG, the District would employ FOG source control as a secondary means to combat FOG, when and if FOG became an issue in the collection system. Currently, as of May 2019, there are only 6 food service establishments in the Marin City and unincorporated area served by the SMCSO collection system.

FOG blockages are controlled by the District through a combination of sewer cleaning and FOG outreach. Pipes with known grease problems are addressed with focused sewer cleaning (see Section 4.4).

7.3 Public Outreach Program

The District conducts a public information and outreach program for FOG source control as part of a collaborative effort with other wastewater treatment agencies in Marin County including:

Central Marin Sewer Authority (CMSA)

- Las Gallinas Valley Sanitary District Sewerage Agency of Southern Marin
- Novato Sanitary District
- Sanitary District No. 5 of Marin County

These Southern Marin Agencies plan public outreach presentations at fairs, tours, and other public gathering events as well as in elementary school classrooms in the County. Some of the FOG-specific activities include informational brochures, public comment questionnaires, calendar of environmental events, and a grease-scraping tool handed out for people to use. Topics included in the informational outreach include:

- The difference between storm drains and sanitary sewers and the function of each
- Appropriate types of wastes for the sanitary sewer
- Issues relating to preventing FOG-related sanitary sewer overflows
- Private laterals, ownership responsibility, and their potential to cause SSOs.

Some of the regional program efforts have shared costs.

The District also periodically publishes information in its newsletter (accessible on the District's website under "Newsletters and Periodicals", January 2015 and June 2018 editions and "How You Can Help" at <http://smcsd.net>) and provides information on residential disposal of FOG.

7.4 Disposal of FOG

Currently, solidified fats found in the collection system during cleaning operations are captured by a combination jetter/vacuum truck and disposed of at an approved location chosen by the contractor, typically the Redwood Landfill. FOG disposal sites in the region include Central Marin Sanitation Agency (CMSA), East Bay Municipal Utility District (EBMUD), Millbrae Wastewater Treatment Plant, Altamont Landfill, and Redwood Landfill.

7.5 FOG Requirements, Standards, and Practices

Legal authority to require installation of grease and oil interceptors and to ensure their proper maintenance is contained in the building permitting requirements administered by Marin County for food service establishments and is also summarized in Element 3 of this SSMP. The District legal authority, through its District Code requires installation of grease removal devices. Commercial establishments also have to meet the County's legal and permitting requirements that may include installation of an interceptor that is approved by the District.

As part of the permit process, the District is responsible for sizing the grease interceptor and submitting a letter to the Department of Environmental Health Services (DEH) detailing the size of the interceptor or notifying DEH that the grease interceptor requirement is being waived.

7.5.1 FOG Preventive Maintenance

The District currently employs preventive maintenance and restaurant inspections as the primary methods to address FOG issues in the system. The District maintains a list and map of pipes in the system with known previous grease issues. The sewer cleaning frequency of pipes with known grease issues is coded on the map and is reevaluated annually for optimization of maintenance and service. Maintenance is discussed in more detail in Section 4.4. Both TCSD and Sausalito conduct food and cooking waste outreach programs that mitigate FOG such that there is virtually no impact to the interceptor system from their collection systems.

7.5.2 FOG Best Management Practices

Best management practices (BMPs) are activities, practices, and/or procedures that when implemented to the maximum extent practicable will prevent or reduce pollutants in discharges. Some examples of BMPs are: scraping and dry wiping dishes and cooking utensils prior to washing, general good housekeeping, proper waste handling, and disposal. FOG issues in the SMCSO interceptor are mitigated by BMPs practiced by TCSD, Sausalito, and Marin City.

7.6 FOG Legal Authorities and Enforcement Staffing

7.6.1 Legal Authority

District Code contains regulations that prohibit the discharge of wastewater containing more than 100 mg/L of fat, oil, or grease. District staff inspects the condition of the grease interceptors on an as-needed basis to determine that they are being properly maintained and pumped on a regular schedule. While Marin County regulations provide legal authority to require installation and proper maintenance of grease and oil interceptors, they do not provide the District legal authority to inspect and enforce a FOG ordinance.

The District has developed relationships with FSE managers in order to effectively communicate the value and importance of managing FOG appropriately. As mentioned previously, at this time there are only 3 FSEs in the area of the SMCSO collection system.

7.7 Sewer Cleaning to Address FOG Issues

Most of the approximately 32,000 feet of gravity sewers in the Marin City collection system were inspected in 2001 for structural and O&M defects through CCTV inspection. Approximately 20,400 feet of the collection system was re-inspected in 2009 and 2010. The latter inspection included the worst ranked pipelines previously inspected in 2001 and various segments of the collection system that had not previously been inspected. The CCTV inspection results, combined with District staff input on known hot spots that require frequent maintenance to address grease accumulation, were used to prioritize pipelines for rehabilitation and maintenance and to develop a hot spot map identifying sewer system sections subject to FOG. The District inspects manholes in these areas on either a 4- or 12-month frequency depending upon previous results to check for potential FOG problems.

The District accomplishes monitoring of grease issues in pipes through periodic maintenance activities. Collection system conditions are updated annually in the CMMS so that the District can proactively manage all collection system sections based upon pipe evaluations, cleaning results and historical patterns that result from ongoing proactive maintenance program. See Section 4.4.1 for more details on the inspection and condition assessment work related to FOG.

7.7.1 Cleaning Schedule for Identified FOG Prone Sewer Segments

Since 2004, the District has only experienced two grease-related SSOs which resulted in one 100 gallon and one 864-gallon SSO. The cleaning of pipes with known grease problems and present lack of FSEs has contributed to the low number grease-related SSO events and is described in more detail in Section 4.4.1. The primary cleaning method used to clean pipes with known grease problems is hydro flushing. The District re-evaluates the cleaning frequency of each hot spot after the contractor reports the results of each hot spot cleaning.

Element 8 System Evaluation and Capacity Assurance Plan

This section of the SSMP presents the District's approach to addressing hydraulic capacity issues through appropriate evaluation of the system and development of capital improvement projects.

8.1 Regulatory Requirements for System Evaluation and Capacity Assurance

The District shall prepare and implement a capital improvement plan (CIP) that will provide hydraulic capacity of key 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 capital improvement plan shall include an implementation schedule and shall identify sources of funding.*
- (d) **Schedule:** The District 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 in Section D. 14.*

8.2 Background

The District has undertaken a number of activities to evaluate the flows and capacity of its sanitary sewer system and identify improvements needed to provide adequate capacity. These activities have included the following:

- In February 2006, the District completed the *Locust Street Pump Station Wet Weather Flow and Capacity Study*, which evaluated the flows and capacity of the interceptor system upstream of the Locust Street Pump Station, including flow monitoring and development of a hydraulic model of this portion of the system.
- In February 2008, the District completed the *Wet Weather Conveyance and Treatment Evaluation*, which expanded the hydraulic model to include the entire interceptor system, identified an appropriate design storm to use for capacity evaluation, and analyzed conveyance and treatment alternatives for providing adequate capacity to handle peak flows for that design storm.
- In the winter of 2008/09, the District, in coordination with the City of Sausalito (Sausalito) and Tamalpais Community Services District (TCSD), conducted an extensive wet weather flow monitoring program as required under the administrative compliance order issued to the three agencies by the U.S. EPA in 2008.

- In October 2010, the District completed a Capacity Assessment and Capacity Assurance Plan as part of the third submittal of its *Sewer Spill Reduction Action Plan* (SSRAP Vol. III) required by the EPA order. The key findings of the capacity assessment and proposed capacity assurance plan are summarized below. Copies of these two sections of the SSRAP Vol. III are included in **Appendix I** to this SSMP.
- In May 2013, the District completed the *Pumps Station Reliability Improvements Project*, which added bypass pumping connections to all pump stations in addition to a bypass connection from the District's gravity interceptor to Coloma's force main in the vicinity of the slip-lined section of interceptor (which reduced its capacity) in order to support emergency bypass pumping. This project added both reliability and redundancy to all existing pump stations.
- In 2012 the District completed the Locust Street Pump Station Improvements Project, which added capacity, updated station controls, improved backup generation reliability, provided a backup power connection and provided a bypass pumping connection. These improvements targeted capacity and reliability. Additional improvements were the elimination of confined space entry to operate the station.
- In 2014 the District completed the Main Street Pump Station Rehabilitation Project, which added capacity, updated station controls, and provided a backup power connection. These improvements targeted capacity and reliability.
- In 2017 the District completed the Highway Booster Pump Station Rehabilitation Project, which updated station controls, improved backup generation reliability, provided a backup power connection and provided a bypass pumping connection. In addition, the gravity sewer feeding the station was upgraded to improve capacity and the force main cleaned and inspected to maintain capacity. These improvements targeted capacity and reliability.

8.3 Capacity Evaluation

In January 2014, the District completed the *Main Street Pumps Station Rehabilitation Project*, which increased both capacity and redundancy to the Main Street pump station which delivers 95% of the flow to the treatment plant. The District has used its hydraulic model to evaluate the capacity of its interceptor system under peak wet weather flow conditions. (Note: There have been no recorded overflows due to wet weather events in the District's local collection system serving Marin City.) The modeling has indicated that the 21-inch gravity interceptor system between Gate 5 Road and Napa Street (upstream of the Locust Street Pump Station) is a hydraulic bottleneck, specifically the portion between Marinship Park and Napa Street that was previously slip-lined with a 17.3-inch diameter liner. The capacity limitation in this section of the interceptor, as well as the limited capacity of the Coloma wet weather pump station that is intended to relieve the gravity interceptor, can result in surcharge and potential overflows from the interceptor upstream of Coloma Street. The District has previously experienced overflows in this portion of the interceptor. The District installed bypass pumping connections at Coloma Pump Station and implements bypass pumps during the wet weather season to supplement capacity in accordance with modeling studies. In addition, manhole covers have been bolted down and sealed from Gate 5 Road to Marinship Way to allow the pipe to pressurize and prevent overflows from occurring.

The District is currently in design of the *Coloma and Whiskey Springs Pump Stations Improvements Project* which has been modeled and sized to alleviate the capacity limitations described above. This project implements permanent pumps with redundancy and a backup power generator which serve to deliver flow from upstream of the conveyance interceptor's capacity limited portion of lined pipe to downstream of the

Locust Street pump station. Modeled capacity requirements have been validated through temporary bypass pumping during severe storm events.

Field investigations undertaken by the District, as well as by Sausalito and TCSD, indicate that defects in sewer pipes, manholes, and private service laterals are the sources of infiltration/inflow (I/I) flows that contribute to peak flows in the system - the District believes that private laterals are currently the primary source of I/I in the District's service territory. Smoke testing has found a few instances of potential direct inflow sources.

8.4 Design Criteria

The District has identified a specific historical rainfall event, the storm of December 31, 2005, as its design wet weather event. The selection of this event was based on continuous simulation analyses of historical flow and rainfall events to determine the statistical frequency of peak flows in the system. The December 31, 2005 event was determined to be an approximate 5-year recurrence frequency event with respect to peak I/I flows in the system. The District's capacity assurance plan is based on providing adequate capacity to convey peak flows generated by the design event without overflows from the sewer system.

The District's Standards and Specifications, Part B - Engineering and Design Requirements, Section 4 - Design Standards, include criteria for design of gravity sewers, including design flow criteria.

8.5 Capacity Enhancement Measures

The District has evaluated various alternatives for providing adequate capacity in the system for both the short-term and long-term through pipeline and pump station improvements, wet weather storage, and I/I reduction. The District's adopted CIP includes a combination of these capacity enhancements, as well as pump station reliability improvements and upgrades to its Wastewater Treatment Plant (WWTP). Short-term improvements include:

- Upgrades to the Locust Street Pump Station involving construction of a new pump station with three pumps to provide firm capacity to handle peak design storm flows. This project was completed and went on-line in 2012.
- Improvements to the Main Street Pump Station including replacement of the existing wet weather pumps and installation of a new pump to provide additional backup capacity. This project was completed and went on-line in January 2014. This project was implemented in lieu of the installation of connections for a portable pump as described in the Capacity Assurance Plan in the SSRAP Vol. III. This project included the installation of bypass pumping connections at Princess and Drake pump stations as well as installation of a dry weather pumping bypass for the rock and debris catcher wet well at the Main Street pump station.
- In 2013, the District completed the *Pumps Station Reliability Improvements Project*, which added bypass pumping connections to all pump stations in addition to a bypass connection from the District's gravity interceptor to Coloma's force main in the vicinity of the slip-lined section of interceptor (which reduced its capacity) in order to support emergency bypass pumping. This project added both reliability and redundancy to all existing pump stations. Upgrades to the Coloma Pump Station to increase capacity and improve reliability. The improvements would include a new wet well and submersible pumps (including backup pump), control panel, and standby generator, and will be coordinated with improvements to the adjacent Whiskey Springs Pump Station. Planning and design of this project started in 2014 and project completion is anticipated by 2021.
- Upgrades to the WWTP including a new headworks facility, new/redundant clarifier, FFR improvements increasing secondary treatment capacity from 6 MGD to 9 MGD, improved tertiary treatment which increases tertiary capacity from 1 MGD to 6 MGD and an added 0.6 million-gallon

equalization storage basin, as well as other plant improvements. Construction of this project is currently underway with planned completion in 2019.

- Repair, rehabilitation, and replacement of approximately 13,000 feet of sewers in the Marin City collection system to address structural and maintenance deficiencies and reduce I/I. This project was completed in January 2013.

In addition, both Sausalito and TCSD are also undertaking sewer rehabilitation work, which will contribute to I/I reductions in the SMCS D system.

Long-term improvements will include additional sewer rehabilitation and replacement in Marin City, as well as similar work by Sausalito and TCSD. All three agencies have committed to cooperate to reduce I/I through rehabilitation of their collection systems over the next 20 to 30 years. Each agency has also committed to maintaining flow and rainfall measurement devices at key locations and to conducting a formal flow monitoring study every 5 years to confirm that the I/I reduction targets are being met.

8.6 Schedule

The anticipated dates for implementation of the District's sewer system capacity improvement projects are included in the CIP project list soon to be located on the District website at <http://smcsd.net> under "Capital Improvement Projects".

Element 9 Monitoring, Measurement, and Program Modifications

This section of the SSMP presents the District's approach to Monitoring, Measurement, and Program Modifications.

9.1 Regulatory Requirements for the Monitoring, Measurement, and Program Modifications Element

The requirements for the Monitoring, Measurement, and Program Modifications element of the SSMP are to:

- (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.*

9.2 Information Used to Establish and Prioritize Activities

The District utilizes data captured in the District's geographical information system (GIS), computerized maintenance management system (CMMS), and the State Water Resources Control Board's California Integrated Water Quality System (CIWQS) SSO database to monitor and measure the performance of the SSMP and SSMP implementation. The District monitors sewer overflow performance to accomplish the following:

- Establish and prioritize appropriate SSMP activities
- Monitor the implementation and effectiveness of the SSMP
- Assess the success of the preventive maintenance program
- Identify and illustrate SSO trends including frequency, volume, and location

The District monitors SSO performance monthly and the Operations Superintendent provides monthly reports and periodically provides a presentation on the overall sewer overflow performance to the District Board at their regularly scheduled Board meetings. These reports are also the primary means to communicate the performance of the SSMP and SSMP implementation to the Board.

The NEXGEN system contains information on the effectiveness of preventive maintenance activities and allows for historical review of pipeline conditions in order to adjust maintenance and repair priorities. The District also performs an analysis of all individual sewer overflow events and identifies corrective actions to SSMP program elements that are appropriate based on this review. The indicators that the District uses to measure the performance of its wastewater collection system and the effectiveness of its SSMP are listed in **Table 9-1**. The District will update the data and analysis of performance measures at the time of each evaluation and may use other performance measures as well in its evaluation.

Table 9-1: Performance Metrics for Monitoring and Measurement

	Performance Measure	Source
Measures Based on SSO Number	Total number and percentage of SSOs by Category	CIWQS
	Number of SSOs by cause:	CIWQS
	Number of SSOs per 100 miles of sewer per year	CIWQS
	Number of locations with more than one SSO in the past year	CIWQS
Measures Based on SSO Volume	Volume (gallons) of SSOs per 100 miles per Year	CIWQS
	Total volume of SSOs (gallons)	CIWQS
	Total SSO volume and percentage (of total volume) recovered	CIWQS
	Total SSO volume (gallons) and percentage (of total) reaching waters (storm drains, not recovered and surface waters)	CIWQS
SSO Response Time	Average response time during business hours	CIWQS
	Average response time outside of business hours	CIWQS
Maintenance Program	Cleaning (LF)	Maintenance Records
	CCTV inspection (LF)	Maintenance Records

9.3 SSMP Updates

The District will update its SSMP as required by State regulations, currently at least once every five years. The SSMP Program Audit, conducted every two years (and more frequently if deemed necessary) will be one of many indicators used to determine if any major updates are required prior to the typical 5-year update frequency. Any major changes to the SSMP require approval from the District's Board of Directors. The District may make minor changes, such as changes to the organizational chart, without Board approval. Changes made to the SSMP will be documented by the SSMP Change Log, located at the end of Element 11.

Element 10 SSMP Program Audits

This section of the SSMP presents the process the District will follow to audit its SSMP and related programs.

10.1 Regulatory Requirements for the 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 District's compliance with the SSMP requirements identified in this subsection (D.13 of the WDR), including identification of any deficiencies in the SSMP and steps to correct them.

10.2 SSMP Audits

The District will audit its SSMP every two years. The audit will evaluate the effectiveness of the SSMP and will review whether the SSMP meets the current requirements of the WDR, whether the SSMP reflects the District's current practices, and whether the District is following the SSMP. The District conducted its last audit in conjunction with this SSMP update, and it is on the District website at <http://smcsd.net> under "Planning Documents" in the "Documents" section. The next SSMP Program Audit is due in May 2021. Subsequent audits will be completed every two years (or at a higher frequency if deemed necessary). The Operations Superintendent will be responsible for ensuring the SSMP Program Audit is conducted on schedule.

The scope of the audit will cover each of the sections of the SSMP. The results of the audit will be included in an SSMP Audit Report. The SSMP Audit Report will include audit results and focus on the effectiveness of the SSMP program, compliance with the WDR requirements, and identification of any deficiencies in the SSMP. The SSMP Audit Report will also identify revisions to the SSMP that may be needed for a more effective program.

Element 11 Communication Program

11.1 Regulatory Requirements for the Communication Program

The Agency shall:

- a. *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 Agency as the program is developed and implemented.*
- b. *Create a plan of communication with systems that are tributary and/or satellite to the Agency's sanitary sewer system.*

11.2 Communication with Public

The District communicates on a regular basis with the public on the development, implementation, and performance of its SSMP. The communication system provides the public the opportunity to provide input to the District's SSMP and SSMP implementation. This communication occurs in the form of notices in the newsletter and on the District website. The SSMP and SSMP Audits are posted on the District website at <http://smcsd.net> under "Planning Documents" in the "Documents" section. Public comments are accepted at all monthly District Board meetings and the District evaluates public input when provided and addresses questions and comments as appropriate. **Table 11-1** lists the various strategies the District employs to communicate with the public on the development, implementation, and performance of the District's SSMP.

Table 11-1: Strategies for Communication with Public on SSMP Development, Implementation and Performance

Subject Matter	Strategy	Description	Frequency
SSMP Development	District Committee and Board Meeting	The public was given the opportunity to review the updated SSMP and to provide the District with input at a Public Information Committee meeting and at a District Board Meeting. This agenda item was also included as an agenda item at a Board Meeting.	During development of SSMP update
SSMP Implementation	Website	The District has a link to regulations on its website at http://smcsd.net under "Regulatory" in the "Documents" section. The page includes a link to the District's SSMP and contact information for whom to call with any questions regarding SSMP content, implementation, and performance	Always available on District webpage
SSO Emergency Response	Website	Every webpage on the SMCSO website, in the lower left corner, has information on who to call in the case of an emergency	Always available on District webpage
Fats, Oils, and Grease (FOG) Best Practices	Website	SMCSO website has a webpage providing the public with information relating to FOG control best practices http://www.sausalitomarincitysanitarydistrict.com/how-you-can-help/no-fog	Always available on District webpage
Sewer Lateral Rehabilitation and Replacement Grants	Website	SMCSO website has a webpage providing the public with information on grant applications to assist property owners in rehabilitation or replacement of their lateral. http://www.sausalitomarincitysanitarydistrict.com/how-you-can-help/sewer-lateral-replacement-program	Always available on District webpage
SSMP Performance	Board Meetings	Monthly reports on SSO performance	Board Meetings
SSMP Performance	CIWQS Website	Sewer overflow performance information is available to the public on the State Water Resources Control Board (SWRCB) California Integrated Water Quality System (CIWQS). Go to https://ciwqs.waterboards.ca.gov/ciwqs/readOnly/PublicReportSSOServlet?reportAction=criteria&reportId=sso_main . Type in "2SSO10189" in the Enter WDID field. Click on "Generate Report" button.	Always available on internet

Subject Matter	Strategy	Description	Frequency
Development and Execution of SSMP Programs	Public Outreach	The District participates in public education events with neighboring wastewater agencies in Marin County. A calendar of events is maintained throughout the year providing the District with numerous opportunities to provide the public with education regarding the development and implementation of SSMP programs. The District has joined with neighboring agencies to develop brochures (http://smcsd.net under "How You Can Help") to communicate best management practices regarding laterals, FOG, and other issues sewer-related issues.	

11.3 Communication with Tributary Systems

The District has a plan of communication with systems that are tributary and/or satellite to the District's sanitary sewer system. Tributary and/or satellite systems include the City of Sausalito, Tamalpais Community Services District, and GGNRA. Each of these agencies maintains a point of contact responsible for providing coordination relating to the sewer system. The District maintains a current contact list for contacts at each of these agencies.

[illegible]

Appendix A-1

State Water Resources Control Board Order No. 2006-0003 Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, May 2, 2006

**STATE WATER RESOURCES CONTROL BOARD
ORDER NO. 2006-0003**

**STATEWIDE GENERAL WASTE DISCHARGE REQUIREMENTS
FOR
SANITARY SEWER SYSTEMS**

The State Water Resources Control Board, hereinafter referred to as "State Water Board", finds that:

1. All federal and state agencies, municipalities, counties, districts, and other public entities that own or operate sanitary sewer systems greater than one mile in length that collect and/or convey untreated or partially treated wastewater to a publicly owned treatment facility in the State of California are required to comply with the terms of this Order. Such entities are hereinafter referred to as "Enrollees".
2. Sanitary sewer overflows (SSOs) are overflows from sanitary sewer systems of domestic wastewater, as well as industrial and commercial wastewater, depending on the pattern of land uses in the area served by the sanitary sewer system. SSOs often contain high levels of suspended solids, pathogenic organisms, toxic pollutants, nutrients, oxygen-demanding organic compounds, oil and grease and other pollutants. SSOs may cause a public nuisance, particularly when raw untreated wastewater is discharged to areas with high public exposure, such as streets or surface waters used for drinking, fishing, or body contact recreation. SSOs may pollute surface or ground waters, threaten public health, adversely affect aquatic life, and impair the recreational use and aesthetic enjoyment of surface waters.
3. Sanitary sewer systems experience periodic failures resulting in discharges that may affect waters of the state. There are many factors (including factors related to geology, design, construction methods and materials, age of the system, population growth, and system operation and maintenance), which affect the likelihood of an SSO. A proactive approach that requires Enrollees to ensure a system-wide operation, maintenance, and management plan is in place will reduce the number and frequency of SSOs within the state. This approach will in turn decrease the risk to human health and the environment caused by SSOs.
4. Major causes of SSOs include: grease blockages, root blockages, sewer line flood damage, manhole structure failures, vandalism, pump station mechanical failures, power outages, excessive storm or ground water inflow/infiltration, debris blockages, sanitary sewer system age and construction material failures, lack of proper operation and maintenance, insufficient capacity and contractor-caused damages. Many SSOs are preventable with adequate and appropriate facilities, source control measures and operation and maintenance of the sanitary sewer system.

SEWER SYSTEM MANAGEMENT PLANS

5. To facilitate proper funding and management of sanitary sewer systems, each Enrollee must develop and implement a system-specific Sewer System Management Plan (SSMP). To be effective, SSMPs must include provisions to provide proper and efficient management, operation, and maintenance of sanitary sewer systems, while taking into consideration risk management and cost benefit analysis. Additionally, an SSMP must contain a spill response plan that establishes standard procedures for immediate response to an SSO in a manner designed to minimize water quality impacts and potential nuisance conditions.
6. Many local public agencies in California have already developed SSMPs and implemented measures to reduce SSOs. These entities can build upon their existing efforts to establish a comprehensive SSMP consistent with this Order. Others, however, still require technical assistance and, in some cases, funding to improve sanitary sewer system operation and maintenance in order to reduce SSOs.
7. SSMP certification by technically qualified and experienced persons can provide a useful and cost-effective means for ensuring that SSMPs are developed and implemented appropriately.
8. It is the State Water Board's intent to gather additional information on the causes and sources of SSOs to augment existing information and to determine the full extent of SSOs and consequent public health and/or environmental impacts occurring in the State.
9. Both uniform SSO reporting and a centralized statewide electronic database are needed to collect information to allow the State Water Board and Regional Water Quality Control Boards (Regional Water Boards) to effectively analyze the extent of SSOs statewide and their potential impacts on beneficial uses and public health. The monitoring and reporting program required by this Order and the attached **Monitoring and Reporting Program No. 2006-0003**, are necessary to assure compliance with these waste discharge requirements (WDRs).
10. Information regarding SSOs must be provided to Regional Water Boards and other regulatory agencies in a timely manner and be made available to the public in a complete, concise, and timely fashion.
11. Some Regional Water Boards have issued WDRs or WDRs that serve as National Pollution Discharge Elimination System (NPDES) permits to sanitary sewer system owners/operators within their jurisdictions. This Order establishes minimum requirements to prevent SSOs. Although it is the State Water Board's intent that this Order be the primary regulatory mechanism for sanitary sewer systems statewide, Regional Water Boards may issue more stringent or more

prescriptive WDRs for sanitary sewer systems. Upon issuance or reissuance of a Regional Water Board's WDRs for a system subject to this Order, the Regional Water Board shall coordinate its requirements with stated requirements within this Order, to identify requirements that are more stringent, to remove requirements that are less stringent than this Order, and to provide consistency in reporting.

REGULATORY CONSIDERATIONS

12. California Water Code section 13263 provides that the State Water Board may prescribe general WDRs for a category of discharges if the State Water Board finds or determines that:

- The discharges are produced by the same or similar operations;
- The discharges involve the same or similar types of waste;
- The discharges require the same or similar treatment standards; and
- The discharges are more appropriately regulated under general discharge requirements than individual discharge requirements.

This Order establishes requirements for a class of operations, facilities, and discharges that are similar throughout the state.

13. The issuance of general WDRs to the Enrollees will:

- a) Reduce the administrative burden of issuing individual WDRs to each Enrollee;
- b) Provide for a unified statewide approach for the reporting and database tracking of SSOs;
- c) Establish consistent and uniform requirements for SSMP development and implementation;
- d) Provide statewide consistency in reporting; and
- e) Facilitate consistent enforcement for violations.

14. The beneficial uses of surface waters that can be impaired by SSOs include, but are not limited to, aquatic life, drinking water supply, body contact and non-contact recreation, and aesthetics. The beneficial uses of ground water that can be impaired include, but are not limited to, drinking water and agricultural supply. Surface and ground waters throughout the state support these uses to varying degrees.

15. The implementation of requirements set forth in this Order will ensure the reasonable protection of past, present, and probable future beneficial uses of water and the prevention of nuisance. The requirements implement the water quality control plans (Basin Plans) for each region and take into account the environmental characteristics of hydrographic units within the state. Additionally, the State Water Board has considered water quality conditions that could reasonably be achieved through the coordinated control of all factors that affect

water quality in the area, costs associated with compliance with these requirements, the need for developing housing within California, and the need to develop and use recycled water.

16. The Federal Clean Water Act largely prohibits any discharge of pollutants from a point source to waters of the United States except as authorized under an NPDES permit. In general, any point source discharge of sewage effluent to waters of the United States must comply with technology-based, secondary treatment standards, at a minimum, and any more stringent requirements necessary to meet applicable water quality standards and other requirements. Hence, the unpermitted discharge of wastewater from a sanitary sewer system to waters of the United States is illegal under the Clean Water Act. In addition, many Basin Plans adopted by the Regional Water Boards contain discharge prohibitions that apply to the discharge of untreated or partially treated wastewater. Finally, the California Water Code generally prohibits the discharge of waste to land prior to the filing of any required report of waste discharge and the subsequent issuance of either WDRs or a waiver of WDRs.
17. California Water Code section 13263 requires a water board to, after any necessary hearing, prescribe requirements as to the nature of any proposed discharge, existing discharge, or material change in an existing discharge. The requirements shall, among other things, take into consideration the need to prevent nuisance.
18. California Water Code section 13050, subdivision (m), defines nuisance as anything which 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.
19. This Order is consistent with State Water Board Resolution No. 68-16 (Statement of Policy with Respect to Maintaining High Quality of Waters in California) in that the Order imposes conditions to prevent impacts to water quality, does not allow the degradation of water quality, will not unreasonably affect beneficial uses of water, and will not result in water quality less than prescribed in State Water Board or Regional Water Board plans and policies.
20. The action to adopt this General Order is exempt from the California Environmental Quality Act (Public Resources Code §21000 et seq.) because it is an action taken by a regulatory agency to assure the protection of the environment and the regulatory process involves procedures for protection of the environment. (Cal. Code Regs., tit. 14, §15308). In addition, the action to adopt

this Order is exempt from CEQA pursuant to Cal.Code Regs., title 14, §15301 to the extent that it applies to existing sanitary sewer collection systems that constitute “existing facilities” as that term is used in Section 15301, and §15302, to the extent that it results in the repair or replacement of existing systems involving negligible or no expansion of capacity.

21. The Fact Sheet, which is incorporated by reference in the Order, contains supplemental information that was also considered in establishing these requirements.
22. The State Water Board has notified all affected public agencies and all known interested persons of the intent to prescribe general WDRs that require Enrollees to develop SSMPs and to report all SSOs.
23. The State Water Board conducted a public hearing on February 8, 2006, to receive oral and written comments on the draft order. The State Water Board received and considered, at its May 2, 2006, meeting, additional public comments on substantial changes made to the proposed general WDRs following the February 8, 2006, public hearing. The State Water Board has considered all comments pertaining to the proposed general WDRs.

IT IS HEREBY ORDERED, that pursuant to California Water Code section 13263, the Enrollees, their agents, successors, and assigns, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted hereunder, shall comply with the following:

A. DEFINITIONS

1. **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.
2. **Sanitary sewer system** – Any 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.

For purposes of this Order, sanitary sewer systems include only those systems owned by public agencies that are comprised of more than one mile of pipes or sewer lines.

3. **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 WDRs, and that has submitted a complete and approved application for coverage under this Order.
4. **SSO Reporting System** – Online spill reporting system that is hosted, controlled, and maintained by the State Water Board. The web address for this site is <http://ciwqs.waterboards.ca.gov>. This online database is maintained on a secure site and is controlled by unique usernames and passwords.
5. **Untreated or partially treated wastewater** – Any volume of waste discharged from the sanitary sewer system upstream of a wastewater treatment plant headworks.
6. **Satellite collection system** – The portion, if any, of a sanitary sewer system owned or operated by a different public agency than the agency that owns and operates the wastewater treatment facility to which the sanitary sewer system is tributary.
7. **Nuisance** - California Water Code section 13050, subdivision (m), defines nuisance as anything which 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.

B. APPLICATION REQUIREMENTS

1. **Deadlines for Application** – All public agencies that currently own or operate sanitary sewer systems within the State of California must apply for coverage under the general WDRs within six (6) months of the date of adoption of the general WDRs. Additionally, public agencies that acquire or assume responsibility for operating sanitary sewer systems after the date of adoption of this Order must apply for coverage under the general WDRs at least three (3) months prior to operation of those facilities.
2. **Applications under the general WDRs** – In order to apply for coverage pursuant to the general WDRs, a legally authorized representative for each agency must submit a complete application package. Within sixty (60) days of adoption of the general WDRs, State Water Board staff will send specific instructions on how to

apply for coverage under the general WDRs to all known public agencies that own sanitary sewer systems. Agencies that do not receive notice may obtain applications and instructions online on the Water Board's website.

3. Coverage under the general WDRs – Permit coverage will be in effect once a complete application package has been submitted and approved by the State Water Board's Division of Water Quality.

C. PROHIBITIONS

1. Any SSO that results in a discharge of untreated or partially treated wastewater to waters of the United States is prohibited.
2. Any SSO that results in a discharge of untreated or partially treated wastewater that creates a nuisance as defined in California Water Code Section 13050(m) is prohibited.

D. PROVISIONS

1. The Enrollee must comply with all conditions of this Order. Any noncompliance with this Order constitutes a violation of the California Water Code and is grounds for enforcement action.
2. It is the intent of the State Water Board that sanitary sewer systems be regulated in a manner consistent with the general WDRs. Nothing in the general WDRs shall be:
 - (i) Interpreted or applied in a manner inconsistent with the Federal Clean Water Act, or supersede a more specific or more stringent state or federal requirement in an existing permit, regulation, or administrative/judicial order or Consent Decree;
 - (ii) Interpreted or applied to authorize an SSO that is illegal under either the Clean Water Act, an applicable Basin Plan prohibition or water quality standard, or the California Water Code;
 - (iii) Interpreted or applied to prohibit a Regional Water Board from issuing an individual NPDES permit or WDR, superseding this general WDR, for a sanitary sewer system, authorized under the Clean Water Act or California Water Code; or
 - (iv) Interpreted or applied to supersede any more specific or more stringent WDRs or enforcement order issued by a Regional Water Board.
3. The Enrollee shall take all feasible steps to eliminate SSOs. In the event that an SSO does occur, the Enrollee shall take all feasible steps to contain and mitigate the impacts of an SSO.
4. In the event of an SSO, the Enrollee shall take all feasible steps to prevent untreated or partially treated wastewater from discharging from storm drains into

flood control channels or waters of the United States by blocking the storm drainage system and by removing the wastewater from the storm drains.

5. All SSOs must be reported in accordance with Section G of the general WDRs.
6. In any enforcement action, the State and/or Regional Water Boards will consider the appropriate factors under the duly adopted State Water Board Enforcement Policy. And, consistent with the Enforcement Policy, the State and/or Regional Water Boards must consider the Enrollee's efforts to contain, control, and mitigate SSOs when considering the California Water Code Section 13327 factors. In assessing these factors, the State and/or Regional Water Boards will also consider whether:
 - (i) The Enrollee has complied with the requirements of this Order, including requirements for reporting and developing and implementing a SSMP;
 - (ii) The Enrollee can identify the cause or likely cause of the discharge event;
 - (iii) There were no feasible alternatives to the discharge, such as temporary storage or retention of untreated wastewater, reduction of inflow and infiltration, use of adequate backup equipment, collecting and hauling of untreated wastewater to a treatment facility, or an increase in the capacity of the system as necessary to contain the design storm event identified in the SSMP. It is inappropriate to consider the lack of feasible alternatives, if the Enrollee does not implement a periodic or continuing process to identify and correct problems.
 - (iv) The discharge was exceptional, unintentional, temporary, and caused by factors beyond the reasonable control of the Enrollee;
 - (v) The discharge could have been prevented by the exercise of reasonable control described in a certified SSMP for:
 - Proper management, operation and maintenance;
 - Adequate treatment facilities, sanitary sewer system facilities, and/or components with an appropriate design capacity, to reasonably prevent SSOs (e.g., adequately enlarging treatment or collection facilities to accommodate growth, infiltration and inflow (I/I), etc.);
 - Preventive maintenance (including cleaning and fats, oils, and grease (FOG) control);
 - Installation of adequate backup equipment; and
 - Inflow and infiltration prevention and control to the extent practicable.
 - (vi) The sanitary sewer system design capacity is appropriate to reasonably prevent SSOs.

- (vii) The Enrollee took all reasonable steps to stop and mitigate the impact of the discharge as soon as possible.
7. When a sanitary sewer overflow occurs, the Enrollee shall take all feasible steps and necessary remedial actions to 1) control or limit the volume of untreated or partially treated wastewater discharged, 2) terminate the discharge, and 3) recover as much of the wastewater discharged as possible for proper disposal, including any wash down water.

The Enrollee shall implement all remedial actions to the extent they may be applicable to the discharge and not inconsistent with an emergency response plan, including the following:

- (i) Interception and rerouting of untreated or partially treated wastewater flows around the wastewater line failure;
 - (ii) Vacuum truck recovery of sanitary sewer overflows and wash down water;
 - (iii) Cleanup of debris at the overflow site;
 - (iv) System modifications to prevent another SSO at the same location;
 - (v) Adequate sampling to determine the nature and impact of the release; and
 - (vi) Adequate public notification to protect the public from exposure to the SSO.
8. The Enrollee shall properly, manage, operate, and maintain all parts of the sanitary sewer system owned or operated by the Enrollee, and shall ensure that the system operators (including employees, contractors, or other agents) are adequately trained and possess adequate knowledge, skills, and abilities.
9. The Enrollee shall allocate adequate resources for the operation, maintenance, and repair of its sanitary sewer system, by establishing a proper rate structure, accounting mechanisms, and auditing procedures to ensure an adequate measure of revenues and expenditures. These procedures must be in compliance with applicable laws and regulations and comply with generally acceptable accounting practices.
10. The Enrollee shall provide adequate capacity to convey base flows and peak flows, including flows related to wet weather events. Capacity shall meet or exceed the design criteria as defined in the Enrollee's System Evaluation and Capacity Assurance Plan for all parts of the sanitary sewer system owned or operated by the Enrollee.
11. The Enrollee shall develop and implement a written Sewer System Management Plan (SSMP) and make it available to the State and/or Regional Water Board upon request. A copy of this document must be publicly available at the Enrollee's office and/or available on the Internet. This SSMP must be approved by the Enrollee's governing board at a public meeting.

12. In accordance with the California Business and Professions Code sections 6735, 7835, and 7835.1, all engineering and geologic evaluations and judgments shall be performed by or under the direction of registered professionals competent and proficient in the fields pertinent to the required activities. Specific elements of the SSMP that require professional evaluation and judgments shall be prepared by or under the direction of appropriately qualified professionals, and shall bear the professional(s)' signature and stamp.
13. The mandatory elements of the SSMP are specified below. However, if the Enrollee believes that any element of this section is not appropriate or applicable to the Enrollee's sanitary sewer system, the SSMP program does not need to address that element. The Enrollee must justify why that element is not applicable. The SSMP must be approved by the deadlines listed in the SSMP Time Schedule below.

Sewer System Management Plan (SSMP)

- (i) **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.
- (ii) **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)).
- (iii) **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.
- (iv) **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.

(v) **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.

(vi) **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.

(vii) **FOG Control Program:** Each Enrollee shall evaluate its service area to determine whether a FOG control program is needed. If an Enrollee determines that a FOG program is not needed, the Enrollee must provide justification for why it is not needed. If FOG is found to be a problem, the Enrollee must prepare and implement a FOG 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 FOG;
- (b) A plan and schedule for the disposal of FOG generated within the sanitary sewer system service area. This may include a list of acceptable disposal facilities and/or additional facilities needed to adequately dispose of FOG generated within a sanitary sewer system service area;
- (c) The legal authority to prohibit discharges to the system and identify measures to prevent SSOs and blockages caused by FOG;
- (d) Requirements to install grease removal devices (such as traps or interceptors), design standards for the removal devices, maintenance requirements, BMP requirements, record keeping and reporting requirements;
- (e) Authority to inspect grease producing facilities, enforcement authorities, and whether the Enrollee has sufficient staff to inspect and enforce the FOG ordinance;
- (f) An identification of sanitary sewer system sections subject to FOG blockages and establishment of a cleaning maintenance schedule for each section; and
- (g) Development and implementation of source control measures for all sources of FOG discharged to the sanitary sewer system for each section identified in (f) above.

(viii) **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.
- (ix) **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.
- (x) **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.

- (xi) **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.

14. Both the SSMP and the Enrollee's program to implement the SSMP must be certified by the Enrollee to be in compliance with the requirements set forth above and must be presented to the Enrollee's governing board for approval at a public meeting. The Enrollee shall certify that the SSMP, and subparts thereof, are in compliance with the general WDRs within the time frames identified in the time schedule provided in subsection D.15, below.

In order to complete this certification, the Enrollee's authorized representative must complete the certification portion in the Online SSO Database Questionnaire by checking the appropriate milestone box, printing and signing the automated form, and sending the form to:

State Water Resources Control Board
Division of Water Quality
Attn: SSO Program Manager
P.O. Box 100
Sacramento, CA 95812

The SSMP must be updated every five (5) years, and must include any significant program changes. Re-certification by the governing board of the Enrollee is required in accordance with D.14 when significant updates to the SSMP are made. To complete the re-certification process, the Enrollee shall enter the data in the Online SSO Database and mail the form to the State Water Board, as described above.

15. The Enrollee shall comply with these requirements according to the following schedule. This time schedule does not supersede existing requirements or time schedules associated with other permits or regulatory requirements.

Sewer System Management Plan Time Schedule

<u>Task and Associated Section</u>	Completion Date			
	Population > 100,000	Population between 100,000 and 10,000	Population between 10,000 and 2,500	Population < 2,500
Application for Permit Coverage Section C	6 months after WDRs Adoption			
Reporting Program Section G	6 months after WDRs Adoption ¹			
SSMP Development Plan and Schedule No specific Section	9 months after WDRs Adoption ²	12 months after WDRs Adoption ²	15 months after WDRs Adoption ²	18 months after WDRs Adoption ²
Goals and Organization Structure Section D 13 (i) & (ii)	12 months after WDRs Adoption ²		18 months after WDRs Adoption ²	
Overflow Emergency Response Program Section D 13 (vi)	24 months after WDRs Adoption ²	30 months after WDRs Adoption ²	36 months after WDRs Adoption ²	39 months after WDRs Adoption ²
Legal Authority Section D 13 (iii)				
Operation and Maintenance Program Section D 13 (iv)				
Grease Control Program Section D 13 (vii)				
Design and Performance Section D 13 (v)	36 months after WDRs Adoption	39 months after WDRs Adoption	48 months after WDRs Adoption	51 months after WDRs Adoption
System Evaluation and Capacity Assurance Plan Section D 13 (viii)				
Final SSMP, incorporating all of the SSMP requirements Section D 13				

1. In the event that by July 1, 2006 the Executive Director is able to execute a memorandum of agreement (MOA) with the California Water Environment Association (CWEA) or discharger representatives outlining a strategy and time schedule for CWEA or another entity to provide statewide training on the adopted monitoring program, SSO database electronic reporting, and SSMP development, consistent with this Order, then the schedule of Reporting Program Section G shall be replaced with the following schedule:

Reporting Program Section G	
Regional Boards 4, 8, and 9	8 months after WDRs Adoption
Regional Boards 1, 2, and 3	12 months after WDRs Adoption
Regional Boards 5, 6, and 7	16 months after WDRs Adoption

If this MOU is not executed by July 1, 2006, the reporting program time schedule will remain six (6) months for all regions and agency size categories.

2. In the event that the Executive Director executes the MOA identified in note 1 by July 1, 2006, then the deadline for this task shall be extended by six (6) months. The time schedule identified in the MOA must be consistent with the extended time schedule provided by this note. If the MOA is not executed by July 1, 2006, the six (6) month time extension will not be granted.

E. WDRs and SSMP AVAILABILITY

1. A copy of the general WDRs and the certified SSMP shall be maintained at appropriate locations (such as the Enrollee's offices, facilities, and/or Internet homepage) and shall be available to sanitary sewer system operating and maintenance personnel at all times.

F. ENTRY AND INSPECTION

1. The Enrollee shall allow the State or Regional Water Boards or their authorized representative, upon presentation of credentials and other documents as may be required by law, to:
 - a. Enter upon the Enrollee's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order;
 - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order;

- c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order; and
- d. Sample or monitor at reasonable times, for the purposes of assuring compliance with this Order or as otherwise authorized by the California Water Code, any substances or parameters at any location.

G. GENERAL MONITORING AND REPORTING REQUIREMENTS

1. The Enrollee shall furnish to the State or Regional Water Board, within a reasonable time, any information that the State or Regional Water Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order. The Enrollee shall also furnish to the Executive Director of the State Water Board or Executive Officer of the applicable Regional Water Board, upon request, copies of records required to be kept by this Order.
2. The Enrollee shall comply with the attached Monitoring and Reporting Program No. 2006-0003 and future revisions thereto, as specified by the Executive Director. Monitoring results shall be reported at the intervals specified in Monitoring and Reporting Program No. 2006-0003. Unless superseded by a specific enforcement Order for a specific Enrollee, these reporting requirements are intended to replace other mandatory routine written reports associated with SSOs.
3. All Enrollees must obtain SSO Database accounts and receive a "Username" and "Password" by registering through the California Integrated Water Quality System (CIWQS). These accounts will allow controlled and secure entry into the SSO Database. Additionally, within 30 days of receiving an account and prior to recording spills into the SSO Database, all Enrollees must complete the "Collection System Questionnaire", which collects pertinent information regarding a Enrollee's collection system. The "Collection System Questionnaire" must be updated at least every 12 months.
4. Pursuant to Health and Safety Code section 5411.5, any person who, without regard to intent or negligence, causes or permits any untreated wastewater or other waste to be discharged in or on any waters of the State, or discharged in or deposited where it is, or probably will be, discharged in or on any surface waters of the State, as soon as that person has knowledge of the discharge, shall immediately notify the local health officer of the discharge. Discharges of untreated or partially treated wastewater to storm drains and drainage channels, whether man-made or natural or concrete-lined, shall be reported as required above.

Any SSO greater than 1,000 gallons discharged in or on any waters of the State, or discharged in or deposited where it is, or probably will be, discharged in or on any surface waters of the State shall also be reported to the Office of Emergency Services pursuant to California Water Code section 13271.

H. CHANGE IN OWNERSHIP

1. This Order is not transferable to any person or party, except after notice to the Executive Director. The Enrollee shall submit this notice in writing at least 30 days in advance of any proposed transfer. The notice must include a written agreement between the existing and new Enrollee containing a specific date for the transfer of this Order's responsibility and coverage between the existing Enrollee and the new Enrollee. This agreement shall include an acknowledgement that the existing Enrollee is liable for violations up to the transfer date and that the new Enrollee is liable from the transfer date forward.

I. INCOMPLETE REPORTS

1. If an Enrollee becomes aware that it failed to submit any relevant facts in any report required under this Order, the Enrollee shall promptly submit such facts or information by formally amending the report in the Online SSO Database.

J. REPORT DECLARATION

1. All applications, reports, or information shall be signed and certified as follows:
 - (i) All reports required by this Order and other information required by the State or Regional Water Board shall be signed and certified by a person designated, for a municipality, state, federal or other public agency, as either a principal executive officer or ranking elected official, or by a duly authorized representative of that person, as described in paragraph (ii) of this provision. (For purposes of electronic reporting, an electronic signature and accompanying certification, which is in compliance with the Online SSO database procedures, meet this certification requirement.)
 - (ii) An individual is a duly authorized representative only if:
 - (a) The authorization is made in writing by a person described in paragraph (i) of this provision; and
 - (b) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity.

K. CIVIL MONETARY REMEDIES FOR DISCHARGE VIOLATIONS

1. The California Water Code provides various enforcement options, including civil monetary remedies, for violations of this Order.
2. The California Water Code also provides that any person failing or refusing to furnish technical or monitoring program reports, as required under this Order, or

falsifying any information provided in the technical or monitoring reports is subject to civil monetary penalties.

L. SEVERABILITY

1. The provisions of this Order are severable, and if any provision of this Order, or the application of any provision of this Order to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this Order, shall not be affected thereby.
2. This order does not convey any property rights of any sort or any exclusive privileges. The requirements prescribed herein do not authorize the commission of any act causing injury to persons or property, nor protect the Enrollee from liability under federal, state or local laws, nor create a vested right for the Enrollee to continue the waste discharge.

CERTIFICATION

The undersigned Clerk to the State Water Board does hereby certify that the foregoing is a full, true, and correct copy of general WDRs duly and regularly adopted at a meeting of the State Water Resources Control Board held on May 2, 2006.

AYE: Tam M. Doduc
Gerald D. Secundy

NO: Arthur G. Baggett

ABSENT: None

ABSTAIN: None



Song Her
Clerk to the Board

Appendix A-2

State Water Resources Control Board Order No. WQ 2013-0058-EXEC Amended Monitoring and Reporting Requirements for Statewide General Waste Discharge Requirements for Sanitary Sewer Systems

STATE OF CALIFORNIA
WATER RESOURCES CONTROL BOARD
ORDER NO. WQ 2013-0058-EXEC

AMENDING MONITORING AND REPORTING PROGRAM
FOR
STATEWIDE GENERAL WASTE DISCHARGE REQUIREMENTS FOR
SANITARY SEWER SYSTEMS

The State of California, Water Resources Control Board (hereafter State Water Board) finds:

1. The State Water Board is authorized to prescribe statewide general Waste Discharge Requirements (WDRs) for categories of discharges that involve the same or similar operations and the same or similar types of waste pursuant to Water Code section 13263(i).
2. Water Code section 13193 *et seq.* requires the Regional Water Quality Control Boards (Regional Water Boards) and the State Water Board (collectively, the Water Boards) to gather Sanitary Sewer Overflow (SSO) information and make this information available to the public, including but not limited to, SSO cause, estimated volume, location, date, time, duration, whether or not the SSO reached or may have reached waters of the state, response and corrective action taken, and an enrollee's contact information for each SSO event. An enrollee is defined as the public entity having legal authority over the operation and maintenance of, or capital improvements to, a sanitary sewer system greater than one mile in length.
3. Water Code section 13271, *et seq.* requires notification to the California Office of Emergency Services (Cal OES), formerly the California Emergency Management Agency, for certain unauthorized discharges, including SSOs.
4. On May 2, 2006, the State Water Board adopted Order 2006-0003-DWQ, "Statewide Waste Discharge Requirements for Sanitary Sewer Systems"¹ (hereafter SSS WDRs) to comply with Water Code section 13193 and to establish the framework for the statewide SSO Reduction Program.
5. Subsection G.2 of the SSS WDRs and the Monitoring and Reporting Program (MRP) provide that the Executive Director may modify the terms of the MRP at any time.
6. On February 20, 2008, the State Water Board Executive Director adopted a revised MRP for the SSS WDRs to rectify early notification deficiencies and ensure that first responders are notified in a timely manner of SSOs discharged into waters of the state.
7. When notified of an SSO that reaches a drainage channel or surface water of the state, Cal OES, pursuant to Water Code section 13271(a)(3), forwards the SSO notification information² to local government agencies and first responders including local public health officials and the applicable Regional Water Board. Receipt of notifications for a single SSO event from both the SSO reporter

¹ Available for download at:

http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2006/wqo/wqo2006_0003.pdf

² Cal OES Hazardous Materials Spill Reports available Online at:

[http://w3.calema.ca.gov/operational/mal haz.nsf/\\$defaultview](http://w3.calema.ca.gov/operational/mal haz.nsf/$defaultview) and <http://w3.calema.ca.gov/operational/mal haz.nsf>

and Cal OES is duplicative. To address this, the SSO notification requirements added by the February 20, 2008 MRP revision are being removed in this MRP revision.

8. In the February 28, 2008 Memorandum of Agreement between the State Water Board and the California Water and Environment Association (CWEA), the State Water Board committed to re-designing the CIWQS³ Online SSO Database to allow "event" based SSO reporting versus the original "location" based reporting. Revisions to this MRP and accompanying changes to the CIWQS Online SSO Database will implement this change by allowing for multiple SSO appearance points to be associated with each SSO event caused by a single asset failure.
9. Based on stakeholder input and Water Board staff experience implementing the SSO Reduction Program, SSO categories have been revised in this MRP. In the prior version of the MRP, SSOs have been categorized as Category 1 or Category 2. This MRP implements changes to SSO categories by adding a Category 3 SSO type. This change will improve data management to further assist Water Board staff with evaluation of high threat and low threat SSOs by placing them in unique categories (i.e., Category 1 and Category 3, respectively). This change will also assist enrollees in identifying SSOs that require Cal OES notification.
10. Based on over six years of implementation of the SSS WDRs, the State Water Board concludes that the February 20, 2008 MRP must be updated to better advance the SSO Reduction Program⁴ objectives, assess compliance, and enforce the requirements of the SSS WDRs.

IT IS HEREBY ORDERED THAT:

Pursuant to the authority delegated by Water Code section 13267(f), Resolution 2002-0104, and Order 2006-0003-DWQ, the MRP for the SSS WDRs (Order 2006-0003-DWQ) is hereby amended as shown in Attachment A and shall be effective on 07/26/2013.

Date 7/30/13

Thomas Howard
Thomas Howard
Executive Director

³ California Integrated Water Quality System (CIWQS) publicly available at
<http://www.waterboards.ca.gov/ciwqs/publicreports.shtml>

⁴ Statewide Sanitary Sewer Overflow Reduction Program information is available at:
http://www.waterboards.ca.gov/water_issues/programs/ssor/

ATTACHMENT A

STATE WATER RESOURCES CONTROL BOARD ORDER NO. WQ 2013-0058-EXEC

AMENDING MONITORING AND REPORTING PROGRAM FOR STATEWIDE GENERAL WASTE DISCHARGE REQUIREMENTS FOR SANITARY SEWER SYSTEMS

This Monitoring and Reporting Program (MRP) establishes monitoring, record keeping, reporting and public notification requirements for Order 2006-0003-DWQ, "Statewide General Waste Discharge Requirements for Sanitary Sewer Systems" (SSS WDRs). This MRP shall be effective from September 9, 2013 until it is rescinded. The Executive Director may make revisions to this MRP at any time. These revisions may include a reduction or increase in the monitoring and reporting requirements. All site specific records and data developed pursuant to the SSS WDRs and this MRP shall be complete, accurate, and justified by evidence maintained by the enrollee. Failure to comply with this MRP may subject an enrollee to civil liabilities of up to \$5,000 a day per violation pursuant to Water Code section 13350; up to \$1,000 a day per violation pursuant to Water Code section 13268; or referral to the Attorney General for judicial civil enforcement. The State Water Resources Control Board (State Water Board) reserves the right to take any further enforcement action authorized by law.

A. SUMMARY OF MRP REQUIREMENTS

Table 1 – Spill Categories and Definitions

CATEGORIES	DEFINITIONS [see Section A on page 5 of Order 2006-0003-DWQ, for Sanitary Sewer Overflow (SSO) definition]
CATEGORY 1	Discharges of untreated or partially treated wastewater of <u>any volume</u> resulting from an enrollee's sanitary sewer system failure or flow condition that: <ul style="list-style-type: none">• 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	Discharges of untreated or partially treated wastewater of <u>1,000 gallons or greater</u> resulting from an enrollee's sanitary sewer system failure or flow condition that <u>do not</u> 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.
CATEGORY 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 <u>within a privately owned sewer lateral</u> connected to the enrollee's sanitary sewer system or from other private sewer assets. PLSDs that the enrollee becomes aware of may be <u>voluntarily</u> reported to the California Integrated Water Quality System (CIWQS) Online SSO Database.

Table 2 – Notification, Reporting, Monitoring, and Record Keeping Requirements

ELEMENT	REQUIREMENT	METHOD
NOTIFICATION (see section B of MRP)	<ul style="list-style-type: none"> Within two hours of becoming aware of any Category 1 SSO <u>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</u>, notify the California Office of Emergency Services (Cal OES) and obtain a notification control number. 	Call Cal OES at: (800) 852-7550
REPORTING (see section C of MRP)	<ul style="list-style-type: none"> Category 1 SSO: 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: 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: Submit certified report within 30 calendar days of the end of month in which SSO the occurred. SSO Technical Report: 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: 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: Update and certify every 12 months. 	Enter data into the CIWQS Online SSO Database (http://ciwqs.waterboards.ca.gov/), certified by enrollee's Legally Responsible Official(s).
WATER QUALITY MONITORING (see section D of MRP)	<ul style="list-style-type: none"> Conduct water quality sampling <u>within 48 hours</u> after initial SSO notification for Category 1 SSOs in which 50,000 gallons or greater are spilled to surface waters. 	Water quality results are required to be uploaded into CIWQS for Category 1 SSOs in which 50,000 gallons or greater are spilled to surface waters.
RECORD KEEPING (see section E of MRP)	<ul style="list-style-type: none"> 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.

B. NOTIFICATION REQUIREMENTS

Although Regional Water Quality Control Boards (Regional Water Boards) and the State Water Board (collectively, the Water Boards) staff do not have duties as first responders, this MRP is an appropriate mechanism to ensure that the agencies that have first responder duties are notified in a timely manner in order to protect public health and beneficial uses.

1. For any Category 1 SSO greater than or equal to 1,000 gallons that results in a discharge to a surface water or spilled in a location where it probably will be discharged to surface water, either directly or by way of a drainage channel or MS4, the enrollee shall, as soon as possible, but not later than two (2) hours after (A) the enrollee has knowledge of the discharge, (B) notification is possible, and (C) notification can be provided without substantially impeding cleanup or other emergency measures, notify the Cal OES and obtain a notification control number.
2. To satisfy notification requirements for each applicable SSO, the enrollee shall provide the information requested by Cal OES before receiving a control number. Spill information requested by Cal OES may include:
 - i. Name of person notifying Cal OES and direct return phone number.
 - ii. Estimated SSO volume discharged (gallons).
 - iii. If ongoing, estimated SSO discharge rate (gallons per minute).
 - iv. SSO Incident Description:
 - a. Brief narrative.
 - b. On-scene point of contact for additional information (name and cell phone number).
 - c. Date and time enrollee became aware of the SSO.
 - d. Name of sanitary sewer system agency causing the SSO.
 - e. SSO cause (if known).
 - v. Indication of whether the SSO has been contained.
 - vi. Indication of whether surface water is impacted.
 - vii. Name of surface water impacted by the SSO, if applicable.
 - viii. Indication of whether a drinking water supply is or may be impacted by the SSO.
 - ix. Any other known SSO impacts.
 - x. SSO incident location (address, city, state, and zip code).
3. Following the initial notification to Cal OES and until such time that an enrollee certifies the SSO report in the CIWQS Online SSO Database, the enrollee shall provide updates to Cal OES regarding substantial changes to the estimated volume of untreated or partially treated sewage discharged and any substantial change(s) to known impact(s).
4. PLSDs: The enrollee is strongly encouraged to notify Cal OES of discharges greater than or equal to 1,000 gallons of untreated or partially treated wastewater that result or may result in a discharge to surface water resulting from failures or flow conditions within a privately owned sewer lateral or from other private sewer asset(s) if the enrollee becomes aware of the PLSD.

C. REPORTING REQUIREMENTS

1. **CIWQS Online SSO Database Account:** All enrollees shall obtain a CIWQS Online SSO Database account and receive a "Username" and "Password" by registering through CIWQS. These accounts allow controlled and secure entry into the CIWQS Online SSO Database.
2. **SSO Mandatory Reporting Information:** For reporting purposes, if one SSO event results in multiple appearance points in a sewer system asset, the enrollee shall complete one SSO report in the CIWQS Online SSO Database which 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 caused the SSO, and provide descriptions of the locations of all other discharge points associated with the SSO event.
3. **SSO Categories**
 - i. **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:
 - a. Reach surface water and/or reach a drainage channel tributary to a surface water; or
 - b. Reach a 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).
 - ii. **Category 2** – Discharges of untreated or partially treated wastewater greater than or equal to 1,000 gallons resulting from an enrollee's sanitary sewer system failure or flow condition that does not reach a surface water, a drainage channel, or the MS4 unless the entire SSO volume discharged to the storm drain system is fully recovered and disposed of properly.
 - iii. **Category 3** – All other discharges of untreated or partially treated wastewater resulting from an enrollee's sanitary sewer system failure or flow condition.
4. **Sanitary Sewer Overflow Reporting to CIWQS - Timeframes**
 - i. **Category 1 and Category 2 SSOs** – All SSOs that meet the above criteria for Category 1 or Category 2 SSOs shall be reported to the CIWQS Online SSO Database:
 - a. Draft reports for Category 1 and Category 2 SSOs shall be submitted to the CIWQS Online SSO Database within three (3) business days of the enrollee becoming aware of the SSO. Minimum information that shall be reported in a draft Category 1 SSO report shall include all information identified in section 8.i.a. below. Minimum information that shall be reported in a Category 2 SSO draft report shall include all information identified in section 8.i.c below.
 - b. A final Category 1 or Category 2 SSO report shall be certified through the CIWQS Online SSO Database within 15 calendar days of the end date of the SSO. Minimum information that shall be certified in the final Category 1 SSO report shall include all information identified in section 8.i.b below. Minimum information that shall be certified in a final Category 2 SSO report shall include all information identified in section 8.i.d below.

- ii. **Category 3 SSOs** – All SSOs that meet the above criteria for Category 3 SSOs shall be reported to the CIWQS Online SSO Database and certified within 30 calendar days after the end of the calendar month in which the SSO occurs (e.g., all Category 3 SSOs occurring in the month of February shall be entered into the database and certified by March 30). Minimum information that shall be certified in a final Category 3 SSO report shall include all information identified in section 8.i.e below.
- iii. **“No Spill” Certification** – If there are no SSOs during the calendar month, the enrollee shall either 1) certify, within 30 calendar days after the end of each calendar month, a “No Spill” certification statement in the CIWQS Online SSO Database certifying that there were no SSOs for the designated month, or 2) certify, quarterly within 30 calendar days after the end of each quarter, “No Spill” certification statements in the CIWQS Online SSO Database certifying that there were no SSOs for each month in the quarter being reported on. For quarterly reporting, the quarters are Q1 - January/ February/ March, Q2 - April/May/June, Q3 - July/August/September, and Q4 - October/November/December.

If there are no SSOs during a calendar month but the enrollee reported a PLSD, the enrollee shall still certify a “No Spill” certification statement for that month.
- iv. **Amended SSO Reports** – The enrollee may update or add additional information to a certified SSO report within 120 calendar days after the SSO end date by amending the report or by adding an attachment to the SSO report in the CIWQS Online SSO Database. SSO reports certified in the CIWQS Online SSO Database prior to the adoption date of this MRP may only be amended up to 120 days after the effective date of this MRP. After 120 days, the enrollee may contact the SSO Program Manager to request to amend an SSO report if the enrollee also submits justification for why the additional information was not available prior to the end of the 120 days.

5. **SSO Technical Report**

The enrollee shall 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:

- i. **Causes and Circumstances of the SSO:**
 - a. Complete and detailed explanation of how and when the SSO was discovered.
 - b. Diagram showing the SSO failure point, appearance point(s), and final destination(s).
 - c. Detailed description of the methodology employed and available data used to calculate the volume of the SSO and, if applicable, the SSO volume recovered.
 - d. Detailed description of the cause(s) of the SSO.
 - e. Copies of original field crew records used to document the SSO.
 - f. Historical maintenance records for the failure location.
- ii. **Enrollee’s Response to SSO:**
 - a. Chronological narrative description of all actions taken by enrollee to terminate the spill.
 - b. Explanation of how the SSMP Overflow Emergency Response plan was implemented to respond to and mitigate the SSO.

- c. Final corrective action(s) completed and/or planned to be completed, including a schedule for actions not yet completed.

iii. **Water Quality Monitoring:**

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

6. **PLSDs**

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 sanitary sewer system assets may be voluntarily reported to the CIWQS Online SSO Database.

- i. The enrollee is also encouraged to provide notification to Cal OES per section B above when a PLSD greater than or equal to 1,000 gallons has or may result in a discharge to surface water. For any PLSD greater than or equal to 1,000 gallons regardless of the spill destination, the enrollee is also encouraged to file a spill report as required by Health and Safety Code section 5410 et. seq. and Water Code section 13271, or notify the responsible party that notification and reporting should be completed as specified above and required by State law.
- ii. If a PLSD is recorded in the CIWQS Online SSO Database, the enrollee must identify the sewage discharge as occurring and caused by a private sanitary sewer system asset and should identify a responsible party (other than the enrollee), if known. Certification of PLSD reports by enrollees is not required.

7. **CIWQS Online SSO Database Unavailability**

In the event that the CIWQS Online SSO Database is not available, the enrollee must fax or e-mail all required information to the appropriate Regional Water Board office in accordance with the time schedules identified herein. In such event, the enrollee must also enter all required information into the CIWQS Online SSO Database when the database becomes available.

8. **Mandatory Information to be Included in CIWQS Online SSO Reporting**

All enrollees shall obtain a CIWQS Online SSO Database account and receive a "Username" and "Password" by registering through CIWQS which can be reached at CIWQS@waterboards.ca.gov or by calling (866) 792-4977, M-F, 8 A.M. to 5 P.M. These accounts will allow controlled and secure entry into the CIWQS Online SSO Database. Additionally, within thirty (30) days of initial enrollment and prior to recording SSOs into the CIWQS Online SSO Database, all enrollees must complete a Collection System Questionnaire (Questionnaire). The Questionnaire shall be updated at least once every 12 months.

i. **SSO Reports**

At a minimum, the following mandatory information shall be reported prior to finalizing and certifying an SSO report for each category of SSO:

- a. **Draft Category 1 SSOs:** At a minimum, the following mandatory information shall be reported for a draft Category 1 SSO report:
1. SSO Contact Information: Name and telephone number of enrollee contact person who can answer specific questions about the SSO being reported.
 2. SSO Location Name.
 3. Location of the overflow event (SSO) by entering GPS coordinates. If a single overflow event results in multiple appearance points, provide GPS coordinates for the appearance point closest to the failure point and describe each additional appearance point in the SSO appearance point explanation field.
 4. Whether or not the SSO reached surface water, a drainage channel, or entered and was discharged from a drainage structure.
 5. Whether or not the SSO reached a municipal separate storm drain system.
 6. Whether or not the total SSO volume that reached a municipal separate storm drain system was fully recovered.
 7. Estimate of the SSO volume, inclusive of all discharge point(s).
 8. Estimate of the SSO volume that reached surface water, a drainage channel, or was not recovered from a storm drain.
 9. Estimate of the SSO volume recovered (if applicable).
 10. Number of SSO appearance point(s).
 11. Description and location of SSO appearance point(s). If a single sanitary sewer system failure results in multiple SSO appearance points, each appearance point must be described.
 12. SSO start date and time.
 13. Date and time the enrollee was notified of, or self-discovered, the SSO.
 14. Estimated operator arrival time.
 15. For spills greater than or equal to 1,000 gallons, the date and time Cal OES was called.
 16. For spills greater than or equal to 1,000 gallons, the Cal OES control number.
- b. **Certified Category 1 SSOs:** At a minimum, the following mandatory information shall be reported for a certified Category 1 SSO report, in addition to all fields in section 8.i.a :
1. Description of SSO destination(s).
 2. SSO end date and time.
 3. SSO causes (mainline blockage, roots, etc.).
 4. SSO failure point (main, lateral, etc.).
 5. Whether or not the spill was associated with a storm event.
 6. Description of spill corrective action, including steps planned or taken to reduce, eliminate, and prevent reoccurrence of the overflow; and a schedule of major milestones for those steps.
 7. Description of spill response activities.
 8. Spill response completion date.
 9. Whether or not there is an ongoing investigation, the reasons for the investigation and the expected date of completion.

10. Whether or not a beach closure occurred or may have occurred as a result of the SSO.
 11. Whether or not health warnings were posted as a result of the SSO.
 12. Name of beach(es) closed and/or impacted. If no beach was impacted, NA shall be selected.
 13. Name of surface water(s) impacted.
 14. If water quality samples were collected, identify parameters the water quality samples were analyzed for. If no samples were taken, NA shall be selected.
 15. If water quality samples were taken, identify which regulatory agencies received sample results (if applicable). If no samples were taken, NA shall be selected.
 16. Description of methodology(ies) and type of data relied upon for estimations of the SSO volume discharged and recovered.
 17. SSO Certification: Upon SSO Certification, the CIWQS Online SSO Database will issue a final SSO identification (ID) number.
- c. **Draft Category 2 SSOs:** At a minimum, the following mandatory information shall be reported for a draft Category 2 SSO report:
1. Items 1-14 in section 8.i.a above for Draft Category 1 SSO.
- d. **Certified Category 2 SSOs:** At a minimum, the following mandatory information shall be reported for a certified Category 2 SSO report:
1. Items 1-14 in section 8.i.a above for Draft Category 1 SSO and Items 1-9, and 17 in section 8.i.b above for Certified Category 1 SSO.
- e. **Certified Category 3 SSOs:** At a minimum, the following mandatory information shall be reported for a certified Category 3 SSO report:
1. Items 1-14 in section 8.i.a above for Draft Category 1 SSO and Items 1-6, and 17 in section 8.i.b above for Certified Category 1 SSO.
- ii. **Reporting SSOs to Other Regulatory Agencies**
- These reporting requirements do not preclude an enrollee from reporting SSOs to other regulatory agencies pursuant to state law. In addition, these reporting requirements do not replace other Regional Water Board notification and reporting requirements for SSOs.
- iii. **Collection System Questionnaire**
- The required Questionnaire (see subsection G of the SSS WDRs) provides the Water Boards with site-specific information related to the enrollee's sanitary sewer system. The enrollee shall complete and certify the Questionnaire at least every 12 months to facilitate program implementation, compliance assessment, and enforcement response.
- iv. **SSMP Availability**
- The enrollee shall provide the publicly available internet web site address to the CIWQS Online SSO Database where a downloadable copy of the enrollee's approved SSMP, critical supporting documents referenced in the SSMP, and proof of local governing board approval of the SSMP is posted. If all of the SSMP documentation listed in this subsection is not publicly available on the Internet, the enrollee shall comply with the following procedure:

- a. Submit an **electronic** copy of the enrollee's approved SSMP, critical supporting documents referenced in the SSMP, and proof of local governing board approval of the SSMP to the State Water Board, within 30 days of that approval and within 30 days of any subsequent SSMP re-certifications, to the following mailing address:

State Water Resources Control Board
Division of Water Quality
Attn: SSO Program Manager
1001 I Street, 15th Floor, Sacramento, CA 95814

D. WATER QUALITY MONITORING REQUIREMENTS:

To comply with subsection D.7(v) of the SSS WDRs, the enrollee shall develop and implement an SSO Water Quality Monitoring Program to assess impacts from SSOs to surface waters in which 50,000 gallons or greater are spilled to surface waters. The SSO Water Quality Monitoring Program, shall, at a minimum:

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, access restrictions, etc.).
3. Require water quality analyses for ammonia 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 enrollee becoming aware of the SSO, require water quality sampling for, at a minimum, the following constituents:
 - i. Ammonia
 - ii. Appropriate Bacterial indicator(s) per the applicable Basin Plan water quality objective or Regional Board direction which may include total and fecal coliform, enterococcus, and e-coli.

E. RECORD KEEPING REQUIREMENTS:

The following records shall be maintained by the enrollee for a minimum of five (5) years and shall be made available for review by the Water Boards during an onsite inspection or through an information request:

1. General Records: The enrollee shall maintain records to document compliance with all provisions of the SSS WDRs and this MRP for each sanitary sewer system owned including any required records generated by an enrollee's sanitary sewer system contractor(s).
2. SSO Records: The enrollee shall maintain records for each SSO event, including but not limited to:
 - i. Complaint records documenting how the enrollee responded to all notifications of possible or actual SSOs, both during and after business hours, including complaints that do not

result in SSOs. Each complaint record shall, at a minimum, include the following information:

- a. Date, time, and method of notification.
 - b. Date and time the complainant or informant first noticed the SSO.
 - c. Narrative description of the complaint, including any information the caller can provide regarding whether or not the complainant or informant reporting the potential SSO knows if the SSO has reached surface waters, drainage channels or storm drains.
 - d. Follow-up return contact information for complainant or informant for each complaint received, if not reported anonymously.
 - e. Final resolution of the complaint.
- ii. Records documenting steps and/or remedial actions undertaken by enrollee, using all available information, to comply with section D.7 of the SSS WDRs.
 - iii. Records documenting how all estimate(s) of volume(s) discharged and, if applicable, volume(s) recovered were calculated.
3. Records documenting all changes made to the SSMP since its last certification indicating when a subsection(s) of the SSMP was changed and/or updated and who authorized the change or update. These records shall be attached to the SSMP.
 4. Electronic monitoring records relied upon for documenting SSO events and/or estimating the SSO volume discharged, including, but not limited to records from:
 - i. Supervisory Control and Data Acquisition (SCADA) systems
 - ii. Alarm system(s)
 - iii. Flow monitoring device(s) or other instrument(s) used to estimate wastewater levels, flow rates and/or volumes.

F. CERTIFICATION

1. All information required to be reported into the CIWQS Online SSO Database shall be certified by a person designated as described in subsection J of the SSS WDRs. This designated person is also known as a Legally Responsible Official (LRO). An enrollee may have more than one LRO.
2. Any designated person (i.e. an LRO) shall be registered with the State Water Board to certify reports in accordance with the CIWQS protocols for reporting.
3. Data Submitter (DS): Any enrollee employee or contractor may enter draft data into the CIWQS Online SSO Database on behalf of the enrollee if authorized by the LRO and registered with the State Water Board. However, only LROs may certify reports in CIWQS.
4. The enrollee shall maintain continuous coverage by an LRO. Any change of a registered LRO or DS (e.g., retired staff), including deactivation or a change to the LRO's or DS's contact information, shall be submitted by the enrollee to the State Water Board within 30 days of the change by calling (866) 792-4977 or e-mailing help@ciwqs.waterboards.ca.gov.

5. A registered designated person (i.e., an LRO) shall certify all required reports under penalty of perjury laws of the state as stated in the CIWQS Online SSO Database at the time of certification.

CERTIFICATION

The undersigned Clerk to the Board does hereby certify that the foregoing is a full, true, and correct copy of an order amended by the Executive Director of the State Water Resources Control Board.

7/30/13

Date



Jeanine Townsend
Clerk to the Board

Appendix A-3

Resolution Adopting SMCSD SSMP (May 2019)

SAUSALITO-MARIN CITY SANITARY DISTRICT

RESOLUTION NO. 1046

**RESOLUTION OF THE SAUSALITO-MARIN CITY SANITARY DISTRICT (SMCSD)
APPROVING THE SEWER SYSTEM MANAGEMENT PLAN (SSMP) AS REQUIRED BY THE
STATE WATER RESOURCES CONTROL BOARD ORDER NO. 2006-0003 STATEWIDE
GENERAL WASTE DISCHARGE REQUIREMENTS (WDR) FOR SANITARY SEWER
SYSTEMS**

WHEREAS, In May of 2006 the State Water Resource Control Board adopted Order No. 2006-003 – Statewide General Waste Discharge Requirements (WDR) for Sanitary Sewer Systems, and

WHEREAS, the purpose of the WDR is to develop a regulatory mechanism to provide a consistent statewide approach for reducing sanitary sewer overflows; and

WHEREAS, the WDR requires that agencies covered under the WDR prepare a Sewer System Management Plan (SSMP) and that the plan be updated every 5-years; and

WHEREAS, SMCSD developed and approved a SSMP in 2013 in compliance with the WDR; and

WHEREAS, the SMCSD has developed a comprehensive 2019 SSMP update to reflect the District's current sanitary sewer system management practices to comply with the WDR; and

WHEREAS, the 2019 SSMP update must be approved by the agency's governing board for certification upon its completion with the State Water Resources Control Board.

NOW, THEREFORE, BE IT RESOLVED that the Board of Directors of the Sausalito-Marín City Sanitary District approves the 2019 SSMP as required by the State Water Resources Control Board Order No. 2006-003 Statewide General Waste Discharge Requirements for Sanitary Sewer Systems.

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I hereby certify that the foregoing Resolution was duly and regularly adopted by the Board of Directors of the Sausalito-Marín City Sanitary District, Marin County, California, at a meeting held on May 14, 2019, by the following vote:

AYES, and in favor thereof, Directors:

Arnott, Beers, DeLano, Rheiner & Ring

NOES, None

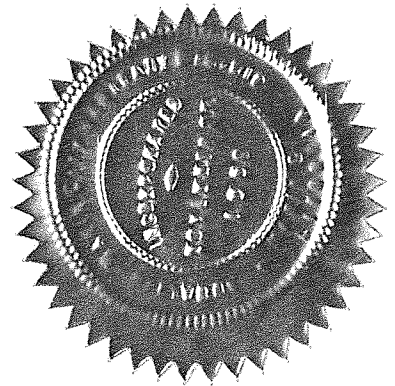
ABSTAIN, None

ABSENT, None


Catherine A. Bondanza, Board Secretary

APPROVED:


Dan Rheiner, Board President



Appendix C

Contact Information for Management, Administrative and Maintenance Positions

Appendix C: Contact Information for Positions Responsible for SSMP Program Measures Implementation

SSMP Element/Measure	Responsible Position	Name	Phone Number/Cell #
Goal	General Manager	Jeff Kingston	331-4718/ 510-289-4180
Organization	General Manager	Jeff Kingston	331-4718/ 510-289-4180
Legal Authority	General Manager	Jeff Kingston	331-4718/ 510-289-4180
Operations and Maintenance Program – Mapping	District Engineer	Kevin Rahman	331-4714/ 707-494-8446
Operations and Maintenance Program – Preventive and Routine Maintenance	Superintendent	Omar Arias	331-4712/ 342-2885
Operations and Maintenance Program – Condition Assessment; Rehabilitation and Replacement Program	District Engineer	Kevin Rahman	331-4714/ 707-494-8446
Operations and Maintenance Program - Training	Superintendent	Omar Arias	331-4712/ 342-2885
Design and Performance Provisions	District Engineer	Kevin Rahman	331-4714/ 707-494-8446
Overflow Emergency Response Plan	Superintendent	Omar Arias	331-4712/ 342-2885
Fats, Oils, and Grease Control Program	Superintendent	Omar Arias	331-4712/ 342-2885
System Evaluation and Capacity Assurance Plan	District Engineer	Kevin Rahman	331-4714/ 707-494-8446
Monitoring, Measurement, and Program Modifications	General Manager	Jeff Kingston	331-4718/ 510-289-4180
SSMP Program Audits	Superintendent	Omar Arias	331-4712/ 342-2885
Communication Program	Superintendent	Omar Arias	331-4712/ 342-2885

Appendix D-1

Service Agreements

AGREEMENT FOR MAINTENANCE OF SANITARY
SEWERS WITHIN THE CITY OF SAUSALITO

THIS AGREEMENT made this 28th day of December, 1953,
by and between Sausalito-Marin City Sanitary District, Marin
County, California, herein called "District" and the City of
Sausalito, Marin County, California, herein called "City",

W I T N E S S E T H:

WHEREAS District has constructed a sanitary sewage disposal system consisting of force mains, pumping plants, interceptor mains, and sewage treatment plant which serve the properties located within the City of Sausalito as well as properties located in unincorporated territory of the County of Marin;

WHEREAS the City of Sausalito has constructed and now maintains the sewage collection system located within the corporate limits of said City;

WHEREAS it is the desire of both parties hereto that City shall continue to maintain the lateral sewer collection system within said City as authorized under Section 6530 of the Health and Safety Code; and

WHEREAS Ordinance No. 3 of District regulates the connection of all premises located within the District to the District's sewage system;

NOW, THEREFORE, in consideration of the premises and of the mutual terms, covenants and conditions herein contained, said parties, acting by and through their respective legislative and governing bodies, do hereby mutually covenant, promise and agree as follows, to wit:

1. City agrees to furnish all material, men and equipment and do all work necessary to maintain the sanitary sewage system located within the corporate limits of said City except

the force mains, interceptor mains, pumping plants, treatment plant, and outfall line constructed for District pursuant to that certain contract dated June 4, 1952, between said District and V. Maggiora.

2. District agrees to furnish all material, men and equipment and do all work necessary to maintain the force mains, interceptor mains, pumping plants, treatment plant and outfall line, constructed pursuant to said contract.

3. All new construction of lateral sewers within the corporate limits of City shall be done under the jurisdiction of District and shall conform to all applicable ordinances, rules and regulations of City and District. In the event of a conflict between any ordinance, rule or regulation of City and any ordinance, rule or regulation of District, the ordinance, rule or regulation of City shall prevail.

4. Upon completion of such new lateral sewers in conformity with all applicable ordinances, rules or regulations of City and District, and acceptance thereof by District, City shall undertake the maintenance of such lateral sewers thereafter.

5. District agrees to furnish all materials, men and equipment and do all work necessary to inspect any and all newly constructed lateral sewers within the City.

6. Lateral sewers as used herein shall mean the public sanitary sewers constructed in the streets, alleys, ways, easements or other public places in City.

7. This agreement, may, from time to time, be changed, altered, or supplemented by and with the consent of the parties hereto by resolution of their respective legislative bodies.

IN WITNESS WHEREOF the parties hereto have caused these presents to be executed by their respective officers and ordered duly authorized by their respective legislative bodies and have

caused their official seals to be affixed hereto, all on the day
and year first above written.

Sausalito-Marin City Sanitary District ,
a public corporation

Eric T. Barnett
President

Countersigned: Earl G. Thompson
Secretary

Approved as to form and
procedure:

James T. Norton
Attorney for District

City of Sausalito, a municipal
corporation

W. J. P. McAllister
Mayor

ATTEST: Frank L. Smith
City Clerk

Approved as to form and
procedure:

John B. Tolan
City Attorney

J-100

SUPPLEMENTAL AGREEMENT FOR MAINTENANCE
OF SANITARY SEWERS WITHIN CITY OF SAUSALITO

DPC

THIS AGREEMENT, made this 27th day of January, 1958, by and between the SAUSALITO-MARIN CITY SANITARY DISTRICT, Marin County, California, herein called "District" and the CITY OF SAUSALITO, Marin County, California, herein called "City"

W I T N E S S E T H:

WHEREAS, pursuant to Section 6530 of the Health and Safety Code of the State of California, the parties hereto entered into an agreement dated December 28, 1953, for the maintenance of the lateral sewer system within the limits of the City;

WHEREAS, certain matters in the agreement require supplementation in order to clarify the position of the City and of the District; and

WHEREAS, Section 7 of said agreement provided for the change, alteration, or supplementation of the original agreement by and with the consent of the legislative bodies of the parties thereto;

NOW, THEREFORE, in consideration of the premises and of the mutual terms, covenants and conditions herein contained, said parties, acting by and through their respective legislative and governing bodies, do hereby mutually covenant, promise and agree, as follows, to wit:

1. Section 3 of the agreement of December 28, 1953, shall be supplemented to read as follows:

"Section 3. All new construction of lateral sewers, including all collection lines, pump stations, and force mains necessary to transmit sewage to the District's system, as described in Section 1, within the corporate limits of City, shall be done under the jurisdiction of District and shall conform to all applicable ordinances, rules and regulations of City and District. In the event of a conflict between any ordinance, rule or regulation of City and any ordinance, rule or regulation of District, the applicable ordinance, rule, or regulation, of City shall prevail.

"Before District shall undertake the construction or installation of new lateral sewers for which City is obligated to bear, in whole or in part, the cost of maintenance, District shall submit to City, for its review and subject to City's approval, the plans and specifications for such construction or installation."

2. Section 4 of the agreement dated December 28, 1953, shall be supplemented to read as follows, to wit:

"Section 4. Upon completion of such new lateral sewers in conformity with all applicable ordinances, rules and regulations of City and District, and after the acceptance thereof by City and by District, City shall be obligated to maintain such sewers."

3. Sections 4(a) and 4(b) shall be added to the terms of the agreement of December 28, 1953, as follows, to wit:

"Section 4(a). However when any new lateral sewers or new lateral sewer systems shall include pumps, the City agrees to bear the cost of maintaining such pumps provided that (a) the pump serves an area solely within the City; and (b) the pump is located on public property.

"District shall provide all labor and materials for the servicing and repairing of any such pumps, and shall render a statement to the City, monthly, for the actual cost of such labor and materials. City agrees to pay such charge within one month after such statement has been presented. The City shall apply for electric service required for such pumps and shall be billed directly by the utility company."

"Section 4(b). When any such lateral sewer serves areas both within and without the corporate limits of City, the cost of maintenance and operation, including the cost for electric service for pumps, shall, at the commencement of each fiscal year, be pro-rated between the parties hereto in accordance with the proportion of connected residential services lying within the City to the number of connected residential services lying within the District but outside the corporate limits of City. Whenever the connected residential service is for a multi-family residence, the number of families occupying such residence shall constitute the number of connected services. When such connected services are for other than residential purposes, the number of units shall be determined by dividing the total number of persons regularly using or occupying said connected service by 3-1/2.

"District shall provide all labor and materials for the servicing and repairing of such lateral sewer, and District shall render a statement to the City for its pro-rata share of the cost of such labor and materials. The District shall apply for electric service for pumps and render a statement to the City for its pro-rata share of the cost of electric service."

4. To the extent that the provisions of this Supplemental Agreement are inconsistent with the provisions of the agreement of December 28, 1953, the provisions of this Supplemental Agreement shall prevail. In all other respects, all other provisions in said agreement of December 28, 1953 shall remain in full force and effect.

IN WITNESS WHEREOF, the parties hereto have caused these presents to be executed by their respective officers and have ordered the same to be duly authorized by their respective legislative bodies, and have caused their official seals to be affixed hereto, all on the day and year first above written.

SAUSALITO-MARIN CITY SANITARY DISTRICT,
a public corporation

L. L. Day
President

Countersigned:

B. Bratton
Secretary

Approved as to form
and procedure:

KIRKBRIDE, WILSON,

HARZFELD & WALLACE

James T. Norton
Attorney for District

CITY OF SAUSALITO, a municipal
corporation

Robert Goshear

Mayor

ATTEST:

Anna L. L. Smith
City Clerk

Approved as to form
and procedure:

John B. Follen

City Attorney

**WASTEWATER SERVICES AGREEMENT BETWEEN
SAUSALITO-MARIN CITY SANITARY DISTRICT
AND
TAMALPAIS COMMUNITY SERVICES DISTRICT**

This Wastewater Services Agreement (this “**Agreement**”) is entered into this 1st day of January, 2013 (“**Effective Date**”) by and between Sausalito-Marín City Sanitary District (“**SMCSD**”) and Tamalpais Community Services District (“**TCSD**”), collectively referred to in this Agreement as “**Districts**.”

RECITALS

A. SMCSD is a sanitary district organized and existing under the Sanitary District Act of 1923 (California Health & Safety Code § 6400 et seq.).

B. TCSD is a community services district organized and existing under the Community Services District Law (California Government Code § 61000 et seq.).

C. Each District owns, operates, and maintains a Collection System in its respective territorial jurisdiction. The City of Sausalito (the “**City**”) operates a Collection System within SMCSD’s Territorial Jurisdiction, pursuant to an agreement between SMCSD and the City.

D. SMCSD provides Wastewater disposal services to SMCSD’s Territorial Jurisdiction and to portions of the Golden Gate National Recreation Area (“**GGNRA**”) pursuant to a contract with the United States Department of the Interior (the “**DOI**”) as successor in interest to the United States Department of Army.

E. TCSD provides Wastewater collection services to TCSD’s Territorial Jurisdiction and to the Muir Woods National Monument pursuant to a contract with the DOI.

F. Wastewater generated in the geographical area of TCSD’s Territorial Jurisdiction known as Kay Park is discharged for purposes of treatment and disposal to the Sewerage Agency of Southern Marin (“**SASM**”). All other Wastewater generated in TCSD’s Territorial Jurisdiction has been discharged to the SMCSD Wastewater System for purposes of treatment and disposal, pursuant to the 2001 Agreement and certain predecessor agreements between TCSD and SMCSD. Wastewater generated in the Muir Woods National Monument is also discharged to the SMCSD Wastewater System.

G. This Agreement applies only to Wastewater discharged by TCSD to the SMCSD Wastewater System.

H. SMCSD owns, operates and maintains the Plant to which Wastewater collected by the Districts’ respective Collection Systems is conveyed, treated and discharged to the San Francisco Bay. The Plant has an average daily dry weather flow treatment capacity of approximately 1.8 MGD, an average daily secondary treatment capacity of approximately 6.0 MGD, a peak instantaneous flow treatment capacity of approximately 10.0 MGD and a maximum hydraulic capacity of approximately 13.0 MGD.

I. The Plant is operated under an NPDES Permit issued by the Regional Board.

J. A new SMCSD NPDES Permit was adopted by the Regional Board on November 14, 2012 for a five-year term expiring on December 31, 2017 and requires SMCSD to implement a plan and construct improvements to minimize blending during peak wet weather flow. In addition, SMCSD is required request and report information from its satellite collection system agencies regarding their plans to repair and replace their collection systems. This requirement is based on EPA policy, the goal of which is to ensure, to the extent feasible, all wet weather flows to publicly owned wastewater treatment plants receive secondary treatment. The EPA policy further states that wet weather diversions past secondary treatment units would not be approved when peak flows are largely due to poor collection system maintenance or lack of investment in or upgrades to treatment capacity.

K. On April 10, 2008, the EPA issued an AO to SMCSD, TCSD and the City for alleged violations of Section 301(a) of the Clean Water Act. The EPA found that spills from the Collection Systems operated by SMCSD, TCSD, and the City were caused by excessive I/I and inadequate control of blockages. Based on the spills, unpermitted discharges and effluent limit violations cited in the AO, the EPA found that SMCSD, TCSD and the City have each discharged or have caused or contributed to the discharge of pollutants to the waters of the United States in violation of Section 301(a) of the Clean Water Act. The AO requires SMCSD, TCSD and the City to take certain actions to reduce the frequency and volume of sewage spills to waters of the United States, including preparation and implementation of a Sewage Spill Reduction Action Plan to renew sewer infrastructure to reduce excessive I/I into each agency's Collection System. SMCSD, TCSD and the City have each submitted their respective SSRAPs to the EPA and are required to implement the plans as submitted. Failure to do so could subject SMCSD, TCSD and the City each to civil actions for appropriate relief, including judicial penalties under Section 309(d) of the Clean Water Act. In addition, Section 309(d) of the Act provides for criminal sanctions for negligent or knowing violations of the Act.

L. Pursuant to the AO, SMCSD, TCSD, and the City each conducted extensive dry and wet weather flow monitoring and analysis in 2009 and 2010 to estimate the Average Dry Weather Flow and Peak Wet Weather Flow from each of the agencies' jurisdictions to the Shared Collection System and the Plant. A table summarizing the contribution of flows to the Shared Collection System and Plant from TCSD, SMCSD (Marin City), the City, and the GGNRA is set forth in Exhibit A attached hereto.

M. In order to comply with the requirements of the AO and SMCSD's NPDES Permit, SMCSD, TCSD, and the City will be required to construct significant capital projects over the next twenty (20) to thirty (30) years to renew infrastructure and reduce PWWF. To fund the necessary improvements to the Shared Collection System and the Plant, SMCSD and TCSD anticipate the need for one or both Districts to enter into long-term financing arrangements with third parties. Neither of these developments was anticipated by the Districts when they negotiated the 2001 Agreement.

N. The 2001 Agreement requires TCSD to pay for its proportionate share of the costs of capital improvements as those costs are incurred by SMCSD and entitles TCSD to repayment (less depreciation) upon termination of the 2001 Agreement. If the arrangements set out in the

2001 Agreement were to continue while the projects contemplated by the AO were completed by SMCSD, TCSD would be required to make substantial one-time payments to SMCSD, which would have significant financial impacts on TCSD and its ratepayers. Accordingly, TCSD seeks greater certainty from SMCSD as to its anticipated payment obligations for the shared capital projects required by the AO and has requested that SMCSD finance TCSD's share of such capital expenditures to allow TCSD to spread those costs evenly over the approximate life of the asset.

O. SMCSD is willing to accommodate TCSD's requests provided that TCSD commits to: (i) paying its share of principal and interest on the long-term financing agreements and of SMCSD's cash funded capital expenditures through the full term of such financing agreements; (ii) setting aside such reserves as are anticipated to be required by the long-term financing agreements; and (iii) agreeing to increase its sewer service charges as required to provide for sufficient revenue to meet its Wastewater service and debt payment obligations to SMCSD (or third party funders) while funding its own collection system capital projects to reduce I/I.

P. The Districts desire to enter into this Agreement to clarify their respective rights and obligations with regard to the Wastewater Services provided by SMCSD to TCSD, the capital projects required by the AO, and the long-term financing agreements.

Q. This Agreement supersedes in its entirety the 2001 Agreement.

NOW, THEREFORE for and in consideration of the mutual covenants and conditions herein contained, the Districts agree as follows:

1. Definition of Terms.

Wherever the following terms are used in this Agreement, they shall have the following meaning, unless otherwise specifically indicated by the context in which they appear.

1.1 **"2001 Agreement"** means that certain Wastewater Collection, Treatment and Disposal Agreement by and between SMCSD and TCSD dated March 13, 2001, which has governed the terms upon which SMCSD receives, transports, treats and disposes of Wastewater from the TCSD Service Area, as amended by Amendment to Wastewater Collection, Treatment and Disposal Agreement for Wastewater Facilities Between Sausalito-Marin City Sanitary District and Tamalpais Community Services District Dated March 13, 2001 to Finance Portion of Annual Sewer and Capacity Charge dated October 12, 2004 and Amendment No. 2 to Wastewater Collection, Treatment and Disposal Agreement for Wastewater Facilities Between Sausalito-Marin City Sanitary District and Tamalpais Community Services District Dated March 13, 2001 to Finance Portion of Annual Sewer and Capacity Charge dated December 5, 2007.

1.2 **"Actual Annual Charge"** means the actual Annual Charge for a given Fiscal Year.

1.3 **"Agreement"** has the meaning set forth in the introductory paragraph of this Agreement.

1.4 “**Applicable Law**” means all existing or subsequently enacted or amended statutes, ordinances, rules, regulations, permits, permit conditions, orders, or requirements of the United States, State of California, Marin County and local government authorities and agencies having applicable jurisdiction that apply to or govern the performance of the Districts’ obligations under this Agreement with regard to the collection, treatment and disposal of Wastewater.

1.5 “**Annual Budget**” means the annual budget adopted by SMCSO’s Board of Directors for the upcoming Fiscal Year.

1.6 “**Annual Charge**” means the annual charge to be paid to SMCSO by TCSD for the wastewater services provided by SMCSO pursuant to this Agreement. The Annual Charge shall consist of the amounts owed by TCSD pursuant to Sections 6 and 8 of this Agreement.

1.7 “**Anticipated Financing**” means debt issued or loans obtained by SMCSO after the Effective Date of this Agreement to finance the Capital Costs identified in Exhibit B attached hereto and incorporated herein.

1.8 “**AO**” means the Administrative Order issued to SMCSO, TCSD and the City by the EPA on April 10, 2008 for alleged violations of Section 301(a) of the Clean Water Act.

1.9 “**Average Dry Weather Flow**” or “**ADWF**” refers to the average daily Wastewater flow based on the three (3) consecutive months of the year with the lowest average daily Wastewater flow during the dry weather months of May through September.

1.10 “**Annual Average Flow**” or “**AAF**” refers to the annual average daily Wastewater flow based on the period beginning July 1st and ending June 30th of each year.

1.11 “**Blending**” refers to the peak wet weather flow treatment management practice whereby a portion of primary treated Wastewater flow is diverted past the secondary treatment process and recombined with flow from the secondary treatment process, disinfected and discharged.

1.12 “**Budget Hearing**” means the hearing at which SMCSO’s Board of Directors considers approval of the Annual Budget.

1.13 “**Capital Costs**” means all expenses necessarily and actually incurred by SMCSO to provide new equipment, structures or facilities which create new capacity or significantly enhance operational characteristics over those of existing facilities or which otherwise augments SMCSO’s capabilities to collect, transmit, treat and dispose of Wastewater, the costs of which are carried on SMCSO’s books of account as depreciable capital expenditures. Capital Costs include, but are not limited to the costs incurred by SMCSO to construct: (i) the projects listed in Exhibit B attached hereto and incorporated herein; (ii) any projects or upgrades required to comply with the existing NPDES Permit or any future permits; (iii) any projects or upgrades required to comply with the AO; and (iv) any projects or upgrades required to comply with Applicable Law.

1.14 **“Cash Funded Costs”** means R&R Costs and Capital Costs that are not financed with Existing Financing, Anticipated Financing or Future Financing and are instead paid from SMCSD’s then-available resources.

1.15 **“Change in Law”** means (a) the enactment, adoption, promulgation, modification or repeal after the Effective Date of any federal or State law, rule, regulation or any similar federal or State legislation related to the collection, treatment or disposal of Wastewater; (b) a change in interpretation after the Effective Date, of any federal or State law, rule, regulation, policy, official permit, license or approval by any regulatory or judicial entity having jurisdiction related to the collection, treatment or disposal of Wastewater; (c) the material modification, after the Effective Date, of any provision in an official permit, license or approval necessary for the operation and maintenance of the SMCSD Wastewater System; or (d) the commencement, after the Effective Date, of an administrative or civil enforcement action by any regulatory entity having jurisdiction over the SMCSD Wastewater System or by any citizen group related to the collection, treatment or disposal of Wastewater.

1.16 **“City”** means the City of Sausalito.

1.17 **“Claims”** means any and all liabilities, losses, damages, fines, deficiencies, penalties, claims, demands, suits, actions, causes of action, legal or administrative proceedings, judgments, costs and expenses (including without limitation reasonable attorneys’ fees and court costs).

1.18 **“Collection System”** means a system for the collection and transmission of Wastewater.

1.19 **“Deferred Costs”** means Cash Funded Costs, TCSD’s payment of which have been deferred pursuant to Section 6.3.f.

1.20 **“Deferred Payment Date”** means the date payment of Deferred Costs would otherwise have been due pursuant to Section 8.3 had they not been deferred pursuant to Section 6.3.f.

1.21 **“Design Event”** is the five (5) year sewer event as presented in the Districts’ SSRAPs, Volume III report to EPA dated October 2010.

1.22 **“Districts”** has the meaning set forth in the introductory paragraph of this Agreement.

1.23 **“Effective Date”** has the meaning set forth in the introductory paragraph of this Agreement.

1.24 **“EPA”** means the U.S. Environmental Protection Agency.

1.25 **“Estimated Annual Charge”** means SMCSD’s estimate of the Annual Charge for the upcoming Fiscal Year.

1.26 **“Event of Default”** means any of the events of default listed in Section 16.

1.27 **“Existing Financing”** means the 2008 City National Bank loan and the 2011 State Revolving Fund loan that SMCSO obtained to finance certain Plant Capital Costs.

1.28 **“Existing Interdistrict Loan”** means TCSD’s share of R&R Costs and Capital Costs for Fiscal Years 2004/05, 2005/06, 2006/07, and 2007/08 financed by SMCSO pursuant to the 2001 Agreement.

1.29 **“Existing Wastewater Facilities”** means Wastewater facilities or portions thereof existing as of the Effective Date or for which construction has begun as of the Effective Date.

1.30 **“Fiscal Year”** means the period commencing on July 1st of each year and terminating on the next succeeding June 30th.

1.31 **“Flow Monitoring Study”** means a flow study which determines the relative contribution of PWWF from each District’s service area to the SMCSO Wastewater System.

1.32 **“TCSD Forcemain”** means the existing forcemain sewer that transmits Wastewater from the TCSD Service Area into the SMCSO Service Area, a portion of which is depicted on Exhibit C attached hereto.

1.33 **“Future Financing”** means long-term financing agreements that were not anticipated by the Districts as of the Effective Date of this Agreement but, become necessary during the term of this Agreement to finance Capital Costs and R&R Costs. Future Financing does not include Existing Financing or Anticipated Financing.

1.34 **“GGNRA”** means the Golden Gate National Recreation Area commonly known as Forts Baker, Barry and Cronkhite.

1.35 **“I/I”** means inflow and infiltration.

1.36 **“I/I Reduction Program”** means a capital improvement program designed to reduce I/I and minimize the potential for wet weather overflows and Blending events.

1.37 **“LAIF Rate”** means the rate of return in effect during the relevant time period on pooled investments managed by the California Local Agency Investment Fund.

1.38 **“MGD”** means million gallons per day.

1.39 **“NPDES Permit”** means a National Pollutant Discharge Elimination System permit.

1.40 **“Non-Shared Collection System”** means the portion of the SMCSO Collection System which does not carry Wastewater from the TCSD Service Area.

1.41 **“Non-Shared Collection System Capital Costs”** means the Capital Costs apportioned to the Non-Shared Collection System.

1.42 **“Non-Shared Collection System R&R Costs”** means the R&R Costs apportioned to the Non-Shared Collection System.

1.43 **“Non-Shared Collection System O&M Costs”** means the O&M Costs apportioned to the Non-Shared Collection System.

1.44 **“O&M Costs”** means all expenses necessarily and actually incurred by SMCSO to operate the SMCSO Wastewater System. Without limiting the generality of the foregoing sentence, such expenses include: salaries, wages and employment benefits; rental charges; fuel and utilities charges; expenses of advisors and consultants for accounting, engineering, legal and similar professional services; risk management, loss prevention and liability and casualty coverage premiums and expenses; the costs of equipment, parts, materials, supplies and chemicals; waste disposal charges; administrative expenses; taxes, assessments, fines, penalties, interest and other economic charges levied against SMCSO in the ordinary course of its business; to the extent not covered by insurance, awards of money, damages, attorneys fees, costs and other relief as a result of claims, litigation, administrative proceedings or other adjudicatory actions including the costs of responding to such matters and conforming to orders, awards and judgments entered against SMCSO in the ordinary course of its business; the cost of banking and financial services; expenses of publications, communications, notices, advertisements and public information and relations; costs of participation in organizations and affiliations pertaining to SMCSO’s business; costs incurred by SMCSO in connection with its use of property owned by the U.S. National Park Service and, costs associated with conducting and complying with governmental and regulatory functions including permitting expenses, but excluding election expenses, board member compensation, and costs associated the preparation of fee studies to support fees imposed on SMCSO’s customers.

1.45 **“Other Unanticipated Capital Costs”** means Unanticipated Capital Costs other than those as described in Section 6.5.a.

1.46 **“Peak Wet Weather Flow”** or **“PWWF”** refers to the 5-year design event peak instantaneous (15 minute) flow rate at the treatment plant and throughout the Shared Collection System. A 5-year design event is one that has a probability of 1 in 5, or twenty percent (20%), of being exceeded in any given year.

1.47 **“Plant”** means the Sausalito-Marín City Sanitary District Wastewater Treatment Plant owned and operated by SMCSO located at #1 Fort Baker Road in Sausalito California as more particularly described in the NPDES Permit, as well as any other buildings, structures, facilities, equipment, devices or systems that SMCSO may now have or may subsequently acquire for Wastewater treatment, storage, disposal, recycling or reclamation. “Plant” also means those buildings, structures, facilities and equipment which SMCSO now owns or subsequently acquires for general management, administration, operational and maintenance purposes including the residence currently occupied by SMCSO’s employees who provide on-call services. “Plant” does not include the SMCSO Collection System or the TCSD Collection System.

1.48 **“Plant Capital Costs”** means the Capital Costs apportioned to the Plant.

1.49 “**Plant O&M Costs**” means the O&M Costs apportioned to the Plant.

1.50 “**Plant R&R Costs**” means the R&R Costs apportioned to the Plant.

1.51 “**R&R Costs**” means all expenses for known future cyclical repair and replacement requirements that extend the life and retain the usable condition of the SMCSO Wastewater System and that are not typically contained in operating budgets. This includes major activities that have a maintenance cycle in excess of one (1) year (e.g., replace roofs, paint buildings, resurface roads, etc.). The cyclical replacement may be for all or a significant portion (e.g., the replacement of fifty percent (50%) or more of a building system component (lighting system, roof system, etc.) as it reaches the end of its useful life, of major components or infrastructure systems, at or near the end of their useful service life. These activities may extend the useful life and retain the usable condition of an associated capital asset (e.g., replacement of an HVAC system, extending the usable life of a facility).

1.52 “**Regional Board**” means the California Regional Water Quality Control Board, San Francisco Bay Region.

1.53 “**Reserve Account**” means an account maintained by TCSD into which TCSD deposits funds for reserves in such amounts and in such a manner as required by Anticipated Financing agreements and Future Financing agreements.

1.54 “**SASM**” means the Sewerage Agency of Southern Marin.

1.55 “**Shared Collection System**” means that portion of the SMCSO Collection System that carries Wastewater from the TCSD Service Area to the Plant, including but not limited to, force mains, gravity interceptor sewers, the Scotties Pump Station, the Locust Street Pump Station, and the Main Street Pump Station.

1.56 “**Shared Collection System Capital Costs**” means the Capital Costs apportioned to the Shared Collection System.

1.57 “**Shared Collection System O&M Costs**” means the O&M Costs apportioned to the Shared Collection System.

1.58 “**Shared Collection System R&R Costs**” means the R&R Costs apportioned to the Shared Collection System.

1.59 “**SMCSO**” has the meaning set forth in the introductory paragraph of this Agreement.

1.60 “**SMCSO Collection System**” means the Collection System owned and operated by SMCSO.

1.61 “**SMCSO Service Area**” means the SMCSO Territorial Jurisdiction and the portions of the GGNRA to which SMCSO provides Wastewater disposal services.

1.62 **“SMCSD Territorial Jurisdiction”** means SMCSD’s jurisdictional boundaries as they may exist from time to time. SMCSD’s jurisdictional boundaries as of the Effective Date are depicted on Exhibit D attached hereto and incorporated herein, which includes the City and the unincorporated community of Marin City, and Bay front properties.

1.63 **“SMCSD Wastewater System”** means the SMCSD Collection System and the Plant.

1.64 **“SSRAP”** means the Sewage Spill Reduction Action Plans prepared by SMCSD, TCSD and the City pursuant to the AO.

1.65 **“TCSD”** has the meaning set forth in the introductory paragraph of this Agreement.

1.66 **“TCSD Collection System”** means the Collection System owned and operated by TCSD.

1.67 **“TCSD Service Area”** means TCSD Territorial Jurisdiction, excluding the Kay Park area, the flow from which is sent to SASM, and the Muir Woods National Monument.

1.68 **“TCSD’s Share”** means TCSD’s proportionate share of O&M Costs, R&R Costs, and Capital Costs calculated in accordance with Section 6 of this Agreement.

1.69 **“TCSD Territorial Jurisdiction”** means TCSD’s jurisdictional boundaries as they may exist from time to time. TCSD’s jurisdictional boundaries as of the Effective Date are the area depicted on Exhibit E attached hereto and incorporated herein.

1.70 **“Unanticipated Capital Costs”** means capital projects were not included in SMCSD’s then-current Ten-Year Capital Program.

1.71 **“Valve Box”** means SMCSD’s valve box for the TCSD Forcemain as depicted in Exhibit C attached hereto.

1.72 **“Wastewater”** means the liquid and water carried industrial or domestic wastes from dwellings, commercial buildings, industrial facilities, and institutions, together with any ground water, surface water, and stormwater that may be present.

1.73 **“Wastewater Services”** means the Wastewater pumped conveyance, treatment and disposal services provided by SMCSD to TCSD pursuant to this Agreement.

1.74 **“Wastewater Strength Characteristics”** means certain measurable qualities of Wastewater such as biological oxygen demand, total suspended solids and other similar factors that are relevant to the treatment and reuse of Wastewater.

2. Term of Agreement; Renegotiation; Scope of Agreement.

2.1 Term. This Agreement shall commence upon the Effective Date and shall continue in effect until the thirtieth (30th) anniversary of the Effective Date unless earlier

terminated pursuant to Section 20 below or the Districts enter into a new agreement that supersedes this Agreement pursuant to Section 2.2 below.

2.2 Renegotiation. If one of the Districts believes: (i) that there has been a change in the circumstances that existed at the time this Agreement was entered into, and (ii) that the change in circumstances has caused one or more of the provisions of this Agreement to inappropriately apportion the benefits and obligations of the Agreement between the Districts, the District may request in writing, that the purportedly inappropriate provision(s) of this Agreement be renegotiated. Within sixty (60) days of the request, representatives of the Districts shall meet to attempt to renegotiate the provisions in question. Nothing in this Section is intended to require the negotiations to reach any particular conclusion; rather, this Section requires that each District negotiate in good faith.

2.3 Scope of Agreement. Nothing in this Agreement addresses the potential reuse of Wastewater for irrigation, landscaping or other beneficial uses. In the event a District or a third party proposes to reuse the Wastewater covered by this Agreement for such beneficial uses, the Districts shall discuss such proposal and the equitable allocation of any proceeds realized from the beneficial use of Wastewater.

3. Capacity Rights of TCSD.

3.1 TCSD Discharges. Provided that TCSD complies with the terms and conditions set forth in this Agreement, including but not limited to, timely payment to SMCSO of all amounts due hereunder, TCSD shall be permitted to discharge Wastewater from the TCSD Service Area to the SMCSO Wastewater System, and SMCSO shall convey, treat and dispose of such Wastewater.

3.2 Maximum PWWF. At no time shall the PWWF entering the SMCSO Wastewater System from the TCSD Service Area exceed 3.7 MGD, which was estimated in TCSD's SSRAP to be TCSD's PWWF.

3.3 Point of Discharge. Unless otherwise expressly agreed upon in writing, Wastewater from the TCSD Service Area shall only enter the SMCSO Wastewater System through the TCSD Forcemain.

3.4 Wastewater from TCSD Service Area Only. Unless otherwise expressly agreed upon in writing, TCSD may only discharge Wastewaters generated in the TCSD Service Area to the SMCSO Wastewater System.

3.5 Acceptance of TCSD's Wastewater By SMCSO. SMCSO shall accept all Wastewaters discharged by TCSD that comply with the terms and conditions set forth in this Agreement and shall cause such Wastewaters to be transported to the Plant for treatment and discharge as treated effluent in accordance with Applicable Law.

3.6 Limitation on Peak Wet Weather Flow. The Bell Lane Pump Station, Marin City Pump Station, Highway Booster Pump Station, and several private pump stations share a common force main to convey Wastewater to a shared gravity interceptor sewer at Bridgeway and Gate Five Road. In addition, downstream facilities have been or will be designed to convey

PWWF based on the flow assessments contained in each District's SSRAP. To ensure that PWWF is properly transported and spills are avoided, TCSD and SMCSO shall limit the capacity of their pump stations to no more than the PWWF presented in each District's SSRAP. For TCSD, the PWWF of the Bell Lane Pump Station shall not exceed 3.7 MGD.

3.7 TCSD Obligation to Send Wastewater to SMCSO Wastewater System. Unless otherwise expressly agreed upon in writing, TCSD shall send all Wastewater generated in the TCSD Service Area to the SMCSO Wastewater System for treatment and disposal. This requirement shall not apply to situations in which SMCSO has requested that flow from TCSD be restricted.

4. Ownership of Wastewater Facilities.

4.1 Ownership of Existing Facilities. Nothing in this Agreement is intended, nor shall it result in either District acquiring or owning any rights or interests in or to any of the Existing Wastewater Facilities that are located in the territorial jurisdiction of the other District. Therefore, SMCSO does not have, and shall not acquire pursuant to this Agreement, any right, title or interest in Existing Wastewater Facilities located in TCSD Territorial Jurisdiction and, likewise, TCSD does not have, and shall not acquire pursuant to this Agreement, any right, title or interest in Existing Wastewater Facilities located in SMCSO Territorial Jurisdiction.

4.2 Ownership of TCSD Forcemain. Notwithstanding Section 4.1 above, the Districts agree that for purposes of determining ownership of the TCSD Forcemain, the Valve Box shall be the point at which ownership of the TCSD Forcemain transfers from TCSD to SMCSO. In the event the location of the Valve Box is moved more than one hundred (100) feet from its present location, the point for transfer of ownership from one District to the other shall be the jurisdictional boundary line or other location agreed to by the Districts.

4.3 Ownership of Future Facilities. Unless otherwise agreed to by the Districts, facilities constructed or acquired in the TCSD Service Area after the Effective Date shall be the property of TCSD and facilities constructed or acquired in the SMCSO Service Area after the Effective Date shall be the property of SMCSO.

4.4 Future Study of Annexation of TCSD Service Area. The Districts agree to conduct an annexation study regarding the potential impacts of annexing the TCSD Service Area to SMCSO.

5. Operation and Maintenance of Wastewater Facilities.

5.1 Responsibility for Operations and Maintenance of Wastewater Facilities. Each District shall be solely and exclusively responsible for the safe and cost-effective operation and maintenance of the Wastewater facilities or portion thereof that it owns, as well as any Wastewater facilities that it operates and/or maintains pursuant to an agreement with any other public agency. For the purposes of this Agreement, the Districts' respective responsibilities for operations and maintenance include, but are not limited to, the authority to make all requisite decisions related to such matters including funding for labor, services, materials, parts, equipment, administration, management and other overhead expenses inherent in operations and maintenance activities. For purposes of this Section 5, operations and maintenance

responsibilities also include all matters related to repair, renovation, replacement and expansion of Wastewater facilities owned and operated by a District.

5.2 Operation and Maintenance of Plant and Shared Collection System. Consistent with the provisions of Section 5.1 above, SMCSO shall have the sole and exclusive responsibility for operating and maintaining the Plant and the Shared Collection System.

5.3 Cooperation on Operations and Maintenance Activities. Notwithstanding the exclusivity of the Districts' respective responsibilities under this Agreement, as set forth in in this Section 5 and elsewhere, the Districts shall confer and cooperate with each other with respect to operations and maintenance activities to serve the purposes of this Agreement to the fullest extent possible. For example, if either District intends to perform any operation or maintenance activity that could affect the other District's operations or maintenance, it shall promptly notify the other District of such activity prior to performing the activity.

6. Compensation for Wastewater Services.

6.1 TCSD's Share of Plant and Shared Collection System Costs. As consideration for the Wastewater Services provided to TCSD by SMCSO pursuant to this Agreement, TCSD shall pay as a component of the Annual Charge its proportionate share of O&M Costs, R&R Costs, and Capital Costs calculated in accordance with this Section 6.

6.2 Operations and Maintenance Costs.

a. Apportionment of Costs. In the Annual Budget and final reconciliation, SMCSO shall fairly and reasonably apportion O&M Costs among (a) the Plant, (b) the Shared Collection System, and (c) the Non-Shared Collection System. Consistent with the foregoing sentence, and unless the Districts otherwise agree as to any particular item of O&M Costs, the following provisions shall serve as apportionment rules:

i. The O&M Costs for effluent monitoring, biosolids disposal, supplies and chemicals used in the treatment processes shall be apportioned exclusively to the Plant;

ii. All other O&M Costs shall be apportioned among the Plant, Shared Collection System, and Non-Shared Collection System in a manner which is equitable under the relevant circumstances. For example, Collection System costs solely within the unincorporated area of Marin City shall be apportioned exclusively to the Non-Shared Collection System.

b. TCSD's Plant O&M Costs. In the Annual Budget and final reconciliation, SMCSO shall calculate TCSD's Share of Plant O&M Costs by multiplying the Plant O&M Costs by the percentage that the Annual Average Flow entering the Plant from the TCSD Service Area over the prior three (3) Fiscal Years bears to the total Annual Average Flow entering the Plant during that time period. The intent of this calculation is to establish the percentage of TCSD's share of the Plant O&M Costs by using a three-year running average of the percentage of its annual flow to that of the total annual flow.

No consideration is being given at this time to potential impacts on O&M Costs which could result from potential differences in the Wastewater Strength Characteristics of the Wastewater generated in each of the Districts' service areas. If at any time in the future, evidence indicates that the Wastewater Strength Characteristics of Wastewater from either District's service area results in increased treatment or related Plant O&M Costs such that it would be inequitable to apportion such costs based on total Wastewater flows as provided in this Section 6.2.b, the Districts shall adjust such costs pursuant to Section 8.4 below, or either District may pursue renegotiation of the Agreement pursuant to Section 2.2 above.

c. TCSD's Shared Collection System O&M Costs. In the Annual Budget and final reconciliation, SMCSO shall calculate TCSD's Share of Shared Collection System O&M Costs on an asset by asset basis. This calculation shall be based on the percentage that the Annual Average Flow from the TCSD Service Area entering the Shared Collection System asset for which O&M Costs are incurred bears to the total Annual Average Flow entering such asset. However, if it is not feasible to accurately measure the respective flows in any Shared Collection System asset, TCSD's allocated share of Shared Collection System O&M Costs shall be calculated by applying the same flow percentage used in subsection b.

d. TCSD's Total O&M Costs. TCSD's Share of O&M Costs shall be the sum of the amounts calculated pursuant to subsections b and c above.

6.3 Capital Costs and R&R Costs.

a. Apportionment of Capital Costs and R&R Costs. In the Annual Budget and final reconciliation, SMCSO shall fairly and reasonably apportion Capital Costs and R&R Costs between (i) the Plant, (ii) the Shared Collection System, and (iii) the Non-Shared Collection System.

b. TCSD's Plant Capital Costs and R&R Costs. In the Annual Budget and final reconciliation, SMCSO shall calculate TCSD's Share by multiplying, as the case may be, Plant Capital Costs and Plant R&R Costs by the percentage that TCSD's PWWF bears to the Plant's PWWF. Based on the Districts' SSRAP, Volume III reports to USEPA dated October 2010, and the respective PWWFs set out therein, the Districts agree that TCSD's current percentage share of Plant Capital Costs and Plant R&R Costs is twenty-nine point six percent (29.6%). TCSD's percentage share of Plant Capital Costs and Plant R&R Costs shall be recalculated in the Annual Budget for the 2016/2017 Fiscal Year and every five (5) years thereafter to reflect the results of the Flow Monitoring Study prepared in accordance with Section 14.6.

c. TCSD's Shared Collection System Capital Costs and R&R Costs. TCSD's share of Shared Collection System Capital Costs and Shared Collection System R&R Costs shall be determined on an asset by asset basis. TCSD shall pay to SMCSO a percentage of Shared Collection System Plant Costs and Shared Collection System R&R Costs equal to TCSD's PWWF in the Shared Collection System asset for which Capital Costs and/or R&R Costs are incurred divided by the total PWWF entering such asset. However, if as a result of the repair or replacement for which the R&R Costs are incurred, the capacity of the asset is increased or decreased, TCSD's share of the Shared Collection System R&R Costs shall be

calculated using the asset's PWWF after the repair or replacement is completed. For the purposes of allocating TCSD's share of Shared Collection System Capital Costs and Shared Collection System R&R Costs for: (1) the Scotties Pump Station and force main; (2) the gravity interceptor from Coloma Street to Locust Street and the Locust Street Pump Station; and (3) the force main and gravity interceptor to the Main Street Pump Station including the force main to the plant; the percentages in "Table 4-4 – Contributions of Flows from Individual Agencies to SMCSD System" of SMCSD's SSRAP Report shall be used. They are thirty-seven point four percent (37.4%) for (1) and (2) above and thirty-one point nine percent (31.9%) for (3) above. TCSD's percentage share of Shared Collection System Capital Costs and Shared Collection System R&R Costs shall be recalculated in the Annual Budget for the 2016/2017 Fiscal Year and every five (5) years thereafter to reflect the results of the Flow Monitoring Study prepared in accordance with Section 14.6.

d. Alternate Allocation of Capital Costs. In the event the use of the formulas in subsections b and c above would lead to an inequitable result with respect to a particular project, the Capital Costs for such project shall be apportioned among the Districts in the ratio that the project is attributable to the needs of each District.

e. Financed Capital Projects.

i. Existing Financing. In 2008, SMCSD obtained a loan to finance certain capital projects in lieu of paying for such costs from available resources. Based on their respective shares of PWWF as set out in the each Districts' SSRAP, the Districts have determined that TCSD's percentage share of principal and interest on the Existing Financing is twenty-nine point six percent (29.6%) for Treatment Plant Improvements and 37.4% for Locust Street Pump Station Improvements, even if the Existing Financing is later refinanced. TCSD shall as a component of the Annual Charge pay its percentage share of principal and interest on the Existing Financing through the maturity date of such financing in accordance with the repayment schedule attached hereto as Exhibit F.

ii. Anticipated Financing. SMCSD intends to issue debt or obtain additional loans to finance the R&R Costs and Capital Costs identified in Exhibit B attached hereto and incorporated herein. TCSD's Share of principal and interest on any Anticipated Financing shall be calculated in accordance with its then-current share as calculated under subsections b and c above. TCSD's percentage share of principal and interest shall be calculated as of the effective date of the applicable financing agreement and shall remain the same throughout the term of such agreement regardless of whether TCSD's PWWF increases or decreases, even if the Anticipated Financing is later refinanced. Except as set forth in Section 20.3, TCSD shall not be responsible for principal and interest payments following the term of this Agreement.

iii. Future Financing. During the term of this Agreement, SMCSD may be required to issue debt or obtain additional loans to finance R&R Costs or Capital Costs that were not contemplated prior to the Effective Date. TCSD shall be responsible for its share of principal and interest on any Future Financing calculated in accordance with subsections b and c above through the term of the applicable financing agreement. Except as set forth in Section 20.3, TCSD shall not be responsible for principal and interest payments following the term of

this Agreement. TCSD's percentage share of principal and interest shall be calculated as of the effective date of the applicable financing agreement and shall remain the same throughout the term of such agreement regardless of whether TCSD's percentage share of PWWF increases or decreases, even if the Future Financing is later refinanced. If the life of the asset or assets funded by the future financing will extend substantially beyond the term of this Agreement, the Districts shall negotiate in good faith, as specified in Subsection 5.3 and Section 17, on an appropriate method for allocating the costs of the asset or assets in a manner that reflects its depreciated value at the end of the term.

iv. Prepayment. TCSD may, without premium or penalty, at any time and from time to time, prepay all or any portion of its share of principal on the Existing Financing, the Anticipated Financing or any Future Financing provided that each such repayment is accompanied by accrued interest on the amount of principal prepaid calculated to the date of such prepayment.

f. Cash Funded Costs. Capital Costs and R&R Costs that are not financed with Existing Financing, Anticipated Financing or Future Financing will be paid from SMCSO's then-available resources. TCSD shall be responsible for its percentage share of Cash Funded Costs calculated in accordance with subsections b and c above and such amount shall be included in the Annual Fee. TCSD may elect to defer payment of Cash Funded Costs incurred within ten (10) years from the Effective Date of this Agreement as specified in this subsection.

i. Interest. Simple interest shall accrue on Deferred Costs commencing on the Deferred Payment Date at a rate of one percent (1%), plus SMCSO's collective rate of return from its financial investments (e.g., LAIF, high-quality corporate bonds, treasury bills).

ii. Payments of Principal and Interest. Commencing after the first (1st) anniversary of the Deferred Payment Date and continuing through the applicable maturity date, TCSD shall make quarterly payments of principal on the Deferred Costs in equal installments, together with interest accrued thereon, at the same time it makes the quarterly installment payments pursuant to Section 8.3.

iii. Maturity Date. Deferred Costs, together with accrued interest, shall be payable in full on the twentieth (20th) anniversary of the applicable Deferred Payment Date or the termination date of this Agreement, whichever is earlier.

iv. Prepayment. TCSD may, without premium or penalty, at any time and from time to time, prepay all or any portion of the outstanding Deferred Costs provided that each such repayment is accompanied by accrued interest on the amount of principal prepaid calculated to the date of such repayment.

g. TCSD's Total Capital Costs and R&R Costs. TCSD's allocated share of Capital Costs and R&R Costs shall be the sum of the amounts calculated pursuant to subsections e through f.

6.4 Costs for Which TCSD is not Responsible. TCSD shall have no responsibility for the following costs:

- a. Any costs resulting from a negligent act or omission by SMCS D's governing board;
- b. Any O&M Costs, R&R Costs or Capital Costs associated with the Non-Shared Collection System, or associated solely with Wastewater from outside the TCSD Service Area; or
- c. Any other costs incurred by SMCS D that are not described in this Agreement.

6.5 Unanticipated Capital Costs. Notwithstanding anything to the contrary set forth in this Agreement, the following provisions shall apply to Unanticipated Capital Costs. The parties agree that the Unanticipated Capital Costs that may be charged to TCSD are limited to those that are necessary to continue providing the current level of service (or such level of service as may be required by regulators in the future) and that result from a reasonable allocation of costs between TCSD and SMCS D, taking into account such factors as the reasonableness of the timing of the proposed expenditures, each parties' short-term budgetary constraints, and the feasibility of long-term financing.

a. Unanticipated Capital Costs Resulting From Change in Law. The Districts acknowledge and agree that during the term of this Agreement there could be a Change in Law that would require the construction of a capital project that was not previously contemplated by the Districts. The Districts further acknowledge and agree that such Unanticipated Capital Costs are unavoidable. Accordingly, the Districts agree that in the event SMCS D incurs or will incur Unanticipated Capital Costs resulting from a Change in Law, the Districts shall meet and confer in good faith, and shall reach agreement, on an equitable method for apportioning responsibility for such Unanticipated Capital Costs between the Districts.

b. Other Unanticipated Capital Costs. The Districts acknowledge and agree that during the term of this Agreement, SMCS D may determine it is necessary to incur Other Unanticipated Capital Costs. The Districts further acknowledge and agree that such circumstances could lead to disputes. For example, TCSD may not want to pay its full share of the Capital Costs of an asset that has a useful life that extends beyond the term of this Agreement, and SMCS D may not want to pay a disproportionate share of the costs of an asset that will substantially benefit TCSD during the term of this Agreement. Accordingly, in the event SMCS D proposes to include Other Unanticipated Capital Costs in the Annual Budget that would cause an increase in the Annual Charge that exceeds five percent (5%) of the previous fiscal year's Annual Charge, SMCS D shall first provide TCSD reasonable notice of its proposal to incur Other Unanticipated Capital Costs in the Annual Budget. Thereafter, the Districts shall, at least thirty (30) days prior to the final Budget Hearing, meet and confer in good faith to discuss the proposed Other Unanticipated Capital Costs and to resolve any disputes in a manner that treats both Districts equitably. The Districts shall promptly convene joint Board or Board committee meetings to facilitate such discussions.

i. Facilitation/Mediation. If the Districts are unable to reach an agreement on inclusion of such Other Unanticipated Capital Costs in the Annual Budget by June 15, the Districts agree to promptly submit the disputed matter to a facilitator or mediator

technically qualified to address the issues of the need for Other Unanticipated Capital Costs, the reasonableness of the budgeted costs, the necessary timing of the expenditures and other equitable cost allocation issues. If the parties cannot promptly agree upon a facilitator/mediator, each party shall select an individual they believe qualified to serve as the facilitator/mediator, and the two chosen individuals shall select a qualified individual to serve as the facilitator/mediator. The intention of this facilitated or mediated discussion is to develop an approach that is mutually acceptable to the Districts and allows for both an equitable apportionment funding and a feasible means of payment by TCSD for necessary Other Unanticipated Capital Costs. Insofar as reasonable under the circumstances, the parties shall attempt to conclude the facilitation or mediation process prior to the date upon which TCSD's next quarterly installment of the Estimated Annual Charge is due under Section 8.3. The facilitation/mediation period shall be no longer than 45 days following the selection of the facilitator/mediation, unless the parties agree to an extension in writing. The parties shall equally share the costs of the facilitator or mediator. If the facilitated or mediated resolution process results in an agreement to reduce the Other Unanticipated Capital Costs included in the Annual Budget, SMCSO shall promptly recalculate the Estimated Annual Charge and notify the TCSD of the revised amount. To the extent that TCSD has already paid one or more quarterly installments of the Estimated Annual Charge based on the Annual Budget, SMCSO shall provide, at TCSD's option, a refund or credit against future quarterly installments within 30 days of providing the notification of the recalculated Estimated Annual Charge.

ii. Dispute Review Board. In the event this facilitated or mediated resolution process does not resolve all issues related to the inclusion of Other Unanticipated Capital Costs in the Annual Budget, either District, within 30 days of the conclusion of the facilitation/mediation period, may request that a dispute review board be convened to issue written findings on the issues remaining in dispute. The dispute review board shall include three members: two engineers familiar with wastewater systems, one chosen by each of the parties, and another individual chosen by the two engineers. Each party shall bear the costs of its chosen member of dispute review board, and the parties shall equally share the costs of the third member. A party requesting that a dispute review board be convened ("the requesting party") shall so notify the other party ("the responding party") by hand-delivery pursuant to Section 21.1 identifying in detail the issues remaining in dispute between the parties, the requesting party's position thereon, and the engineer the requesting party has chosen to serve on the dispute review board. Within 10 days of the notification, the responding party shall notify the requesting party by hand-delivery pursuant to Section 21.1 of its position on the issues identified in the requesting party's notice, of any additional issues remaining in dispute, and the engineer the responding party has chosen to serve on the dispute review board. If any additional issues in dispute are identified in the notice of the responding party, the requesting party shall by hand-delivery pursuant to Section 21.1 notify the responding party of its position on those issues. The two engineers chosen to serve on the dispute review board shall choose the third member within 15 days of the final notification required by the foregoing. The dispute review board shall endeavor to issue its report within 60 days of the selection of the third member of the board, which report shall be provided to the District Boards immediately upon issuance. The report shall include the dispute review board's determinations on each of the issues remaining in dispute, including any related findings of fact. The dispute review board shall have the power if it deems it necessary to elicit witness testimony and to require written briefing and oral presentations from the parties.

The dispute review board's report shall be considered a public record, and the parties agree that it shall be admissible in subsequent legal proceedings between the parties.

The foregoing dispute review resolution processes shall constitute informal dispute resolution proceedings provided under Section 19.2. The foregoing requirements shall not apply to Other Unanticipated Capital Costs that are necessitated by the existence of an emergency as reasonably determined by the SMCSO Board; provided however, SMCSO shall notify TCSD of the anticipated expenditures and the necessity therefore promptly after the discovery of the emergency and the need for such prompt expenditures arises.

7. Repayment of Existing Interdistrict Loan.

7.1 Existing Interdistrict Loan. TCSD shall repay the Existing Interdistrict Loan in accordance with this Section 7. As of the Effective Date, the outstanding principal and interest on the Existing Interdistrict Loan is \$_____.

7.2 Interest. Simple interest equal to the one percent (1%), plus SMCSO's collective rate of return from its financial investments (e.g., LAIF, high-quality corporate bonds, treasury bills) shall continue to accrue on the Existing Interdistrict Loan through the maturity date of the Existing Interdistrict Loan.

7.3 Payments of Principal and Interest. TCSD shall make quarterly payments of principal and interest on the Existing Interdistrict Loan, together with interest accrued thereon in accordance with the repayment schedule set forth in Exhibit G.

7.4 Maturity Date. The entire outstanding principal balance of the Existing Interdistrict Loan, together with accrued interest, shall be payable in full by June 30, 2014, unless modified by separate agreement between TCSD and SMCSO.

7.5 Prepayment. TCSD may, without premium or penalty, at any time and from time to time, prepay all or any portion of the outstanding principal balance of the Existing Interdistrict Loan provided that each such repayment is accompanied by accrued interest on the amount of principal prepaid calculated to the date of such repayment.

8. Annual Charge.

8.1 Annual Charge. Each year, TCSD shall pay to SMCSO the Annual Charge in accordance with this Section 8.

8.2 Estimated Annual Charge. Annually at the time of adoption of its Annual Budget, SMCSO shall use its best efforts to accurately estimate the Annual Charge for the upcoming Fiscal Year. Estimates of TCSD's share of O&M costs shall be calculated using the AAF for the prior three (3) Fiscal Years. Upon adoption of the Annual Budget, SMCSO shall promptly notify TCSD of the amount of the Estimated Annual Charge and the basis upon which the estimate was determined.

8.3 Timing of Payment of Estimated Annual Charge. TCSD shall pay to SMCSO the Estimated Annual Charge in equal quarterly installments on or before July 15th, October 15th,

January 15th and April 15th of each Fiscal Year. However, no quarterly payment shall be due or payable by TCSD until thirty (30) days after TCSD receives notification from SMCSO of the amount of the Estimated Annual Charge for that Fiscal Year.

8.4 Actual Annual Charge. As promptly as possible after the end of each Fiscal Year, SMCSO shall cause its financial statements to be audited in the manner required by Applicable Law. Based upon the financial information confirmed by the annual audit, and prior to February 15th of the Fiscal Year following, SMCSO shall cause a qualified financial professional mutually acceptable to the Districts to calculate the Actual Annual Charge for that Fiscal Year. The cost of retaining the qualified financial professional shall be shared equally by the Districts. The financial professional, SMCSO general manager and TCSD general manager shall collectively meet to review and approve the allocation of costs and calculation of the Actual Annual Charge and to make any adjustments to the allocation and/or calculation of the Actual Annual Charge that are determined by the Districts' General Managers to be appropriate to comply with this Agreement or equitably apportion the costs between the Districts. Each District's governing board shall review the Actual Annual Charge calculated by the financial professional. If the Actual Annual Charge differs from the Estimated Annual Charge for that Fiscal Year, the difference shall be, as the case may be, credited or invoiced to TCSD. TCSD shall pay any invoiced amounts within thirty (30) days of receipt of the SMCSO invoice. Any refunded amounts will be credited to the Annual Charge for the following Fiscal Year.

8.5 Interest. The quarterly payments required pursuant to Section 8.3 or any adjustments required to be made pursuant to Section 8.4 shall accrue interest at the LAIF Rate. Interest shall commence to accrue thirty (30) days after the date a quarterly payment was due pursuant to Section 8.3 or thirty (30) days from the date an overpayment or underpayment was made requiring adjustment pursuant to Section 8.4.

9. TCSD Reserve and Revenue Requirements.

9.1 TCSD Rate and Reserve Requirements. To ensure that TCSD has dedicated sufficient funds to pay its share of principal and interest on Capital Costs, R&R Costs, and the Anticipated and Future Financing, TCSD shall make payments into the Reserve Account in such amounts as required by the Anticipated Financing and any Future Financing and shall comply with all rate covenants imposed by the Anticipated Financing and Future Financing. Interest earned on funds in the Reserve Account shall be for the sole account of TCSD. SMCSO shall have the right to draw upon the funds in the Reserve Account on the mutual agreement of the parties or upon a court order based on a determination that TCSD has committed an Event of Default of the type specified in Section 16.1.a, which relates to the Anticipated Financing or Future Financing.

10. Joint Planning and Coordination.

10.1 Financial Plan Exchange. Due to the financial interrelationship of the Districts created by this Agreement, each District shall periodically prepare and exchange financial plans that shall include forecasting of revenues and rates, required to meet each District's obligations under this Agreement. It is anticipated that the plans will be similar in scope and detail to the 2010 SMCSO financial plan. The plans shall be prepared and exchanged during the month of

March not less frequently than every five (5) years, unless an alternative schedule is mutually agreed to.

10.2 Joint Board or Board Committee Meetings. In order to further facilitate coordination between the Districts for financial and project planning, a joint meeting of the Districts' Boards or of Board Committees shall be held not less frequently than once every two (2) years. The joint Board or Board Committee meetings are intended to provide a forum for addressing issues of significance that may arise under this Agreement and to allow for joint discussion of required coordination and financial planning. Either District may request a joint Board or Board Committee meeting at any time.

11. Wastewater Quality Limits.

11.1 Compliance with Applicable Law. At all times, SMCSO and TCSD shall conduct their Wastewater activities in conformance with all requirements of Applicable Law.

11.2 Actions to Prevent Interference or Pass Through. TCSD and SMCSO shall take reasonable action to prevent the contribution of Wastewater to the SMCSO Wastewater System which would interfere with or degrade the condition and effectiveness of the SMCSO Wastewater System or would cause the effluent discharged from the Plant to be in violation of any of SMCSO's NPDES Permit requirements and conditions, including water quality limitations, or any other provision of Applicable Law.

11.3 Monitoring of Muir Woods National Monument. The Districts acknowledge and agree that SMCSO intends to negotiate an agreement with the National Park Service that will provide SMCSO with the right to monitor the Wastewater collection activities of the National Park Service with respect to the Muir Woods National Monument and that TCSD shall cooperate with SMCSO to achieve such arrangement. Until such time that SMCSO obtains the right to monitor the Wastewater collection activities of the National Park Service with respect to the Muir Woods National Monument, TCSD shall take reasonable steps to ensure that such Wastewater collection activities do not pose a threat to operation of downstream facilities, including the Shared Collection System and the Plant. TCSD shall promptly notify SMCSO when it becomes aware of activities that could pose such a threat.

11.4 Odor Control Facilities. TCSD agrees to furnish and operate chemical odor control facilities to minimize the conveyance and formation of hydrogen sulfide in the shared TCSD Forcemain. SMCSO agrees to furnish and operate similar odor control facilities in Marin City and elsewhere to minimize the production of odor constituents.

11.5 Pollution Prevention Program. TCSD shall implement a pollution prevention program, including source control and public education plans to minimize the discharge of pollutants of concern (i.e. fats, oil, and grease, hazardous waste, pharmaceuticals, pesticides, etc.) to the Shared Collection System and the Plant. TCSD shall submit a report annually to SMCSO documenting its efforts to implement such program. SMCSO shall include the report in its annual report to the Regional Board.

11.6 Communications from Regulatory Agencies. If either SMCSO or TCSD receives any written communication from any Federal, State or local agency jurisdiction regarding the

collection, treatment or disposal of Wastewater or performance of any other obligations pursuant to this Agreement, it shall provide the other District a copy of such communication within five (5) business days. TCSD and SMCSO shall comply with any obligations imposed by such communication and all other governmental orders or grant contracts that TCSD and SMCSO are legally obliged to observe with respect to Wastewater discharges. Such compliance shall include the enactment and enforcement of such regulations, policies and procedures that are necessary to comply with such obligations and that the Districts are legally empowered to adopt.

12. Inflow and Infiltration Prevention.

12.1 Excessive I/I. The Districts acknowledge that to comply with the AO, reduce spills and decrease or eliminate Blending, excessive I/I must be reduced within the SMCSO and TCSD Service Areas. SMCSO estimates that collectively a thirty-five percent (35%) reduction in I/I in the SMCSO Collection System, the City of Sausalito Collection System and TCSD Collection System will be needed to reduce PWWF to the Plant to about 9 MGD. This is the proposed expanded secondary treatment capacity of the Plant which is being designed to avoid future Blending.

SMCSO, TCSD and the City have committed to the EPA to cooperate to reduce I/I in the SMCSO Collection System, City of Sausalito Collection System and TCSD Collection System through rehabilitation of their collection systems over the next twenty (20) to thirty (30) years. SMCSO has determined that the most significant bottlenecks in its Collection System should be addressed by capacity enhancements to be constructed in the next five (5) years. These enhancements will primarily involve expansion of SMCSO wastewater pump stations and some Plant improvements. TCSD has committed to the EPA to implement improvements in its Collection System to reduce PWWF. In conjunction with its Flow Monitoring Study, TCSD shall prepare a project specific I/I reduction plan, stamped and signed by a professional engineer, that includes detailed sewer repair/replacement projects designed to achieve the I/I reduction goals set forth in Section 11.3.a., a schedule for implementation of such projects and an estimate of the costs of such projects.

12.2 I&I Reduction Programs. TCSD and SMCSO shall develop and implement capital improvement programs in their respective jurisdictions to reduce I/I and minimize the potential for wet weather overflows. TCSD's I/I Reduction Program shall be designed to achieve a thirty-five percent (35%) reduction in PWWF from TCSD's Collection System within thirty (30) years to prevent spills from the Shared Collection System and the Plant caused by excessive I/I. Each District shall review and revise its I/I Reduction Program annually. By October 15th of each year, each District shall provide the other District a copy of its annual report to the EPA identifying actions taken by the District over the past year to implement its I/I Reduction Program and any changes that are necessary to achieve the I/I goals, as specified in this agreement.

12.3 Reductions in I/I from TCSD Service Area.

a. Schedule for I/I Reductions. The Districts, along with the City, have committed to the EPA to consistently and substantially reduce the frequency and volume of sewage spills to waters of the United States and to complete improvements necessary to

eliminate conditions in their Collection Systems that cause or contribute to sewage spills, bypasses, or effluent limit violations from the Shared Collection System or the Plant. The Districts have determined that the best approach for ensuring adequate wet weather capacity in the SMCSD Wastewater System as required by the AO is to reduce I/I by rehabilitating and replacing defective sewer pipes in their respective Collection Systems. Therefore, in order to ensure compliance with the AO, TCSD shall make good faith efforts consistent with reasonable engineering judgment to achieve substantial compliance with the following targeted I/I reduction goals:

2015 – a reduction in PWWF from 3.7 MGD to 3.5 MGD

2020 – a reduction in PWWF from 3.5 MGD to 3.3 MGD

2030 – a reduction in PWWF from 3.3 MGD to 2.8 MGD

2040 – a reduction in PWWF from 2.8 MGD to 2.4 MGD

b. Determination of I/I Reduction. Reduction in I/I shall be determined by a qualified engineering consultant mutually agreed to by the Districts, who shall (i) assess wet weather flows based on flow and rainfall monitoring, (ii) analyze the flow and rainfall data to develop the relationship between rainfall and I/I in the sewer system, (iii) apply the relationships between rainfall and I/I to the Design Event using appropriate hydrologic and hydraulic modeling techniques to develop estimates of current PWWF for each District.

c. Failure to Achieve I/I Reductions. In the event that TCSD does not reduce I/I from the TCSD Collection System in accordance with subsection a above, TCSD shall revise and accelerate its I/I Program, including changes to its associated financial plan to establish new milestones and a schedule for achieving the peak I/I reduction goals as specified in Section 11.a.

13. Disruption of Service.

13.1 Disruption of Service. In the event that SMCSD is unable to provide Wastewater Services to TCSD, it shall provide TCSD at least thirty (30) days' notice of the inability to provide such service. If such advance notice is not feasible because SMCSD has no knowledge of the future disruption of Wastewater Services, SMCSD shall notify TCSD immediately upon obtaining knowledge of the disruption of service. Any disruption of Wastewater Services shall not relieve SMCSD of its responsibilities under this Agreement to provide Wastewater Services to TCSD.

14. Measurement and Reporting.

14.1 Flow and Rainfall Measurements by TCSD. TCSD, at its sole cost and expense, shall provide, operate and maintain Wastewater flow and rainfall measuring devices that accurately and continuously meter and record the rate of Wastewater flow and volume of Wastewater that enters the SMCSD Wastewater System from the TCSD Service Area and of rainfall within the TCSD Service Area.

14.2 Flow and Rainfall Measurements by SMCSD and GGNRA. SMCSD, at its sole cost and expense, shall provide, operate and maintain Wastewater flow and rainfall measuring devices that accurately and continuously meter and record the rate of Wastewater flow and total volume of Wastewater that enters the Plant from all service areas and the rate of Wastewater flow and volume of Wastewater that is pumped from the Marin City, Highway Booster, Scotties, Locust Street and Main Street pump stations. GGNRA measures the rate of Wastewater flow from the GGNRA service area at its Fort Baker Pump Station. SMCSD shall meter and record rainfall in SMCSD's Territorial Jurisdiction.

14.3 Maintenance and Calibration of Flow and Rainfall Monitoring Devices. The Districts shall keep their flow measuring devices in good operating condition at all times. The Districts shall have their respective Wastewater flow and rainfall measuring devices calibrated by qualified technicians on schedules recommended by device manufacturers or qualified instrumentation professional but in no case less than once a year. The Districts shall cause calibration of their respective Wastewater flow and rainfall measuring devices to occur at approximately the same time with not more than seven (7) days in between one District's calibration and the other District's calibration. Each District shall provide the other District with its calibration results.

14.4 Exchange of Flow and Rainfall Measurement Information. No later than seven (7) days following the end of each month, each District shall provide the other with a summary of the Wastewater flow and rainfall measurement data collected for the previous month in accordance with Sections 14.1 and 14.2. No later than ten (10) days following the end of each Fiscal Year, each District shall provide the other with a summary of the Wastewater flow and rainfall measurement data collected for the previous Fiscal Year in accordance with Sections 14.1 and 14.2.

14.5 Flow Data Used to Calculate O&M Costs. The Wastewater flow measurement data collected by the Districts in accordance with Sections 13.1 and 13.2 shall be used to calculate TCSD's allocated share of O&M Costs pursuant to Section 6.2.

14.6 Flow Monitoring Studies. By December 30, 2015, and every five (5) years thereafter, the Districts shall complete a Flow Monitoring Study. Each District shall be responsible for the cost of the Flow Monitoring Study for its own service area. The results of the Flow Monitoring Study shall be used to calculate TCSD's share of R&R Costs and Capital Costs for the Fiscal Year following the date of the study and subsequent Fiscal Years.

15. Records and Accounts.

SMCSD shall keep and maintain accurate and correct books of account showing in detail all financial transactions which relate to the subject matter of this Agreement. The books of account shall be maintained in accordance with generally accepted accounting principles as prescribed by the American Institute of Certified Public Accountants and the Government Accounting Standards Board. The books of account shall be audited annually in the manner required by Applicable Law by independent auditors retained by SMCSD. The books of account shall be open to inspection at all times during normal business hours by representatives of TCSD. Financial records shall be retained for five (5) years.

16. Events of Default; Remedies.

16.1 Events of Default. The following shall be Events of Default under this Agreement:

a. Failure by either District to pay any amounts required to be paid hereunder within fifteen (15) days of the time specified herein, and such failure is not cured within ten (10) days after written notice thereof by the other District.

b. Failure by either District to observe or perform any covenant, condition or agreement in this Agreement (other than those listed in subsection a above) for a period of thirty (30) days after written notice thereof by the other District; provided however, if the nature of any such default is such that it cannot be cured within thirty (30) days, the other District's failure to cure the default within thirty (30) days shall not constitute a default if the other District thereafter prosecutes the curing of such default with due diligence and in good faith until the default is corrected.

16.2 Remedies. If within the applicable cure period, either District fails to cure a default or fails to commence to cure and diligently pursue completion of a cure, as applicable, or if a cure is not possible, the other District may proceed with any of the following remedies:

a. Bring an action for equitable relief seeking the specific performance of the terms and conditions of this Agreement, and/or enjoining, abating, or preventing any violation of such terms and conditions, and/or seeking declaratory relief;

b. Terminate this Agreement in accordance with Section 20.2;

c. Pursue any other remedy allowed at law or in equity.

Each of the remedies provided herein is cumulative and not exclusive. Either District may exercise from time to time any rights and remedies available to it under applicable law or in equity, in addition to, and not in lieu of, any rights and remedies expressly provided in this Agreement.

17. Intergovernmental Cooperation, Communication and Assistance.

17.1 Cooperation. The Districts acknowledge and agree that the purposes of this Agreement will be best served by promoting and maintaining policies and procedures which require a high level of mutual cooperation, communication, and assistance with respect to the Districts' joint interests and concerns. The Districts further acknowledge that they both have an interest in the O&M, R&R and Capital Costs for the Plant and the Shared Collection System. The Districts agree to use their best efforts to cooperate with each other in the performance of this Agreement and in making decisions that affect the Districts' joint interests.

17.2 Communication. To facilitate the Districts' communications with each other and the flow of relevant information between them, the Districts shall:

a. Establish and implement policies and procedures by which meeting notices of the boards of directors and standing committees, agenda materials, public notices, reports, rules, regulations, policies, budgets, financial reports and publications which are produced or acquired by one of the Districts in connection with its governmental interests in Wastewater disposal are regularly and routinely disseminated to the other District without charge. The Districts shall regularly review and, as necessary, revise these policies and procedures to the end that each Districts' need to receive current and accurate information from the other is satisfied as fully as possible.

b. Encourage direct communication between their respective representatives to facilitate and enhance discussion of matters of mutual interest. As appropriate, the Districts may schedule joint meetings of the Districts' Board of Directors or Ad hoc Committees of the Board. The Districts shall require their respective general managers to confer together regularly regarding issues of interest to both Districts, including decisions that affect, or in the future will affect, the Annual Charge. The Districts shall report the results of their conferences to their respective Boards. Representatives of the Districts, and especially members of their Board of Directors, may attend the meetings of the other District's Board and standing committees and provide recommendations. The minutes of the meetings and any recommendation from a standing committee to the Board of Directors shall note the attendance and comments of any representative of the other District.

18. Indemnity and Insurance.

18.1 TCSD's Indemnity Obligations. TCSD agrees to indemnify, defend and hold harmless SMCSO and its elected and appointed officers, officials, employees, contractors, agents and representatives from and against Claims arising as a result of or in connection with TCSD's breach of this Agreement or any negligent or willful act or omission of TCSD or its elected or appointed officers, officials, employees, contractors, agents or representatives.

18.2 SMCSO's Indemnity Obligations. SMCSO agrees to indemnify, defend and hold harmless TCSD and its elected and appointed officers, officials, employees, contractors, agents and representatives from and against any and all Claims arising as a result of or in connection with SMCSO's breach of this Agreement or any negligent or willful act or omission of SMCSO or its elected or appointed officers, officials, employees, contractors, agents or representatives.

18.3 Insurance. Each District shall procure and maintain in full force and effect during the term of this Agreement insurance coverage which conforms with the specifications contained in Exhibit H attached hereto and incorporated herein. TCSD acknowledges and agrees that a portion of the premium and other costs of SMCSO's insurance coverage are Plant O&M Costs and Shared Collection System Costs for which TCSD must pay its proportionate share.

19. Dispute Resolution.

19.1 Avoidance of Disputes. The Districts acknowledge and agree that it is their goal to avoid disputes concerning the subject matter of this Agreement. They further acknowledge and agree that this goal is most likely to be achieved by:

a. Ensuring that the contracts, agreements and understandings between the Districts, including those contained in this Agreement, are clearly stated, free from ambiguity, comprehensive and accurately focused on relevant issues. To the extent it is necessary to do so, each District agrees that it will consider carefully and negotiate in good faith any modifications to, changes in or additions to contracts, agreements, understandings, policies and procedures applicable to the Districts' relationship, which the other District proposes in good faith; and

b. Observing the provisions of Section 17 with regard to mutual cooperation, communication and assistance.

c. Both Districts observing the principals of good faith and fair dealing when taking actions under this Agreement.

19.2 Informal Dispute Resolution. In the event a dispute occurs between the Districts which arises out of the interpretation or performance of this Agreement, it is the Districts' preference, if practicable, that the dispute be resolved by the Districts directly or, if they mutually agree, with the aid of mediators or other dispute resolution facilitators through discussion, negotiation and mutual agreement. Each District agrees that it will not initiate adversarial dispute resolution proceedings against the other District prior to engaging in non-adversarial dispute resolution activities unless, in the judgment and discretion of the complaining District, good cause exists to pursue adversarial proceedings from the outset. Even if adversarial proceedings have been commenced, the Districts agree that they will continue to give good faith consideration to the use of non-adversarial dispute resolution techniques as a preferred means of resolving the Districts' dispute.

19.3 Arbitration. In the event adversarial dispute resolution proceedings are required and upon the mutual written approval of both Districts, the Districts' dispute shall be referred to private arbitration. Arbitration shall be conducted according to the provisions set forth in California Code of Civil Procedure sections 1280 through 1294.2, or any successor provisions thereto, except as otherwise provided in this Section 19. The Districts acknowledge and agree that arbitration is often well-suited to the resolution of disputes which are primarily fact-based rather than those primarily based upon legal principles.

19.4 Other Formal Dispute Resolution Proceedings. In the event adversarial dispute resolution proceedings are required and the Districts do not mutually agree in writing to arbitration, either District may commence an adversarial proceeding before any tribunal which has the required legal authority and jurisdiction to hear and finally determine the Districts' dispute.

19.5 Recovery of Attorneys' Fees. In any arbitration under Section 19.3 or any action or proceeding commenced under Section 19.4, the prevailing District, as determined by the tribunal, shall be entitled to recover its litigation expenses and attorneys' fees as determined by the tribunal.

20. Termination.

20.1 Mutual Termination. The Districts may mutually agree in writing to terminate this Agreement, in which case the date of termination shall be the effective date of the agreement to terminate.

20.2 Termination for Event of Default. If a District repeatedly breaches the material provisions of this Agreement and fails to cure such breaches within the time periods set forth in Section 16.1, and if the breaches, when viewed as a whole, demonstrate that it is no longer reasonable for the non-breaching District to remain a party to this Agreement, the non-breaching District may seek a court order terminating this Agreement. In such case, the termination shall not become effective until three (3) years following the court order terminating the agreement, unless the Districts otherwise agree in writing. Notwithstanding the foregoing, in no event may TCSD seek termination of this Agreement while any Existing, Future or Anticipated Financings is outstanding unless TCSD first pays to SMCS D TCSD's share of outstanding principal and interest of such debt calculated in accordance with Section 6.3.e, or TCSD provides such other financial assurances for payment as may be fully satisfactory to both SMCS D and the entity issuing the financing, as determined by each in their sole discretion.

20.3 Payments Required Upon Termination. In the event this Agreement is terminated, each District shall pay the other, within forty-five (45) days of the date of termination, any and all amounts owed under this Agreement as of the date of termination, unless other equally satisfactory arrangements have been agreed to in writing by the other District prior to termination.

20.4 No Reimbursement to TCSD for Capital Costs. In the event this Agreement is terminated, absent a separate agreement to the contrary, SMCS D shall have no obligation to reimburse TCSD for any Capital Costs paid by TCSD for Existing Wastewater Facilities or for Wastewater facilities or equipment that are constructed or purchased after the Effective Date of this Agreement.

21. Miscellaneous Provisions.

21.1 Notices. Any notice which a District is required by this Agreement to give to the other District shall be in writing and either hand delivered or sent by first class mail, postage prepaid addressed as follows:

To **SMCS D**:

General Manager
Sausalito-Marín City Sanitary District
1 East Road
Sausalito, CA 94965

To TCSD:

General Manager
Tamalpais Community Services District
305 Bell Lane
Mill Valley, CA 94941

21.2 Governing Law. This Agreement is made in the State of California and shall be enforced and interpreted under its constitution and laws.

21.3 No Waiver. Any waiver by either party of any term or provision of this Agreement must be in writing. No waiver shall be implied from any delay or failure by either party to take action on any breach or default hereunder or to pursue any remedy allowed under this Agreement or applicable law. No failure or delay by either party at any time to require strict performance by the other party of any provision of this Agreement or to exercise any election contained herein or any right, power or remedy hereunder shall be construed as a waiver of any other provision or any succeeding breach of the same or any other provision hereof or a relinquishment for the future of such election.

21.4 Amendment. This Agreement may not be amended except in writing. Any such amendment must be duly and regularly approved and executed by the governing boards of both Districts.

21.5 Severability. Should any portion of this Agreement be determined by any court or other tribunal having jurisdiction to make such a determination to be illegal, invalid or otherwise unenforceable or ineffectual, the validity of the remaining portions of the Agreement shall not be affected by that determination.

21.6 Successors. This Agreement is binding upon and shall inure to the benefit of the Districts and their respective successors in interest. Except as expressly provided for in this Agreement, or by any amendment to this Agreement, neither District may assign any right or obligation under this Agreement without the express written consent of the other District.

21.7 Superseding Effect. This Agreement supersedes in its entirety the 2001 Agreement, and all prior oral or written agreements, understandings and negotiations between the Districts with respect to the subject matter of this Agreement except and to the extent such agreements, understandings and negotiations are expressly incorporated into this Agreement.

21.8 No Third Party Beneficiaries. This Agreement is made and entered into for the benefit of the Districts and their permitted successors and assigns, and no other persons or entities shall have any right pursuant to this Agreement.

21.9 Contract Interpretation. Both Districts have been represented by counsel in the preparation of this Agreement and no presumption or rule that ambiguity shall be construed against a drafting party shall apply to interpretation or enforcement of the Agreement. The captions in this Agreement are solely for convenience of reference. They are not part of this Agreement and shall have no effect on its construction or interpretation.

21.10 Counterparts. This Agreement may be executed in counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same agreement.

21.11 Administrative and Civil Liability. In the event that SMCSO is subject to an administrative or civil action related to the collection, treatment or disposal of Wastewater, TCSD shall pay the same percentage of such costs as the percentage for TCSD's Share of Plant O&M Costs most recently calculated pursuant to Section 6.2.b for response to such action, including but not limited to, any penalties, fines, damages, attorneys' fees or expert fees. This obligation by TCSD shall be limited to liability arising from operations of the Plant and facilities within the Shared Collection System.

21.12 Exhibits. The following Exhibits are attached to this Agreement and are incorporated by reference:

Exhibit A – Contribution of Flows

Exhibit B – Anticipated Capital Projects

Exhibit C – TCSD Forcemain

Exhibit D – SMCSO Territorial Jurisdiction (as of the Effective Date)

Exhibit E – TCSD Territorial Jurisdiction (as of the Effective Date)

Exhibit F – TCSD Repayment Schedule for Existing Financing

Exhibit G – TCSD Repayment Schedule for Existing Interdistrict Loan

Exhibit H – Insurance Requirements

[EXECUTION PAGE FOLLOWS.]

IN WITNESS WHEREOF, the Districts have executed this instrument as of the date set forth above.

SMCSD:

SAUSALITO-MARIN CITY SANITARY DISTRICT

By: _____
Board President

ATTEST:

By: _____
District Secretary

APPROVED AS TO FORM:

By: _____
District Counsel

TCSD:

TAMALPAIS COMMUNITY SERVICES DISTRICT

By: _____
Board President

ATTEST:

By: _____
District Secretary

APPROVED AS TO FORM:

By: _____
District Counsel

1805750.6

Exhibit A

Contribution of Flows

Exhibit B

Capital Projects in October 2010 Report to EPA

Exhibit C

TCSD Forcemain

Exhibit D

SMCSD Territorial Jurisdiction (as of the Effective Date)

Exhibit E

TCSD Territorial Jurisdiction (as of the Effective Date)

Exhibit F

TCSD Repayment Schedule for Existing Financing

Exhibit G

TCSD Repayment Schedule for Existing Interdistrict Loan

Exhibit H

Insurance

1994648.2

SAUSALITO-MARIN CITY SANITARY DISTRICT

RESOLUTION NO. 972

A RESOLUTION AUTHORIZING EXECUTION AND APPROVAL OF AGREEMENT DATED JANUARY 1, 2013 BETWEEN SAUSALITO-MARIN CITY SANITARY DISTRICT AND TAMALPAIS COMMUNITY SERVICES DISTRICT

RESOLVED, by the Board of Sausalito-Marin City Sanitary District, Marin County, CA that

WHEREAS, the Sausalito-Marin City Sanitary District (SMCSD) and Tamalpais Community Services District (TCSD) have had for many years a mutually beneficial service relationship that provides for collection, treatment and disposal of wastewater from a portion of TCSD's service area and the reimbursement of a proportional share of SMCSD costs to construct, operate, maintain and renew facilities used for that purpose.

WHEREAS, the terms and conditions by which SMCSD provides service to TCSD and TCSD compensates SMCSD for that service has been memorialized in a series of successive agreements dating back to 1955.

WHEREAS, the Districts recognized that changes in circumstances since the time when the latest Wastewater Collection, Treatment, and Disposal Agreement dated March 2001 had been entered into, require that the terms by which SMCSD provides wastewater collection, treatment, and disposal service to TCSD, and by which TCSD pays for that service, be updated and renegotiated to better meet the needs of the Districts.

WHEREAS, the Districts formed Board Ad hoc Committees to meet and confer with respect to proposed changes to the terms of the 2001 agreement.

WHEREAS, the Districts' Ad hoc Committees have completed negotiations and reached agreement and have recommended that their respective Board approve the Agreement, which is attached hereto.

WHEREAS, the negotiated agreement addresses:

- the implementation of long term improvement programs by the Districts to reduce inflow and infiltration, which cause or contribute to sanitary sewer overflows and the wet weather treatment management practice known as blending. USEPA and the Regional Water Board will be discontinuing blending as an approved peak wet weather flow treatment practice,
- financing of TCSD capital charges over the life of the capital asset to spread costs and provide for long term stability and predictability of SMCSD's capital charges to TCSD,
- a new cost apportionment formula that is based on rigorous engineering analysis of peak wet weather and annual average flow rates reported to USEPA and the Regional Water Board by the Districts.

WHEREAS, District Counsel has approved the agreement as to form.

NOW, THEREFORE BE IT RESOLVED by the District Board as follows:

1. The Agreement between Sausalito-Marin City Sanitary District and Tamalpais Community Services District is hereby accepted and approved.
2. The President of the Sausalito-Marin City Sanitary District is hereby authorized and instructed to execute said agreement on behalf of the District.

I certify that the foregoing Resolution was duly and regularly adopted by the Board of Directors of the Sausalito-Marin City Sanitary District, Marin County, California, at a meeting held on December 19, 2012, by the following vote.

AYES, and in favor thereof, Directors: Arnott, Beers, Gergus, Rheiner, Ring

NOES, Directors:

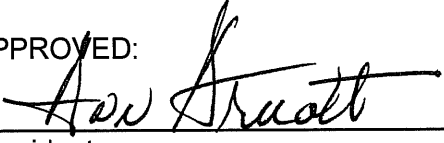
ABSTAIN, Directors:

ABSENT, Directors:


Secretary

Sausalito-Marin City Sanitary District

APPROVED:



President

Appendix D-2

District Code (May 2016) (<http://smcsd.net>)



SAUSALITO-MARIN CITY SANITARY DISTRICT

#1 EAST ROAD

SAUSALITO, CALIFORNIA

(415) 332-0244 [p] (415) 332-0453 [f]

Sausalito-Marin City

Sanitary District

Code

Adopted by Board Action on
May 2, 2016

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Title 1

ADMINISTRATION

Chapters:

1.05 Board of Directors Meetings

1.10 Directors' Fees

Chapter 1.05**BOARD OF DIRECTORS MEETINGS**

Sections:

- 1.05.010 Regular meetings.
- 1.05.020 Special meetings.
- 1.05.030 Meeting place.
- 1.05.040 District office and mailing address.
- 1.05.050 Order of business.
- 1.05.060 Rules of proceedings.

1.05.010**Regular meetings.**

The regular meetings of the Board of Directors of the Sausalito-Marin City Sanitary District shall hereafter be held on the first Monday at 7:00 p.m. and third Monday at 4:00 p.m. of each and every calendar month until this board shall, by ordinance, resolution or vote otherwise provide. In the event that any day fixed for a meeting of the board shall fall upon a holiday, or be otherwise inconvenient for a majority of the board, then the meeting scheduled for such day shall be held on a day agreed upon by the board which is not a holiday, at the regular hour and place of meeting. [Ord. 90 § 1, 2013; Ord. 69 § 1, 1994; Ord. 57 § 1, 1989; Ord. 4 § 1, 1953; Ord. 1 § 1, 1951.]

1.05.020**Special meetings.**

Special meetings of the Board of Directors shall be held upon call of the president of said board, or of three members thereof, by written notice to be delivered personally or by mail or electronic mail to each member not less than 24 hours before the time fixed for the proposed meeting. In the event of any member not being present at his/her office or residence when service is attempted, such service may be made by leaving such notice in the hands of any occupant of either his/her office or residence, and if no occupant be there present at such time, then by posting same at or near the door of either such office or residence. Such notice shall specify the time and place of the special meeting and the business to be transacted, and no other business shall be considered at such meeting. Attendance at such meeting by any member shall be deemed a sufficient compliance and waiver of the

provisions herein for notice to him/her. [Ord. 4 § 2, 1953; Ord. 1 § 2, 1951.]

1.05.030**Meeting place.**

Regular and Special meetings of the board shall be held either at the City of Sausalito City Hall Chambers located at 420 Litho Street, Sausalito CA or at the District Office Board Room, located at 1 East Road, Sausalito, California unless it shall adjourn to or fix another place, or unless prevented by flood, fire or other disaster, or unless otherwise agreed by the members. [Ord. 66 § 1, 1992; Ord. 1 § 3, 1951.]

1.05.040**District office and mailing address.**

The district office shall be located at 1 East Road, Sausalito, California, on the district sewage treatment plant site; and the official mailing address of said district and its board is hereby established as:

1 East Road

Sausalito, California 94965

[Ord. 41 § 1, 1978; Ord. 1 § 4, 1951.]

1.05.050**Order of business.**

The order of business at the regular meetings of said board shall be as follows:

- A. Roll call.
- B. Reading of minutes.
- C. Reading of reports.
- D. Reading of communications.
- E. Reading of petitions.
- F. Unfinished business.
- G. New business.
- H. Allowance of claims.
- I. Adjournment. [Ord. 1 § 5, 1951.]

1.05.060**Rules of proceedings.**

A. Public Meetings. All legislative sessions of the board, whether regular or special, shall be open to the public.

B. Quorum. A majority of the board shall constitute a quorum for the transaction of business.

C. Adjournment. When a meeting may not be opened or further action may not be had at a

regularly opened meeting, for want of a quorum said meeting may be adjourned to a day and hour certain by the secretary or any member of the board, and notice of such adjournment shall be given for the time and in the manner provided for calling special meetings, excepting that the purpose of the adjourned meeting need not be stated.

D. Method of Action. The board shall act only by ordinance, resolution or motion, unless otherwise provided by law.

E. Ordinances. Ordinances shall be signed by the president and countersigned by the secretary; they shall be published once in a newspaper published in the district and shall take effect upon the expiration of the week of publication.

F. Execution of Documents. All contracts, deeds, warrants, releases, receipts, and documents shall be signed in the name of the district by its president and countersigned by its secretary.

G. Robert's Rules. In all other regards such meetings shall be conducted in conformity with Robert's Rules of Order. [Ord. 1 § 6, 1951.]

Chapter 1.10

DIRECTORS' FEES

Sections:

1.10.010 Directors' Fees.

1.10.010

Directors' Fees.

The directors' fees payable to members of the Board of Directors of the Sausalito-Marín City Sanitary District shall be \$160.00 per meeting or day of service as of the effective date of the ordinance codified in this chapter. [Ord. 77 § 1, 2001.]

Title 2**SEWER REGULATION****Chapters:**

- 2.05 Definitions**
- 2.10 General Provisions**
- 2.15 Use of Public Sewers Required**
- 2.20 Private Sewage Disposal**
- 2.25 Uniform Plumbing Code**
- 2.30 Lateral Sewers and Connections**
- 2.33 Inspection, Repair or Replacement of Private Laterals**
- 2.35 Public Sewer Construction**
- 2.40 Use of Public Sewers**
- 2.45 Permits and Fees**
- 2.50 Marinas and Trailer Parks**
- 2.53 Mercury Reduction**
- 2.55 Enforcement**
- 2.60 Miscellaneous Provisions**
- 2.65 Fats, Oils and Grease**

Chapter 2.05**DEFINITIONS**

Sections:

- 2.05.010 A.
- 2.05.020 B.
- 2.05.030 C.
- 2.05.040 D.
- 2.05.050 E.
- 2.05.060 F.
- 2.05.070 G.
- 2.05.080 H.
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- 2.05.160 P.
- 2.05.170 Q.
- 2.05.180 R.
- 2.05.190 S.
- 2.05.200 T.
- 2.05.210 U.
- 2.05.220 V.
- 2.05.230 W.
- 2.05.240 X.
- 2.05.250 Y.
- 2.05.260 Z.
- 2.05.270 Additional definitions.

2.05.010**A.**

“Applicant” means the person making application for a permit for a sewer or plumbing installation and shall be the owner of premises to be served by the sewer for which a permit is requested, or his/her authorized agent. [Ord. 21 § 111, 1964.]

2.05.020**B.**

“Backwater valve” means a device installed in a drainage system to prevent reverse flow.

“Board” means the Board of Directors of said district.

“Building” means any structure or vessel used for human habitation or a place of business, recreation or other purpose containing sanitary facilities.

“Building sewer” means that portion of any sewer beginning at the plumbing or drainage outlet of any building or industrial facility, beginning two (2) feet outside the building wall, and running to the public sewer or to a private sewage disposal system. [Ord. 21 §§ 104, 110, 124, 1964.]

2.05.030**C.**

“City” means the City of Sausalito.

“Combined sewer” means a sewer receiving both surface runoff and sewage.

“Contractor” means an individual, firm, corporation, partnership or association duly licensed by the state of California to perform the type of work to be done under the permit.

“County” means the county of Marin, California. [Ord. 21 §§ 102, 103, 112, 119, 1964.]

2.05.040**D.**

“Deadline” means the date something is due, but if a deadline to complete a task or submit a form falls on a weekend or legal holiday, the due date shall be the next business day following the weekend or legal holiday.

“District” means the Sausalito-Marin City Sanitary District, Marin County, California.

“District engineer” means the engineer either appointed, or a hired firm or person, that acts as the project engineer of record for the board and shall be a registered civil engineer.

“District inspector” means the inspector acting for the board or General Manager and may be a member of the board, the district engineer or inspector appointed by the board.

“District secretary” means the secretary of said board. [Ord. 21 §§ 101, 105, 106, 107, 1964.]

2.05.050**E.**

Reserved.

2.05.060**F.**

“Fixture” means any facility connected to a sewer by a drain, such as a bathtub, shower, washbasin, toilet, urinal, kitchen sink, dishwasher, laundry tub, washing machine, etc., each counted separately no matter whether a

number of fixtures are contained in one washroom, bathroom or kitchen.

“Fixture unit” means fixture unit load values for drainage piping and shall be computed from Tables 1 and 2 of Chapter 4 of the Uniform Plumbing Code adopted herein.

“Floating home” means any boat, craft, living accommodation or structure supported by means of flotation, designed to be used without a permanent foundation which is used for human habitation, or as judged so by the district engineer.

“Floating home marina” means an area within the district covered by the waters of Richardson’s Bay which contains one or more berthing spaces for floating homes, either permanently or on a temporary basis when authorized by the City of Sausalito or the county of Marin. [Ord. 29 § 1, 1972; Ord. 21 §§ 133, 135, 136, 137, 1964.]

2.05.070

G.

“Garbage” shall include any or all of the following: garbage, swill, refuse, cans, bottles, papers, vegetable matter, carcasses of dead animals, offal, trash, rubbish and radioactive waste material. [Ord. 21 § 129, 1964.]

“General Manager” means the Manager of the District with all authority granted by the Board of Directors and District policies and procedures.

2.05.080

H.

Reserved.

2.05.090

I.

“Industrial waste” means any and all liquid or solid waste substance, not sewage, from any producing, manufacturing or processing operation of whatever nature. [Ord. 21 § 116, 1964.]

2.05.100

J.

Reserved.

2.05.110

K.

Reserved.

2.05.120

L.

“Lateral sewer” means the portion of a sewer connecting a private building sewer to the public main sewer. [Ord. 21 § 123, 1964.]

2.05.130

M.

“May” means permissive.

“Main sewer” means a public sewer designed to accommodate more than one lateral sewer.

“Moor” means the fixing of a vessel in one location, temporarily or permanently, by mooring, anchoring, grounding, or by any other means. [Ord. 21 §§ 122, 131, 1964.]

2.05.140

N.

Reserved.

2.05.150

O.

“Outside sewer” means a sanitary sewer beyond the limits of the sanitary district not subject to the control or jurisdiction of the district. [Ord. 21 § 127, 1964.]

2.05.160

P.

“Permit” means any written authorization required pursuant to this or any other regulation of the district for the installation of any sewage works.

“Person” means any human being, individual, firm, company, partnership, association and private or public or municipal corporations, the United States of America, the state of California, districts and all political subdivisions, governmental agencies and mandatories thereof.

“Private sewer” means a sewer serving an independent sewage disposal system not connected with a public sewer and which accommodates one or more buildings or industries.

“Public sewer” means a sewer which is controlled by or under the jurisdiction of the district. [Amended by district during 2016 codification: Ord. 21 §§ 108, 109, 118, 126, 1964.]

2.05.170**Q.***Reserved.***2.05.180****R.***Reserved.***2.05.190****S.**

“Shall” means mandatory

“Sanitary sewer” means a sewer which carries sewage and to which storm, surface and groundwaters are not intentionally admitted.

“Sewage” means any and all waste substances, liquid or solid, associated with human habitation or which contains or may be contaminated with human or animal excreta or excrement, offal, or any feculent matter.

“Sewage treatment plant” means any arrangement of devices and structures used for treating sewage.

“Sewage works” means all facilities owned or controlled by the district for collecting, pumping, treating and disposing of sewage.

“Sewer” means a pipe or conduit for carrying sewage.

“Side sewer or Private Sewer Lateral” means the private property sewer line (or building sewer) beginning two (2) feet outside the foundation wall of any building and terminating at the main sewer.

“Single-family unit” means the place of residence for a single family. Property improved for multifamily purposes shall constitute the number of units that the facilities thereon provide in number of facilities for single-family units. When such improvements are for other than residential purposes, the number of units shall be determined by dividing the total number of persons regularly using or occupying said premises by three. When said property is unimproved, a single lot shall be such unit. When such property is unsubdivided, it shall be deemed to have five lots to the acre, unless the Board of Directors, in its discretion, specially fixes some other number of lots therefor. When said property is a trailer court, trailer park or mobile home park, it shall be deemed to have the number of units for which spaces are provided.

“Standard Sewer Specifications” means the most recent District standard specifications for sewer system design and construction.

“Storm sewer” or “storm drain” means a sewer which carries storm and surface or groundwaters and drainage, but excludes sewage and polluted industrial wastes.

“Street” means any public highway, road, street, avenue, alley, way, public place, public easement or right-of-way. [Ord. 21 §§ 113, 114, 115, 117, 120, 121, 125, 128, 134, 1964.]

2.05.200**T.**

“Transient vessel” means any vessel temporarily moored within the geographic limits of the district, which is occupied for a period of less than 10 consecutive days, or 20 days in any calendar month. [Ord. 21 § 132, 1964.]

2.05.210**U.***Reserved.***2.05.220****V.**

“Vessel” means any water craft of any type or size, including but not limited to barges, ferryboats, tour boats, excursion boats, arks, yachts, houseboats or rafts. [Ord. 32 § 1, 1973; Ord. 21 § 130, 1964.]

2.05.230**W.***Reserved.***2.05.240****X.***Reserved.***2.05.250****Y.***Reserved.***2.05.260****Z.***Reserved.*

2.05.270**Additional definitions.**

For the purpose of this title, additional terms shall have the meaning indicated in Chapter 1 of the Uniform Plumbing Code as adopted herein. [Ord. 29 § 1, 1972; Ord. 21 § 135, 1964.]

Chapter 2.10**GENERAL PROVISIONS**

Sections:

- 2.10.010 Rules and regulations.
- 2.10.020 Purpose.
- 2.10.030 Short title.
- 2.10.040 Posting and publication.
- 2.10.050 Violation unlawful.
- 2.10.060 Grants of waivers.
- 2.10.070 Limitations on waivers.
- 2.10.080 Necessary determinations.
- 2.10.090 Procedures.
- 2.10.100 District inspector – Compensation.
- 2.10.110 Permits and fees.

2.10.010**Rules and regulations.**

The following rules and regulations respecting sewer construction and disposal of sewage and drainage of buildings and connection to the sewage works of the district are hereby adopted, and all work in respect thereto shall be performed as herein required and not otherwise. [Ord. 21 § 201, 1964.]

2.10.020**Purpose.**

This title is intended to provide rules and regulations for the use and construction of sanitary sewer facilities hereafter installed, altered or repaired within the district.

The local collection sewer system within the City limits shall be installed, altered or repaired under the rules and subject to the jurisdiction of the City. This title shall not apply retroactively and, in the event of an alteration or repair hereafter made, it shall apply only to the new materials and methods used therein. [Ord. 21 § 202, 1964.]

2.10.030**Short title.**

This title shall be known as the “District code of the Sausalito-Marín City Sanitary District.” [Amended by district during 2016 codification: Ord. 21 § 203, 1964.]

2.10.040**Posting and publication.**

The adoption of the ordinance codified in this title shall be entered in the minutes of the Board of Directors, shall be published once in the local newspaper of general circulation printed and published in the district, within one week following its passage and adoption, and shall take effect and be in force and effect immediately upon the expiration of one week of publication. [Ord. 21 § 204, 1964.]

2.10.050**Violation unlawful.**

Following the effective date of the ordinance codified in this title, it shall be unlawful for any person to connect to, construct, install or provide, maintain and use any other means of sewage disposal from any building in said district except by connection to a public sewer in the manner as in this title provided, or in the manner and subject to the regulations of the City if the building lies within the corporate limits of the City. [Ord. 21 § 205, 1964.]

2.10.060**Grants of waivers.**

Subject to the other provisions of this title, the district board may grant waivers from compliance with the provisions of district ordinances, rules and regulations, either in whole or in part. A waiver may be granted on the board's own motion or upon the application of any person pursuant to District code 2.10.090(A). [Ord. 80 § 1, 2003.]

2.10.070**Limitations on waivers.**

No waiver shall be granted if the waiver would result in a violation of any statute, regulation, order, or other provision of law promulgated or enacted by a federal, state or local government entity having jurisdiction over the matter in question. [Ord. 80 § 2, 2003.]

2.10.080**Necessary determinations.**

A. Required Determinations. A waiver may be granted only upon the determination by the district board that:

1. In the absence of a waiver, the strict application of the provisions of the ordinance, rule or regulation in question would result in a substantial hardship peculiar to a person or persons that is not generally applicable to other persons similarly situated;

2. The waiver is necessary for the preservation and enjoyment by a person or persons of substantial personal and/or property rights possessed by other persons similarly situated, and granting of the waiver will not accord a special privilege to a person or persons who may benefit from it; and

3. The waiver will not be materially detrimental to the public health, safety and welfare, nor will it result in undue hardships to other persons.

B. Resolution Required. Whenever the board determines that a waiver should be granted, the board shall do so by adopting a resolution specifying the terms of the waiver and any conditions upon which the waiver grant may be made. The resolution shall include findings of fact supporting the board's determinations, including those required by subsection (A) of this section. [Ord. 80 § 3, 2003.]

2.10.090**Procedures.**

A. On Board's Own Motion. A proposal by a board member or the General Manager to grant a waiver on the district board's own motion shall be agendaized for consideration at a regular or special meeting of the board in the same manner as other items of district business.

B. Request by Others. Persons other than board members or the General Manager may request that a waiver be granted by the district board by satisfying the following requirements:

1. Applications for waivers shall be submitted in writing, accompanied by a fee of \$200.00. The application shall be considered and acted upon promptly by the district board at a regular or special meeting. The district board may schedule a public hearing on the application, in which event the district board shall cause notice of the public hearing to be given in such manner as it determines is adequate considering the circumstances.

2. The burden of establishing facts to support the necessary determinations supporting

a waiver shall be upon the applicant. The district board may deny any application if the applicant fails to supply sufficient relevant information, including documents and records, to enable the district board to make the necessary determinations.

3. In addition to the application fee required by subsection (B)(1) of this section, the district board may impose additional reasonable fees and charges to cover the costs to the district of considering the application, including the costs of giving notice of a public hearing and the costs of administration, engineering, legal and other costs which the board deems necessary to evaluate the application. [Ord. 80 § 4, 2003.]

2.10.100

District inspector – Compensation.

The district board shall employ some fit and qualified person or persons to perform the duties of inspecting the installation, connection, maintenance and use of all side sewers, public sewers, private sewers and facilities in connection therewith in said district, to be known as the district inspector. The person so employed shall receive as compensation for his/her services for making inspections required to be made by the ordinances and orders and regulations from time to time enacted and ordered by the board, a sum to be fixed by the board. The inspector shall serve at the pleasure of the board and may be another official of the district. [Ord. 21 § 208, 1964.]

2.10.110

Permits and fees.

No public sewer or other sewerage facility within a public right-of-way or public easement shall be installed, altered or repaired within the district, except when such sewers lie within the City, in which case the regulations of the City shall apply, until a permit for the work has been obtained from the district and all fees paid in accordance with the requirements of Chapter 2.45 of District code. [Ord. 21 § 209, 1964.]

Chapter 2.15

USE OF PUBLIC SEWERS REQUIRED

Sections:

- 2.15.010 Disposal of wastes.
- 2.15.020 Treatment of wastes required.
- 2.15.030 Unlawful disposal.
- 2.15.040 Occupancy prohibited.
- 2.15.050 Sewer connection – When mandatory.

2.15.010

Disposal of wastes.

It shall be unlawful for any person to place, deposit, or permit to be deposited in any unsanitary manner upon public or private property within the district, or in any area under the jurisdiction of said district, any human or animal excrement, garbage, or other objectionable waste. [Ord. 21 § 301, 1964.]

2.15.020

Treatment of wastes required.

It shall be unlawful to discharge to any stream or watercourse any sewage, industrial wastes, or other polluted waters, except where suitable treatment has been provided in accordance with provisions of this title. [Ord. 21 § 302, 1964.]

2.15.030

Unlawful disposal.

Except as herein provided, it shall be unlawful to construct or maintain any privy, privy vault, septic tank, cesspool, seepage pit or other facility intended or used for the disposal of sewage. [Ord. 21 § 303, 1964.]

2.15.040

Occupancy prohibited.

No building, industrial facility or other structure shall be occupied until the owner of the premises has complied with all rules and regulations of the district. [Ord. 21 § 304, 1964.]

2.15.050

Sewer connection – When mandatory.

Following the effective date of the ordinance codified in this title, it shall be unlawful for any person to connect to, construct, install, provide,

maintain and use any other means of sewage disposal in said district, except connection with the sewerage system of said district or the sewerage system of the City, for any house or building or for any vessel, other than a transient vessel, moored within the district, in the manner in this title provided. [Ord. 21 § 305, 1964.]

Chapter 2.20

PRIVATE SEWAGE DISPOSAL

Sections:

- 2.20.010 Sewer not available.
- 2.20.020 Permit required.
- 2.20.030 Inspection required.
- 2.20.040 Design requirements.
- 2.20.050 Abandonment of facilities.
- 2.20.060 Cost of maintenance by owner.
- 2.20.070 Additional requirements.

2.20.010

Sewer not available.

Where a public sewer is not available to satisfy the provisions of District code 2.15.050, the building sewer shall be connected to a private sewage disposal system complying with the provisions of this title. [Ord. 21 § 401, 1964.]

2.20.020

Permit required.

Before commencement of construction of a private sewage disposal system, the owner shall first obtain a written permit signed by the General Manager or secretary of the district. The application for such permit shall be made on a form furnished by the district, which the applicant shall supplement by any plans, specifications and other information as deemed necessary by the secretary. A permit and inspection fee shall be paid to the district at the time application is filed in accordance with the provisions of this title. [Ord. 21 § 402, 1964.]

2.20.030

Inspection required.

A permit for a private sewage disposal system shall not become effective until the installation is completed to the satisfaction of the district inspector. The district inspector shall be allowed to inspect the work at any stage of construction and, in any event, the applicant for the permit shall notify the district inspector when the work is ready for final inspection, and before any underground portions are covered. The inspection shall be made within 48 hours, Sundays and holidays excluded, of the receipt of the notice by the district inspector. [Ord. 21 § 403, 1964.]

2.20.040**Design requirements.**

The type, capacities, location and layout of a private sewage disposal system shall comply with the District's Standard Sewer Specifications and all recommendations of the Department of Public Health of the state of California, the health officer of the county and the building department of the county. No permit shall be issued for any private sewage disposal system employing subsurface soil absorption facilities where the characteristics of the property do not indicate sufficient soil absorption qualities. No septic tank, cesspool, anaerobic tank or chemical process shall be permitted to discharge to any public sewer or any stream or watercourse. [Ord. 21 § 404, 1964.]

2.20.050**Abandonment of facilities.**

At such time as a public sewer becomes available to a property served by a private sewage disposal system, as provided in District code 2.15.050, a direct connection shall be made to the public sewer in compliance with the ordinances, rules and regulations of the district, and any septic tanks, cesspools, anaerobic tanks, chemical processes and similar private sewage disposal facilities shall be abandoned and filled with suitable material as determined by the district inspector. [Ord. 21 § 405, 1964.]

2.20.060**Cost of maintenance by owner.**

The owner shall operate and maintain the private sewage disposal facilities in a sanitary manner at all times, at no expense to the district. [Ord. 21 § 406, 1964.]

2.20.070**Additional requirements.**

No statement contained in this chapter shall be construed to interfere with any additional requirements that may be imposed by any law, ordinance, rule or regulation or by the health officer or building inspector of the county. [Ord. 21 § 407, 1964.]

Chapter 2.25**UNIFORM PLUMBING CODE****Sections:**

- 2.25.010 Uniform Plumbing Code adopted.
- 2.25.020 Administrative authority.

2.25.010**Uniform Plumbing Code adopted.**

The 2013 California Plumbing Code (CPC), incorporates the 2012 Uniform Plumbing Code with State of California amendments, copies of which are on file in the office of the district for use and examination by the public. is hereby adopted as the Uniform Plumbing Code of the Sausalito-Marín City Sanitary District, to which reference is hereby made and is hereby adopted by reference as if set forth in full herein. The CPC shall apply to the installation, alteration, repair and replacement of plumbing systems, including equipment, appliances, fixtures, fittings and appurtenances thereto. Future versions and revisions to the CPC are prospectively adopted as the plumbing code of the district. [Amended by district during 2016 codification: Ord. 21 § 501, 1964.]

2.25.020**Administrative authority.**

Wherever the term "administrative authority" is used in the Uniform Plumbing Code, it shall be construed to mean only those persons duly authorized by the sanitary district board to administer the code as follows:

Administration of the code and enforcement of regulations thereof shall be under the direction of the district board.

Sewer mains and laterals outside of the building plumbing and drainage system shall be inspected by the district inspector.

The interpretation of technical provisions of this title, review of plans and specifications required thereby, determination of the suitability of alternate materials and types of construction and the development of rules and regulations covering unusual conditions not inconsistent with the requirements of this title shall be made by the district engineer. [Ord. 21 § 502, 1964.]

Chapter 2.30**LATERAL SEWERS AND CONNECTIONS**

Sections:

- 2.30.010 Permit required.
- 2.30.020 Construction requirements.
- 2.30.030 Minimum size and slope.
- 2.30.040 Repealed.
- 2.30.050 Cleanouts.
- 2.30.060 Sewer too low.
- 2.30.070 Connection to public sewer.
- 2.30.080 Protection of excavation.
- 2.30.090 Maintenance of side sewer.

2.30.010**Permit required.**

In accordance with Chapter 2.60 of District code no person shall construct a lateral sewer or make a connection with any public sewer without first obtaining a written permit from the district and paying all fees and connection charges as required therein. [Ord. 21 § 601, 1964.]

2.30.020**Construction requirements.**

Construction of lateral sewers, when subject to the jurisdiction of the district, shall be in accordance with the requirements of the County, Uniform Plumbing Code, and all other requirements of the district. [Ord. 21 § 602, 1964.]

2.30.030**Minimum size and slope.**

The minimum size of sewers shall be in accordance with the Uniform Plumbing Code and district standard specifications, as said code and specifications are heretofore or hereafter adopted by the district. [Ord. 21 § 603, 1964.]

2.30.040**Separate sewers.**

Repealed by Ord. 89. [Ord. 64 § 1, 1991; Ord. 38 § 1, 1977; Ord. 21 § 604, 1964.]

2.30.050**Cleanouts.**

Cleanouts in sewers subject to the jurisdiction of the district shall be provided in accordance with the most recent Uniform Plumbing Code and

other Sausalito-Marin City Sanitary District requirements. Cleanouts shall be the same diameter as the sewer. All cleanouts shall be maintained watertight and shall be constructed in accordance with the specifications established by the district. [Ord. 21 § 605, 1964.]

2.30.060**Backwater valves or lifting
required if sewer too low.**

Backwater valves are required if fixtures are installed on a floor level that is lower than the cover of the next upstream manhole cover of the public or private sewer to which the building's lateral is connected. Fixtures on such floor level that are not below the next upstream manhole cover are not required to be protected by a backwater valve. Fixtures on floor levels above such elevation shall not discharge through the backwater valve. In all buildings in which any building sewer is too low to permit gravity flow to the public sewer, sanitary sewage carried by such building sewer shall be lifted by artificial means, approved by the district engineer, and discharged to the public sewer at the expense of the owner. [Amended by district during 2016 codification: Ord. 21 § 606, 1964.]

2.30.070**Connection to public sewer.**

The connection of the building sewer into the public sewer shall be made in accordance with the specifications for such connections established by the district, including the installation of backwater valves on all connections. The connection to the public sewer shall be made in the presence of the district inspector or the district engineer, and under his/her supervision and direction. Any damage to the public sewer shall be repaired at the cost of the applicant to the satisfaction of the district inspector or district engineer. [Ord. 21 § 607, 1964.]

2.30.080**Protection of excavation.**

All excavations for a side sewer installation shall be adequately guarded with barricades or lights so as to protect the public from hazard. Streets, sidewalks, parkways and other property disturbed in the course of the work shall be restored in a manner satisfactory to the district,

the City and the county, or any other person having jurisdiction thereover. [Ord. 21 § 608, 1964.]

2.30.090

Maintenance of side sewer.

Side sewers and any backwater valves shall be maintained by the owner of the property served thereby. Where a side sewer provides service to more than one single-family residential unit in a development with common walls, condominium, stock cooperative, community apartment or other similar improvements, the obligation to maintain the side sewer shall be in the homeowners' association or other entity responsible for the maintenance of the property and facilities owned in common. [Ord. 38 § 1, 1977; Ord. 21 § 609, 1964.]

Chapter 2.33

INSPECTION, REPAIR OR REPLACEMENT OF PRIVATE LATERALS

Sections:

- 2.33.010 Definitions.
- 2.33.020 Responsibility and standards for maintenance of private sewer laterals.
- 2.33.030 Public nuisances.
- 2.33.040 When a compliance certificate is required.
- 2.33.050 How to obtain a compliance certificate.
- 2.33.060 Compliance certificate term limits.
- 2.33.070 Conditional compliance certificate.
- 2.33.080 Fees.
- 2.33.090 Appeals.
- 2.33.100 Violations and enforcement.
- 2.33.110 Remedies.

2.33.010

Definitions.

The following terms apply to this title:

A. "Backflow prevention device" shall mean any approved device (backwater valve) that allows wastewater to spill outside of buildings in the event of a blockage.

B. "Cleanout" means a pipefitting and associate piping connected to a sewer pipe that provides access to the pipe for the purposes of inspection, maintenance, and diagnostic purposes.

C. "Complete replacement" means rehabilitation or replacement of the entire length of the private sewer lateral.

D. "Conditional compliance certificate" means a compliance certificate issued by the district when requested by the property owner in order to allow transfer of title to proceed without delay. Conditional compliance certificates shall be valid for a period of 90 days.

E. "Compliance certificate" means a certificate issued by the district indicating that the private sewer lateral complies with the district's standards set forth in this chapter.

F. "Escrow account" means a real estate transaction account into which an applicant deposits funds to obtain a 90-day time extension

pursuant to this chapter to complete the required work on the private sewer lateral.

G. “General Manager” means the General Manager of the Sausalito-Marín City Sanitary District.

H. “Inflow” and “infiltration” mean groundwater and rainwater that enter a sanitary sewer system intended for wastewater flows. Infiltration is water that enters the sewer system through openings in the joints or walls of pipes or manholes. “Inflow” is water that enters the sewer system through direct connections such as uncapped lateral cleanouts, openings in manhole covers, illicit connections, including area drains, catch basins, foundation drains and roof drains.

I. “Non-sanitary-sewer connection” means anything that directly or indirectly conveys inflow to the district’s wastewater system including storm water, surface water, roof runoff, intercepted groundwater or subsurface drainage into sanitary sewers including, but not limited to, downspouts, yard or area drains, or other sources of storm water or runoff.

J. “Private sewer lateral” also means the “side sewer” per District code 2.05.190 and includes that part of the sewer piping that extends from the end of the building drain, as defined by the Uniform Plumbing Code, from two feet outside the outer foundation wall of the structure to the first encountered publicly owned sewer pipe, including the connection.

K. “Repair” and “replacement” mean construction activities performed by a licensed contractor to bring a private sewer lateral into compliance with this chapter. “Repair” means a partial repair of a private sewer lateral while “replacement” applies to the complete length of the private sewer lateral. Lining of a private sewer lateral is considered to be replacement.

L. “Structure” means any structure or building as defined in applicable plumbing code that is provided with public sewer service.

M. “Title transfer” means the sale or transfer of an entire real property estate or the fee interest in that property estate and does not include the sale or transfer of partial interest, including leasehold.

N. “Verification test” means a test to be witnessed by the district’s authorized representative(s) to verify that the private sewer lateral is in compliance with this chapter.

[Amended by district during 2016 codification: Ord. 89 § 1, 2012.]

2.33.020

Responsibility and standards for maintenance of private sewer laterals.

It shall be the responsibility of the property owner to perform all required maintenance, repairs and replacement of the private sewer lateral, including backwater valves, in accordance with district requirements. The standards for maintenance of the private sewer lateral are set forth below.

A. The private sewer lateral shall be kept free from roots, grease deposits, and other solids, which may impede or obstruct flow.

B. All joints shall be watertight and all pipes shall be sound.

C. The private sewer lateral shall be free of any structural defects, such as fractures, sags, cracks, breaks, openings, or missing portions.

D. All cleanouts shall be securely sealed with a cap or backflow prevention device at all times.

E. There shall be no nonsanitary connections or any piping that connects to the private sewer lateral.

F. The private sewer lateral shall be free from measurable quantities of inflow or infiltration. [Amended by district during 2016 codification: Ord. 89 § 2, 2012.]

2.33.030

Public nuisances.

A private sewer lateral constitutes a public nuisance when it is not in compliance with the district’s standards set forth in this chapter. Each day the private sewer lateral is not in compliance with these standards constitutes an additional day of violation. [Ord. 89 § 3, 2012.]

2.33.040

When a compliance certificate is required.

A. Title Transfer. Prior to transferring title to any real property that contains any structure with a private sewer lateral within the district’s wastewater service area, the transferor property owner shall disclose the requirements of this chapter and provide a copy of a valid compliance certificate to: (1) the transferor’s real estate

broker, if any, (2) the transferee, (3) the transferee's real estate broker, if any, and (4) the escrow owner, if any.

B. Change of Customer. Whenever the name on the wastewater/sewer service account is changed for any real property that contains a structure with a private sewer lateral within the district's wastewater service area, the district shall require the new customer to provide a copy of a valid compliance certificate to the district.

C. Construction or Remodeling. Whenever a property owner applies for any permit or other approval needed for construction, remodeling, modification or alterations of any structure with a private sewer lateral within the district's wastewater service area, the property owner shall provide a copy of a valid compliance certificate to the public agency responsible for approving completion of the building permit. Notwithstanding the foregoing, this subsection shall not apply to remodeling modification or alteration work where the total cost of the overall remodel project is less than \$50,000.

D. Change in Use. Whenever a property owner applies for any permit or other approval needed to change the use of any structure with a private sewer lateral within the district's wastewater service area, the property owner shall provide a copy of a valid compliance certificate to the public agency responsible for issuing the permit or other approval. For the purposes of this chapter, the addition of a second dwelling unit shall constitute a change in use.

E. An Individually Owned Unit in a Multi-Unit Structure Served by a Single Lateral or Shared Laterals, such as Condominium or Other Common Interest Development. Within 10 years of the adoption of the ordinance codified in this chapter, the homeowners' association or a responsible party for a multi-unit structure served by a single lateral or shared laterals shall determine if the private sewer lateral(s) is (are) in compliance with District code 2.33.020 and this section and perform any necessary repair or replacement work to achieve compliance.

F. District Request. Whenever a property owner who owns a structure with a private sewer lateral within the district's wastewater service area and who does not possess a valid compliance certificate receives notice from the district requesting that the property owner obtain a

compliance certificate, the property owner shall obtain a compliance certificate within 90 days of receipt of the written notification to the property owner.

G. Exception. A property owner of a structure with a private sewer lateral that is less than 10 years old from the date of (1) intended title transfer, (2) obtaining a permit for remodeling, or (3) obtaining approval for the change in wastewater/sewer service account pursuant to District code 2.33.030, who provides the appropriate evidence, such as a valid building permit showing that the private sewer lateral was replaced in total, may request a compliance certificate. Thereafter, recertification of the private sewer lateral shall occur at 20-year intervals. [Ord. 89 § 4, 2012.]

2.33.050

How to obtain a compliance certificate.

Whenever a compliance certificate is required from the District under this chapter, a property owner who does not hold a valid compliance certificate shall do the following at the property owner's expense, using properly licensed contractors:

A. Repair or Replacement. The property owner shall determine whether the private sewer lateral is in compliance with the district's ordinance requirements. If the private sewer lateral is not in compliance, the property owner shall perform any and all repair and replacement work needed to bring the private sewer lateral into compliance.

B. District Verification. After the property owner determines (through any combination of inspection, repair or replacement) that the private sewer lateral is in compliance with those standards, the property owner shall, upon payment of the required fee, established pursuant to this section, perform verification testing in the presence of the district's employee or agent authorized to witness the test. If the verification testing demonstrates that the private sewer lateral is in compliance with those standards, then the district shall issue a certificate of compliance.

C. Procedures for Verification Testing. The district will maintain written requirements governing the performance of verification testing. These requirements shall be made available to

property owners and their contractors upon request. Property owners and their contractors shall comply with these requirements. [Ord. 89 § 5, 2012.]

2.33.060

Compliance certificate term limits.

When the compliance certificate is obtained as a result of replacement of the private sewer lateral, the compliance certificate shall be valid for 20 years from the date of issuance. When the compliance certificate is obtained without complete replacement (e.g., as a result of repair work or testing without repair), the compliance certificate shall be valid for seven years from date of issuance. [Ord. 89 § 6, 2012.]

2.33.070

Conditional compliance certificate.

The requirement to obtain a compliance certificate from the District prior to transfer of title in no way affects the legality of the transfer of title in the underlying property transaction. If a compliance certificate cannot be obtained prior to title transfer, the property owner may request a time extension of 90 days in which to perform the repairs or replacement required in conjunction with the transfer of property by applying to the district for a conditional compliance certificate.

The conditional compliance certificate request shall be submitted to the district with the required fee established pursuant to this chapter. The conditional compliance certificate shall provide an additional 90 days for completion of the work required to ensure that the private lateral conforms to the requirements of this chapter. Upon issuance of the conditional compliance certificate, the property owner must take one of the following two actions:

A. The property owner must deposit \$4,500 into escrow. Property owners are responsible for the full cost of lateral compliance with district requirements, which may exceed \$4,500 deposit. Once the private sewer lateral passes a verification test, funds will be released in accordance with escrow instructions.

B. Alternatively, the property owner may enter into an agreement with the district, suitable for recording, under which the district will

arrange for the needed work and will collect the costs from the property owner along with the sewer service fees on the tax roll.

If the work is not entirely complete within 90 days of issuance of the conditional compliance certificate, or if the work has been completed but the private sewer lateral still does not comply with this chapter, a violation of this chapter exists, and the district shall take steps to correct the violation. Pursuant to Health and Safety Code Sections 6523.2 and 6523.3, the district may enter onto the property and may repair or replace the private sewer lateral, thereafter collecting the costs of correction along with the sewer service fees. [Ord. 89 § 7, 2012.]

2.33.080

Fees.

The district Board of Directors may establish fees by resolution for administration of this chapter. [Ord. 89 § 8, 2012.]

2.33.090

Appeals.

A. Request for Relief. Any person or entity who is unable to comply with the requirements of this chapter may file with the General Manager a written request for relief within 15 days of becoming aware of their inability to comply, setting forth in detail the facts supporting the request. The request shall be acted upon by the district within 10 days from the receipt of the request.

B. Request for Reconsideration. Within 30 days after the mailing of written notice of any district decision, action, or determination related to this chapter, any person or entity affected by the decision may file with the secretary of the district a written request for reconsideration, setting forth in detail the facts supporting the request. The request for reconsideration shall be placed on a future board agenda within 60 days from the receipt of the request for reconsideration. The decision, action, or determination shall remain in effect during such period of review by the Board of Directors. The Board of Directors decision shall be final. [Ord. 89 § 9, 2012.]

2.33.100**Violations and enforcement.**

The General Manager or designated representative shall enforce the provisions of this chapter as provided for herein.

A. Violations of this chapter include but are not limited to:

1. Failure to obtain compliance certificate when one is required;
2. Failure to either deposit \$4,500 into an escrow account and perform the required work or enter into an agreement with the district pursuant to District code 2.33.070 after receiving conditional compliance certificate;
3. Failure to comply with the district's requirements for repair and replacement testing;
4. Falsifying facts to obtain a compliance or conditional compliance certificate; and/or
5. Presenting a false compliance or conditional compliance certificate.

B. Enforcement.

1. When the General Manager finds that a person or entity violates or threatens to violate the provisions of this title, the General Manager may notify the person in writing. The person or entity will be required within 30 days of the notification mailing date to submit for approval by the General Manager a detailed time schedule of specific actions the person or entity shall take to correct or prevent violation of requirements. The actions must be taken within 60 calendar days of submittal of the time schedule.

2. The General Manager has the authority to take enforcement actions against a person or entity for violating the provisions of this chapter and failing to perform any act required in this chapter including, but not limited to, imposing administrative fees, filing an injunction requiring the work to be done, entering onto the subject property to inspect and, if necessary, perform the work needed to bring the property into compliance, and/or requesting the environment service department of the county of Marin to rescind the occupancy permit for the premises.

C. Violation – Penalties. Any violation of any provisions of this chapter shall be also be deemed a misdemeanor but may be prosecuted, in the discretion of the enforcing officer, as an infraction and shall be punishable as set forth in Section 6523 of the Health and Safety Code of the state of California. [Ord. 89 § 10, 2012.]

2.33.110**Remedies.**

The remedies specified in this chapter are cumulative. [Ord. 89 § 11, 2012.]

Chapter 2.35**PUBLIC SEWER CONSTRUCTION**

Sections:

- 2.35.010 Permit required.
- 2.35.020 Plans, profiles and specifications required.
- 2.35.030 Subdivisions.
- 2.35.040 Easements or rights-of-way.
- 2.35.050 Persons authorized to perform work.
- 2.35.060 Grade stakes.
- 2.35.070 Compliance with local regulations.
- 2.35.080 Protection of excavation.
- 2.35.090 Design and construction standards.
- 2.35.100 Completion of sewer required.

2.35.010**Permit required.**

In accordance with Chapter 2.45 District code, no person shall construct, extend or connect to any public sewer without first obtaining a written permit from the district, or in the event the sewer is under the jurisdiction of the City, from the City, and paying all fees and connection charges and furnishing bonds as required therein. The provisions of this section requiring permits shall not be construed to apply to contractors constructing sewers and appurtenances under contracts awarded and entered into by the district or by the City. [Ord. 21 § 701, 1964.]

2.35.020**Plans, profiles and specifications required.**

The application for a permit for public sewer construction shall be accompanied by complete plans, profiles and specifications, complying with all applicable ordinances, rules and regulations of the district, prepared by a registered civil engineer showing all details of the proposed work based on an accurate survey of the ground. The application, together with the plans, profiles and specifications, shall be examined by the district engineer who shall within 10 days approve them as filed or require them to be modified as he/she deems necessary for proper installation. After examination by the district engineer, the application, plans, profiles and specifications shall be submitted to the board at its next regular meeting for its consideration. When the board is

satisfied that the proposed work is proper and the plans, profiles and specifications are sufficient and correct, it shall order the issuance of a permit predicated upon the payment of all connection charges, fees and furnishing bonds as required by the district. The permit shall prescribe such terms and conditions as the board finds necessary in the public interest. [Ord. 21 § 702, 1964.]

2.35.030**Subdivisions.**

The requirements of District code 2.35.010 and 2.35.020 shall be fully complied with before any final subdivision map of properties lying in unincorporated areas within the district shall be approved by the board. The final subdivision map shall provide for the dedication for public use of all streets, easements or rights-of-way in which public sewer lines are to be constructed. If a final subdivision map of a tract is recorded and the work of constructing sewers to serve the tract is not completed within the time limit allowed in the permit, the Board of Directors may extend the time limit or may complete the work and take appropriate steps to enforce the provisions of the bond furnished by the subdivider. [Ord. 21 § 703, 1964.]

2.35.040**Easements or rights-of-way.**

In the event that an easement is required for the extension of the public sewer or the making of connections, the applicant shall procure and have accepted by the board a proper easement or grant of right-of-way sufficient in law to allow the laying and maintenance of such extension or connection. [Ord. 21 § 704, 1964.]

2.35.050**Persons authorized to perform work.**

Only properly licensed contractors shall be authorized to perform the work of public sewer construction within the district. All terms and conditions of the permit issued by the district to the applicant shall be binding on the contractor. The requirements of this section shall apply to side sewers installed concurrently with public sewer construction. [Ord. 21 § 705, 1964.]

2.35.060**Grade stakes.**

Grade and line stakes shall be set by a registered civil engineer prior to the start of work on any public sewer construction. The contractor shall be responsible for accurately transferring grades to grade bars and sewer invert. [Ord. 21 § 706, 1964.]

2.35.070**Compliance with local regulations.**

Any person constructing a sewer within a street shall comply with all state, county or City laws, ordinances, rules and regulations pertaining to the cutting of pavement, opening, barricading, lighting and protecting of trenches, backfilling and repaving thereof and shall obtain all permits and pay all fees required by the department having jurisdiction prior to the issuance of a permit by the district. [Ord. 21 § 707, 1964.]

2.35.080**Protection of excavation.**

The applicant shall maintain such barriers, lights and signals as are necessary to give warning to the public at all times that a sewer is under construction and of each dangerous condition to be encountered as a result thereof. The applicant shall also likewise protect the public in the use of the sidewalk against any such conditions in connection with the construction of the sewer. Streets, sidewalks, parkways and other property disturbed in the course of the work shall be reinstalled in a manner satisfactory to the district, the City, and the county or any other person having jurisdiction thereover. [Ord. 21 § 708, 1964.]

2.35.090**Design and construction standards.**

Minimum standards for the design and construction of sewers within the district and subject to the jurisdiction of the district shall be in accordance with the latest version of the standard specifications of Sausalito-Marín City Sanitary District adopted by the district, copies of which are on file in the district office. The district engineer may permit modifications or may

require higher standards where unusual conditions are encountered.

“As-built” drawings showing the actual location of all mains, structures, wyes, laterals and cleanouts shall be filed with the district before final acceptance of the work. [Amended by district during 2016 codification: Ord. 83 § 2, 2007; Ord. 72 § 2, 1995; Ord. 21 § 709, 1964.]

2.35.100**Completion of sewer required.**

Before any acceptance of any sewer line by the district and prior to the admission of any sewage into the system, the sewer line shall be tested and shall be complete in full compliance with all requirements of the latest version of the standard specifications of Sausalito-Marín City Sanitary District, and to the satisfaction of the district engineer. [Ord. 83 § 2, 2007; Ord. 72 § 2, 1995; Ord. 21 § 710, 1964.]

Chapter 2.40**USE OF PUBLIC SEWERS¹**

Sections:

- 2.40.010 Drainage into sanitary sewers prohibited.
- 2.40.020 Use of storm sewers required.
- 2.40.030 Types of wastes prohibited.
- 2.40.040 Discharge of contaminated groundwater prohibited.
- 2.40.050 Discharges in violation of national pollutant discharge elimination system (NPDES) permit restricted.
- 2.40.060 Interceptors required.
- 2.40.070 Maintenance of interceptors.
- 2.40.080 Preliminary treatment of wastes.
- 2.40.090 Maintenance of pretreatment facilities.
- 2.40.100 Control manholes.
- 2.40.110 Measurements and tests.
- 2.40.120 Special agreements – Private facilities.
- 2.40.130 Special agreements – Public facilities.
- 2.40.140 Swimming pools.

2.40.010**Drainage into sanitary sewers prohibited.**

No leaders from roofs and no surface drains for rain water shall be connected to any sanitary sewer. No surface or subsurface drainage, rain water, storm water, seepage, cooling water or unpolluted industrial process waters shall be permitted to enter any sanitary sewer by any device or method whatsoever. Reference is hereby made to the provisions of Ordinance 6 of the district regulating the storm water drains and other private storm water drainage facilities within the district, as adopted May 23, 1955. [Ord. 21 § 801, 1964.]

2.40.020**Use of storm sewers required.**

Storm water and all other unpolluted drainage shall be discharged to such sewers as are specifically designated as storm sewers, or to a

natural outlet approved by the district engineer. Industrial cooling water or unpolluted process waters may be discharged, upon approval of the district engineer, to a storm sewer, or natural outlet. [Amended by district during 2016 codification: Ord. 21 § 802, 1964.]

2.40.030**Types of wastes prohibited.**

Except as hereinafter provided, no person shall discharge or cause to be discharged any of the following described waters or wastes to any public sewer:

A. Any liquid or vapor having a temperature higher than 150 degrees Fahrenheit.

B. Any water or waste which may contain more than 100 parts per million, by weight, of fat, oil or grease.

C. Any gasoline, benzene, naphtha, fuel oil or other flammable or explosive liquid, solid or gas, petroleum products of any kind or other flammable or explosive liquids, solid or gas, or any waste automotive radiator coolant or any radioactive wastes.

D. Any garbage that has not been shredded to such a degree that all particles will be carried freely under the flow conditions normally prevailing in public sewers, with no particle greater than one-half inch in any dimension.

E. Any ashes, cinders, sand, mud, straw, shavings, metal, glass, rags, feathers, tar, plastics, wood, paunch manure, or any other solid or viscous substance capable of causing obstruction to the flow in sewers or other interference with the proper operation of the sewage works.

F. Any waters or wastes having a pH lower than 5.5 or higher than 9.0 or having any other corrosive property capable of causing damage or hazard to structures, equipment and personnel of the sewage works.

G. Any waters or wastes containing a toxic or poisonous substance in sufficient quantity to injure or interfere with any sewage treatment process, constitute a hazard to humans or animals, or create any hazard in the receiving waters of the sewage treatment plant. Any toxic substances in excess of the United States Environmental Protection Agency standards

1. Prior legislation: Ord. 6.

pursuant to Section 307(a) of the Clean Water Act, or any other substances which may interfere with the biological processes of the wastewater treatment system.

H. Any waters or wastes containing suspended solids of such character and quantity that unusual attention or expense is required to handle such materials at the sewage treatment plant.

I. Any noxious or malodorous gas or substance capable of creating a public nuisance.

J. Any septic tank sludge. [Ord. 64 § 1, 1991; Ord. 21 § 803, 1964.]

2.40.040

Discharge of contaminated groundwater prohibited.

Discharges of contaminated groundwater are a special case outside of normal district service and are therefore a privilege and not a right. Acceptance of such discharges by the district is done as a service to the community. Permission from the district into whose lines water is discharged is the first step for acceptance of contaminated groundwater into the system. The district will review applications under the guidelines established in this title.

This title establishes special procedures and limits for these discharges. Except as may otherwise be authorized by contract, only contaminated groundwater generated inside district service area will be accepted under this title.

A. Potential Sources. Contaminated groundwater may include continuous discharges (e.g., from groundwater cleanup or from construction in areas of contaminated soil) and batch or one-time discharges (e.g., from monitoring wells from underground tanks). Such discharges may be either treated or untreated.

B. Procedures for Obtaining Permit. After contact by the potential permittee with the district inspector, a packet containing the following information will be sent:

1. The district's policy on acceptance of contaminated groundwater discharges;
2. A form for reporting results of analysis on the potential discharge;
3. A form for reporting quantity of discharge (either flow or total volume for a batch discharge);

4. A form for certification that the discharge is not hazardous;

5. A request for a site plan;

6. The district's ordinances governing waste discharges; and

7. A permit request form.

Upon receipt of this material by the district, it will be reviewed to determine if the discharge can be accepted under the policy. If so, the amount of fee due will be calculated (based on the quantity of discharge as well as the standard permit fee) and an invoice sent to the permittee.

The frequency of sampling (by the permittee and by the district) and the parameters to be analyzed will be specified at this time. The costs for all monitoring, including analytical work (for the permittee and for district) as well as costs for district personnel time for sampling, will be borne by the permittee. All analytical tests done by the permittee will be performed by a laboratory certified by the state of California for such analyses.

If the discharge cannot be accepted under this policy (this would in most cases be due either to high concentrations of pollutants in the discharge or to high rates of flow), the discharger will be directed either to install a pretreatment system or to haul the contaminated groundwater away in accordance with state and federal regulations. If a pretreatment system is necessary, plans for such a system must be submitted to the district for review and approval prior to construction.

Upon receipt of the fee by the district, a permit will be issued.

In the case of discharges which were permitted before this policy became effective, the discharge will be allowed to continue until the current permit expires, after which time this policy will be enforced.

In an emergency, another public agency may, upon issuance of a permit by the district, discharge contaminated groundwater meeting the discharge requirements to the sanitary sewer without completing the forms required for a permit.

C. Discharge Requirements. Contaminated groundwater discharged into the district sewage works, prior to dilution by any other discharges, shall comply with all federal and state limits on such discharges, as well as the requirements of this title governing industrial waste discharges.

The permittee shall provide a sampling point for the discharge and district personnel shall have access to the sampling point. The district shall be contacted three working days before the permittee samples the discharge for the initial analysis, so that district personnel may observe the sampling procedures.

All continuous discharges of groundwater shall be metered at the point of discharge by an approved flow meter. The meter shall be read monthly by the permittee. The district may inspect the meter at any time and may require that it be recalibrated or replaced if its measurements are found to be unsatisfactory.

Once a month, the permittee shall check the explosive level of the sewer atmosphere at the point of discharge into the sanitary sewer system. This shall be achieved by taking readings with an approved explosive atmosphere meter.

At the point of discharge into the sanitary sewer, the following restrictions shall apply in addition to those contained in District code 2.40.030:

1. No solids, liquids, or gases shall be discharged in concentrations that alone or by interaction with other substances may create fire or explosive conditions in the sewer system.

2. No organic solvents, dissolved and/or undissolved, in the water shall be discharged in a sum total concentration greater than 1.0 mg/L.

3. Total petroleum hydrocarbons shall not exceed 1.0 mg/L.

4. BTEX (benzene toluene ethyl benzene and xylene) concentration shall not exceed 1.0 mg/L.

5. Table I, hereto attached and by reference incorporated herein, lists the discharge limits for non-sanitary waste discharged into the sewer system. For any priority pollutant whose concentration is also limited by the district's industrial waste discharge restrictions, this limit or the title limit shall apply, whichever is lower.

6. Prior to review by the district, the volume of discharge shall be reviewed and approved by the district. The volume will be determined on a case-by-case basis and shall not exceed that specified in the permit. The permittee may be required to stop discharging to the sanitary sewer system during periods of rainfall, high infiltration or periods of peak flows and may

be required to install a holding tank and other facilities.

7. Pumping directly into the gravity system is not permitted, unless approved by the District. Permittee shall cease discharging to the sanitary sewer whenever directed to do so by the district.

Permittee shall immediately cease discharging into the sanitary sewer if analyses shows violations of the discharge limits or explosive conditions. Permittee shall then immediately contact the district in person or by phone. Permittee shall not resume discharging into the sanitary sewer until the cause for sample violations or explosive conditions has been corrected and written approval has been obtained from the district.

Reports summarizing flow, sewer atmosphere monitoring, and analytical work shall be submitted to the district quarterly. The first report shall be received 90 days after the effective date of the permit.

D. Fees and Charges. The annual fee for these discharges shall be as specified in the district's rules, regulations and ordinances or as established by special agreement or permit for such special requirement discharges. In addition, a sewer service charge shall be paid for testing, both that done by the district and that done by the permittee.

E. Permit Conditions.

1. The district reserves the right to modify, at any time, the terms and conditions of the permit or the discharge quantity and concentration limits authorized herein. The permittee shall comply with the district industrial waste discharge ordinance.

2. No vested rights of any type whatsoever of discharge to or sewerage capacity in the district's sanitary sewer system is created by this permit.

3. Contaminated groundwater discharges permitted hereunder are accepted only on a capacity available basis. The time period will be determined on a case-by-case basis. Such discharges are subject to reduction, modification, suspension, or termination at any time by the district by a phone call or letter notice. Discharges shall cease immediately upon request and may not be restarted without further written permission.

4. Permittee shall obtain any plumbing permits required for the connection to the sanitary sewerage system. Any connection shall be subject to the approval of the district's inspector.

5. Permittee shall cease discharging to the sanitary sewerage system when directed by the district during periods of rainfall or at other times and/or conditions determined appropriate by the district.

6. Permits issued hereunder shall be valid until June 30th of each year. The effective dates shall be specified in the permit. The permit is subject to renewal upon request. The discharger shall apply 30 days in advance of the expiration date of the permit for renewal thereof.

7. The potential permittee shall furnish evidence of insurance as follows:

a. Comprehensive General Liability. The district, its officers, agents and employees shall be named as additional insureds. The insurance shall be primary and shall have the following minimum limits: \$1,000,000 on account of any one occurrence with an aggregate limit of not less than \$1,000,000.

b. The insurance shall cover any activity in connection with the permit.

8. Permittee shall indemnify, defend and hold harmless the district, its officers, agents and employees from and against all liability, claims, damages, losses, and expenses including, but not limited to, attorney's fees resulting from any activity associated with the permit.

F. Grounds for Revocation of Permit.

1. Noncompliance with any requirement or conditions of the permit or of the district's rules, regulations or ordinances shall be cause for its termination.

2. A sampling analysis which indicates concentrations, volumes, or constituents which are in violation of the permit or other applicable local, state, or federal regulations not specifically modified by the permit.

3. Failure to make timely payments of all fees and charges.

G. Enforcement. Since discharges of high levels of the chemicals present in contaminated groundwater have the potential for serious damage to the collection and pumping systems and to the treatment plant, noncompliance with the discharge limits will bring severe penalties. Such violations may incur fines and penalties in

accordance with law and pursuant to Chapter 2.55 District code.

In addition, the discharger shall pay for any damages to the sanitary sewerage system including the district treatment plant that the discharge of contaminated groundwater may cause. [Amended by district during 2016 codification: Ord. 61 § 1, 1990; Ord. 21 § 803.1, 1964.]

2.40.050

Discharges in violation of national pollutant discharge elimination system (NPDES) permit restricted.

Any wastewater discharge which contains material or materials restricted by the district's NPDES permit, as it presently exists or as hereafter modified, shall not be made to the district's sewerage system or permitted following any modification of said permit except by a written permit or special agreement allowing such discharge. Such permit or special agreement shall specify such terms and conditions of such discharge as may be required by the board. [Ord. 61 § 1, 1990; Ord. 21 § 803.2, 1964.]

2.40.060

Interceptors required.

Grease, oil and sand interceptors shall be provided when, in the opinion of the district engineer, they are necessary for the proper handling of liquid wastes containing grease in excessive amounts, or any flammable wastes, sand and other harmful ingredients; except that such interceptors shall not be required for buildings used for residential purposes. All interceptors shall be of a type and capacity approved by the district engineer, and shall be so located as to be readily and easily accessible for cleaning and inspection. Any business, institution or industry that may discharge oil, grease, flammable substances, sand or other materials that may be harmful to the sewage system shall have a properly functioning interceptor. Interceptors shall be designed, constructed and maintained in accordance with the provisions of Section 2.25.010 of the District code. Interceptors shall be maintained by the property owner. Interceptors found by the district engineer to be inadequately maintained shall be reported to the

county health officer for purposes of enforcement of this regulation. The health officer's orders for correcting deficient or malfunctioning interceptors shall be final and there shall be no appeal of such orders.

Maintenance shall include periodic removal of grease, sand or other materials. Materials removed from interceptors shall not be disposed of in the sewer system. A record of interceptor maintenance shall be kept and made available upon request of the health officer. The use of chemicals to dissolve coagulated materials is specifically prohibited.

All drains from work or processing areas shall be connected to the interceptor; provided, however, that toilets, urinals and wash basins shall not flow through the interceptor. [Ord. 64 § 1, 1991; Ord. 21 § 804, 1964.]

2.40.070

Maintenance of interceptors.

All grease, oil and sand interceptors shall be maintained by the owner, at owner's expense, in continuously efficient operation at all times. [Ord. 21 § 805, 1964.]

2.40.080

Preliminary treatment of wastes.

The admission into the public sewers of any waters or wastes having: (a) a five-day biochemical oxygen demand greater than 300 parts per million by weight, (b) containing more than 350 parts per million by weight of suspended solids, or (c) containing any quantity of substance having the characteristics described in District code 2.40.030, or (d) having an average daily flow greater than two percent of the average daily sewage flow of the district, shall be subject to the review and approval of the district engineer. Where necessary in the opinion of the district engineer, the owner shall provide, at owner's expense, such preliminary treatment as may be necessary to (a) reduce the biochemical oxygen demand to 300 parts per million and the suspended solids to 350 parts per million by weight, or (b) reduce objectionable characteristics or constituents to within the maximum limits provided for in District code 2.40.030, or (c) control the quantities and rates of discharge of such waters or wastes.

Plans, specifications, and any other pertinent information relating to proposed preliminary treatment facilities shall be submitted for the approval of the district engineer and of the water pollution control commission of the state of California and no construction of such facilities shall be commenced until said approvals are obtained in writing. [Ord. 21 § 806, 1964.]

2.40.090

Maintenance of pretreatment facilities.

Where preliminary treatment facilities are provided for any waters or wastes, they shall be maintained continuously in satisfactory and effective operation by the owner at owner's expense. [Ord. 21 § 807, 1964.]

2.40.100

Control manholes.

When required by the General Manager or district engineer, the owner of any property served by a side sewer carrying industrial wastes shall install a suitable control manhole in the side sewer to facilitate observation, sampling and measurement of wastes. Such manhole, when required, shall be accessibly and safely located, and shall be constructed in accordance with plans approved by the district engineer. The manhole shall be installed by the owner at owner's expense, and shall be maintained by him/her so as to be safe and accessible at all times. [Ord. 21 § 808, 1964.]

2.40.110

Measurements and tests.

All measurements, tests, and analyses of the characteristics of waters and wastes to which reference is made in District code 2.40.030 and 2.40.080 shall be determined in accordance with standard methods and shall be determined at the control manhole provided for in District code 2.40.100, or upon suitable samples taken at said control manhole. In the event that no special manhole has been required, the control manhole shall be considered to be the nearest downstream manhole in the public sewer to the point at which the side sewer is connected. [Ord. 21 § 809, 1964.]

2.40.120**Special agreements – Private facilities.**

No statement contained in this chapter shall be construed as preventing any special agreement or arrangement between the district and any industrial concern whereby an industrial waste of unusual strength or character may be accepted by the district for treatment, subject to payment therefor by the industrial concern and subject to such terms and conditions as might be required by the district. [Ord. 21 § 810, 1964.]

2.40.130**Special agreements – Public facilities.**

No statement contained in this chapter shall be construed as preventing any special agreement or arrangement between the district, the housing authority of the county of Marin, the redevelopment agency of the county of Marin, or any other public corporation or entity, whereby the district undertakes to provide for the construction, acceptance, maintenance or operation of facilities for the collection, pumping or other means of transmission of sewage from the public agencies pursuant to any appropriate legal authorization or pursuant to cooperation, joint powers, or other similar agreement. [Ord. 21 § 811, 1964.]

2.40.140**Swimming pools.**

It shall be unlawful for any person to discharge the contents of a swimming pool into a sanitary sewer except in the manner specified herein. The size of pipe carrying discharge water shall not be larger than two inches and shall not be under a head to exceed 20 feet. If the water is discharged by pumping, the rate of flow shall not exceed 100 gallons per minute. Each swimming pool discharging to a sanitary sewer shall be equipped with an approved separator to preclude any possibility of a backflow of sewage into the swimming pool or piping system. [Ord. 21 § 812, 1964.]

Chapter 2.45**PERMITS AND FEES****Sections:**

- 2.45.010 Permit required.
- 2.45.020 Application for permit.
- 2.45.030 Compliance with permit.
- 2.45.040 Agreement.
- 2.45.050 Classes of permits.
- 2.45.060 Fees – Annexation charges.
- 2.45.070 Fees – Connection charges.
- 2.45.080 Special connection charges.
- 2.45.090 Sewer permit and inspection charges.
- 2.45.100 Bond – Public sewer construction.
- 2.45.110 Fees – Sewer service charges.
- 2.45.120 Disposition of fees.
- 2.45.130 All work to be inspected.
- 2.45.140 Notification.
- 2.45.150 Condemned work.
- 2.45.160 All costs paid by owner.
- 2.45.170 Outside sewers.
- 2.45.180 Permit optional.
- 2.45.190 Special outside agreements.
- 2.45.200 Street excavation permit.
- 2.45.210 Liability.
- 2.45.220 Time limit on permits.

2.45.010**Permit required.**

No unauthorized person shall uncover, make any connections with or opening into, use, alter, or disturb any public sewer or appurtenance or perform any work on any plumbing or drainage system under the jurisdiction of the district, without first obtaining a written permit from the district. [Ord. 21 § 901, 1964.]

2.45.020**Application for permit.**

Any person, legally entitled to apply for and receive a permit, shall make such application on forms provided by the district for that purpose. The applicant shall give a description of the character of the work proposed to be done and the location, ownership, occupancy and use of the premises in connection therewith. The district engineer may require plans, specifications or drawings and such other information as he/she may deem necessary.

If the district engineer determines that the plans, specifications, drawings, descriptions or information furnished by the applicant is in compliance with the ordinances, rules and regulations of the district, the secretary shall issue the permit applied for upon payment of the required fees as hereinafter fixed. [Ord. 21 § 902, 1964.]

2.45.030

Compliance with permit.

After approval of the application, evidenced by the issuance of a permit, no change shall be made in the location of the sewer, the grade, materials or other details from those described in the permit or as shown on the plans and specifications for which the permit was issued, except with written permission from the district, the district engineer, or other authorized representatives. [Ord. 21 § 903, 1964.]

2.45.040

Agreement.

The applicant's signature on an application for any permit as set forth in District code 2.45.050 shall constitute an agreement to comply with all of the provisions, terms and requirements of this title and other ordinances, rules and regulations of the district, and with the plans and specifications the applicant has filed with his/her application, if any, together with such corrections or modifications as may be made or permitted by the district, if any. Such agreement shall be binding upon the applicant and may be altered only by the district upon the written request for the alteration from the applicant. [Ord. 21 § 904, 1964.]

2.45.050

Classes of permits.

There shall be nine classes of permits, as follows:

- A. Single-family residential sewer permit;
- B. Trailer court and multiple-dwelling sewer permit;
- C. Commercial, industrial, church, school, public and other user sewer permit;
- D. Public sewer construction permit;
- E. Private sewage disposal permit;
- F. Force main connection permit;

G. Floating home and floating home marina sewer permit;

H. Ferryboat, tour boat and excursion boat sewer permit; and

I. Change of use permit. [Ord. 46 § 1, 1982; Ord. 32 § 2, 1973; Ord. 29 § 2, 1972; Ord. 21 § 905, 1964.]

2.45.060

Fees – Annexation charges.

The owner or owners of lands within areas proposed to be annexed to the district shall deposit with the secretary of the district a sum to be fixed by the district secretary, prior to commencement of proceedings by the Board of Directors on the proposed annexation. The amount to be fixed by the district secretary shall be in a sum estimated to equal the engineering, legal and publication costs and all other charges which may be incurred by the district in preparing and examining maps, legal descriptions, and other documents in relation thereto, and other expenses regularly incurred in connection therewith. Should the amount of the deposit exceed the costs incurred by the district, the excess shall be refunded to the owner or owners following the conclusion of the final hearing on the proposed annexation. Should the amount of the deposit be insufficient to pay such costs incurred by the district, the owner or owners shall advance such additional sums as shall be necessary to pay said costs prior to the final hearing on the proposed annexation. [Ord. 21 § 906, 1964.]

2.45.070

Fees – Connection charges.

In addition to any other charges established by the ordinances, rules and regulations of the district, there shall be collected, prior to connection to the sanitary sewerage system of the district, connection charges as follows.

(Section Repealed and replaced by Chapter 3.1)

A. Special Assessment District Equalizing Connection Charge. For any parcel, unit or lot, or part of said property, lying within the present boundaries of the district or hereafter annexed to the district, which abuts on or can be directly served by any existing sewer main or sanitary sewerage facilities of the district, which were

constructed pursuant to special assessment proceedings, additional connection charges to be paid prior to the issuance of a permit for sewer connection in any such areas are hereby established as follows:

Where the facilities which were constructed pursuant to special assessment proceedings consist of collection mains, together with major interceptor mains and/or any other sanitary sewerage facilities, an additional connection charge shall be collected, in a sum to be computed by the district engineer, as said property's share of the cost of the existing sewerage facilities, which were constructed by special assessment proceedings to be used by said property. Said sum shall be the equivalent of the cost to similar properties within the district which have paid for said facilities so to be used. Said sum shall include all costs incident to the installation of such facilities, together with interest charges thereon. Said sum shall not include any amounts for which bonds of the district are then outstanding and to which said property is or shall become subject.

B. Connection Charge – Annexed Areas. For any parcel unit, or lot, or part of said property, a connection charge equal to the charge specified in Chapter 3.10 Sewer Connection Charge System per residential or non-residential dwelling unit of property within said areas hereafter annexed to said district shall be paid by the owner or other persons desiring the connection of any such property to any existing district sanitary sewerage system or proposed extension thereof, or to any other sanitary sewerage system within such area which may connect with or be proposed to be connected to the district's existing sanitary sewerage system or proposed extension thereof.

C. Demolition, Destruction and Replacement of Buildings. When an existing building is demolished, destroyed by fire, casualty or act of God and replaced by a new building, the district rules, regulations, fees, charges and ordinances shall apply as if the land were being initially improved. A credit against the applicable connection charge shall be allowed, based upon the charge which would have been payable had the connection charge for the building been calculated at the rate applicable at the time of reconnection. When a building is demolished or

destroyed, the side sewer shall be removed, plugged or filled in a manner acceptable to the district and any replacement shall be connected to the public sewer system by a new side sewer or sewers, unless such requirement is suspended or modified pursuant to District code 2.10.060 through 2.10.090. No credit shall be allowed if the building demolished or destroyed is not replaced within 10 years of the date of demolition or destruction.

D. Change of Use. If the use of any building is changed resulting in an increase in use or addition of facilities, the district shall calculate the charge to be paid due to the additional use which charge must be paid prior to the issuance of a change of use permit. In no event shall a change of use result in any obligation by the district to refund any payment previously made. [Ord. 73 § 1, 1996; Ord. 59 § 1, 1989; Ord. 56 § 1, 1988; Ord. 55 § 1, 1988; Ord. 46 § 1, 1982; Ord. 44 § 1, 1980; Ord. 38 § 2, 1977; Ord. 21 § 907, 1964.]

2.45.080

Special connection charges.

In addition to any other charges established herein, the district may establish special connection charges for any sewer connection when, in the opinion of the Board of Directors of the district, the circumstances of such connection necessitate the establishment of unusual conditions or necessitate the payment of charges over and above those established herein. [Ord. 21 § 908, 1964.]

2.45.090

Sewer permit and inspection charges.

Permit and inspection charges are hereby established as follows:

A. Single-Family Resident and/or Floating Home. A fee of \$150 shall be paid to the district for issuing a permit, and for inspecting each single-family residential building sewer installation or floating home building sewer installation.

B. Commercial, Industrial, Church, Trailer Court, Floating Home Marina, Ferryboat, Tour Boat and Excursion Boat, Multiple and Duplex Dwelling, School, Public and Other Users. A fee of \$150 for issuing a permit, and \$50 per 100

lineal feet of sewer for inspecting said sewer installation shall be paid to the district for each lateral sewer installation serving commercial, industrial, church, trailer court, floating home marina, ferryboat, tour boat and excursion boat, multiple dwelling, school, public and other users, with a minimum of \$50.00 for said inspection. Where such property, building or vessel is to be developed for commercial and industrial uses such as, in the opinion of the district secretary, will necessitate the conduct of special analysis of the effect of the installation on the sewage effluent, the person seeking a permit for such installation shall provide the district with any such analysis as the district may require at the sole cost and expense of the person seeking such permit. [Ord. 32 § 2, 1973; Ord. 29 § 2, 1972; Ord. 21 § 909, 1964.]

2.45.100

Bond – Public sewer construction.

Prior to the issuance of a permit for public sewer construction, the applicant shall furnish to the district a faithful performance bond or cash in the amount of the total estimated cost of the work. Said bond shall be in the minimum amount of \$2,000 and shall be secured by a surety or sureties satisfactory to the district. The cash deposit or faithful performance bond shall be conditioned upon the performance of the terms and conditions of the permit and shall guarantee the correction of faulty workmanship and the replacement of defective materials for a period of one year after the date of acceptance of the work. [Ord. 21 § 910, 1964.]

2.45.110

[Ord. 21 § 911, 1964.]

2.45.120

Disposition of fees.

All fees collected on behalf of the district shall be deposited with the secretary who shall place said funds in the depository of the district. [Ord. 21 § 912, 1964.]

2.45.130

All work to be inspected.

All sewer construction work, building sewers, plumbing and drainage systems shall be inspected by an inspector acting for the district or for the

City, or for the county, or for any and all entities having jurisdiction thereof, to ensure compliance with all requirements of the district, the City or the county. No sewer shall be covered at any point until it has been inspected and passed for acceptance. No sewer shall be connected either directly or indirectly to the district's public sewer system until the work covered by appropriate permit has been completed, inspected and approved. All sewers shall be tested for leakage in the presence of the appropriate inspector and shall be cleaned of all debris accumulated from construction operations. If the test proves satisfactory, the inspector shall issue a certificate of satisfactory completion. [Ord. 21 § 913, 1964.]

2.45.140

Notification.

It shall be the duty of the person doing the work authorized by permit to notify the office of the district in writing that said work is ready for inspection. Such notification shall be given not less than 24 hours before the work is to be inspected. It shall be the duty of the person doing the work to make sure that the work will stand the tests required by the district before giving the above notification. [Ord. 21 § 914, 1964.]

2.45.150

Condemned work.

When any work has been inspected and the work condemned and no certification of satisfactory completion given, a written notice to that effect shall be given instructing the owner of the premises, or the agent of such owner, to repair the sewer or other work authorized by the permit in accordance with the ordinances, rules and regulations of the district. An additional fee for reinspection will be charged for each subsequent inspection. Said additional fee shall be in an amount sufficient to reimburse all district costs and expenses attributable to each reinspection. [Ord. 21 § 915, 1964.]

2.45.160

All costs paid by owner.

All costs and expenses incident to the installation and connection of any sewer or other work for which a permit has been issued shall be borne by the owner. The owner shall indemnify

the district from any loss or damage that may directly or indirectly be occasioned by the work. [Ord. 21 § 916, 1964.]

2.45.170

Outside sewers.

Permission shall not be granted to connect any lot or parcel of land outside the district to any public sewer in or under the jurisdiction of the district unless a permit therefor is obtained. The applicant shall first enter into a contract in writing whereby he/she shall bind himself/herself, his/her heirs, successors and assigns to abide by all ordinances, rules and regulations in regard to the manner in which such sewer shall be used, the manner of connecting therewith, and the plumbing and drainage in connection therewith and also shall agree to pay all fees required for securing the permit and a monthly fee in the amount set by the district for the privilege of using such sewer. [Ord. 21 § 917, 1964.]

2.45.180

Permit optional.

The granting of such permission for an outside sewer in any event shall be optional with the board. [Ord. 21 § 918, 1964.]

2.45.190

Special outside agreements.

Where special conditions exist relating to an outside sewer, they shall be the subject of a special contract between the applicant and the district. [Ord. 21 § 919, 1964.]

2.45.200

Street excavation permit.

A separate permit must be secured from the City or the county or any other person having jurisdiction thereover by owners or contractors intending to excavate in a public street for the purpose of installing sewers or making sewer connections. [Ord. 21 § 920, 1964.]

2.45.210

Liability.

The district and its officers, agents and employees shall not be answerable for any liability or injury or death to any person or damage to any property arising during or growing out of the performance of any work by any such

applicant. The applicant shall be answerable for, and shall save the district and its officers, agents and employees harmless from, any liability imposed by law upon the district or its officers, agents or employees, including all costs, expenses, fees and interest incurred in defending same or in seeking to enforce this provision. Applicant shall be solely liable for any defects in the performance of his/her work or any failure which may develop therein. [Ord. 21 § 921, 1964.]

2.45.220

Time limit on permits.

If work under a permit be not commenced within six months from the date of issuance or if after partial completion the work be discontinued for a period of one year, the permit shall thereupon become void and no further work shall be done until a new permit shall have been secured. A new fee shall be paid upon the issuance of said new permit. [Ord. 21 § 922, 1964.]

Chapter 2.50**MARINAS AND TRAILER PARKS**

Sections:

- 2.50.010 Discharge of excreta.
- 2.50.020 Signs concerning sanitation regulations.
- 2.50.030 Sewer connection.
- 2.50.040 Sewer lateral system.
- 2.50.050 Connection to sewerage lateral system.
- 2.50.060 Floating home inboard sewage device.
- 2.50.070 Sewage pumping facilities.
- 2.50.080 Schedule of charges.

2.50.010**Discharge of excreta.**

No person shall discharge or permit or allow any other person on a vessel under his/her control or command to discharge any human or animal excreta from any head, toilet or similar facility on a vessel into the waters of Richardson's Bay. [Ord. 29 § 3, 1972; Ord. 21 § 950, 1964.]

2.50.020**Signs concerning sanitation regulations.**

The owner or operator of any commercial boat docking facility or marina located on the waters of Richardson's Bay shall install and maintain at owner's expense in conspicuous locations on the premises thereof standard signs to inform the public of the regulations prohibiting the discharge of toilets on any vessel into the waters of Richardson's Bay, and other provisions of harbor sanitation. Uniform standards and specifications for the design and general locations of such signs shall be prescribed by the Board of Directors. Existing commercial boat docking facilities or marinas shall be brought into compliance with the requirements of this section on or before July 1, 1972. [Ord. 29 § 3, 1972; Ord. 21 § 951, 1964.]

2.50.030**Sewer connection.**

Every vessel moored at a marina shall be lawfully connected to an approved sewer line. [Ord. 29 § 3, 1972; Ord. 21 § 952, 1964.]

2.50.040**Sewer lateral system.**

Every marina shall provide a sewerage lateral for the collection of sewage from every vessel accommodated at the marina. The sewerage laterals shall be connected to a shoreside facility, shall have an inlet connected at each vessel's side, and shall be constructed, installed, and maintained in an approved manner. Connections at floating home berths shall be equipped with approved backflow prevention devices and provide for the entrance of effluent from floating homes without reflux or back pressure. [Ord. 29 § 3, 1972; Ord. 21 § 953, 1964.]

2.50.050**Connection to sewerage lateral system.**

It shall be unlawful for any person to use, occupy or let any vessel for human habitation unless the same is lawfully connected to a sewerage system as provided in District code 2.50.040. [Ord. 29 § 3, 1972; Ord. 21 § 954, 1964.]

2.50.060**Floating home inboard sewage device.**

A sewage receiving tank ejector device must be installed aboard every floating home. Said device shall consist of a tank with a capacity of not less than 30 gallons nor more than 40 gallons, and shall be equipped with a two-inch outlet and a one-half horsepower pump. Said device must connect to the sewerage lateral system. [Ord. 29 § 3, 1972; Ord. 21 § 955, 1964.]

2.50.070**Sewage pumping facilities.**

Permission may be granted to install and operate marina sewage pumping facilities that are connected to the District's public sewer system for boats moored to shore-connected structures, providing such installations are first approved by the sanitary district engineer. In requesting approval by the engineer, the following must be submitted in letter form to the district secretary:

A. Name and address of the person responsible for the installation.

B. Name and address of the manufacturer of all pumping equipment.

C. A complete description of the materials and the equipment to be used.

D. An eight-and-one-half-by-11-inch, or larger, sketch, clearly showing the location of the sewage discharge lines, the connection to the sewer system, and the area to be served. [Ord. 29 § 3, 1972; Ord. 21 § 956, 1964.]

2.50.080

Schedule of charges.

(Section Repealed and replaced by Sewer Service Charge Rate Ordinance No. 94)
[Ord. 29 § 3, 1972; Ord. 21 § 957, 1964.]

Chapter 2.53

MERCURY REDUCTION

Sections:

- 2.53.010 Introduction.
- 2.53.020 Purpose and policy.
- 2.53.030 Definitions.
- 2.53.040 Waste management practices.
- 2.53.050 Amalgam separators.
- 2.53.060 Exemptions.

2.53.010

Introduction.

The ordinance codified in this chapter shall be known as the “mercury reduction ordinance of the Sausalito-Marín City Sanitary District” and may be so cited and pleaded.

The ordinance codified in this chapter is adopted pursuant to provisions of Section 6400 et seq. of the Health and Safety Code of the state of California. [Ord. 87 § 1, 2009.]

2.53.020

Purpose and policy.

A. Mercury is a toxic metal that bioaccumulates in several species of fish in San Francisco Bay, making them unsafe for human consumption. During 2007 the San Francisco Bay regional water quality control board adopted the San Francisco Bay mercury watershed permit to control discharge of mercury into the Bay. The permit requires Sausalito-Marín City Sanitary to implement mercury control strategies.

Dental amalgam is the largest controllable source of mercury to the SMCS D service area. Dental amalgam is approximately 50 percent mercury, mixed with silver and other metals. When installing, repairing or removing amalgam fillings, dentists discharge amalgam wastes to the sanitary sewer. This chapter is intended to significantly reduce the quantity of mercury entering the agency’s water pollution control system.

B. Ordinance No. 21, “Sewer Use Ordinance of the Sausalito-Marín City Sanitary District,” adopted by SMCS D, regulates the discharge of wastes into the agency’s water pollution control system. Chapter 2.15 District code, Use of Public Sewers Required, prohibits the discharge of wastes which will cause pass-through of the

water pollution control system. The SMCS Board of Directors has authority to require sewer users to install pretreatment equipment as necessary to bring their discharges into compliance with the ordinance. [Ord. 87 § 2, 2009.]

2.53.030

Definitions.

“Amalgam separator” is a device that employs filtration, settlement, centrifugation, or ion exchange to remove amalgam and its metal constituents from a dental office vacuum system before it discharges to the sanitary sewer.

“Amalgam waste” means and includes noncontact amalgam (amalgam scrap that has not been in contact with the patient); contact amalgam (including, but not limited to, extracted teeth containing amalgam); amalgam sludge captured by chairside traps, vacuum pump filters, screens, and other amalgam trapping devices; used amalgam capsules; and leaking or unusable amalgam capsules.

“ISO 11143” is the International Organization for Standardization’s standard for amalgam separators. [Ord. 87 § 3, 2009.]

2.53.040

Waste management practices.

All owners and operators of dental facilities that remove, repair or place amalgam fillings shall comply with the following waste management practices:

A. No person shall rinse chairside traps, vacuum screens, or amalgam separator equipment in a sink or other connection to the sanitary sewer.

B. Owners and operators of dental facilities shall ensure that all staff members who handle amalgam waste are trained in the proper handling, management and disposal of mercury-containing material and shall document how training is being provided to staff. Training records shall be available for inspection by an authorized representative of the agency during normal business hours.

C. Amalgam waste shall be stored and managed in accordance with the instructions of the recycler or hauler of such materials.

D. Bleach and other chlorine-containing disinfectants shall not be used to disinfect the vacuum line system.

E. The use of bulk mercury is prohibited. Only pre-encapsulated dental amalgam is permitted. [Ord. 87 § 4, 2009.]

2.53.050

Amalgam separators.

All owners and operators of dental vacuum suction systems, except as set forth in District code 2.53.060, shall comply with the following:

A. An amalgam separator device certified in accordance with ISO 11143, or the most recent standard promulgated by ISO for amalgam separators, shall be installed for each dental vacuum suction system on or before December 31, 2010; provided, however, that all dental facilities that are newly constructed on and after the effective date of the ordinance codified in this chapter shall include an installed ISO 11143 certified amalgam separator device. The installed device must be ISO 11143 certified as capable of removing a minimum of 95 percent of amalgam. The amalgam separator system shall be certified at flow rates comparable to the flow rate of the actual vacuum suction system operation. Neither the separator device nor the related plumbing shall include an automatic flow bypass. For facilities that require an amalgam separator that exceeds the practical capacity of ISO 11143 test methodology, a noncertified separator will be accepted; provided, that smaller units from the same manufacturer and of the same technology are ISO-certified.

B. All amalgam separators installed pursuant to subsection (A) of this section shall be on the most recent version of the “Bay Area Pollution Prevention Group (BAPPG) List of Accepted Amalgam Separators”. For amalgam separators installed prior to the date of the ordinance codified in this chapter, approval may occur by the agency on a case-by-case basis and separators must meet the standards of subsection (A) of this section.

C. Certification of installation shall be submitted to the district within 30 days of installation of the separator. A form will be provided by the district and must be completed for demonstration of certification.

D. Amalgam separators shall be maintained in accordance with manufacturer recommendations. Records documenting separator maintenance and disposal or recycling of amalgam waste shall be available for inspection upon request by an authorized representative of the district during normal business hours. [Amended by district during 2016 codification: Ord. 87 § 5, 2009.]

2.53.060

Exemptions.

The following types of dental practice are exempt from District code 2.53.050; provided, that removal, repair or placement of amalgam fillings occurs at the facility no more than three days per year: (A) orthodontics; (B) periodontics; (C) oral and maxillofacial surgery; (D) radiology; (E) oral pathology or oral medicine; (F) endodontistry and prosthodontistry. [Ord. 87 § 6, 2009.]

Chapter 2.55

ENFORCEMENT

Sections:

- 2.55.010 Violation.
- 2.55.020 Public nuisance.
- 2.55.030 Disconnection.
- 2.55.040 Public nuisance – Abatement.
- 2.55.050 Means of enforcement only.
- 2.55.060 Misdemeanor.
- 2.55.070 Liability for violation.
- 2.55.080 Civil penalties.
- 2.55.090 Falsifying information.

2.55.010

Violation.

Any person found to be violating any provision of this title or any other ordinance, rule or regulation of the district, except District code 2.35.100 and 2.60.010, shall be served by the secretary or other authorized person with written notice stating the nature of the violation and providing a reasonable time limit for the satisfactory correction thereof. Said time limit shall be not less than two nor more than seven working days. The offender shall, within the period of time stated in such notice, permanently cease all violations. All persons shall be held strictly responsible for any and all acts of agents or employees done under the provisions of this title or any other ordinance, rule or regulation of the district. Upon being notified by the secretary of any defect arising in any sewer or of any violation of this title, the person or persons having charge of said work shall immediately correct the same. [Ord. 21 § 1001, 1964.]

2.55.020

Public nuisance.

Continued habitation of any building or continued operation of any industrial facility in violation of the provisions of this title or any other ordinance, rule or regulation of the district is hereby declared to be a public nuisance. The district may cause proceedings to be brought for the abatement of the occupancy of the building or industrial facility during the period of such violation. [Ord. 21 § 1002, 1964.]

2.55.030**Disconnection.**

As an alternative method of enforcing the provisions of this title or any other ordinance, rule or regulation of the district, the engineer shall have the power to disconnect the user or subdivision sewer system from the sewer mains of the district. Upon disconnection the engineer shall estimate the cost of disconnection from and reconnection to the system, and such user shall deposit the cost, as estimated, of disconnection and reconnection before such user is reconnected to the system. The engineer shall refund any part of the deposit remaining after payment of all costs of disconnection and reconnection. [Ord. 21 § 1003, 1964.]

2.55.040**Public nuisance – Abatement.**

During the period of such disconnection, habitation of such premises by human beings shall constitute a public nuisance, whereupon the district shall cause proceedings to be brought for the abatement of the occupancy of said premises by human beings during the period of such disconnection. In such event, and as a condition of reconnection, there is to be paid to the district a reasonable attorney's fee and cost of suit arising in said action. [Ord. 21 § 1004, 1964.]

2.55.050**Means of enforcement only.**

The district hereby declares that the foregoing procedures are established as a means of enforcement of the terms and conditions of its ordinances, rules and regulations, and not as a penalty. [Ord. 21 § 1005, 1964.]

2.55.060**Misdemeanor.**

Section 6523 of the Health and Safety Code of the state of California provides that the violation of an ordinance or regulation of a sanitary district by any person is a misdemeanor punishable by fine not to exceed \$1,000, imprisonment not to exceed 30 days, or both. Each and every connection or occupancy in violation of the ordinances and regulations of the district shall be deemed a separate violation and each and every day or part of a day a violation of the ordinance or regulation continues shall be deemed a

separate offense hereunder and shall be punishable as such. [Ord. 38 § 3, 1977; Ord. 21 § 1006, 1964.]

2.55.070**Liability for violation.**

Any person violating any of the provisions of the ordinances, rules or regulations of the district shall become liable to the district for any expense, loss or damage occasioned by the district by reason of such violation. [Ord. 21 § 1007, 1964.]

2.55.080**Civil penalties.**

Any person who violates any provision of this title, requirements, or conditions set forth in permits duly issued, or who discharges wastewater which causes pollution, or violates any prohibition, effluent limitation, national standard of performance, pretreatment or toxicity standard, shall be assessed civil penalties of not less than \$1,000 nor more than \$6,000 for each offense. Each day on which a violation shall occur or continue shall be deemed a separate and distinct offense. In addition to the penalties provided herein, the district may recover reasonable attorneys' fees, court costs, court reporters' fees and other expenses of litigation by appropriate suit at law against the person found to have violated this title or the orders, rules, regulations, and permits issued hereunder. [Ord. 64 § 1, 1991; Ord. 21 § 1008, 1964.]

2.55.090**Falsifying information.**

Any person who knowingly makes any false statements, representation or certification in any application, record, report, plan or other document filed or required to be maintained pursuant to this title, or nondomestic sewer use permit, or who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required under this title, shall, upon conviction, be punished by a fine of not more than \$1,000 or by imprisonment for not more than 30 days, or by both. [Ord. 64 § 1, 1991; Ord. 21 § 1009, 1964.]

Chapter 2.60**MISCELLANEOUS PROVISIONS**

Sections:

- 2.60.010 Protection from damage.
2.60.020 Powers and authorities of inspectors.

2.60.010**Protection from damage.**

No unauthorized person shall maliciously, willfully, or negligently break, damage, destroy, uncover, deface or tamper with any structure, appurtenance or equipment which is a part of the district sewage collection, conveyance and treatment system. Any person violating this provision shall be subject to the penalties provided by law. [Ord. 21 § 1101, 1964.]

2.60.020**Powers and authorities of inspectors.**

The officers, inspectors, engineer and any duly authorized employees of the district shall wear or carry an official badge of office or other evidence establishing his/her position as such, and upon exhibiting the proper credentials and identification shall be permitted to enter in and upon any and all buildings, industrial facilities and properties for the purposes of inspection, reinspection, observation, measurement, sampling, testing or otherwise performing such duties as may be necessary in the enforcement of the provisions of the ordinances, rules and regulations of the district. [Ord. 21 § 1102, 1964.]

Chapter 2.65**FATS, OILS AND GREASE**

(Reserved)

Title 3

FEES AND COLLECTION

Chapters:

3.05 Sewer Service Charges

3.10 Sewer Connection Charge System

Chapter 3.05

SEWER SERVICE CHARGES

Sections:

- 3.05.010 Authority.
- 3.05.020 Purpose.
- 3.05.030 Definitions.
- 3.05.040 Customers subject to charge.
- 3.05.050 Determination of annual charges.
- 3.05.060 Strength characteristics.
- 3.05.070 Water consumption.
- 3.05.080 Effective date of charges.
- 3.05.090 Person responsible.
- 3.05.100 Collection of sewer service charges on tax roll.
- 3.05.110 Direct billing.
- 3.05.120 Rates.

3.05.010

Authority.

Pursuant to California Health and Safety Code Section 6520.5, a provision of the Sanitary District Act of 1923, the district elects to impose sewer service charges for the purposes stated in District code 3.05.020. [Ord. 96 § 1, 2014; Ord. 93 § 1, 2014; Ord. 91 § 1, 2013; Ord. 78 § 1, 2002.]

3.05.020

Purpose.

The purpose of the sewer service charge is to raise revenue for the costs of maintenance, operation, construction, and reconstruction of the district's wastewater facilities used for the collection, conveyance, treatment, and disposal of wastewater, and for other expenditures deemed necessary to conduct the lawful business of the district. [Ord. 96 § 1, 2014; Ord. 93 § 1, 2014; Ord. 91 § 1, 2013; Ord. 78 § 1, 2002.]

3.05.030

Definitions.

For the purposes of this chapter, the terms listed below have the meanings indicated:

A. "Connection" means a physical connection between any types of piping not owned by the district to any other type of piping or facility which is directly or indirectly connected to the district's wastewater system.

Premises located in the City of Sausalito that discharge to the City's wastewater collection system are deemed to be connected to the district's wastewater system for the purposes of this chapter.

B. "District wastewater system" means any sanitary sewer or other wastewater facility, which is part of the wastewater collection, treatment and disposal facilities owned and operated by the district.

C. "Dwelling unit" means any residence, apartment house unit, condominium or other habitation occupied by a single person or single family and requiring wastewater disposal service; also, any live-aboard vessel which receives direct wastewater disposal services from the district.

D. Equivalent Dwelling Unit (EDU). An EDU is a service unit measured in relation to the characteristics of the average daily discharge produced by a typical single dwelling unit, which are:

1. Flow: 200 gallons per day.
2. Strength:
 - a. BOD: 200 mg/liter;
 - b. TSS: 290 mg/liter.

E. "Nonresidential" means all uses other than residential.

F. "Owner" means the person holding title to any premises as shown by the official records of Marin County or the holder of any possessory interest in publicly owned property.

G. "Person" means any person, firm, company, corporation, partnership, association, any public corporation, political subdivision, City, county, district, the state of California, or the United States of America, or any department or agency of any of them. The singular in each case shall include the plural.

H. "Premises" means any lot, piece, or parcel of real property improved or unimproved within the boundary of the district.

I. "Residential" means a place designed or used for residence or dwelling, whether permanent or temporary in nature. Includes single-family, multifamily and floating home residences. Does not include hotels or motels. [Amended by district during 2016 codification: Ord. 96 § 1, 2014; Ord. 93 § 1, 2014; Ord. 91 § 1, 2013; Ord. 78 § 1, 2002.]

3.05.040**Customers subject to charge.**

The owners of all premises connected to the district's wastewater system and all premises which are able to connect to the system are subject to the sewer service charge. Those premises which are unable to make a connection are exempt from the sewer service charge. It is the sole responsibility of the premises' owner to notify the district of the grounds for any claimed exemption. [Ord. 96 § 1, 2014; Ord. 93 § 1, 2014; Ord. 91 § 1, 2013; Ord. 78 § 1, 2002.]

3.05.050**Determination of annual charges.¹**

A. Residential Customer Sewer Service Charge. Each residential customer shall pay an annual sewer service charge, which is equivalent to the annual charge as established by the district's Board of Directors.

1. Residential – single-family customer's annual sewer service charge shall be the equivalent of one EDU.

2. Residential – multifamily customer's annual sewer service charge shall be the equivalent of ninety-seven-hundredths EDU.

3. Residential – floating home customer's annual sewer service charge shall be the equivalent of ninety-two-hundredths EDU.

B. Nonresidential Customer Sewer Service Charge. Each nonresidential customer shall pay an annual sewer service charge calculated as follows:

1. The customer's annual water usage shall be determined as provided in District code 3.05.070.

2. The customer's loading factor shall be determined as provided in District code 3.05.060.

3. The customer's EDU shall be calculated by multiplying the customer's annual water usage by the customer's loading factor.

4. The customer's annual sewer service charge shall be the amount in dollars obtained when the customer's EDUs are multiplied by the applicable annual sewer charge rate as established by the district's Board of Directors,

except that in no case shall the charge be less than the charge for one EDU.

C. Supplementary Charge for Unincorporated Area Customers. Customers whose premises are located in the Marin City community or in other unincorporated areas of the district for whom the district provides wastewater collection services in addition to wastewater treatment services shall pay an additional charge as specified in this subsection. The additional charge shall be a dollar amount established by the Board of Directors which represents the annual cost per EDU to provide wastewater collection service to customers in the district's unincorporated areas. The supplementary charge for residential customers shall be calculated by multiplying the customer's number of dwelling units by the annual EDU charge established under this section. The supplementary charge for non-residential customers shall be calculated by multiplying the customer's number of EDUs from subsection (B)(3) of this section by the annual EDU charge established under this section, but in no case shall the charge be less than the charge for one EDU. [Ord. 96 § 1, 2014; Ord. 93 § 1, 2014; Ord. 91 § 1, 2013; Ord. 78 § 1, 2002.]

3.05.060**Strength characteristics.**

Each nonresidential customer's premises shall be assigned a loading factor, which represents the strength characteristics of the wastewater discharged by the premises. The loading factors shall be determined from the following table to the extent applicable.

Strength	Loading Factor
High	2.40
Medium	1.70
Low	1.00

Examples of uses which produce high strength wastewater are restaurants and bakeries.

1. Code reviser's note: The latest sewer service charge rates are adopted by a separate ordinance and are

available at the district office. See District code 3.05.120.

Examples of uses which produce medium strength wastewater are delicatessens and markets with delicatessens. Examples of uses which produce low strength wastewater are offices, general retail and institutional occupancies.

In any case where the district determines that the loading factors in the table above do not accurately represent the strength characteristics of the wastewater discharge from a particular premises (for example, mixed use occupancies), the district will establish a loading factor which represents the actual conditions. [Ord. 96 § 1, 2014; Ord. 93 § 1, 2014; Ord. 91 § 1, 2013; Ord. 78 § 1, 2002.]

3.05.070

Water consumption.

Subject to the provisions of subsection (E) of this section, annual water consumption shall be determined as follows:

A. The average daily discharge from each dwelling unit is presumed to be 200 gallons per day average daily flow and shall not be based upon measured water consumption or other conditions of occupancy of the dwelling unit.

B. The EDU determination of annual charges in District code 3.05.050 for residential customers has been adjusted for each customer class based on winter water usage as determined by the district from water use data furnished by the Marin Municipal Water District (MMWD).

C. Water consumption for all other uses, including commercial (such as, for example, motels and hotels), shall be based upon actual metered water consumption (measured in units) determined as follows:

1. The average monthly water usage for each premises during the two two-month “summer” and “winter” intervals for the district’s preceding fiscal year shall be determined by the district from the annual report furnished by the Marin municipal water district.

2. The water usage determined under subsection (C)(1) of this section shall be annualized.

D. As used in this section, a “unit” of water consumption is defined as the equivalent of a volume of water measuring 100 cubic feet.

E. The following provisions apply to water consumption by nonresidential users:

1. Upon application to the district by customers maintaining extensive irrigated landscaping or in other situations where it can be conclusively established that the metered water consumption is not a valid measure of the quantity of wastewater discharged, the quantity of wastewater to be used in determining the customer’s EDUs shall be determined by the district.

2. The district may require the installation of district-approved recording and sampling devices or flow meters on the premises for use by the district at the customer’s expense. Such devices or meters shall be available for inspection at any reasonable time. Recording devices shall be capable of recording instantaneous and accumulated flows, and sampling devices shall be automatic and capable of 24-hour storage and maintenance of temperature between 35 degrees and 40 degrees Fahrenheit and have a five-gallon capacity as approved by the district. The customer shall be responsible for the maintenance, calibration, repair and replacement of all sampling or recording devices and equipment.

F. No credit, adjustment or refund shall be made to any customer because the premises or any portion of them are vacant, unless the premises are disconnected from the sewer system.

G. No premises or customers shall be provided district wastewater services without charge or at a reduced charge. [Amended by district during 2016 codification: Ord. 96 § 1, 2014; Ord. 93 § 1, 2014; Ord. 91 § 1, 2013; Ord. 78 § 1, 2002.]

3.05.080

Effective date of charges.

Charges and rates established by this chapter shall be effective upon the date specified by the district and shall apply to all premises connected at that time to the district’s wastewater system. Premises which are connected to the system after the effective date shall be subject to the sewer service charge effective as of and prorated from the date of connection. The charge shall be billed directly in accordance with District code 3.05.110. [Ord. 96 § 1, 2014; Ord. 93 § 1, 2014; Ord. 91 § 1, 2013; Ord. 78 § 1, 2002.]

3.05.090**Person responsible.**

The owner of any premises is responsible for payment of all sewer service charges applicable to the premises. It is the duty of each owner to ascertain from the district the amount and due date of any charge applicable to the premises and to pay the charge when due and payable. It is the duty of all owners of all premises to inform the district immediately of all pertinent circumstances and/or a change in any circumstances which will in any way affect the applicability of a charge to the owner's premises or the amount of any such charge. [Ord. 96 § 1, 2014; Ord. 93 § 1, 2014; Ord. 91 § 1, 2013; Ord. 78 § 1, 2002.]

3.05.100**Collection of sewer service charges on tax roll.**

A. Pursuant to the provisions of Division 5, Part 3, Chapter 6, Article 4 of the Health and Safety Code, but subject to the provisions of this section, the district elects, as the primary procedure for the collection of sewer service charges prescribed or imposed by the provisions of this chapter, to have sewer service charges for each fiscal year collected on the tax roll of the county of Marin in the same manner, by the same persons and at the same time as property taxes, assessments and other charges collected in that manner.

B. At the beginning of the district's fiscal year, a written report shall be prepared and filed with the district secretary setting forth a description of each parcel of real property, inside or outside the district, upon which are situated premises which receive wastewater services of the district and the amount of the charge for each parcel for that year, computed in conformity with the charges prescribed by this chapter.

C. The district secretary shall cause notice of the filing of the report and of the time and place for a public hearing to be published in a newspaper of general circulation within the district. The publication of notice shall be once a week for two successive weeks. Publications shall be made with at least five days intervening between the respective publication dates not counting the publication dates. A minimum of two public notices shall be published in a

newspaper circulated more than once a week. In newspapers which circulate once a week, the public notice shall be published in each circulation for two successive weeks. The period of notice commences on the first day of publication and terminates at the end of the fourteenth day, including in that period the first day of publication.

D. At the time stated in the notice, the district board shall hear and consider all objections or protests, if any, to the report and may continue the hearing from time to time. If the district board finds that protest is made by a majority of separate parcels of property described in the report, the report shall not be adopted and the charges shall be collected separately from the tax roll and shall not constitute a lien against any parcel or parcels of land.

E. Upon the conclusion of the hearing, the district board may adopt, revise, change, reduce or modify and charge or overrule any or all protests and/or objections, excepting protests or objections from a majority as described in subsection (D) of this section, and the board shall make its determination upon each charge as described in the report, which determination is final.

F. By August 10th of each year following the board's final determination, the district secretary shall file with the controller of the county of Marin a copy of the report with a statement endorsed over his/her signature stating that the report has been finally adopted by the district in order that the controller of the county of Marin shall be able to enter the amounts of the charges against the respective lots or parcels of land as they appear on the current assessment roll and in order that the charges may be collected on the tax roll in accordance with the provisions of Sections 5473.5 through 5473.11 of the Health and Safety Code.

G. Except as provided in Section 5473.8 of the Health and Safety Code, the amount of the charges shall constitute a lien against the lot or parcel of land against which the charge has been imposed as of the lien date prescribed by law for property taxes. [Ord. 96 § 1, 2014; Ord. 93 § 1, 2014; Ord. 91 § 1, 2013; Ord. 78 § 1, 2002.]

3.05.110**Direct billing.**

If the full amount of any sewer service charges is, for any reason, not collected in accordance with the provisions of District code 3.05.100, the sewer service charges, or the portion of them not appearing on the tax roll, shall be collected by direct billing of the property owner as provided in this section. The provisions of this section shall also apply to sewer service charges accruing after a new connection to the district's wastewater facilities, in which case the annual charge shall be prorated over the period of time from the date of the new connection to the end of the fiscal year.

A. Billing. The district shall ascertain the amount of each sewer service charge applicable to each premises and shall mail to the owner and/or owner and occupant, within 60 days from the date any sewer service charges become due and payable, a bill for the sewer service charges which are then due and payable. The bill shall be mailed to all persons listed as the owners on the last equalized assessment roll of the county of Marin at the address shown on the assessment roll, or to the successor in interest of the owner and/or occupant, if known. Each bill shall contain a statement that a delinquency in payment for 60 days shall constitute a lien against the lot or parcel against which the charge is imposed and that, when recorded, it shall have the force, effect and priority of a judgment lien for three years unless sooner released or otherwise discharged. Failure of the district to mail a sewer service charge bill or failure of the owner to receive a sewer service charge bill shall not excuse the owner of any premises from the obligation of paying any sewer service charge for any premises owned by the owner.

B. How Payable. Each sewer service charge to be collected by direct billing shall be due and payable in full at the time of billing; provided, however, if in any fiscal year a sewer service charge is payable for a period covering eight months or more of the fiscal year, the sewer service charge shall be billed in two installments with the first installment covering the period for which a sewer service charge is owed during the first six months of the fiscal year, and the second installment covering the remaining six months of the fiscal year.

C. Delinquency Date of Sewer Service Charges. Each sewer service charge shall be delinquent if not paid on or before the thirtieth day of the month following the date upon which such sewer service charge becomes due and payable.

D. Where Payable. Sewer service charges collected by direct billing shall be payable at the administrative office of the district, as noted in the billing.

E. Penalties for Nonpayment of Sewer Service Charges – Lien. Whenever a delinquency shall occur for nonpayment of sewer service charges, a penalty of 10 percent shall attach to the unpaid charges, and for each month that the charges remain delinquent a further penalty of one and one-half percent of said basic charge shall be added. [Ord. 96 § 1, 2014; Ord. 93 § 1, 2014; Ord. 91 § 1, 2013; Ord. 78 § 1, 2002.]

3.05.120**Rates.**

A. Residential Sewer Service Charges. Pursuant to District code 3.05.050(A), the annual sewer service charge payable by each residential customer class, per dwelling unit, shall be as follows:

Customer Class	FY 2014/15	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19
Single Family	\$770	\$817	\$833	\$850	\$866
Multifamily	\$715	\$726	\$741	\$756	\$771
Floating Homes	\$708	\$687	\$705	\$722	\$736

If applicable, residential customers shall also be subject to the supplementary sewer service charge provided for in subsection (C) of this section.

B. Nonresidential Sewer Service Charges. Pursuant to District code 3.05.050(B), the annual sewer service charge payable for each nonresidential customer shall be calculated based upon the following sewer service charge rates:

Customer Class	FY 2014/15	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19
Nonresidential	\$770	\$817	\$833	\$850	\$866

If applicable, nonresidential customers shall also be subject to the supplementary sewer service charge provided for in subsection (C) of this section.

C. Supplementary Charges for Unincorporated Area Customers. Pursuant to District code 3.05.050(C), customers whose premises are located in the Marin City community or in other unincorporated areas of the district shall pay an additional charge as set forth below:

1. All residential customers shall pay a supplementary charge as follows:

Customer Class	FY 2014/15	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19
Residential	\$61	\$66	\$71	\$76	\$78

2. All nonresidential customers shall pay a supplementary charge calculated based upon the following rates:

Customer Class	FY 2014/15	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19
Non-Residential	\$61	\$66	\$71	\$76	\$78

D. Automatic Increases – Exceptions. The increases in sewer service charges and sewer service charge rates for fiscal year 2015/16, 2016/17, 2017/18 and FY 2018/19 shall occur automatically on July 1st of each respective fiscal year without further approval or other action by the district's board. Notwithstanding the automatic nature of those increases, the board shall review scheduled increases prior to the beginning of each fiscal year and may, in its discretion, reduce the amount to be imposed pursuant to this section for that following fiscal year.

If the board concludes by a majority vote that the sewer service charges or supplementary charges in amounts less than the maximum amounts as set forth in this chapter for the then following fiscal year will produce adequate revenues for that fiscal year, the board may by resolution make appropriate findings and determine that it will impose sewer service charges in a lesser amount for that year.

Any such reduction for one fiscal year shall not affect the sewer service charges and rates for the following fiscal years, absent additional actions by the board. Therefore, at the end of any fiscal year for which the board has acted to impose less than the full amount of sewer services charges authorized by this chapter, the following years' charges as set forth by this chapter will automatically take effect unless the board takes appropriate actions to set or impose alternative sewer service charge amounts.

E. The rates and charges imposed by the board shall continue thereafter in effect until further action of the board. [Ord. 96 § 1, 2014; Ord. 93 § 1, 2014, Ord. 94 §§ 2 – 6, 2014; Ord. 92 §§ 2 – 5, 2013; Ord. 88 §§ 2 – 5, 2010; Ord. 86 §§ 2 – 4, 2009; Ord. 85 §§ 2 – 4, 2008; Ord. 79 §§ 2 – 5, 2002; Ord. 76 § 1, 1999; Ord. 75 § 1, 1998; Ord. 74 § 1, 1997; Ord. 70 § 1, 1995; Ord. 68 § 1, 1994; Ord. 67 § 1, 1993; Ord. 65 § 1, 1992; Ord. 63 § 1, 1991; Ord. 60 § 1, 1990; Ord. 58 § 1, 1989; Ord. 54 § 1, 1988; Ord. 52 § 1, 1987; Ord. 51 § 1, 1986; Ord. 50 § 1, 1985; Ord. 49 § 1, 1984; Ord. 48 § 1, 1982; Ord. 47 § 1, 1982; Ord. 45 § 1, 1981; Ord. 43 § 1, 1980; Ord. 42 § 1, 1979; Ord. 40 § 1, 1978; Ord. 39 § 1, 1978; Ord. 37 § 1, 1977; Ord. 36 § 1, 1976; Ord. 35 § 1, 1975; Ord. 34 § 2, 1974; Ord. 33 § 1, 1973; Ord. 31 § 1, 1973; Ord. 30 § 1, 1972; Ord. 28 § 1, 1971; Ord. 27 § 1, 1970; Ord. 26 § 1, 1969; Ord. 25 § 1, 1968; Ord. 24 § 1, 1967; Ord. 23 § 1, 1966; Ord. 22 § 1, 1965; Ord. 20 § 1, 1964; Ord. 19 § 1, 1963; Ord. 17 § 1, 1962; Ord. 16 § 1, 1961; Ord. 15 § 1, 1960; Ord. 14 § 1, 1959; Ord. 12 § 2, 1958; Ord. 10 § 1, 1957; Ord. 8 § 1, 1956; Ord. 7 § 1, 1955; Ord. 5 § 2, 1954; Ord. 2 § 2, 1953.]

Chapter 3.10**SEWER CONNECTION CHARGE
SYSTEM**

Sections:

- 3.10.010 Establishment of district sewer connection charge system.
- 3.10.020 Payment of connection charge required.
- 3.10.030 Basis of charge.
- 3.10.040 Schedule/determination of charges.
- 3.10.050 Charges by type of connection.
- 3.10.060 Persons responsible for payment.
- 3.10.070 Increased use of sewers.
- 3.10.080 Resumption of use.
- 3.10.090 Wastewater volume determination.
- 3.10.100 Administration of connection charges.

3.10.010**Establishment of district sewer connection charge system.**

A. This chapter establishes a system of charges for connections to and the acquisition of discharge capacity allowances in the district's wastewater collection, treatment, and disposal system.

B. The purposes of the sewer connection charge are (1) to provide revenue to acquire, construct, install and replace capital facilities and other assets required for the district's wastewater disposal system, and (2) to distribute the cost of acquisition, construction, installation and replacement of the district's wastewater facilities and other capital assets so that the owners of each parcel connected to the district's system pay a fair share of those costs. Payment of the applicable connection charge allows discharges of wastewater to be made from the respective parcel in an amount that corresponds to the amount of the charge established by this chapter. The discharge capacity thus acquired is irrevocable and runs with the parcel. [Ord. 81 § 1, 2006.]

3.10.020**Payment of connection charge required.**

No connection may be made to any public sewer, or to any sewer flowing into a public sewer within the district, until the applicable sewer

connection charge has been paid to the district. The connection charge shall be in addition to charges for permits, inspections or the other requirements of any other rule or regulation of the district. The connection charge shall be paid at the time the application for a sewer connection permit is filed. [Ord. 81 § 2, 2006.]

3.10.030**Basis of charge.**

A. In general, the base connection charge is the replacement cost of all existing district assets plus the cost of all the projects scheduled for construction in the district's 10-year capital improvement and renewal and replacement plans divided by the total number of equivalent residential units connected to the district's system. For purposes of this calculation, the following rules will apply:

1. Replacement costs shall be calculated based on direct replacement cost plus 40 percent administrative cost.

2. The total number of district connections to be used in the calculation under subsection (A) of this section is the total number of connected dwelling units plus the nonresidential discharges expressed in equivalent residential units. For purposes of nonresidential discharges, an equivalent residential unit is the amount of water usage by a nonresidential discharger measured in gallons per day divided by the equivalency factor of 200 gallons per day per dwelling. (Refer to District code 3.10.070(B)(2).) [Amended by district during 2016 codification: Ord. 81 § 3, 2006.]

3.10.040**Schedule/determination of charges.**

A. The applicable connection charge rates for new connections and increased discharges to the district's system shall be determined from the following schedule:

Fiscal Year	Base Charge (Aggregate)	Base Charge (per Gallon per Day)
2006-07	\$5,778	\$32.10
2007-08	\$5,951	\$33.06

Fiscal Year	Base Charge (Aggregate)	Base Charge (per Gallon per Day)
2008-09 to 2014	\$6,130	\$34.06
2014 and thereafter	\$6,130	\$30.65

B. Scheduled rate increases shall occur automatically at the commencement of each fiscal year without the need for approval by the district board. Notwithstanding the automatic nature of the increase, the board shall review the scheduled increase at the beginning of each fiscal year and may, in its discretion, reduce (but not increase, except as provided in District code 3.10.100(A)) the scheduled charges for that fiscal year. Any reduction in the charge per this subsection does not affect changes scheduled in any succeeding fiscal year(s); nor shall scheduled changes or board actions to decrease the charges affect the board's power to increase connection charges in excess of the scheduled amount so long as the board has complied with all notice, hearing and other requirements of law.

[Amended by district during 2016 codification: Ord. 84 § 2, 2008; Ord. 82 § 2, 2007; Ord. 81 § 4, 2006.]

3.10.050

Charges by type of connection.

A. Residential Connections. The residential connection charge for connection to the district's system shall be the corresponding base charge for the applicable fiscal year for each dwelling unit.

B. Nonresidential Connection. The nonresidential connection charge shall be the applicable per gallon charge for the applicable fiscal year multiplied by the estimated volume of wastewater discharge measured in gallons per day (refer to District code 3.10.090), but in no event shall the charge be less than the corresponding aggregate base charge for the applicable fiscal year (refer to District code 3.10.040(A)). Payment of the nonresidential connection charge shall entitle the owner(s)/occupant(s) of the premises to discharge up to the volume of wastewater discharge capacity acquired, but no more.

C. Combined Residential and Nonresidential Connection. In the event a parcel has combined residential and nonresidential uses, the connection charge shall be the corresponding base charge for the applicable fiscal year times the number of dwelling units plus the corresponding per gallon charge for the applicable fiscal year times the estimated volume of wastewater to be discharged from the nonresidential premises measured in gallons per day (refer to District code 3.10.090). In no event shall the connection charge for the nonresidential premises be less than the corresponding aggregate base charge for the applicable fiscal year.

D. Credit for Contributed Facilities. In the case of any person who constructs wastewater facilities that are then dedicated to the district for public use, and to the extent the value of those facilities has been taken into account in the district's establishment of connection charge rates imposed pursuant to this chapter, the person shall be allowed an appropriate credit against the connection charges otherwise payable by that person. The credit shall be calculated by the district, consistent with the manner in which the connection charge rate was established by the district. [Ord. 81 § 5, 2006.]

3.10.060

Persons responsible for payment.

The owner of the premises is responsible for payment of all connection charges applicable to the premises. It is the duty of each property owner to ascertain from the district the amount and due date of any connection charge applicable to the property and to pay the charge when due and payable. Each property owner shall be responsible to inform the district within a reasonable period of time of any changes in circumstances that might result in a change in the amount of the charge. [Ord. 81 § 6, 2006.]

3.10.070

Increased use of sewers.

A. No person shall cause or permit an increase in the wastewater discharge from any nonresidential premises over the amount of the wastewater discharge capacity allowance for the premises without prior consent of the district and

the payment of an additional sewer connection charge.

B. As of the effective date of the ordinance codified in this chapter, the wastewater discharge allowance, measured in gallons per day, for any premises in the district shall be as follows:

1. For premises not previously legally connected to the district's wastewater facilities, the allowance is "0."

2. For residential premises legally connected to the district system as of the effective date of the ordinance codified in this chapter, the allowance shall be determined by the number of dwelling units authorized to be connected, with each dwelling unit, regardless of size or occupancy, being deemed to discharge the equivalent of 200 gallons per day.

3. For nonresidential premises legally connected to the district's system as of the effective date of the ordinance codified in this chapter, the allowance shall be the greatest of (a) the flow authorized to be discharged under a district permit or other formal authorization, (b) the flow derived from water use data used by the district in calculating sewer service charges levied for the parcel in fiscal year 2005-06, or (c) such other discharge rate as the property owner is able to demonstrate represents actual previous discharges from the premises and for which district sewer service charges were paid. In the case of nonresidential premises connected pursuant to a district permit, which measured the anticipated discharge in fixture units rather than gallons, a fixture unit is deemed to be equivalent to a discharge rate of seven and one-half gallons per day. [Amended by district during 2016 codification: Ord. 81 § 7, 2006.]

3.10.080

Resumption of use.

A. Any person required to obtain a permit for resumption of a discontinued use shall pay a supplemental connection charge computed in accordance with this section.

B. Before allowing any credits that may be applicable under subsection (C) of this section, the amount of the connection charge that would be applicable for a new connection shall first be determined as provided in District code 3.10.040.

C. Credit shall then be given for any connection charges previously paid for

wastewater use that was disconnected. Credit shall also be given for the differential increase, if any, in connection charges that occurred from the time connection charges were originally paid to the time the original use was discontinued, but only if all sewer service charges levied against the premises during that interval were paid. In no event shall the amount of the credit exceed the amount of the connection charge determined as provided in District code 3.10.040. [Ord. 81 § 8, 2006.]

3.10.090

Wastewater volume determination.

A. This section governs the manner in which flows of wastewater are determined for the purposes of this chapter.

B. As provided in District code 3.10.070(B)(2), each residential dwelling unit is presumed to discharge a volume of wastewater at the rate of 200 gallons per day.

C. Subject to the provisions of subsections (D) and (E) of this section, the volume of wastewater discharged by nonresidential premises is determined as follows:

1. The volume of all sources of water furnished to the premises for the periods described in subsection (C)(2) of this section shall be ascertained. In the case of nonresidential premises connected pursuant to a district permit, which measured the anticipated discharge in fixture units rather than gallons, a fixture unit is deemed to be equivalent to a discharge rate of seven and one-half gallons per day. For example, a public water closet is designated in the Uniform Plumbing Code to have six fixture units. The wastewater discharge rate from the plumbing fixture is determined by multiplying the number of fixture units (six) by seven and one-half gallons per day, the product of which is 45 gallons per day. The total discharge rate from the premises is determined by totaling the number of fixture units for each plumbing fixture in the premises and multiplying that total by seven and one-half gallons per day. The connection fee is then determined by multiplying that product by the corresponding per gallon per day base charge for the applicable fiscal year (refer to District code 3.10.040(A)).

For water derived from a public utility, the flow shall be based upon the records of metered flows supplied by the utility. See subsection (E) of this section for determination of sources of water not supplied by a public utility.

2. The pertinent periods of water usage are the calendar months of July and August and January and February during the calendar year immediately preceding the fiscal year in question. For example, the wastewater discharge volume determination applicable in fiscal year 2006-07 for nonresidential premises would be based on water usage during the months of July and August 2005 and January and February 2006.

3. The amount of water, measured in gallons, determined under subsection (C)(2) of this section is totaled and then multiplied by three. That product is then divided by 365 and the result is the presumed average daily flow for the premises.

D. Upon application by a customer, and upon a finding by the district that a significant portion of the water supplied to the premises does not flow into the district's sewers, the district may authorize determination of the volume of wastewater discharged from the premises to be made by an appropriate metering device. Upon such finding, a metering device, of a type and at a location approved by the district, shall be installed at the customer's expense. The metering device shall measure either the amount of wastewater discharged into district sewers or the amount of water diverted from district sewers. Upon installation, meters shall be maintained and tested periodically for accuracy in accordance with requirements established by the district. All maintenance and testing shall be at the expense of the owner.

E. In lieu of use of a metering device, and upon a determination by the district that it would

be unnecessary or impractical to install, maintain, or operate a metering device, the volume of wastewater discharges may be based upon an estimate as determined by the district. The estimate may be based upon apparent volumes of wastewater flows into the district's system from the customer's premises taking into account building occupancy factors, the kinds of improvements located upon the premises, annual production of goods and services related to the premises, or other factors determined by the district to be related to water use, wastewater volume calculations and/or diversions of water flow from wastewater facilities. [Amended by district during 2016 codification: Ord. 81 § 9, 2006.]

3.10.100

Administration of connection charges.

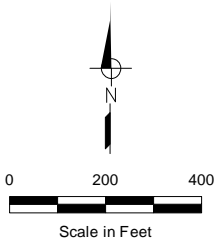
A. The sewer connection charge rate may be revised only by an amendment to this chapter approved by a two-thirds vote of the members of the district board.

B. The district board shall review the sewer connection charge annually during the month of June to determine whether the connection charge rates should be adjusted. No permits for which a connection charge is payable shall be issued in the next fiscal year until the review has been completed.

C. Nothing contained in this section shall be deemed to limit any rights or remedies of the district to collect sewer connection charges. In addition to any other rights and remedies which are available, the district board may, if it determines to do so, employ the procedures established in California Health and Safety Code Section 5474 et seq. [Ord. 81 § 10, 2006.]

Appendix E-1

Marin City Collection System Map



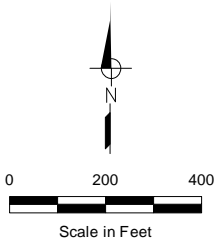
Sausalito-Marine City Sanitary District

Marin City
Wastewater Collection System



Appendix E-2

Marin City Hotspot Cleaning Map



**Sausalito-Marín City Sanitary District
Marín City Wastewater Collection System**

**Hot Spot Map - 4-Month
and 12-Month Cleaning Schedule**



Appendix E-3

SMCSD Conveyance System Assessment Map



Sausalito-Marine City Sanitary District Conveyance System Condition Assessment

Previous Conveyance System Rehabilitation Details



Appendix G

Overflow Emergency Response Manual (<http://smcsd.net>)

Sausalito-Marin City Sanitary District

Overflow Emergency Response Plan

Prepared by:
RMC
Water and Environment

**August 2013
Revised April 2019**

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List of Abbreviations

CalOES	California Office of Emergency Services
CCTV	Closed-Circuit Television
CDFG	California Department of Fish and Game
CIWQS	California Integrated Water Quality System
CMMS	Computerized Maintenance Management System
District	Sausalito-Marín City Sanitation District
EHS	County of Marin Environmental Health Services
EPA	Environmental Protection Agency
Field Report	Sanitary Sewer Overflow Service Call & Field Report Form
GWDR	General Waste Discharge Requirement
LRO	Legally Responsible Officer
MRP	Monitoring and Reporting Form
O&M	Operations and Maintenance
RWQCB	Regional Water Quality Control Board
SMCSD	Sausalito-Marín City Sanitation District
SOP	Standard Operating Procedure
SSO	Sanitary Sewer Overflow
OERP	Overflow Emergency Response Plan
SWRCB	State Water Resources Control Board

Chapter 1 Introduction

The purpose of the Sanitary Sewer Overflow Response Plan (SSORP) or Overflow Emergency Response Plan (OERP) is to support an orderly and effective response to Sanitary Sewer Overflows (SSOs). The OERP provides guidelines for responding to, cleaning up, and reporting SSOs that may occur within the collection system service area.

1.1 Regulatory Requirements

The section summarizes the regulatory requirements for the OERP.

1.1.1 EPA Administrative Order Requirements

For Sausalito-Marín City Sanitation District (District or SMCS D), this Sanitary Sewer Overflow Response Plan addresses the requirements of Section II of the EPA Order for Compliance, Docket No. CWA-309(a)-08-031, dated April 10, 2008 which includes the following requirements:

II. Spill Response, Recordkeeping, Notification and Reporting

- A. Sanitary Sewer Overflow Response Plan: By October 15th, 2008, an SSORP shall be submitted to EPA. An SSORP shall describe emergency response and contingency procedures to address SSOs from its collection system, including measures for containing and recovering spilled sewage, establishment of interim system operations, and timely repair and restoration of normal operations. Each agency shall ensure that agency staff and responders are adequately trained to perform the procedure outlined in the SSO response plan. The plan shall include:*
- i. Procedures to notify the responders during normal business hours and after business hours. The responder shall respond within 30 minutes after notification.*
 - ii. Procedures to ensure containment, termination, maximum recovery, and cleanup of spilled sewage. These procedures shall prevent spills from reaching storm drains and surface water, and mitigate the impact of spills that reach storm drains and surface water.*
 - iii. Procedure to estimate volume. The procedures should include more than one estimation method that can be used for different spill scenarios.*
 - iv. Procedures to secure the area surrounding a spill and post warning signs as necessary in coordination with the County of Marin's Department of Health and Human Services;*
 - v. Procedures to sample and monitor surface waters following spills.*
 - vi. A list of necessary spare parts and emergency equipment to ensure adequate response time and maximum recovery of spilled sewage.*
 - vii. A description of staffing needs required to respond to SSOs and whether staffing duties will be carried out by agency staff, staff from other agencies, or private contractor(s). To the extent that any SSO response duties will be carried out by private contractor(s), the plan shall describe the contractor and include copies of the contracts obligating the contractor(s) to fulfill the requirements of the SSO response plan implemented pursuant to this Order.*
- B. Recordkeeping: The response plan developed shall include procedures for agency staff or its contractors to maintain records of spill incidents, including field reports that provide*

adequate information to meet reporting requirements to regulatory agencies, and procedures to link these records to the Maintenance Management System.

- C. Notification: The response plan developed shall include procedures for notifying the public, including schools and recreational clubs, which may be affected by the spill. The plan should include procedures for advising the public to avoid contact and to take steps, as appropriate, in cases of contact with spilled sewage. For spills in homes and businesses, the plan should include procedures for cleaning the spill area. The plan shall identify the agency staff person(s) responsible for public notification.*
- D. Reporting: The response plan shall include procedures for reporting spills, as required, to the appropriate regulatory agencies, including the Regional Board, State Water Resources Control Board, the State of California's Emergency Management Agency¹, and the County of Marin's Department of Health and Human Services. The plan shall identify the agency staff person(s) responsible for reporting sewage spills.*

An Amended Order is currently pending.

1.1.2 GWDR Requirements

The Statewide General Waste Discharge Requirements (GWDR) for Sanitary Sewer System was adopted by the State Water Resources Control Board of California (SWRCB) on May 2, 2006. The goal of the GWDR is to provide a consistent statewide approach for reducing SSOs. The GWDR outlines requirements for all publicly owned sanitary sewer collection systems in California with more than one mile of sewer pipe. Per the GWDR, 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 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.

¹ California Emergency Management Agency is the California Office of Emergency Services (CalOES).

1.2 Goals

The purpose of this OERP is to provide Sausalito-Marín City Sanitation District (District or SMCS D) personnel with established guidelines for responding to sewer spills which may occur within the collection system service area. The goals with respect to responding to SSOs are:

- Respond quickly to minimize the volume of the SSO;
- Eliminate the cause of the SSO;
- Contain the spilled wastewater to the extent feasible;
- Minimize public contact with the spilled wastewater;
- Mitigate the impact of the SSO; and
- Meet the regulatory reporting requirements.

1.3 Definitions

Major Sanitary Sewer Overflow (SSO): Category 1 SSO or Category 2 SSO.

Minor Sanitary Sewer Overflow (SSO): Category 3 SSO.

Sanitary Sewer System: Any 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.

Sanitary Sewer Overflow (SSO): - An SSO includes any overflow, spill, release, discharge or diversion of untreated or partially treated wastewater from a sanitary sewer system. Temporary storage and conveyance facilities (such as vaults, temporary piping, construction trenches, wet wells, impoundment, tanks, etc) are considered to be part of the sanitary sewer system, and discharges to these temporary storage facilities are not considered to be SSOs. Table 1-1 summarizes the SSO categories and definitions.

Table 1-1: Spill Categories and Definitions

CATEGORIES	CATEGORIES DEFINITIONS*
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: <ul style="list-style-type: none"> <input type="checkbox"/> Reach surface water and/or reach a drainage channel tributary to a surface water; or <input type="checkbox"/> Reach a municipal separate storm sewer system 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 municipal separate storm sewer system is considered to have reached surface water unless the storm drain system discharges to a dedicated storm water or ground water infiltration basin (e.g., infiltration pit, percolation pond).
CATEGORY 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 municipal separate storm sewer system unless the entire SSO discharged to the storm drain system is fully recovered and disposed of properly.
CATEGORY 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 CIWQS Online SSO Database.

*[see Section A on page 5 of Order 2006-0003-DWQ for Sanitary Sewer Overflow (SSO) definition]

Chapter 2 Response to Notification of Spill

The Sausalito-Marín City Sanitary District has adopted service call/overflow response procedures requiring immediate response to minimize or eliminate an overflow. The District provides all necessary spill response supplies, which are available for use at any time. The Overflow Response Standard Operational Procedure (SOP), included as Appendix 1, is to aid staff in prompt and responsible SSO response.

When a notification of an SSO is received, it should be clearly communicated who will respond, the estimated time of arrival, and what areas will need to be accessed. The information provided by the caller should be verified before dispatching a field crew. This includes verifying the address and nearest cross street and making sure it is part of the District's conveyance system. If not, provide the caller with the phone number of the responsible agency and follow up by calling the agency and providing the details of the call. Contact information for neighboring agencies is included in Appendix 2.

2.1 Public Observation of SSO

Public observation is the most common way that District is notified of blockages and spills. Contact information for reporting sewer spills and backups are in the phone book and on the website: www.smcsd.net. The main telephone number and after hours number is (415) 332-0244.

2.1.1 Normal Working Hours

The regular working hours are Monday through Friday from 7:00 a.m. 3:00 p.m., except holidays. When a report of a sewer spill or backup is made, District staff route the call directly to the Superintendent, who takes the information from the caller, and fills out the first section of the Collection Systems Service Call & Field Report Form (Field Report) found in Appendix 4.

The Superintendent verbally communicates the information to On-Call Crew along with any information collected on the Field Report (Appendix 4).

2.1.2 After Normal Working Hours

After working hours, calls are automatically routed to an answering service. The service's telephone number is (415) 332-0244. The answering service takes essential information and then notifies the District's On-Call Crew, who complete the first part of the Field Report (Appendix 4). The On-Call Crew determines the appropriate response measures based on information provided by the caller.

2.2 Receipt of SCADA Alarm

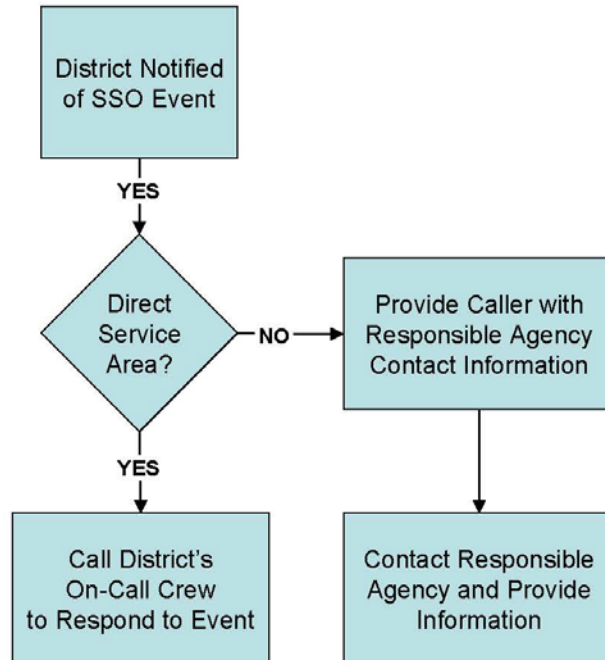
The City's pump stations are monitored using SCADA. Alarm conditions are monitored by District staff.

2.3 Staff Observation

District field crews and contractors perform periodic work on its sewer system facilities. Any problems noted with the sewer system facilities are reported to the Superintendent, who, in turn, responds to emergency situations.

2.4 Response Flow Chart

Sewer service calls and pump station alarms are considered high priority events that demand a prompt response. The notification and response procedure flow chart is shown on **Figure 2-1**.

Figure 2-1: Notification and Response Flow Chart

2.5 Roles for Responding to SSOs

Currently, the following positions are responsible for responding to SSOs:

- First Responder to SSO: SSO Response Crew
- First Responder to Pump Station or Forcemain Failure: SSO Response Crew or District supervisory staff.
- Claims Processing: General Manager

The contact information for those currently holding the positions named above are shown in Appendix 3.

Chapter 3 SSO Response Procedures

This section describes the procedures for responding to an SSO from the time that the first responders are dispatched through containment of the spill.

3.1 Customer Relations Practices

As a representative of the District, you will occasionally have to deal with an irate homeowner. A sewer backup is a stressful event and even a reasonable homeowner can become irate if it is perceived that staff members as being indifferent, uncaring, unresponsive, and/or incompetent.

Although sometimes difficult, effective management of a sewage backup situation is critical. If it is not managed well, the situation can end up in a costly, prolonged process with the homeowner. The homeowner should feel assured that the District is responsive and the homeowner's best interest is a top priority.

It is important for employees to communicate effectively with customers, especially in sewage backup situations. How we communicate – on the phone, in writing, or in person – is how we are perceived. Good communication with the homeowner results in greater confidence in our ability to address the problem satisfactorily, less chance of having the homeowner prolong the claims process, and less chance of the customer exaggerating the damage done on the property.

Here are a few communication tips:

- Give the homeowner ample time to explain the situation or to vent. Show interest in what the homeowner has to say, no matter how many times you have heard it before, or how well you understand the problem.
- As soon as possible, let the customer know that you will determine if the source of the sewer backup is in the sewer main and, if it is, will have it corrected as quickly as you can.
- Acknowledge the homeowner's concerns. For example, if the homeowner seems angry or worried about property damage, say something like, "I understand that you're concerned about the possible damage to your property, but a professional cleanup crew can restore the area."
- Express understanding and empathy for any inconveniences caused by the incident, but do not admit fault. If it is determined that the District is at fault, the property owner has the right to file a claim for any reasonable repairs or losses resulting from the incident.
- As much as possible, keep the homeowner informed on what is being done and will be done to correct the problem.
- Keep focused on getting the job done in a very professional manner. Don't wander from the problem with too much unnecessary small talk with the homeowner.
- Don't find fault or lay blame on anyone.

3.2 First Responder Priorities

The first responder's priorities are:

- To follow safe work practices.
- To respond promptly with the appropriate equipment.
- To evaluate the cause of spill and determine responsibility.
- To restore the flow as soon as possible.
- To contain the spill whenever feasible.
- To minimize public access to and/or contact with the spilled sewage.

- To promptly notify the Superintendent or General Manager 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).

3.3 Safety

The first responder is responsible for following safety procedures at all times. Special safety precautions must be observed when performing sewer work. Special consideration should be given to following all local traffic, confined space, and safety procedures.

3.4 Initial Response

All sewer system calls require a response to the reported location of the event in an attempt to minimize or eliminate an overflow. The first responder must respond (depart their current location) within 60 minutes after initial notification of the spill. If the responder cannot depart their current location within 60 minutes, then the late response shall be reported according to the requirements in Chapter 6.

The first responder should determine appropriate response measures based on the circumstances and information provided by the caller (e.g. weather and traffic conditions, small backup vs. sewage flowing on the ground, etc.). If additional help is needed, contact other employees, contractors, and/or equipment suppliers. Contact information for District personnel is available in the Appendix 3. A comprehensive external Emergency Contact List can be found in Appendix 2. Based on available information, the first responder should determine if a combination sewer cleaning truck and/or a spill response vehicle is needed.

Upon arrival at the site, the first responder should:

- Note arrival time at spill site (include in Field Report in Appendix 4).
- Verify the existence of a sewer system spill or backup.
- Field verify the address and nearest cross street, making sure it's part of the District's sewer/conveyance system.
- Identify and clearly assess the affected area and extent of spill.
- Comply with all safety precautions (traffic, confined space, etc.)
- Contact caller, if time permits.
- Notify the Superintendent if:
 - The spill appears to be large, in a sensitive area, or there is doubt regarding the extent, impact, or how to proceed; or
 - Additional help is needed for line cleaning or repair, containment, recovery, lab analysis, and/or site cleanup.
- If the spill is large or in a sensitive area, document conditions upon arrival.

3.5 Restore Flow

Upon arrival at the location of a spill into a house or a building, the first responder should evaluate and determine if the spill was caused by a blockage in the lateral or in the District-owned sewer main, caused either by a backup in the sewer main line or nearby O&M activities.

- If a blockage is found in a property owner's lateral, it should be clearly communicated that it is not the District's responsibility to work on a private lateral.
- If a backup in the main line is found to have caused the SSO in a house or building, relieve the blockage in the main line and see Section 4.6 for Claims and Restoration Firm information.

The first responder should attempt to remove the blockage from the system and restore flow to the area. Using the appropriate cleaning tools, the field crew should set up downstream of the blockage and hydro-clean upstream from a clear manhole. The flows should be observed to ensure that the blockage does not recur downstream.

If the blockage cannot be cleared within a reasonable time, 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. A Staff Contact List can be found in Appendix 3, and an external Emergency Contact List is in Appendix 2.

3.5.1 Pump Station or Forcemain Facilities

The first responder to a potential conveyance system failure should:

- Determine whether flow can be restored within a reasonable time.
- If it appears that flow cannot be restored within a reasonable time or if the conveyance system facility requires construction and/or repairs, then employ contingency plans covering containment, bypass pumping, contractual assistance, etc.

If assistance is required, immediately contact other employees, contractors, and equipment suppliers as required. The contact information can be found in Appendix 2 and Appendix 3.

3.6 Contain the Spill

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 available equipment and materials 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 or vacuum flow from upstream of the blockage and dispose of downstream of the blockage to prevent further overflow.
- When an SSO occurs inside of a house or building, the property owner should be instructed to follow these guidelines:
 - Keep all family members and pets away from the affected area.
 - Place towels, rags, blankets, etc between areas that have been affected and areas that have not been affected.
 - Do not remove any contaminated items
 - Turn off the HVAC system
 - Move any uncontaminated property away from the overflow area.
- NOTE: If an SSO reaches a water body, see Section 4.3 for Water Quality Sampling requirements.

3.7 SSO Notification Signage and Restrict Public Access

Barriers shall be installed to prevent the public from having contact with the sewage if possible. Signs should be posted to keep vehicles and pedestrians away from contact with spilled sewage. Do not remove the signs until directed by the General Manager. A sample warning sign is included as Appendix 5. Additional information about posting signs during major SSOs is included in Chapter 5 of this document.

Chapter 4 Recovery and Clean Up

The recovery and clean up phase begins when the flow has been restored and the spilled sewage has been contained to the extent possible.

4.1 Recovery of Spilled Sewage

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

4.2 Clean Up and Disinfection

Clean up and disinfection procedures should 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 should be modified as required for wet weather conditions. Where clean up is beyond the capabilities of District staff, a cleanup contractor will be used.

4.2.1 Private Properties

Spills inside houses or buildings should be cleaned up by a professional cleaning company. Contact information for professional cleaning companies can be found in Appendix 3. Claims should be submitted based on information in Section 4.6 of this document.

4.2.2 Hard Surface Areas

- Collect all signs of sewage solids and sewage-related material either by hand or with the use of rakes and brooms.
- Wash down the affected area with clean water. Take reasonable steps to contain and vacuum up the wastewater.
- Disinfect all areas that were contaminated from the overflow using the disinfectant solution of household bleach diluted 10:1 with water. Apply minimal amounts of the disinfectant solution using a hand sprayer. Document the volume and application method of disinfectant that was employed.
- Allow area to dry. Repeat the process if additional cleaning is required.

4.2.3 Landscaped and Unimproved Natural Vegetation

- Collect all signs of sewage solids and sewage-related material either by 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.

4.2.4 Natural Waterways

The California Department of Fish and Game (CDFG) should be notified in the event an SSO impacts any creeks, gullies, or natural waterways. CDFG will provide the professional guidance needed to effectively clean up spills that occur in these sensitive environments. Clean up should proceed quickly in order to minimize negative impact. Any water that is used in the cleanup process should be de-chlorinated prior to use.

4.2.5 Wet Weather Modifications

Omit flushing and sampling during heavy storm events with heavy runoff where flushing is not required and sampling would not provide meaningful results.

4.3 Water Quality Sampling

Water quality sampling and testing is required whenever spilled sewage enters a water body to determine the extent and impact of the SSO. The following guidelines must be followed:

- The first responder should notify District Field Crew to collect samples. Samples should be collected as soon as possible after the discovery of the SSO event.
- For spills less than 1,000 gallons, at a minimum water quality samples should be collected at the discharge point, 100 feet upstream, and 100 feet downstream.
- If a spill is more than 1,000 gallons, additional sites should be sampled and should account for spill travel time in the surface water; recommendations should be given according to County of Marin Environmental Health Services (EHS) requirements.
- If a spill reaches a large water body, the water quality samples should be collected near the point of entry of the spilled sewage and every 100 feet along the shore of stationary water bodies.
- In scenarios where monitoring following the protocol described above is not possible due to safety, access restrictions, or other constraints, communicate with EHS and/or RWQCB staff to determine an acceptable monitoring approach. Document decisions to deviate from the standard monitoring approach, including date, time, and parties communicated with at EHS and RWQCB regarding an alternative approach.

The water quality sampling procedures, which are the same as the EHS procedures are:

- Keep the sterile collection bottle closed until it is to be filled. Do not contaminate inner surface of the lid or bottle rim.
- Collect water sample just below the surface in knee deep water, approximately 3 feet deep (full arm's length), without rinsing. If needed, extend the sampling pole to the fullest length to reach deeper water depth. Minimize contact with bank or beach bed as water fouling may occur.
- Remove cap and hold the bottle near its base and plunge it, neck downward, below the surface. Turn bottle until neck points slightly upward and mouth is directed toward the current. Fill bottle leaving about 1 inch of air to allow lab to mix by shaking. Collect a minimum of 100 mL. (If applicable, insert sterile collection bottle into the holder on the sample pole. Extend the sample pole and plunge bottle end into the water, bottle opening downward.)
- Immediately place cap securely on bottle to avoid leaks and contamination.
- Dry the bottle.
- Label container with distinctive sample site name, date, and time collected.
- Complete the laboratory requisition slip with requested information (site, bottle number, collector, date and time of collection, type of sample, test requested, name and phone number of responsible person for reporting purposes, and deliverer name). Note any field observations that may have occurred during the sampling.
- Test all samples from SSO events for ammonia, fecal coliform and total coliform.
- If deemed necessary by the County EHS for compliance with the California Ocean Water-Contact Sports Standards, or if the SSO is greater than 50,000 gallons, water quality testing must be conducted for all of the following: Ammonia; Total coliform; Fecal coliform; E. coli; Enterococcus.

Samples should be stored and shipped according to the following procedures:

- Place water sample bottle in a cooler with frozen blue ice. Water sample must be kept cool. Ice may be used but care must be taken so water samples are not contaminated or diluted by the ice.
- Bring to a California state-certified laboratory within 8 hours of collection. For compliance tests, the holding time must not exceed 8 hours from the time of collection to time of processing or the tests will be invalidated. Other water tests for non-compliance purposes may be held below 10 degrees C until the time of analysis, up to 24 hours.
- Water samples may be analyzed by the District's laboratory or alternatively a County Health Lab or nearby agency if they are available.
- An alternate testing laboratory that is accredited or certified for the required water quality tests is also an acceptable option.

If deemed necessary by County EHS, sampling must be tested for compliance with Public Beach Sanitation and Ocean Water-Contact Sports bacteriological standards.

A single sample exceeds the standard if:

- Total coliform bacteria are $> 1,000$ per 100 mL sample, if the ratio of fecal/total coliform bacteria exceeds 0.1; or
- Total coliform bacteria are $> 10,000$ per 100 mL sample; or
- Fecal coliform bacteria are > 400 per 100 mL sample; or
- Enterococcus bacteria > 104 per 100 mL of sample.

The mean value of at least five weekly consecutive samples during any 30-day sampling period exceeds the standards if:

- Total coliform bacteria $> 1,000$ per 100 mL of sample; or
- Fecal coliform bacteria are > 200 per 100 mL sample; or
- Enterococcus bacteria are > 35 per 100 mL sample.

If water quality samples are required by an environmental or health regulatory agency or State law, or if voluntary monitoring is conducted by the District or its agent(s), as a result of any SSO, records of monitoring information shall include:

- The date, exact place, and time of sampling or measurements;
- The individual(s) who performed the sampling or measurements;
- The date(s) analyses were performed;
- The individual(s) who performed the analyses;
- The analytical technique or method used; and
- The results of such analyses.

4.4 Estimate the Volume of Spilled Sewage

Use the methods outlined in Appendix 6 to estimate the volume of the spilled sewage. Wherever possible, document the estimate using photos of the SSO site before and during the recovery operation.

4.5 Follow Up Activities

If sewage has reached the storm drain system, the combination sewer cleaning truck should be used to vacuum/pump out the catch basin and any other portion of the storm drain that may contain sewage.

In the event that an overflow occurs at night, the location should be re-inspected first thing the following day. The operator should look for any signs of sewage solids and sewage-related material that may warrant additional cleanup activities.

4.6 Claims for Backups into a Building

The responder to a sewer backup into a house or building should

- Gather information and fill out the Sewer Backup Summary Report (Appendix 7).
- Notify the Superintendent and / or General Manager of the incident.
- Wait for restoration firm to arrive.
- Forward incident reports and related documents to General Manager.

For claims and for potential claims, follow District policies. Responses should follow the protocol highlighted in the Sewer Backup Response and Claims Handling Manual (Appendix 10).

Chapter 5 Public Notification

5.1 County Environmental Health Services Requirements

The EHS Deputy Director shall determine if a field investigation of the discharge site and potentially affected areas is required. If possible, verify the extent of the contamination in the field before the water body closure decision is made. During the field investigation, EHS staff shall notify the Deputy Director of their findings by telephone.

Creeks, streams and beaches that have been contaminated as a result of an SSO should be posted at visible access locations until the risk of contamination has subsided to acceptable background levels. The warning signs, once posted, should be checked every day to ensure that they are still in place. “Closed” signs shall be posted at the outfall and a minimum of 100 feet upstream and 100 feet downstream of the discharge. If there is a large volume of sewage, more signs would have to be posted downstream.

Signs must remain posted until at least two consecutive days of samplings meet the Public Beach Sanitation and Ocean Water-Contact Sports standards as listed in Section 4.3 of this document. In the event where background levels of the water bodies may exceed the standards, EHS will analyze available test results, the situation at hand, and/or require more testing to determine if the Public Beach Sanitation and Ocean Water-Contact Sports standards can be met. The removal of signs must be approved by EHS and the County Public Health Officer.

EHS has the authority to close and re-open the beaches and water bodies for public water contact. The water bodies affected are determined by the following parameters and best professional judgment:

- The volume of sewage discharged;
- Parameters affecting flow of sewage to the water bodies;
- Direction of current;
- Tides;
- Past experience in the area; and/or
- Any other pertinent information.

5.2 Point of Contact

The General Manager or the Superintendent shall be responsible for public notification, if necessary.

Chapter 6 SSO Documentation and Reporting

All SSOs should be thoroughly investigated and documented for use in managing the sewer system and meeting established reporting requirements.

6.1 Internal SSO Documentation

6.1.1 Category 1, 2 and 3 SSOs

The first responder will complete a work order and the Field Report (Appendix 4). The first responder will follow the procedures and complete the Sewer Backup Summary Report (Appendix 7) if an SSO has occurred in a residence or building.

SMCSD staff will prepare a file for each individual SSO. The file should include the following information:

- Initial service call information
- Collection System Service Call & Overflow Field Report Form (Appendix 4)
- Copies of the California Integrated Water Quality System (CIWQS) report forms
- Volume estimate
- Closed-Circuit Television (CCTV) inspection (optional for Category 2 SSOs that are not blockage related)
- Water quality sampling and test results, if applicable

6.1.2 Failure Analysis Investigation (OPTIONAL)

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.

When this optional investigation is deemed necessary, the investigation should include reviewing all relevant data to determine appropriate corrective action(s). The investigation should include:

- Reviewing and completing the Field Report (Appendix 4);
- Reviewing past maintenance records;
- Conducting a CCTV inspection to determine the condition of the line segment immediately following the SSO and reviewing the video and logs; and
- Interviewing staff who responded to the spill.

The product of the failure analysis investigation should be the determination of the root cause and the identification of the corrective actions. The Collection System Failure Analysis Form (Appendix 8) should be used to document the investigation.

6.2 External SSO Documentation

The GWDR requires that individual SSO records be maintained by the District for a minimum of **five years** from the date of the SSO. This period may be extended when requested by a RWQCB Executive Officer. All records shall be made available for review upon SWRCB, RWQCB, or EPA staff's request. Records shall be retained for all SSOs, including but not limited to the following when applicable:

- Copy of Certified CIWQS report;
- All original recordings for continuous monitoring instrumentation;
- Service call records and complaint logs of calls received by the District;

- SSO calls;
- SSO records;
- Steps that have been and will be taken to prevent the SSO from recurring and a schedule to implement those steps;
- Work orders, work completed, and any other maintenance records from the previous five years which are associated with responses and investigations of system problems related to SSOs;
- A list and description of complaints from customers or others from the previous five years; and
- Documentation of performance and implementation measures for the previous five years.

6.3 Internal SSO Reporting Procedure

6.3.1 Category 1 and 2 SSOs

During normal working hours, the first responder will immediately notify the Superintendent . The first responder will fill out the Field Report (Appendix 4) and turn it in to the Legally Responsible Official (LRO). The Superintendent or their designee will meet with field crew at the site of the SSO event to assess the situation and to document the conditions with photos. In the event of a very large overflow or an overflow in a sensitive area, the Superintendent will notify the General Manager and the General Manager may notify the Board of Directors.

6.3.2 Category 3 SSO

The first responder will fill out the Field Report (Appendix 4) and turn it in to the LRO.

6.4 External SSO Reporting Procedure

6.4.1 SSO Reporting in SWRCB CIWQS Database

The CIWQS electronic reporting system should be used for reporting SSO information to the SWRCB whenever possible. A flow chart showing the external reporting response requirements based on the type of SSO is included as Figure 6-1 and a table summarizing notification, reporting, monitoring, and record keeping requirements is included in Table 6-1.

6.4.2 SSO Technical Report

The District 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 will include the following:

Causes and Circumstances of the SSO:

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

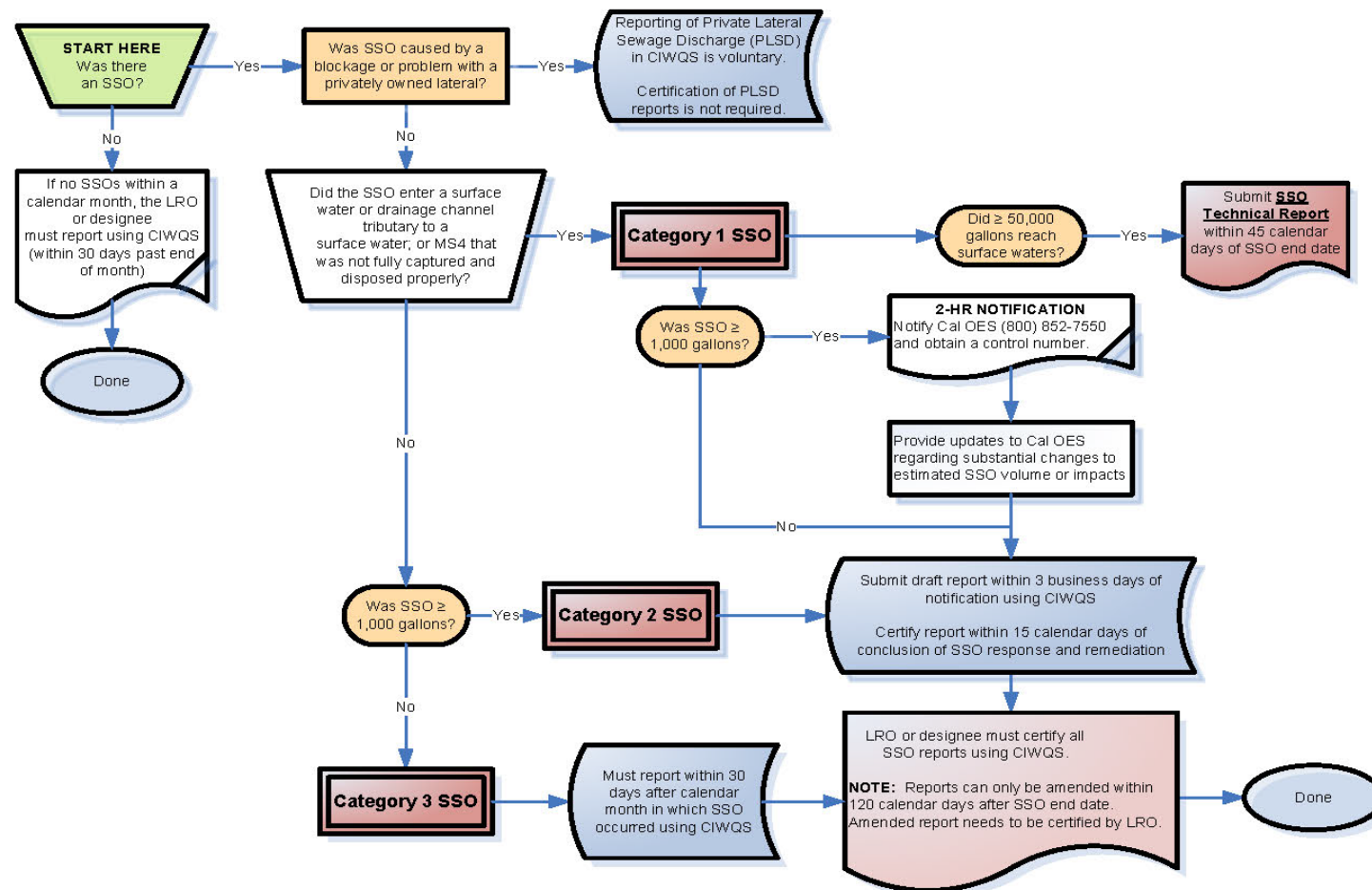
District's Response to SSO:

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

Water Quality Monitoring:

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

Figure 6-1: External Reporting Requirement Flow Chart



Note: In the case of an SSO requiring 2-hour notification to CalOES, the RWQCB and EHS are automatically notified by CalOES of the SSO and therefore do not need to be contacted directly during a 2-hour notification procedure.

Table 6-1: Notification, Reporting, Monitoring, and Record Keeping Requirements

ELEMENT	REQUIREMENT	METHOD
NOTIFICATION (see Section B*)	<ul style="list-style-type: none"> Within 2 hours of becoming aware of any Category 1 SSO greater than or equal to 1,000 gallons, notify the California Emergency Management Agency (Cal OES) and obtain a notification control number. 	Call Cal OES at: (800) 852-7550
REPORTING (see Section C*)	<ul style="list-style-type: none"> Category 1 SSO: Submit Draft report within 3 business days of becoming aware of the SSO and certify within 15 calendar days of SSO end date. Category 2 SSO: Submit Draft report within 3 business days of becoming aware of the SSO and certify within 15 calendar days of SSO end date. Category 3 SSO: Submit Certified report within 30 calendar days of the end of month in which SSO occurred. SSO Technical Report: Certify within 45 calendar days after the end date of any Category 1 SSO in which 50,000 gallons or greater is spilled to surface waters. “No Spill” Monthly Certification: Certify that no SSOs occurred within 30 calendar days of the end of the month in which no SSOs occurred. Collection System Questionnaire: Update and Certify every 12 months. 	Enter data into the California Integrated Water Quality System (CIWQS) Online SSO Database (http://ciwqs.waterboards.ca.gov/), certified by enrollee's Legally Responsible Official(s).
WATER QUALITY MONITORING (see Section D*)	<ul style="list-style-type: none"> Conduct water quality sampling within 48 hours after initial SSO notification for Category 1 SSOs in which 50,000 gallons or greater is spilled to surface waters. 	Water quality results are required to be uploaded into CIWQS for Category 1 SSOs in which 50,000 gallons or greater is spilled to surface waters.
RECORD KEEPING (see Section E*)	<ul style="list-style-type: none"> SSO event records. Sanitary Sewer Management Plan (SSMP) implementation and changes/updates to 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.

*Refers to section in Order No. WQ 2013-0058-EXEC (2013 amendment to Monitoring and Reporting Program associated with Order 2006-003-DWQ).

Category 1 SSOs

Within two hours of being notified of the spill event, the Superintendent, or their designee, will:

- Notify California Office of Emergency Services (CalOES) and obtain spill number for use in other reports;

Within 3 business days of being notified of the spill event, the Superintendent, or their designee, will submit a draft SSO report using CIWQS.

Within 15 calendar days of the conclusion of SSO response and remediation, the Superintendent, or their designee, will certify the final report using CIWQS.

The Superintendent, or their designee, will update the certified report as new or changed information becomes available. Reports can only be amended within 120 calendar days after SSO end date. Amended report needs to be certified by the LRO.

Category 2 SSOs

Within 3 business days of being notified of the spill event, the Superintendent, or their designee, will submit a draft SSO report using CIWQS.

Within 15 calendar days of the conclusion of SSO response and remediation, the Superintendent, or their designee, will certify the final report using CIWQS.

The Superintendent, or their designee, will update the certified report as new or changed information becomes available. Reports can only be amended within 120 calendar days after SSO end date. Amended report needs to be certified by the LRO.

Category 3 SSOs

Within 30 calendar days after the end of the calendar month in which the SSO occurs, the Superintendent, or their designee, will submit an electronic report using CIWQS. The Superintendent, or their designee, will certify the report. The report will include the information to meet the GWDR requirements.

Private Lateral Sewage Discharges

The Superintendent, or their designee, may voluntarily report private lateral SSOs using CIWQS, specifying that the sewage discharge occurred and was caused by a private lateral and identifying the responsible party (other than the District), if known. Voluntary Private Lateral Sewage Discharge (PLSD) reports in CIWQS do not require certification.

Monthly No Spill Certification

If there are no SSOs during the calendar month, the Superintendent, or their designee, will submit an electronic report that the District did not have any SSOs, **within 30 calendar days after the end of each calendar month**. The General Manager, or their designee, will certify the report.

CIWQS Not Available

In the event that CIWQS is not available, the Superintendent, or their designee, will fax or email all required information to the RWQCB office in accordance with the time schedules identified above. In such event, the District will submit the appropriate reports using CIWQS as soon as practical. The San Francisco Bay RWQCB (Region 2) fax number is (510) 622-2460.

6.4.3 EPA Reporting Requirements

On the fifteenth day of January, April, July, and October in each year in which activities are conducted pursuant to the EPA Administrative Order, the District shall submit a tabulation of all sewage spills occurring during the previous calendar quarter. The quarterly reports shall indicate, for each spill, the spill

date, spill volume, volume recovered, spill location, and spill destination. Certified and uncertified spill reports submitted to the SWRCB's CIWQS during the previous calendar quarter may be included.

Chapter 7 Equipment Inventory

The District and a local contractor, Roy's Sewer Service, maintain a stock of emergency response equipment which is available if needed for SSO response. Roy's Sewer Service equipment inventory is included as Appendix 9.

For proper water quality sampling according to EHS standards, the following supplies are needed:

- Sterile plastic bottles, 125 mL and 250 mL
- Chain of Custody Forms (COCs)
- Styrofoam container, ice chest, or equivalent
- Blue ice packs, frozen
- Waterproof marker and ballpoint pen
- Labels for collection bottles
- Paper or Towel for drying bottles
- Sampling pole for collecting samples (optional)
- Rubber boots and/or rubberized waders

Chapter 8 SSO Response Training

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

8.1 Employees and Contractor Employees

8.1.1 Initial and Annual Refresher Training

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

8.1.2 SSO Training Record Keeping

Records should 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 should include date, time, place, content, name of trainer(s), and names of attendees.

Appendix 1 - Overflow Response Standard Operating Procedures

Appendix 2 - Emergency Contact List

Appendix 3 - First Responders Contact List

Appendix 4 - Sewer System Overflow Service Call & Field Report Form

Appendix 5 - Sample Warning Sign

Appendix 6 - Methods for Estimating Spill Volume

Appendix 7 - Sewer Backup Summary Report

Appendix 8 - Collection System Failure Analysis Form

Appendix 9 - Equipment Inventory

Appendix 10 - Sewer Backup Response and Claims Handling Manual

Appendix I

Capacity Assessment and Capacity Assurance Plan (from SSRAP Vol. III)

**Capacity Assessment and Capacity Assurance Plan
Sections from the October 2010 Sewage Spill Reduction
Action Plan – Volume III**

Section 4 Capacity Assessment

4.1 Introduction

4.1.1 Purpose

This portion of the SSRAP submittal presents the results of the collection system capacity assessment to comply with subsection IV.B.3 of the Order. This subsection of the Order requires that the agencies identify areas, sources, and quantities of infiltration/inflow (I/I) in the collection system; identify bottlenecks to conveying wet weather flows; and discuss the impact of flows from one agency to another and on SMCSD's wastewater treatment plant (WWTP).

This capacity assessment for SMCSD is based on flow monitoring data obtained during the 2008/09 wet weather season, flow data from the District's permanent pump stations, and hydraulic analysis of the SMCSD interceptor system and WWTP. The capacity assessment has been used to develop a Capacity Assurance Plan as required under Section V.B of the Order (see Section 5 of this report) and to complete the Pump Station Reliability Certification for Peak Wet Weather Flows as required under Section III.C of the Order (see Section 2 of this report).

4.1.2 Requirements of the EPA Amended Order for Compliance

The EPA Order, Section IV.B includes the following requirements:

IV. COLLECTION SYSTEM ASSESSMENTS

B. Capacity Assessment:

1. *By October 15, 2008, SMCSD, TCSD, and the City of Sausalito shall each install flow meters to identify average and peak dry and wet weather flow rates generated by each agency's collection system service area*
2. *By October 15, 2009, and each year thereafter, SMCSD, TCSD, and the City of Sausalito shall each submit a report to EPA providing the results of collection system flow monitoring, including average dry weather flow and peak wet weather flow from its collection system.*
3. *By October 15, 2010, , SMCSD, TCSD, and the City of Sausalito each shall complete an assessment and submit a report to EPA on collection system flows and hydraulic capacity. The assessments shall include flow measurements, visual observations of flow levels and predictive flow modeling as needed to complete a report that:*
 - a) *Identifies areas, sources and quantities of significant inflow to the sewage collection system;*
 - b) *Identifies areas, sources and quantities of significant infiltration to the sewage collection system;*
 - c) *Identifies any bottlenecks in the collection system which lack sufficient capacity to convey sewage flows through the collection system and to the SMCSD WWTP during wet weather; and*
 - d) *Provides a discussion of the impact of wet weather flow from one agency to another as well as the impact on the SMCSD WWTP.*
4. *If the work described in either Paragraph IV.B.1 or Paragraph IV.B.3 has been completed within the past two years by any of the agencies, a brief summary of the work and the recommendations may be substituted for the study.*

4.1.3 Current and Previous Flow Monitoring

Flows in the SMCSD system are measured by permanent meters located at three of the SMCSD wastewater pump stations (Main Street, Locust Street, and Marin City), at the TCSD Bell Lane Pump Station, and at the SMCSD WWTP. (Flows from the GGNRA are also measured at the National Park Service's Fort Baker Pump Station.) A temporary wet weather flow monitoring program was conducted during the 2008/09 wet weather season in compliance with subsection IV.B.1 of the Order, and the results were summarized in the Annual Report on Flow Monitoring submitted to the EPA in October 2009. A limited flow monitoring program was also conducted by SMCSD in the 2004/05 wet weather season as part of previous wet weather flow and capacity studies.

4.1.4 Previous Hydraulic Modeling and Capacity Assessments

SMCSD developed a partial hydraulic model of its wastewater conveyance system in 2006 as part of a capacity assessment for its Locust Street Pump Station (Locust Street Pump Station Flow and Capacity Study, MWH, February 17, 2006). That model was expanded to include the conveyance system downstream of Locust Street to the WWTP as part of a more comprehensive system analysis completed in 2008 (Wet Weather Conveyance and Treatment Evaluation, RMC, February 2008). The models developed during these previous studies were calibrated to data from SMCSD permanent flow monitors and previous temporary meters. As part of the previous work, SMCSD conducted analyses to select an appropriate design storm event, and developed alternatives for handling design peak wet weather flows in its conveyance system and WWTP. The capacity assessment presented in this report builds upon the work conducted in the previous studies.

4.2 Hydraulic Model

The modeling conducted for this capacity assessment utilized InfoWorks CS™, a fully dynamic hydraulic modeling software program that had been used for the previous modeling of the SMCSD system.

The hydraulic model consists of a representation of key facilities in the SMCSD conveyance system, plus the sewer "subbasins" (called "subcatchments" in InfoWorks) that represent the flow from unmodeled sewers in the SMCSD, TCSD, and Sausalito collection systems that discharge to the SMCSD conveyance system. Specifically, the model includes the SMCSD interceptor system starting upstream at the Bell Lane Pump Station (the Bell Lane Pump Station and first approximately 4,000 feet of force main are owned by TCSD) and extending downstream to the WWTP. The model also includes the Marin City Pump Station and its connection to the interceptor. **Figure 4-1** shows the modeled SMCSD conveyance system and the tributary areas for Sausalito, Marin City (part of SMCSD), and TCSD, as well as the permanent flow monitoring sites in the SMCSD system.

As part of the development of the 2008/09 flow monitoring program, collection system maps available in GIS format were used to delineate sewer subbasins. Sewer subbasins define areas within each agency's collection system that typically drain to a common point or several points in close proximity on the SMCSD interceptor. **Figure 4-2 through Figure 4-4** show the delineation of sewer subbasins and 2008/09 wet weather flow monitoring sites for the Sausalito, Marin City, and TCSD systems. (A total of 26 flow monitoring sites, including permanent pump station sites, were included in the 2008/09 program.) Note that because all flow from TCSD (other than a small area along Tennessee Valley Road identified as Subbasin TCSD-8 in Figure 4) is discharged into the SMCSD system via the Bell Lane Pump Station, TCSD is represented in the SMCSD model by only two areas, the combined Bell Lane tributary area (subbasins TCSD-1 through -6) and subbasin TCSD-8. (Note that TCSD also receives a small amount of flow from the Muir Woods National Monument, which is conveyed through the system to the Bell Lane Pump Station.) Therefore, the flow contribution from TCSD was based on the flows measured at the Bell Lane Pump Station. Data from the temporary meters installed elsewhere in TCSD were not used for SMCSD's capacity assessment.

Figure 4-5 shows an overall schematic diagram of the SMCSD modeled system and subbasins.

Figure 4-1: SMCSD Modeled Conveyance System, Tributary Areas, and Permanent Flow Monitoring Sites

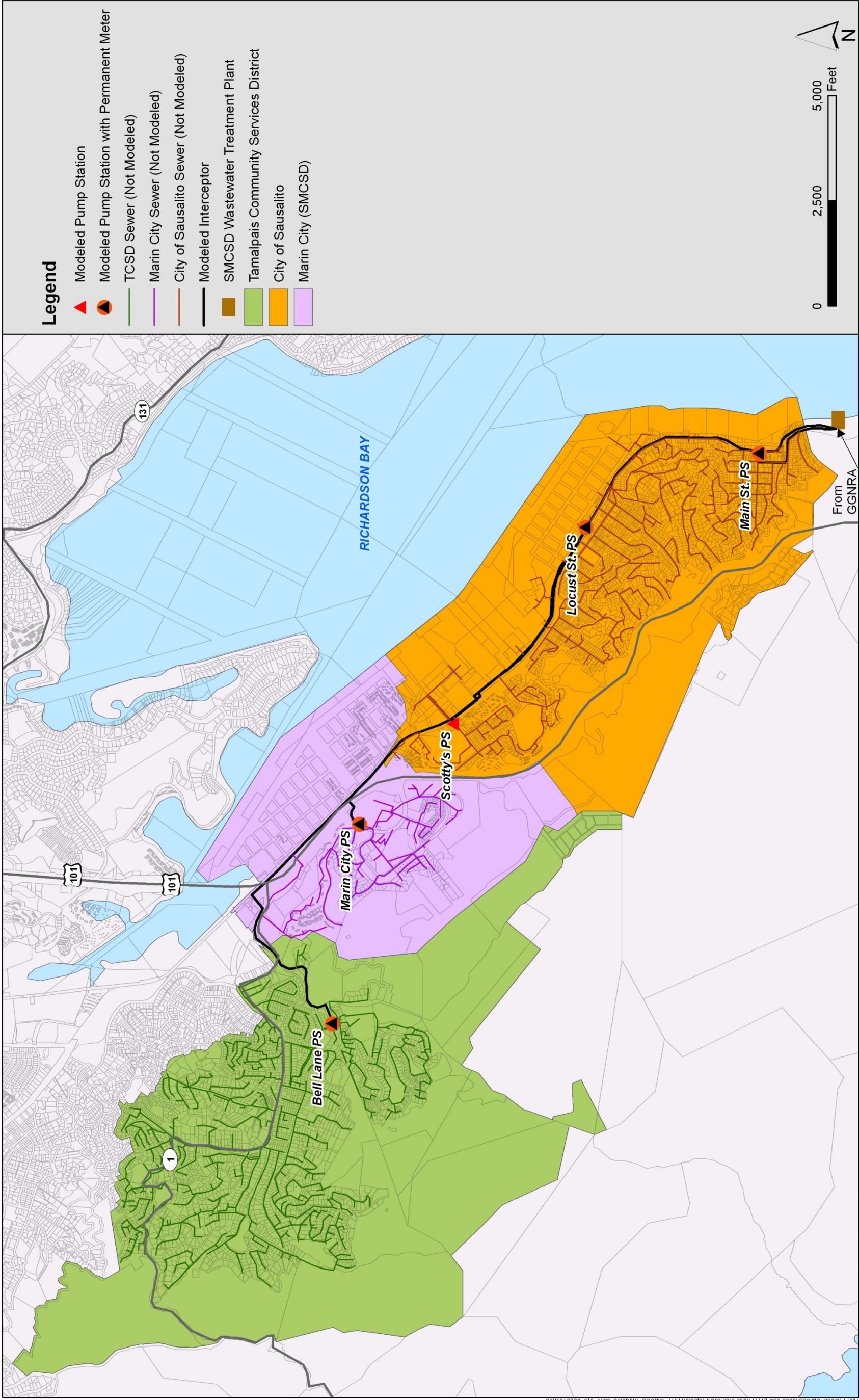


Figure 4-2: Sausalito Sewer Subbasins and Wet Weather Flow Monitoring Sites

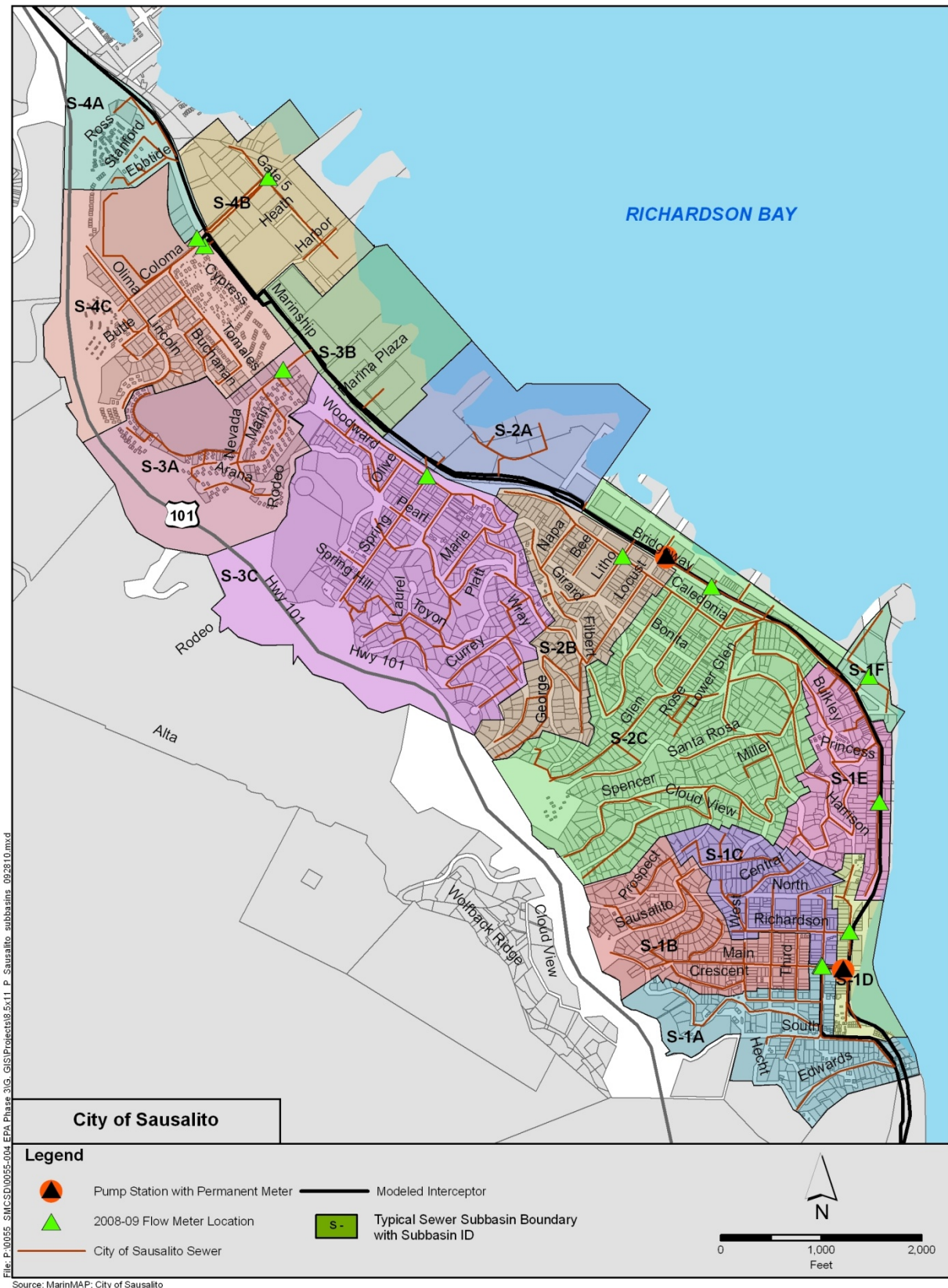


Figure 4-3: Marin City (SMCSD) Sewer Subbasins and Wet Weather Flow Monitoring Sites

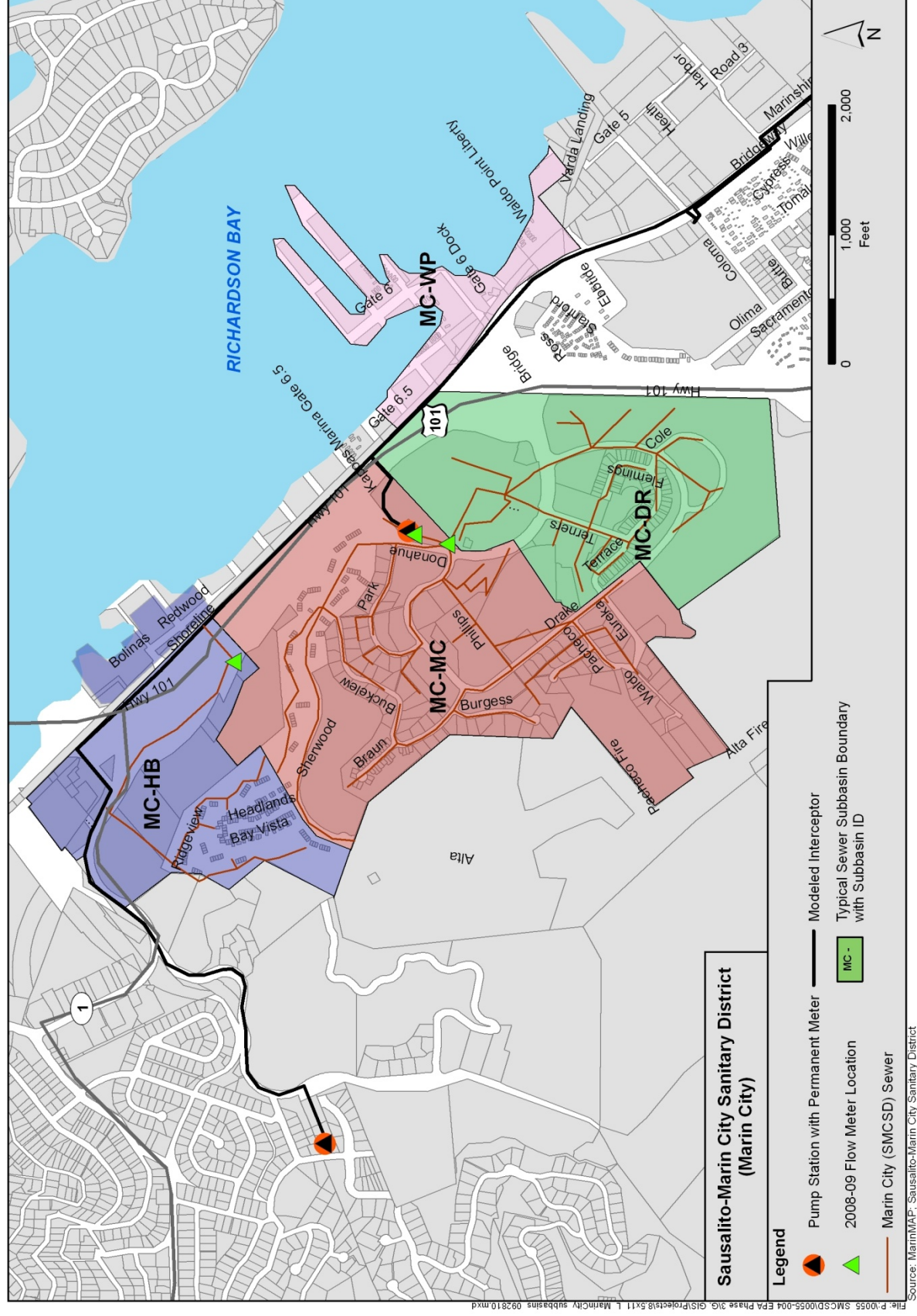


Figure 4-4: TCSD Sewer Subbasins and Wet Weather Flow Monitoring Sites

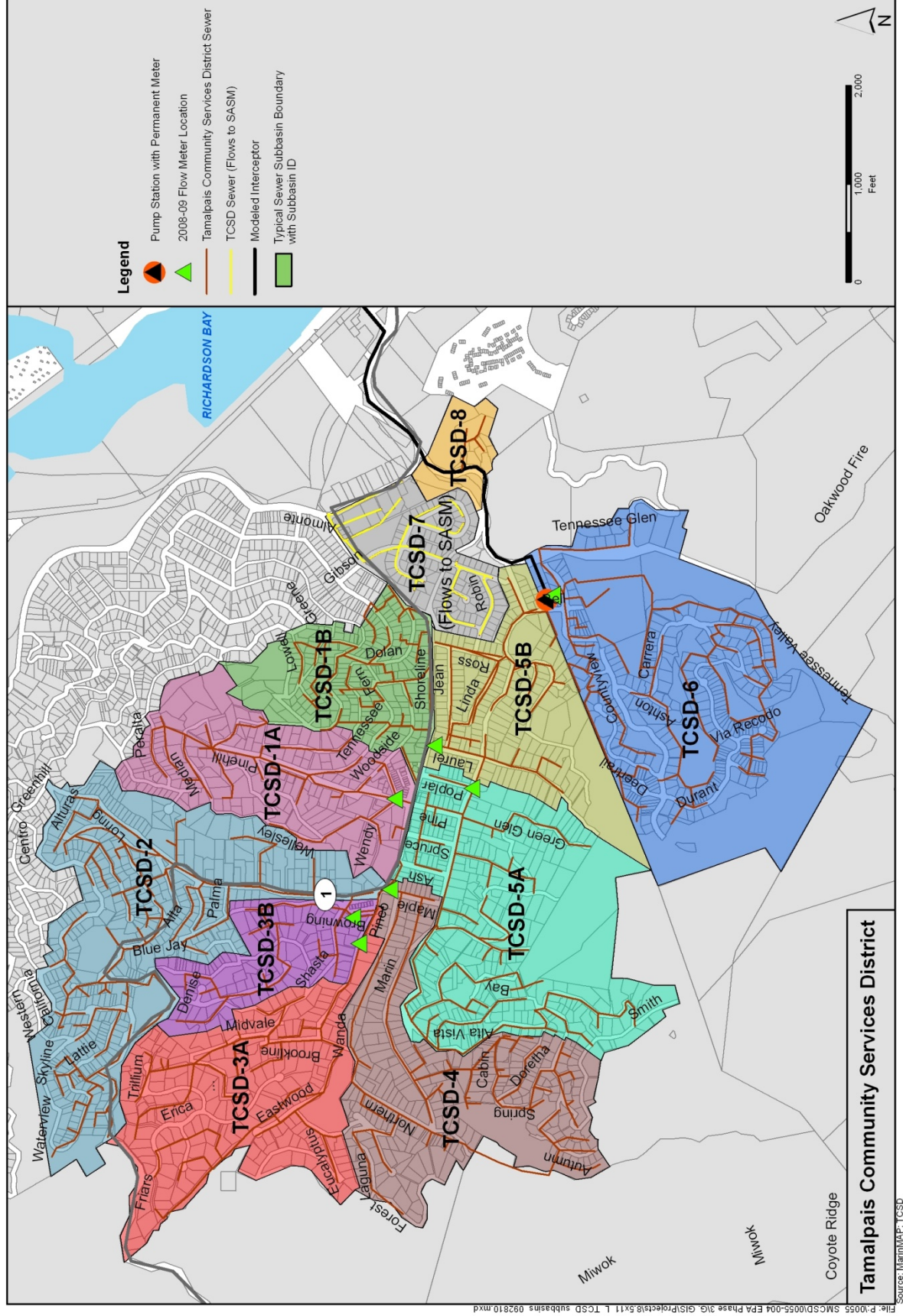
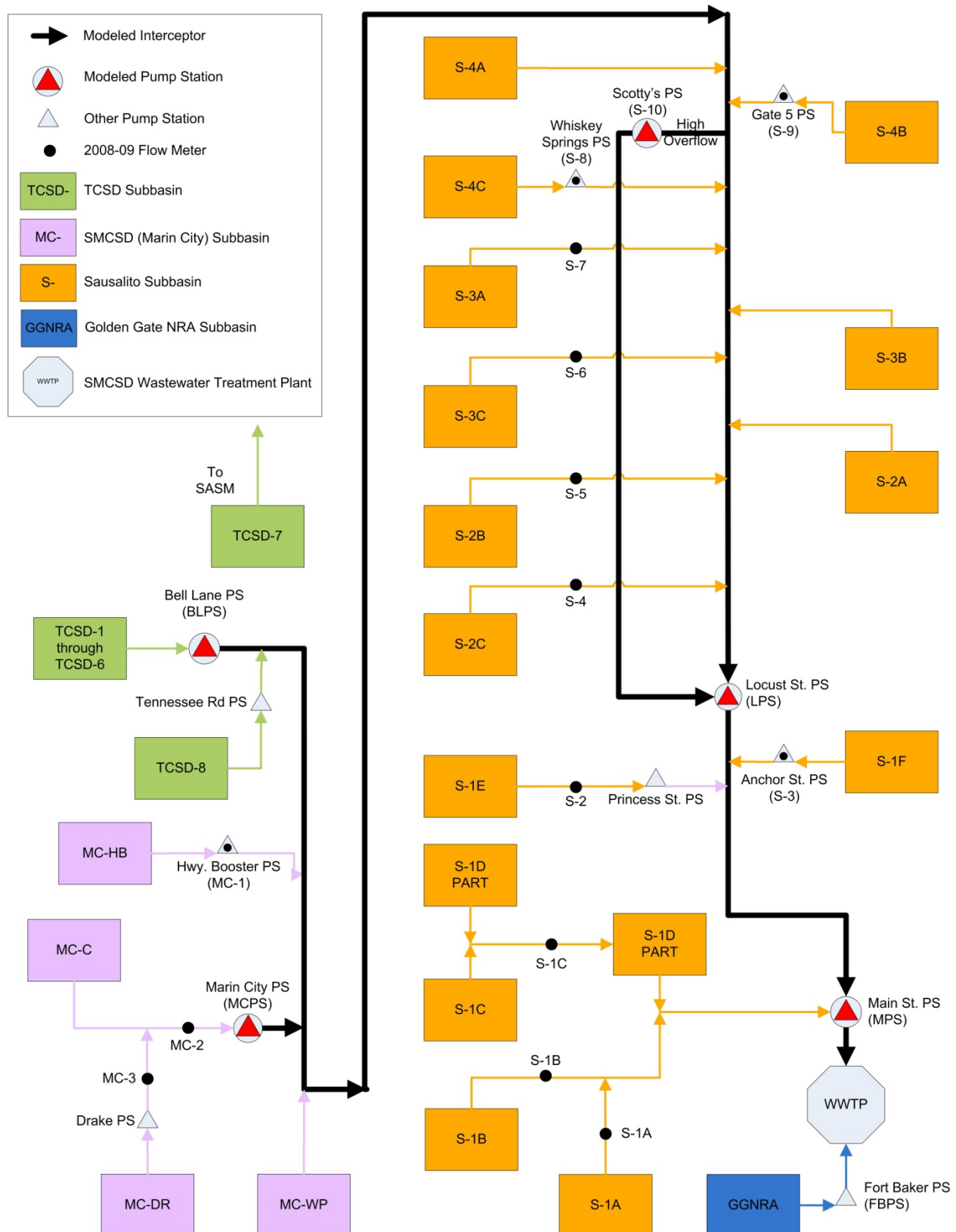


Figure 4-5: SMCSD System Schematic



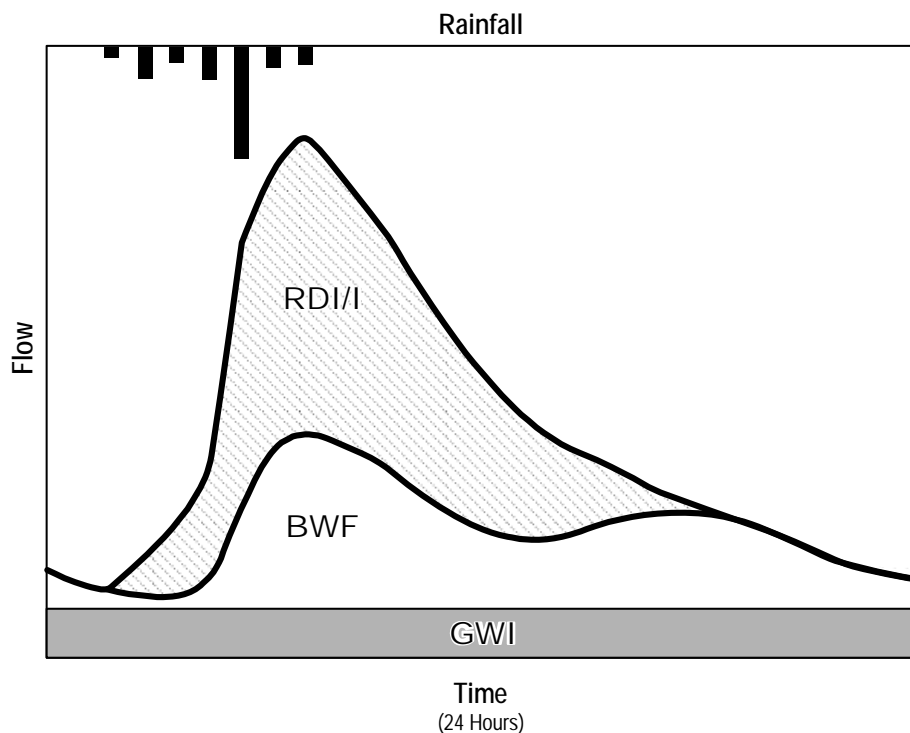
Data on the physical configuration of the modeled facilities were derived from maps and record drawings of the system. For each pipe, the model includes the pipe length and diameter, upstream and downstream invert elevations, and pipe friction factor. For each manhole, the model includes the manhole diameter and rim elevation. Physical dimensions are also included for overflow weirs and pump station wet wells. Additional information for modeling of the pump stations was obtained from pump manufacturer's information, pump curves, and actual operating data (e.g., pump set points).

The model computes the flow hydrographs from each sewer subbasin based on parameters that define its wastewater flow components (discussed in next section), and routes those hydrographs through the modeled system. Any capacity deficiencies in the system can be identified through the model results as areas of the system in which the model predicts significant pipe surcharge or potential overflows, or flows in excess of the rated capacity of modeled pump stations.

4.3 Wastewater Flow Components

Wastewater flows include three components: base wastewater flow (BWF), groundwater infiltration (GWI), and rainfall-dependent infiltration/inflow (RDI/I), as illustrated conceptually in **Figure 4-6**.

Figure 4-6: Wastewater Flow Components
(Not to scale)



BWF represents the sanitary and process flow contributions from residential, commercial, institutional, and industrial users of the system. BWF varies throughout the day, but typically follows predictable diurnal patterns depending on the type of land use.

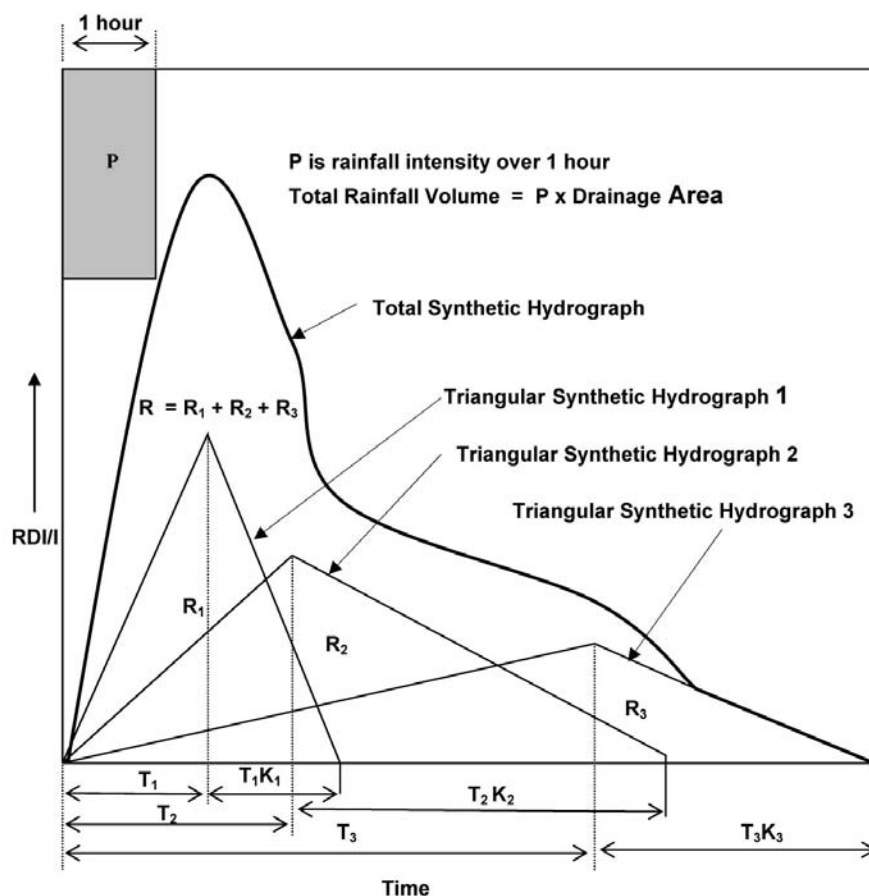
GWI is groundwater that infiltrates into defects in sewer pipes and manholes, particularly in winter and springtime in low-lying areas. GWI is typically seasonal in nature and remains relatively constant during specific periods of the year. However, rainfall clearly has long-term impacts on GWI rates in some areas, as evidenced by measurable increases in GWI after prolonged periods of rainfall.

RDI/I is storm water inflow and infiltration that enter the system in direct response to rainfall events. RDI/I may enter the sewer system through direct connections (termed “inflow” sources) such as holes in manhole covers, cross-connections from storm drain systems, or illegally connected roof leaders or area drains; or, more commonly, through subsurface defects in sewer pipes, manholes, and service laterals (termed “infiltration” sources). RDI/I typically results in short term peak flows that recede relatively quickly after the rainfall ends. The magnitude of RDI/I flows are related to the intensity and duration of the rainfall, the relative soil moisture at the time of the rainfall event, and the condition of the sewers.

It should be noted that the inflow and infiltration components of RDI/I cannot easily be distinguished through analysis of flow monitoring data alone, as some sources of rainfall-dependent infiltration, such as defects in shallow pipes and service laterals, may result in very rapid flow increases and high peak flows in a manner similar to the response from direct inflow sources. Therefore, specific inflow and infiltration sources are best identified through field investigation techniques such as manhole and sewer inspections and smoke and dye testing.

For this capacity assessment, wastewater flow components were quantified based on data collected during the 2008/09 flow monitoring program. Specifically, BWF was quantified based on flows on non-rainfall days not impacted by prior rainfall. As such, BWF may include some amount of GWI that occurs year-round or early in the wet weather season. Wet weather-related GWI and RDI/I were quantified based on the flow monitoring data during and following rainfall events. A unit hydrograph approach was used to represent RDI/I response as a function of rainfall for each metered subbasin (unmetered subbasins, generally very small areas, were assigned I/I parameters based on similar, nearby metered areas). Specifically, RDI/I response to rainfall events was quantified in terms of three sets of triangular unit hydrograph parameters that represent the volume percentage of rainfall that enters the system as RDI/I and the shape of the RDI/I hydrograph as a function of each hour of rainfall. The three unit hydrographs, illustrated in **Figure 4-7** represent different types of response: fast, medium, and slow. By applying the RDI/I hydrograph parameters to a design rainfall event (discussed in next section), the predicted design RDI/I response for each area of the system can be estimated.

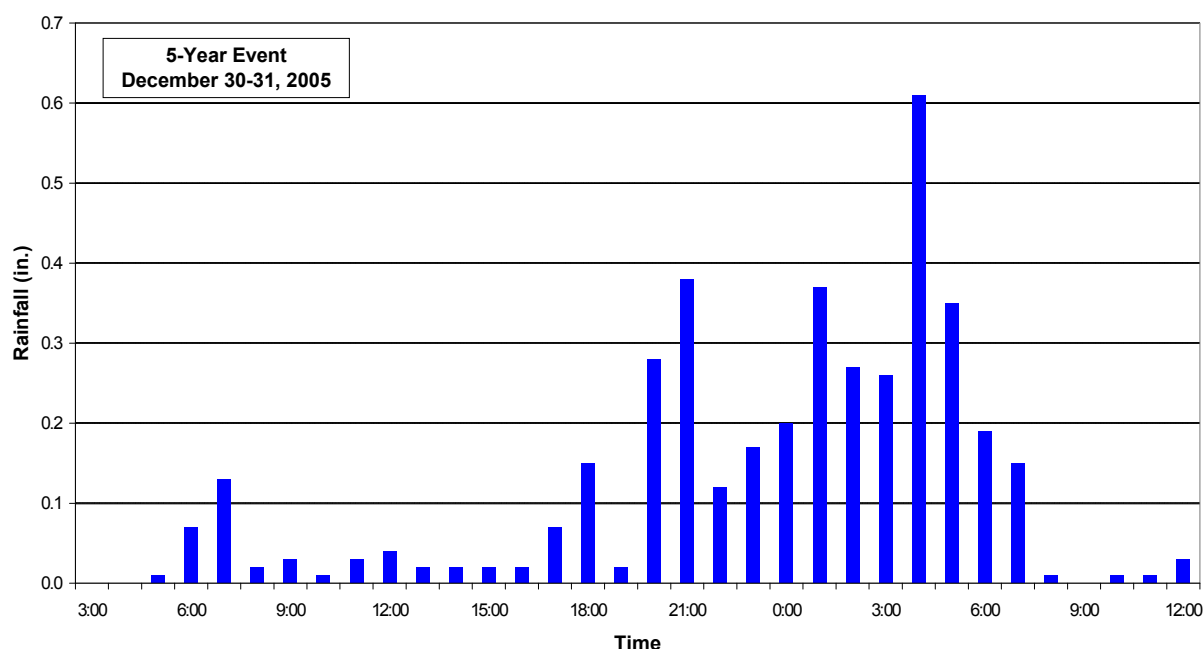
Figure 4-7: RDI/I Hydrograph Components



4.4 Design Event

Since flow response to wet weather events varies with storm rainfall (as well as other factors), quantifying I/I in the system and identifying hydraulic constraints must be referenced to a “design” condition or “design event.” In the case of the SMCS D system, the design event has been defined as the storm of December 31, 2005, a notable event in recent memory that resulted in considerable wet weather issues throughout the San Francisco Bay Area. As part of its previous capacity assessment work, SMCS D conducted continuous simulation analyses of historical flow and rainfall events to determine the statistical frequency of peak flows in its system. Based on these analyses, the storm of December 31, 2005 was determined to be an approximate 5-year frequency event with respect to peak RDI/I flows in the system (peak flow recurrence frequency differs from rainfall recurrence frequency in that it also takes into account various factors in addition to rainfall duration and intensity that contribute to peak flows, including antecedent conditions and time of day). The design event rainfall pattern is depicted in **Figure 4-8**, which represents actual rainfall recorded at a rain gauge located at the Bell Lane Pump Station for this event.

Figure 4-8: Design Rainfall Event



The I/I estimates and system capacity analysis results presented in the following subsections are based on the analysis of the system for the design wet weather event.

4.5 Areas, Sources and Quantities of Inflow and Infiltration

This section discusses the areas, likely sources, and estimated quantities of I/I in the SMCSO collection system. This discussion pertains only to the collection system owned and operated by SMCSO, specifically the system serving the unincorporated portion of the SMCSO service area, including the community of Marin City. The I/I analyses for the Sausalito and TCSD systems will be presented separately in reports prepared by those respective agencies.

Through the model calibration process, flow estimates were developed for each sewer subbasin. **Table 4-1** presents flows for the four sewer subbasins that comprise the SMCSO Marin City and unincorporated collection system area, including average dry weather flow (ADWF), peak RDI/I, and model-computed design event peak wet weather flow (PWWF) and associated peaking factor.

Table 4-1: Estimated Wastewater Flows for SMCSO Subbasins

Flow Component	Subbasin			
	MC-HB	MC-MC	MC-DR	MC-WP ³
ADWF ¹ (mgd)	0.014	0.126	0.072	0.010
Peak RDI/I ² (mgd)	0.11	0.70	0.34	0.02
PWWF ² (mgd)	0.12	0.84	0.42	0.03
WW Peaking Factor ²	8.6	6.7	5.8	N/A

1. Based on non-rainfall days during flow monitoring period (mid-January 2009)
2. 15-minute peak flow for 5-year design event.
3. Includes private sewers only. Flows are estimated (no flow data available).

In August 2008, SMCSO conducted smoke testing of the entire Marin City collection system. The potential I/I sources identified by the smoke testing are summarized in **Table 4-2**.

Table 4-2: Smoke Testing Results for SMCSO (Marin City) Subbasins

Defect Type	Number per Subbasin		
	MC-HB	MC-MC	MC-DR
Lateral	0	2	2
Cleanout	0	4	3
Manhole	4	2	0
Catch Basin	1	0	0

The relatively few number of smoke returns from laterals is unusual and could suggest that surface inflow through defective cleanouts and into and around manhole covers and frames have a relatively larger contribution to I/I in the Marin City system than in other Bay Area sewer systems. The catch basin detected by the smoke testing in the MC-HB subbasin receives surface runoff from a restaurant parking lot, and could be the reason for the relatively high wet weather peaking factor in that subbasin. SMCSO has notified the restaurant owner of this illegally connected catch basin and directed that it be disconnected from the sanitary sewer system.

All of the gravity sewers in the Marin City collection system have been inspected by CCTV (see Section 3). The inspections identified defects that are common to most sewer systems in the San Francisco Bay Area that experience I/I during wet weather, including cracks in pipes, offset and open joints, and root intrusion. It can be assumed that similar defects in laterals are also sources of infiltration in these systems. **Table 4-3** summarizes the percentage of televised pipe in each subbasin rated as being in good, fair, or poor condition. The larger percentage of sewers rated as being in poor condition in subbasin MC-HB appears to correlate to the higher wet weather peaking factor in this area and suggests that sewer pipe defects are likely sources of infiltration.

Table 4-3: Pipe Condition Ratings Based on CCTV for SMCSO (Marin City) Subbasins

Condition Rating	Percentage of Televised Pipe		
	MC-HB	MC-MC	MC-DR
Good	13%	40%	33%
Fair	13%	18%	23%
Poor	74%	43%	44%

4.6 Hydraulic Bottlenecks in SMCSD System

The hydraulic model was used to assess the performance of the SMCSD interceptor system under peak wet weather flow conditions. The model was calibrated using the flow monitoring data collected during the 2008/09 flow monitoring program to determine the components of wastewater flows for each sewer subbasin, as discussed in Section 3. The model was then run for the design event to identify bottlenecks in the system.

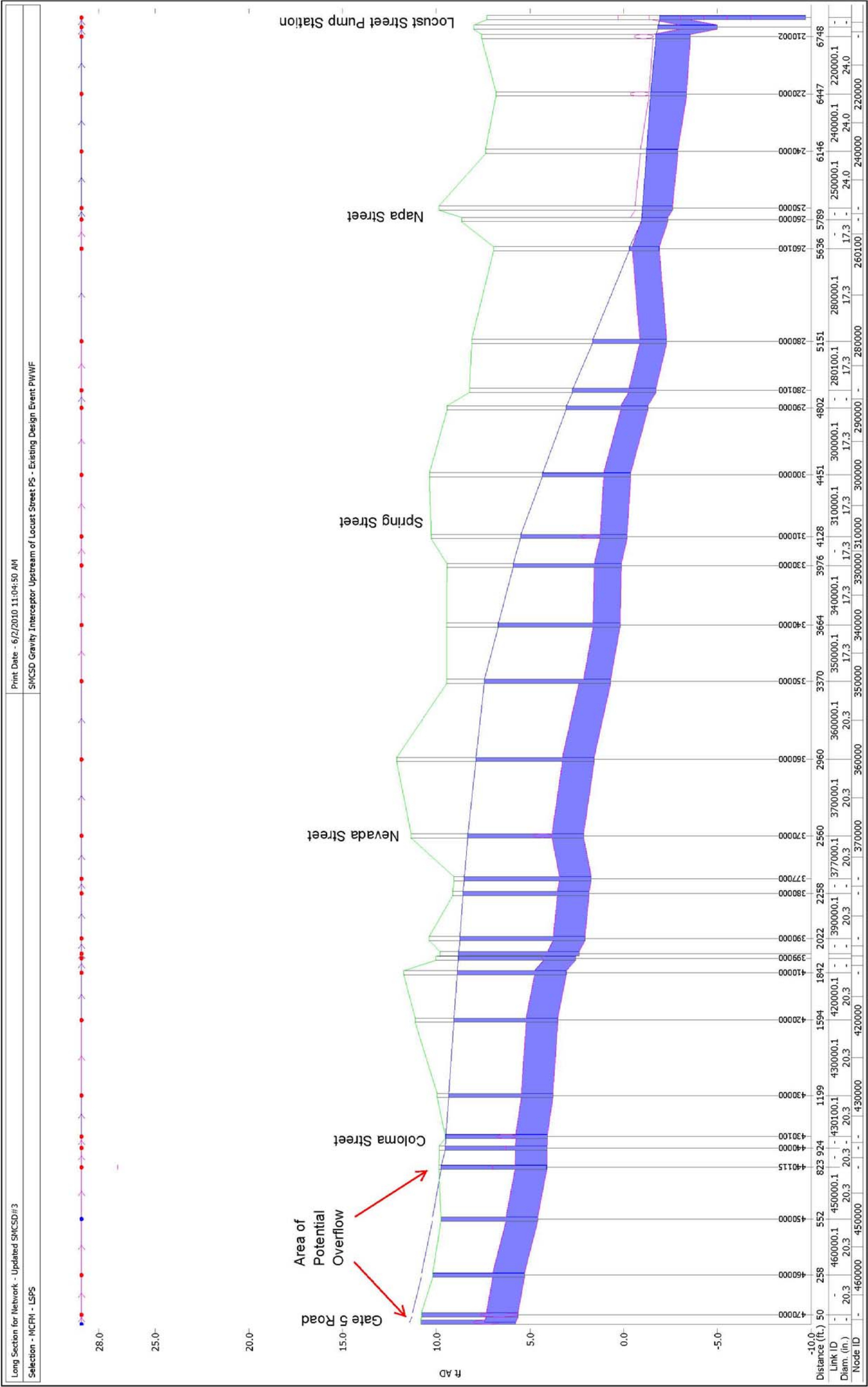
Figure 4-9 shows a model profile of the gravity section of the interceptor from Gate 5 Road downstream to the Locust Street Pump Station. In the profile, the green line represents the ground surface, the pink lines represent the pipe, the blue line is the water surface or hydraulic gradeline (HGL), and the vertical black lines are manholes identified by manhole ID. Various information including the distance along the pipe and the pipe diameter, as well as the pipe (link) and manhole (node) IDs, are presented underneath the profile.

The profile shows that this section of the interceptor represents a significant bottleneck in the system, particularly the 17.3-inch slip-lined portion between Marinship Park and Napa Street (approximately 2,300 feet), as evidenced by the steep slope of the HGL between MH 260100 and MH 350000. The model predicts potential overflows (HGL above the ground surface) upstream of Coloma Street under the design event. Note that SMCSD has installed bolted manhole covers in this area to allow the pipe to pressurize under such infrequent peak flows and thereby prevent actual overflows.

The capacity restriction in this section of the interceptor and the current capacity of the Locust Street and Scotty's Pump Stations limit the peak flows that can reach the system downstream of Locust Street. If these capacity constrictions were alleviated by increasing the pumping capacity of Scotty's and Locust Street Pump Stations, then peak flows reaching the WWTP would be about 12.3 (including flow from the GGNRA, estimated at 0.7 mgd). This flow rate exceeds the secondary treatment capacity of the plant, but can be handled using blending. The higher flows conveyed downstream of Locust Street could cause some surcharge in the gravity sewer from south of Princess Street to the Main Street Pump Station, but no overflows would be predicted.

SMCSD has evaluated alternatives for eliminating hydraulic bottlenecks in the system, including upgrading pump stations (a capacity upgrade of the Locust Street Pump Station has been designed and is awaiting funding under the State Revolving Fund loan program), constructing upstream wet weather storage facilities, and increasing the capacity of treatment units. The possibility of TCSD diverting all or a portion of its flows to the Sewerage Agency of Southern Marin (SASM) for treatment was also considered. However, based on separate studies, TCSD has advised SMCSD that shifting flow to SASM has been determined to be infeasible because 1) TCSD was unable to acquire the necessary treatment capacity from the SASM member agencies to shift all of its flow, 2) increases in SASM's charges to fund future capital improvements has eliminated the savings gap between the two agencies, and 3) the cost of infrastructure to shift the flow to SASM was determined to be too expensive. Consequently, TCSD has informed SMCSD of its intent not to shift flow to SASM. Currently, discussions are being held regarding a new, long term service agreement between the two agencies. This Capacity Assessment, and the Capacity Assurance Plan presented in Section 5, are based on the assumption that there will be no significant shift of TCSD wastewater flow from SMCSD to SASM.

Figure 4-9: Hydraulic Profile of Constricted Gravity Interceptor Upstream of Locust Street Pump Station (Design Event PWWF)



4.7 Impact of Flows from Sausalito and TCSD on SMCSD

As part of the capacity assessment, SMCSD has analyzed the impact of flows from its tributary agencies to its interceptor system and wastewater treatment plant (WWTP). **Table 4-4** summarizes the contribution of flows to the SMCSD conveyance system and WWTP from the three agencies: TCSD, SMCSD (Marin City), and Sausalito, and the GGNRA. The table also indicates the breakdown of the flow contribution to the constricted 17.3-inch portion of the gravity interceptor shown in Figure 4-9 and to the Locust Street Pump Station, the two major hydraulic bottlenecks in the SMCSD conveyance system. The table shows that TCSD contributes a greater proportion of the wet weather flow to the system than its share of dry weather flow, and contributes about half of the peak flow to the constricted 17.3-inch gravity interceptor and almost 40 percent of the peak flow to the Locust Street Pump Station.

Table 4-4: Contribution of Flows from Individual Agencies to SMCSD System

Agency	Total Subbasin Flow ¹ (mgd)			Ratio of PWWF to ADWF	Percent of Total		
	ADWF ²	Peak RDI/I ³	PWWF ³		ADWF	Peak RDI/I	PWWF
To WWTP							
TCSD	0.32	3.4	3.7	11.5	21%	33%	30%
Marin City (SMCSD)	0.22	1.2	1.4	6.3	15%	11%	11%
Sausalito	0.84	5.3	6.7	7.9	56%	51%	54%
GGNRA	0.12 ⁴	~0.5	0.7 ⁵	~6	8%	5%	6%
To 17.3” Sewer							
TCSD	0.32	3.4	3.7	11.5	34%	55%	49%
Marin City (SMCSD)	0.22	1.2	1.4	6.3	23%	19%	19%
Sausalito	0.41	1.6	2.4	6.0	43%	26%	32%
To Locust Street PS							
TCSD	0.32	3.4	3.7	11.5	27%	42%	37%
Marin City (SMCSD)	0.22	1.1	1.4	6.3	19%	14%	14%
Sausalito	0.63	3.6	4.8	7.6	54%	44%	49%

Notes:

- Flows represent sum of subbasin flow contributions and do not reflect flow attenuation in the system. Flows for unmetered subbasins were estimated based on flow balancing to downstream permanent meters. Due to relative meter inaccuracies, particularly for temporary meters installed in sewer manholes with less-than-ideal physical and hydraulic conditions, these estimates may not accurately reflect the actual distribution of flows in the system. The agencies will continue to verify and refine these flow estimates as additional flow monitoring data becomes available.
- ADWF represents non-rainfall days during flow monitoring period (mid-January 2009).
- RDI/I and PWWF are peak 15-minute flows for 5-year design event.
- Based on non-rainfall days during early February 2010.
- Based on recorded Ft. Baker Pump Station flow during December 31, 2005 storm.

Section 5 Capacity Assurance Plan

5.1 Introduction

5.1.1 Purpose

This portion of the SSRAP submittal presents the proposed Capacity Assurance Plan to comply with subsection V.B of the Order. This subsection of the Order requires that the agencies develop short- and long-term capital improvement plans that provide for improvements to the system as needed to ensure that there is sufficient capacity to convey peak wet weather flows to the SMCSD WWTP without overflows from collection system pipelines or pump stations or bypasses of flow from the SMCSD WWTP.

5.1.2 Requirements of the EPA Amended Order for Compliance

The EPA Order, Section V.B includes the following requirements:

V. *CAPACITY ASSURANCE*

B. *Capacity Assurance Plan:*

1. *By October 15, 2010, SMCSD, TCSD, and the City of Sausalito shall propose and schedule improvements identified from the condition and capacity assessments completed in Paragraph IV. The plan(s) shall consider the effects that existing capacity limitations and future upgrades may have on the SMCSD WWTP and its contributing collection systems. The plan(s) should be sufficient to eliminate spills from the collection systems and wastewater treatment plant during peak wet weather.*
2. *By October 15, 2013, SMCSD, TCSD, and the City of Sausalito shall complete the short-term improvements pursuant to Paragraph V.B.1. The improvements shall address preliminary I&I control, conveyance of peak flows, storage of peak flows, and improvements to treatment plant capacity.*

5.2 Basis of Capacity Assurance Plan

The Capacity Assurance Plan is based on the results of the capacity assessment presented in the previous section of this report and the results of SMCSD's capacity assessment of its WWTP. The capacity assessment estimated the peak wet weather flows in the SMCSD system for a design flow event, considered to be equivalent to an approximate 5-year frequency peak wet weather flow. The capacity assessment identified bottlenecks in the SMCSD gravity interceptors and pump stations which result in surcharging and potential manhole overflows during large wet weather events, and flows in excess of WWTP secondary treatment capacity. I/I flows from all of the SMCSD tributary agencies contribute to the problems caused by these bottlenecks and limited WWTP capacity.

SMCSD has determined that the most significant bottlenecks in its system should be addressed by capacity enhancements to be constructed in the short-term (next five years). These enhancements will primarily involve expansion of SMCSD wastewater pump stations and some WWTP improvements. Construction of upstream storage basins in the collection systems was not considered a viable alternative for SMCSD because of the highly developed service area with limited sites for potential basins, challenging soil conditions, and public reluctance to accept raw wastewater storage within the communities. Storage basins may be re-considered in the future if planned long-term I/I reductions are not achieved. I/I reduction is considered the optimal solution to capacity issues, but may require a longer

timeline to implement and a program that may involve rehabilitation of sewer laterals on private property as well as public sewer mains.

Longer-term I/I reduction efforts will be used to meet SMCSD's goal of reducing "blending" at its WWTP. SMCSD has estimated that an approximate 35 percent reduction in I/I system-wide would be needed to reduce the design event PWWF to the WWTP to about 9 mgd, the estimated, proposed expanded secondary treatment capacity of the plant, if blending is to be avoided. (Alternately, an overall 25 percent reduction in I/I volume with a higher (e.g., 40 percent) reduction in the peak I/I component would provide the necessary peak flow reduction.) All of the tributary agencies will share in the efforts to reduce I/I through sewer system rehabilitation in their collection systems over the next 20 to 30 years.

5.3 Proposed Capacity Assurance Measures

5.3.1 Short-Term Capacity Assurance Plan

The primary focus of SMCSD's short-term capacity assurance plan is to eliminate wet weather overflows in the conveyance system upstream of Locust Street and reduce the number of blending events at the WWTP. **Table 5-1** summarizes the estimated PWWF for the design event for the major SMCSD facilities based on the proposed capacity assurance plan.

Table 5-1: Estimated Design Event Flows for SMCSD Conveyance System

Facility	Estimated Design Event PWWF (mgd)
Bell Lane Pump Station (TCSD)	3.7
Scotty's Pump Station	4.2
Locust Street Pump Station	5.5
Main Street Pump Station	11.6
SMCSD WWTP	12.3

The projects included in the short-term capacity assurance plan are described below.

Scotty's Pump Station Improvements

As described in Sections 2 and 4, Scotty's Pump Station is a wet weather only facility that conveys flow that is diverted at Coloma Street from the gravity interceptor upstream of the Locust Street Pump Station. The flow diversion to Scotty's Pump Station is triggered when the flow level in the gravity interceptor exceeds the height of the weir in the manhole at Coloma Street. The proposed improvements to Scotty's Pump Station include increasing its peak wet weather pumping capacity to 4.2 mgd and providing sufficient backup pumping capacity to provide for reliable firm capacity for design peak wet weather flows.

As discussed in Section 2, the improvements to Scotty's Pump Station will be coordinated with improvements to the City of Sausalito's Whiskey Springs Pump Station, and SMCSD and Sausalito will undertake joint predesign studies to identify the most appropriate location and configuration of shared facilities. At this time, it is anticipated that the improvements may include construction of a new wet well, new submersible pumps (likely either two duty and one backup pump or one duty and one backup pump) at the existing Scotty's Pump Station site, and new shared generator and control panel at Whiskey Springs Pump Station. The location and configuration may change, however, based on the results of the predesign studies.

As described in Section 2, SMCSD will implement temporary improvements (use of portable pumps) in the interim period before the permanent Scotty's and/or Whiskey Springs Pump Stations improvement are constructed to mitigate the potential for overflows.

Locust Street Pump Station Improvements

SMCSD has completed design of improvements to the Locust Street Pump Station and is awaiting State Revolving Fund loan funding for the project. The project will involve construction of a new station adjacent to the existing station. The proposed new pump station will utilize three pumps to provide firm capacity equal to or greater than the design PWWF of 5.5 mgd.

Main Street Pump Station Improvements

As described in Section 2, Main Street Pump Station improvements will include facilities to allow hookup of a 12-inch portable, diesel-powered pump during wet weather conditions to provide firm pump station capacity for the design PWWF. The pump will be connected into SMCSD's SCADA system so that it will automatically start up if the wet well level rises above a specified level.

WWTP Improvement Projects

SMCSD is planning improvements to the WWTP to allow up to 9 mgd to receive primary and secondary treatment without blending. Stress testing of the secondary plant is planned to confirm that up to 9 mgd can be conveyed through the secondary treatment fixed film reactors and a planned ballasted flocculation process. Should stress testing indicate that 9 mgd cannot be conveyed through secondary treatment, SMCSD will propose the use of ballasted flocculation treatment only for flows that are not treated by the fixed film reactors. Increasing the secondary treatment capacity of the plant from 6 to 9 mgd will reduce the frequency of annual blending events from 7.0 to 1.5 times per year, as well as decrease the cumulative duration (from 29.9 to 4.2 hours) and cumulative volume (from 1.9 to 0.1 MG) of annual blending events.

SMCSD is also planning improvements to its headworks and primary treatment facilities that will increase plant reliability and lessen the load on the secondary treatment processes.

5.3.2 Long-Term Capacity Assurance Plan

As noted above, the objective of the long-term capacity assurance plan is to further reduce flows to the WWTP to significantly reduce and ultimately eliminate blending at the plant during peak wet weather periods. SMCSD plans to achieve its I/I reduction goals in its collection system service area (Marin City) through a combination of targeted mainline and manhole repairs, rehabilitation, and replacement; and rehabilitation incentives and enforcement of regulations for private laterals. The City of Sausalito and TCSD will also be required to achieve I/I reduction goals to meet the overall objective of the joint Capacity Assurance Plan.

It is planned that the three agencies will collaborate in the evaluation of progress in achieving flow reductions through periodic (approximately every five years) review of WWTP and permanent pump station flow records and temporary flow monitoring programs in the collection system in areas where rehabilitation work has been conducted. If the results of flow monitoring indicate that I/I reduction goals are not being met, then more extensive rehabilitation would be undertaken or other means to reduce peak flows to the WWTP may need to be considered.

5.4 Capital Improvement Program

The estimated costs and proposed schedule for the short-term capacity assurance plan activities described above are presented in **Table 5-2**. Short- and long-term sewer rehabilitation (I/I reduction) projects are included in the Sewer Repair, Rehabilitation, and Replacement Plan for the SMCSD collection system presented in the next section and in the corresponding plans submitted separately by TCSD and Sausalito.

Table 5-2: Short-term (5-Year) Capacity Assurance Plan

Project	Est. Capital Cost
Scotty's Pump Station Improvements	\$1,100,000
Locust Street Pump Station Improvements	\$1,350,000
Main Street Pump Station Portable Pump	\$380,000
WWTP Headworks/Primary Treatment	\$12,900,000
WWTP Secondary Treatment Improvements	\$6,500,000

Appendix K

SMCSD SSMP Audit Report- April 2019

Sausalito-Marin City Sanitary District (SMCSD)

Sewer System Management Plan (SSMP) - Audit

2017 - 2018

SSMP Audit

This audit reviews the Sausalito-Marin City Sanitary District's (District) SSMP documentation and implementation for the period of 2017 through 2018. The audit is intended to meet State Water Resources Control Board (SWRCB) 2006 waste discharge requirements (WDR), State Water Board Order No. 2006-0003-DWQ, for agencies that own or operate wastewater collection systems. Consequently, this audit assesses the current state of compliance with WDR provisions, identifies "deficiencies" found in the SSMP and recommends corrective actions to remedy those deficiencies.

Humphrey Consulting (HC) performed this third-party audit on behalf of the District through evaluation of SSMP documentation provided by the District, publicly available data sources such as the District website and California Integrated Water Quality System (CIWQS), and meetings and conversations with District staff involved in the implementation of the District SSMP. The following table lists the audit participants:

Table 1 - Audit Participants

Participant	Role	Agency
Doug Humphrey	Lead Auditor	Humphrey Consulting
Omar Arias	Operations Superintendent	SMCSD
Kevin Rahman	District Engineer	SMCSD

Humphrey met with Mr. Arias and Mr. Rahman on February 22, 2019 and again on March 19, 2019 and provided Humphrey with SSMP information then and throughout the audit in response to requests from Humphrey.

Audit Schedule

The District's SSMP includes both SWRCB and Regional Water Quality Control Board (RWQCB) Element language and requirements, including the WDR requirement of audits every two years. Consequently, audits reports are due for completion by September 3 (based on the original SSMP adoption date), every other year, and no submittal to the RWQCB or SWRCB is required. Previous audits were done in 2009, 2010, 2011, and 2012.

SSMP Effectiveness

The evaluation of effectiveness of each SSMP Element, including a brief narrative of audit findings, is provided on the attached SSMP Elements Audit Report for 2017 - 2018. Any deficiencies and subsequent corrective actions are noted in the narratives for each

element. The SSMP has also been updated at this time in accordance with this audit and its findings.

SSO Rate and Volumes

The rate of SSOs, SSO volume, and SSO volume that reaches waters are the most common measurements of SSMP effectiveness and success. The following is a summary of these parameters for SMCSD for the audit period of 2017 and 2018.

- The SSO rate decreased significantly in the second year of the audit period (2018), and was much lower than the Region (2) rates calculated from CIWQS data. The rate was higher in 2017, but it should be noted that the system size is very small (11.15 miles) and only one SSO means the rate would be higher than the Regional average.

SMCSD's rates were 17.09/100 miles/year (2017) and 0.00/100 miles/year (2018). That compares to Region (Region 2, San Francisco Bay Region) rates of 6.86 in 2017 and 5.30 in 2018. The SSMP is effective in reducing the rate or keeping the rate low, as well as maintaining the occurrence of SSOs at a low and reasonable rate.

SSO Rate (SSOs/100 miles/year)

Year	SSOs	District SSOs/100mi./year	Region 2 (SSOs/100 mi./year)
2017	2	17.09	6.86
2018	0	0.00	5.30

- The SSO volume for 2017 is greater than the Regional figure and significantly lower than the Regional figure for 2018. The total volume of District SSOs in 2017 was 32,941 gallons and in 2018 was 0 gallons. That is 295,353 gallons/100 miles/year in 2017 and 0 gallons/100 miles/year in 2018. Regional figures were 88,883 and 6128 for 2017 and 2018 respectively. The following table shows the District and Region values for SSO in gallons per year, and gallons per 100 miles per year.

SSO Volume (Gallons & Gallons/100 miles/year)

Year	SSO Volume (Gals.)	District Gals./100mi./year	Region 2 (Gals./100 mi./year)
2017	32,941	295,353	88,883
2018	0	0	6128

- The SSO volume that reached surface water was 30,555 gallons or 92.6% and 0 gallons or 0% in 2017 and 2018 respectively. In comparison, the Region values were 96% and 53% for these same years, as shown in the table below. This is a very important indicator, since the primary goal of the SSMP is to operate and maintain the collection system so that water quality is maintained and impacts from SSOs are minimized. It is noted that in 2017 the entire SSO volume reaching waters was the result of one SSO at the District's Main Street Pump Station, when there was a power failure and the standby generator subsequently went off-line as well due to a cooling water issue. This was a very unusual occurrence and the only event during the audit period that there was any SSO volume that reached waters.

**SSO Volume Reaching Surface Water
(Gallons & SSO % Reaching Surface Waters)**

Year	SMCSD SSO Volume (Gals.)	SMCSD SSO Volume (% reaching water)	Region SSO Volume (% reaching water)
2017	30,555	92.6	96
2018	0	0	51

Strengths

The following is a summary of the strengths of the District SSMP:

- The SSO rate is reasonable, and the trend decreased to none in the second year of this audit period.
- The SSO volume is usually very low and the volume to surface water is usually extremely low, actually 0 (none) in 2018 although there was the one SSO event in 2017 when a significant volume did reach waters. This demonstrates that District staff have generally implemented the overflow emergency response plan effectively and provided efficient SSO responses.
- The time to respond (in person) to SSO events or "response time" is excellent - only 6 minutes to respond to the one event in 2017. This obviously helps to minimize volumes and volumes to surface water.
- SSO reporting is timely and in accordance with requirements.
- The District has a thoughtful, comprehensive, planned preventive maintenance program. Implementation of the program is thorough and effective in

accomplishing proper system operations and maintenance (O&M). The District employs condition assessment (CCTV work) in addition to preventive (regular cleaning) and reactive maintenance activities, and that assessment is an important diagnostic tool and resource that assists capital planning and can help to minimize catastrophic asset failures and minimize SSOs. It appears that staff has completed planned maintenance activities as planned.

- The District Code provides adequate legal authority to meet the requirements of the WDR.
- The recordkeeping of collection system activities is of good quality and is very comprehensive and accessible. Information for this audit was easy to obtain and was readily available upon request.
- This update is generally performed within the timelines required by the WDR and MRP.

Deficiencies & Corrective Actions

- The reporting of SSOs in CIWQS needs to be completed accurately. There is one SSO in 2017 that was reported as being completed 3 hours prior to the time that the District was informed of the event. The LROs and Data Submitters need to be careful to accurately complete information into CIWQS and check this information prior to certifying reports.
Corrective Action: Ensure that information entered into the CIWQS system is correct and check reports prior to making them "final" in CIWQS.
- The SSMP Monitoring Tracking Sheet contains much good information needed to adequately assess SSMP performance, but the figures regarding causes of SSOs could be added. Also, there are no illustrations or graphs of trends and performance included or added as an attachment to the tracking sheet. Some suggested graphics are attached to this audit report.
Corrective Action: Add the SSO cause data to the tracking sheet, and add some graphs to illustrate some of the tracked data. The sheet and associated graphs should be posted on the District website each year.
- SSMP audits are required to be completed every two years, and the deadline is tagged to the original SSMP completion date of September 3 (every two years).
Corrective Action: Revise the audit element in the SSMP and post completed audits on the District website after acceptance by the District Board.
- There presently is no annual SSMP training for staff that implements the SSMP.
Corrective Action: Initiate annual SSMP refresher training for relevant staff.

- There was no existing SSMP Change Log, so the SSMP has not been kept up to date with significant SSMP revisions since the last SSMP update. **Corrective Action: Add a Change Log to the SSMP (provided as part of this Update) and maintain the change log in the future by adding any significant changes to the SSMP as they occur.**
- Information regarding main line mileage in the CIWQS system differs slightly from the figures in the SSMP.
Corrective Action: Change the main mileage figure in the SSMP to be correct and consistent with CIWQS system figure.
Status: Done, part of SSMP update.

Compliance

This audit finds the District to be in general compliance with the WDR.

SMCSD

Sewer System Management Plan (SSMP) Audit 2017 & 2018

The purpose of the SSMP Audit is to evaluate the effectiveness of the Sausalito-Marín City Sanitary District's (District's) SSMP and to identify any needed for improvement.

Directions: Please check YES or NO for each question. If NO is answered for any question, describe the updates/changes needed and the timeline to complete those changes.

		YES	NO
INTRODUCTION			
A.	Is the current system description complete and up-to-date? Are infrastructure statistics current and complete?	X	
Discussion/Deficiencies/Corrective Actions: Some system information needs to be updated, when District has complete information on system.			
		YES	NO
ELEMENT 1 - GOALS			
A.	Are the goals stated in the SSMP still appropriate and accurate?	X	
Discussion/Deficiencies/Corrective Actions: Goals are appropriate and the District monitors results relevant to their goals. There is no need to revise goals, unless the District chooses to do so in the future.			
ELEMENT 2 - ORGANIZATION			
A.	Is the List of District Staff Responsible for SSMP current?		X
B.	Is the Sewer Staff Contact List current?	X	
C.	Is the District Organization Chart included and current?		X
D.	Are the position descriptions an accurate portrayal of staff responsibilities?	X	
E.	Is the Table regarding the SSO Reporting and Response Chain of Communication accurate and up-to-date?	X	
Discussion/Deficiencies/Corrective Actions: Both responsible staff and the District organization chart were revised. The organization chart has been revised to reflect the current District organization and will be included in an updated SSMP. District staff is well aware of their SSMP responsibilities and the staff is very capable in regards to carrying out these responsibilities.			

		YES	NO
ELEMENT 3 – LEGAL AUTHORITY			
Does the SSMP contain current references to the SMCSD District Code documenting the City's legal authority to:			
A.	Prevent illicit discharges?	X	
B.	Require proper design and construction of sewers and connections	X	
C.	Ensure access for maintenance, inspection, or repairs for portions of the lateral owned or maintained by the District?	X	
D.	Limit discharges of fats, oils and grease?	X	
E.	Enforce any violation of its sewer ordinances?	X	
F.	Were any changes or modifications made in the past two years (this audit period) to District Sewer Ordinances, Regulations or standards?		X
Discussion/Deficiencies/Corrective Actions: No changes were made to the SMCSD Code that affects any of the legal authority aspects of the SSMP.			
ELEMENT 4 – OPERATIONS AND MAINTENANCE			
Collection System Maps			
A.	Does the SSMP reference the current process and procedures for maintaining the District's wastewater collection system maps?	X	
B.	Are the City's wastewater collection system maps complete, current and sufficiently detailed?	X	
C.	Are storm drainage facilities identified 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?	X	
Prioritized Preventive Maintenance			
C.	Does the SSMP describe current preventive maintenance activities and the system for prioritizing the cleaning of sewers?	X	
D.	Based upon information in SSO Reporting, are the District's preventive maintenance activities sufficient and effective in minimizing SSOs and blockages?	X	
Scheduled Inspections and Condition Assessments			
E.	Is there an ongoing condition assessment plan sufficient to develop a capital improvement plan addressing the proper management and protection of infrastructure assets? Does the plan 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?	X	
Contingency Equipment and Replacement Inventory			
F.	Does the SSMP list the major equipment currently used in the operation and maintenance of the collection system?	X	

		YES	NO
G.	Are contingency and replacement parts sufficient to respond to emergencies and properly conduct regular maintenance?	X	
Training			
H.	Does the SSMP document current training expectations and programs?	X	
I.	Are training records current?	X	
Discussion/Deficiencies/Corrective Actions: O&M details will be revised in the SSMP update to reflect current operational practices. System maps are updated regularly, and there currently is an effort underway to update the GIS system since there are some locations on maps that staff has indicated are not accurate. The SSMP and appendices document the O&M practices. Condition assessment is used in prioritizing rehabilitation and there's a CIP plan that addresses rehabilitation needs. Training is conducted on a regular basis - the District should continue to implement regular, annual SSMP training. Contingency parts and equipment are minimal, the District relies heavily on contractors for collection system work, including emergencies.			
ELEMENT 5 - DESIGN AND PERFORMANCE STANDARDS			
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?	X	
B.	Does the SSMP reference 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?	X	
Discussion/Deficiencies/Corrective Actions: No changes were needed, as the District's design and performance standards all are current, appropriate, and accurately reflected in the existing SSMP.			
ELEMENT 6 – OVERFLOW AND EMERGENCY RESPONSE PLAN			
A.	Does the District's Sanitary Sewer Overflow Emergency Response Plan (OERP) contain proper notification procedures so that primary responders and regulatory agencies are informed of all sanitary sewer overflows (SSOs) as required by the WDR and MRP?	X	
B.	Does the OERP have a program to ensure an appropriate response to all overflows?	X	

		YES	NO
C.	Does the OERP contain procedures to ensure prompt notification to appropriate regulatory agencies and other potentially affected entities of all SSOs that potentially affect public health or reach waters of the State in accordance with the MRP? Does the SSMP identify the officials who will receive immediate notification of such SSOs?	X	
D.	Are staff and contractor personnel aware of and appropriately trained on the procedures of the OERP?	X	
E.	Does the OERP contain procedures to address emergency operations such as traffic and crowd control and other necessary response activities?	X	
F.	Does the OERP 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 SSOs, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the discharge?	X	
G.	Was required training on SSMP and OERP completed and documented?	X	
H.	Does the OERP contain a water quality monitoring plan that is current? Have employees been trained on this plan and what is needed for an SSO with a large volume?		X
I.	If applicable, was sampling performed within 48 hours for all SSOs greater than 50,000 gallons and was a Technical Report prepared and filed on the CIWQS website?	X (NA)	
Discussion/Deficiencies/Corrective Actions: The OERP is still current and reflects the District's emergency response plan. All other sections are proper and address WDR requirements for emergency response. The OERP did not have a basic WQMP in place, so that has been added (brief section in the OERP) as part of this audit.			
ELEMENT 7 – FATS, OILS AND GREASE (FOG) CONTROL PROGRAM			
A.	Does the FOG Control Program include efforts to educate the public on proper handling and disposal of FOG?	X	
B.	Does the FOG Control Program identify sections of the collection system subject to FOG blockages, establish a cleaning schedule and address source control measures to minimize these blockages?	X	
C.	Are requirements for grease removal devices, best management practices (BMPs), record keeping and reporting established in the District's FOG Control Program?	X	

		YES	NO
D.	Does the District have sufficient legal authority to implement and enforce the FOG Control Program, including prohibition of discharges, measure to prevent SSOs and blockages caused by FOG?	X	
E.	Is the current FOG program effective in minimizing blockages of sewer lines resulting from discharges of FOG to the system?	X	
F.	Is there a plan and schedule for the disposal of FOG generated within the District?		X
G.	Does the FOG Control Program include development and implementation of source control measures for all sources of FOG discharged to the system for each sewer system subject to FOG blockages?	X	
H.	Does the FOG Control Program include the authority to inspect grease producing facilities, enforce when necessary, and does the City have sufficient staff to inspect and enforce its FOG ordinance	X	
Discussion/Deficiencies/Corrective Actions: The District has a comprehensive FOG control program that addresses all required items, with the possible exception of a FOG disposal plan. There were no FOG-caused SSOs in 2017 or 2018, the entire audit period.			
ELEMENT 8 - SYSTEM EVALUATION AND CAPACITY ASSURANCE PLAN			
A.	Does the District's Sanitary Sewer Master Plan evaluate hydraulic deficiencies in the system and provide estimates of peak flows associated with condition similar to those causing overflow events, if applicable?	X	
B.	Does the District's Capital Improvement Plan (CIP) establish a schedule of approximate completion dates for both short and long-term improvements and is the schedule reviewed and updated to reflect current budgetary capabilities and activity accomplishment?	X	
Discussion/Deficiencies/Corrective Actions: No changes were needed as the District's system evaluation and capacity assurance plan is current and accurately reflected in the existing SSMP. There have been no capacity issues experienced and the District has effectively managed collection system capacity.			
ELEMENT 9 - MONITORING, MEASUREMENT, AND PROGRAM MODIFICATIONS			
A.	Does the City maintain relevant information that can be used to establish and prioritize appropriate SSMP activities?	X	

		YES	NO
B.	Does the District monitor implementation and, where appropriate, measure the effectiveness of each element of the SSMP?	X	
C.	Does the District assess the success of the preventive maintenance program?	X	
D.	Does the District update program elements, as appropriate, based on monitoring or performance evaluations	X	
E.	Does the District identify and illustrate SSO trends?		X
ELEMENT 10 – SSMP AUDITS			
A.	Does the audit focus on evaluating the effectiveness of the SSMP?	X	
B.	Was the audit completed on time, every two years, and kept on file (preferably as an appendix to the SSMP)?		X

Discussion/Deficiencies/Corrective Actions: <p>ELEMENT 9 - There have been no updates of program elements based on evaluations, but none have been needed prior to this Update. There are no trends illustrated, but the small system size and extremely low number of events, if there are any, result in in very little data (if any) on which to develop any trend graphs or illustrations.</p> <p>ELEMENT 10 - The SSMP has been revised to implement the biennial audit, as required by the SWRCB, in line with the 2012 direction from the Regional Board in Oakland. Future audits will be performed every two years as a result, and the last audit report should be retained as an appendix to the SSMP.</p>			
ELEMENT 11 – COMMUNICATION PROGRAM			
A.	Does the District communicate with the public on a regular basis about the implementation and performance of the SSMP, and provide the public and opportunity for input? feedback?	X	
B.	Did District staff communicate with satellite collection systems? Are all agreements with satellite systems current or are changes necessary to these agreements?	X	
Discussion/Deficiencies/Corrective Actions: <p>The public has the opportunity for input at every District Board meeting. The current SSMP and appendices are posted on the District website. The updated SSMP should be posted on this page once completed and approved by the District Board, and staff should consider posting SSO data and graphs here as well.</p>			

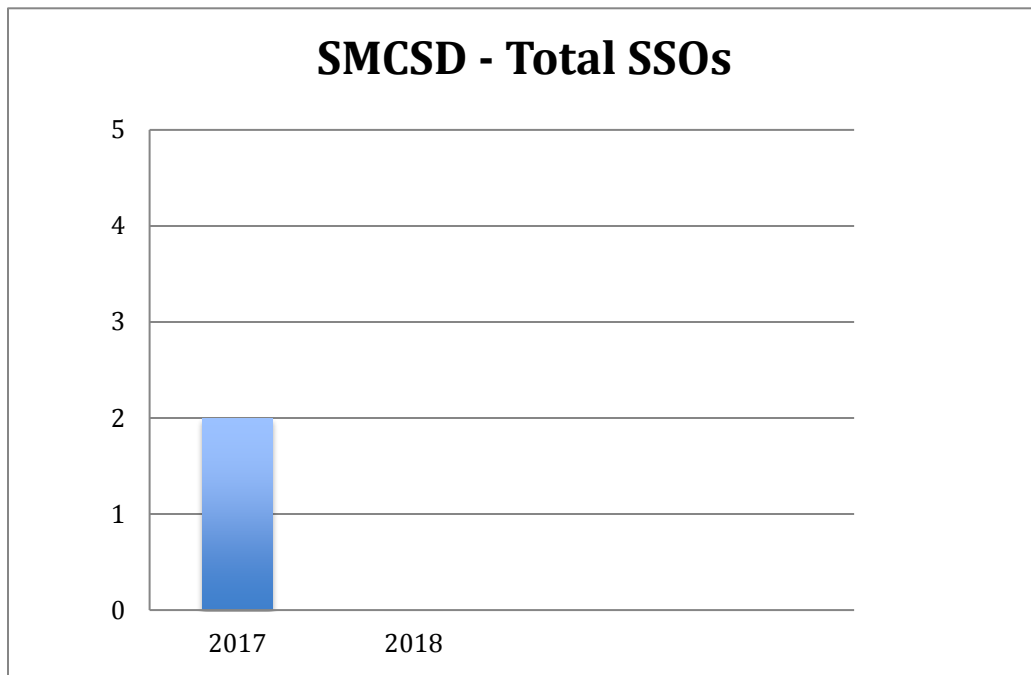
Change Log			
A.	Is the SSMP Change Log, current and up to date?		X
Discussion/Deficiencies/Corrective Actions: The Change Log or "Revisions List" as it was previously termed was not current at the time of the audit. However, a new Change Log was completed and prepared that notes the major changes made in the SSMP update subsequent to the audit, and is now current. This Log should be kept current and used anytime there are significant changes made to SSMP items prior to the next audit and SSMP update.			

Prepared By: Douglas Humphrey, Humphrey Consulting

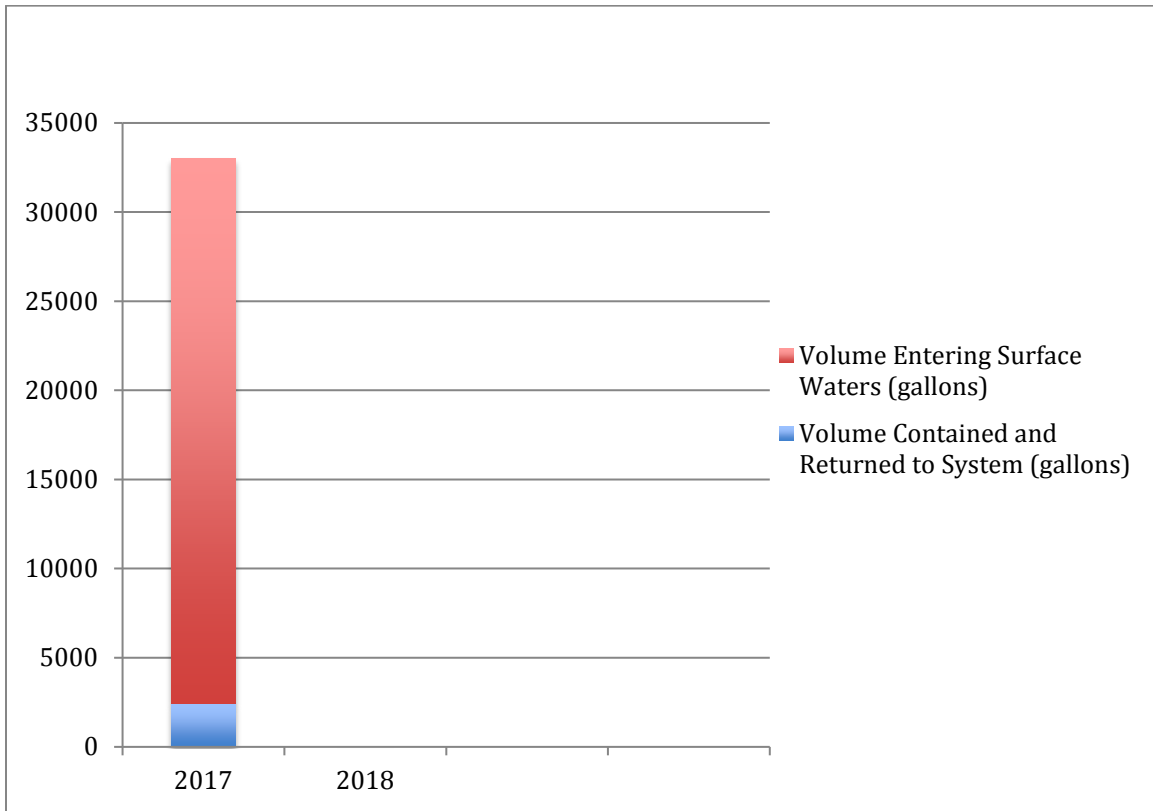
Reviewed By: Omar Arias, SMCSO

Approved for Filing on: May 15, 2019

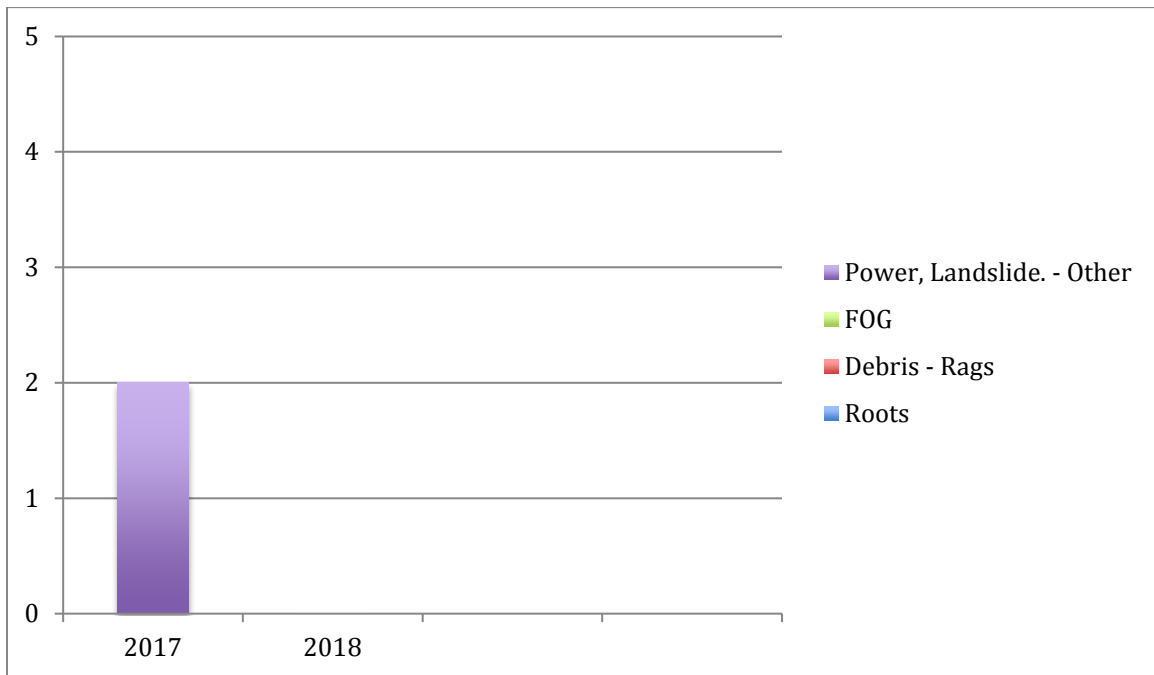
ATTACHMENT - SSO PERFORMANCE
SSO RATES, CAUSES, & VOLUMES TO WATERS



SMCSD - SSO Volumes Returned to System, Entering Surface Waters



SMCSD - SSO Causes



SMCSD - Comparison to Region 2 SSO Rate (#/100 miles/year)

