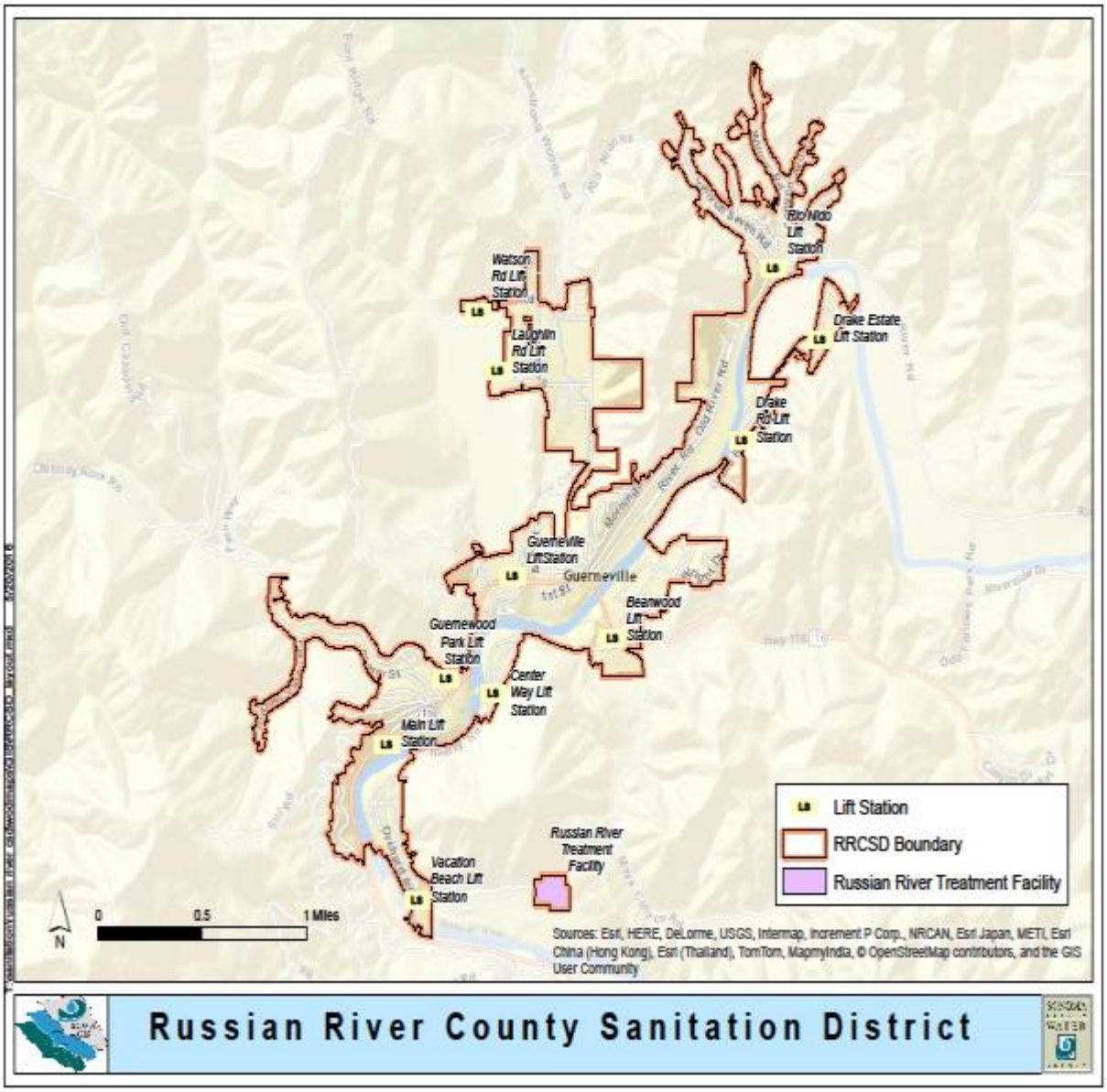
Russian River County Sanitation District Sewer System Management Plan (SSMP)



Preparation Supported by:

WOODARD &CURRAN

January 2021

Russian River County Sanitation District
Sewer System Management Plan

Record of Changes to the SSMP

Section E.3 of the Monitoring and Reporting Program for the Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (SWRCB Order No. WQ 2013-0058-EXEC) requires the District to maintain a record of changes to the SSMP for a minimum of five years, and the record of changes must be available for review by the State Water Resources Control Board during onsite inspection or through information request. The following is an excerpt of the new requirement:

> *Records documenting all changes 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.*

The Russian River County Sanitation District's SSMP was last certified in June 2016. The following table summarizes the changes to the SSMP since its last certification. These changes have been incorporated into the SSMP dated April 2021.

SSMP Element	Description of Change or Update	Authorized by	Date
All	Added a table of contents. Added an abbreviations and definitions table. Added descriptions of each element at the beginning of their respective chapters. Added the regulatory requirements of each element at the beginning of their respective chapters. Changed references to Sonoma County Water Agency to Sonoma Water.		Apr. 2021
Introduction	Updated the Russian River County Sanitation District Service Area and Sewer System Section.		Apr. 2021
1 - Goals	Edited the goals to make them more concise.		Apr. 2021
2 - Organization	Updated the organization chart. Updated the narrative explanation of responsibilities of SSMP organization positions and moved these descriptions to a table. Added narrative explanations of responsibilities of SSMP organization positions for positions added to the organization chart. Updated the table with positions responsible for SSMP implementation. Updated key staff contact information and moved to the appendix. Added the Notification and Reporting of SSOs Section.		Apr. 2021
3 - Legal Authority	None; only minor formatting changes and text edits.		Apr. 2021
4 - Operations and Maintenance	Updated the Prioritize Preventative Maintenance (PM) and Scheduled Inspections flow chart. Changed the Resources and Budget section to Rehabilitation and Replacement Plan and added information about the assessments of pipelines conducted by closed circuit television (CCTV) and		Apr. 2021

SSMP Element	Description of Change or Update	Authorized by	Date
	grades assigned to pipeline structural conditions based on the PACP rating system. Added a list of contingency equipment to the appendix.		
5 – Design Standards	None; only minor formatting changes and text edits.		Apr. 2021
6 – Sewer System Overflow Emergency Response Plan	Replaced the link to the OERP with a statement that the OERP will be included in the appendix.		Apr. 2021
7 – FOG Control Program	Added the FOG Control Measures Section, which includes some of the text from the previous SSMP as well as added information about efforts to prevent blockages in the District's collection system from Fats, Oils, and Grease (FOG). Updated the number of SSOs attributed to FOG since 2016.		Apr. 2021
8 – Capacity Assessment and System Evaluation and Capacity Assurance Plan	Changed the reference from RMC Water and Environment (RMC) to Woodard Curran. Included a link to the Capacity Assessment. Reorganized and updated the discussion about capacity assessment methodology and results, updated the text related to the hydraulic model, and updated the discussion about the capacity assessment results. Included information about the hydraulic model update in 2020 and the District's continued assessment of system capacity on a periodic basis. Added the Design Criteria Section.		Apr. 2021
9 – Monitoring, Measurements and Program Modifications	Updated and moved information related to monitoring, measurement, and modifications, including the Measurement, Monitoring, and Program Modifications table, to the audit report. Added the Key Performance Indicators Section. Added the SSMP Performance Review Section.		Apr. 2021
10 – SSMP Program Audits	Added a statement about the SSMP audits element under the General Section. Replaced the Russian River County Sanitation District Biennial Sewer System Management Plan Audit Report dated 12/17/2019, the Evaluation of the Effectiveness of the SSMP Section, and the Description of Scheduled Updates/Changes to the SSMP Section with a statement that a copy of the most recent audit report is included in the appendix.		Apr. 2021
11- Communication Program	Added text stating that there are currently no publicly owned sewer collection systems that are tributary and/or satellite to the District's sewer collection system. Updated the website where the public may find		Apr. 2021

SSMP Element	Description of Change or Update	Authorized by	Date
	information about the SSMP.		

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Abbreviations and Definitions

ADWF	Average dry weather flow
CCTV	Closed circuit television (inspection)
CEUs	Continuing Education Units
CIP	Capital Improvement Plan
CIWQS	California Integrated Water Quality System. Refers to the SWRCB online electronic reporting system that is used to report SSOs, certify completion of the SSMP, and provide information on the sanitary sewer system.
CPP	Capital Projects Plan
CSD	County Sanitation District
CWEA	California Water Environment Association
District	Russian River County Sanitation District
FOG	Fats, Oils and Grease
GIS	Geographic Information System. Refers to the Sonoma Water's system that is used to store, analyze, and manage geospatial data associated with the District's sanitary sewer system assets.
I/I	Infiltration and Inflow. Refers to storm water or groundwater that enter the sanitary sewer system through defects in pipes and manholes (infiltration) or direct drainage connections (inflow).
LRO	Legally Responsible Official
NASSCO	National Association of Sewer Service Companies
OERP	Overflow Emergency Response Plan
OES	California State Office of Emergency Services
O&M	Operations and Maintenance
P3S	Pretreatment, Pollution Prevention, Storm Water
PACP	Pipeline Assessment Certification Program
PDWF	Peak dry weather flow
PM	Preventive Maintenance
RDI/I	Rainfall-dependent infiltration and inflow
PWWF	Peak wet weather flow
RWQCB	Regional Water Quality Control Board
RRCSD	Russian River County Sanitation District
SECAP	System Evaluation and Capacity Assurance Plan
Sonoma Water	Sonoma County Water Agency
SSMP	Sewer System Management Plan

SSO	Sanitary Sewer Overflow. Refers to any overflow, spill, release, discharge or diversion of untreated or partially treated wastewater from a sanitary sewer system.
SWRCB	State Water Resources Control Board
W.A.	Water Agency
WDR	Refers to SWRCB Order No. 2006-0003 Statewide General Waste Discharge Requirements for Sanitary Sewer Systems

Introduction

The introductory section provides background information on the purpose and organization of this Sewer System Management Plan (SSMP) and provides a brief overview of the Russian River County Sanitation District (RRCSD or District) service area and sewer system. The District is managed and operated by the Sonoma County Water Agency (Sonoma Water).

SSMP Requirement Background

This SSMP has been prepared in compliance with requirements of the California State Water Resources Control Board (SWRCB) promulgated waste discharge requirements on May 2, 2006, to regulate sanitary sewer systems. This permit is known as SWRCB Order No. 2006-0003, Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (WDR). On July 30, 2013, Attachment A to the Order was promulgated and became effective on September 9, 2013, and is known as Attachment A, SWRCB Order No. WQ-2013-0058-EXEC, amending the Monitoring and Reporting Program for Statewide General Waste Discharge Requirements for Sanitary Sewer Systems.

Documentation Organization

This SSMP is intended to meet the requirements of the Statewide WDR. 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. Operations and Maintenance program
5. Design and Performance Provisions
6. Overflow Emergency Response Plan (OERP)
7. Fats, Oils, and Grease (FOG) Control Program
8. System Evaluation and Capacity Assurance Plan (SECAP)
9. Monitoring, Measurement and Program Modifications
10. SSMP Program Audits
11. Communications Program

Each element section is organized into sub-sections, as follows:

1. Description of the SWRCB requirement for that element.
2. 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, 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. This main volume of the SSMP is available for review and download on Sonoma Water's website. The full SSMP including all appendices has been provided to the SWRCB as required and is also available for review by interested parties at Sonoma Water's offices.

Russian River County Sanitation District Service Area and Sewer System

The RRCSD Service Area comprises 2,700 acres and serves a population of 7,305 (3,213 single-family dwelling unit equivalents). The collection system, constructed in the early 1980s, includes 45.4 miles of sewers (34.1 miles of gravity sewer mains ranging from 4 to 30 inches in diameter, 4.2 miles of force mains ranging from 2 to 16 inches, and 7.1 miles of service laterals for which the District is responsible) and 11 pump stations. The RRCSD treatment plant is designed to treat an average dry weather flow (ADWF) of up to 0.71 million gallons per day (mgd) to advanced (tertiary) wastewater treatment standards. Recycled water is transported to seasonal discharge locations, including nearby forests and the Northwood Golf Course.

Chapter 1 Goal of SSMP

1.1 Regulatory Requirements for the Goal Element

The WDR includes the following goal for the SSMP:

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 to prevent SSOs and mitigate any SSOs that do occur. This will help reduce and prevent SSOs, as well as mitigate any SSOs that do occur.

1.2 SSMP Goals

The goals of the Russian River County Sanitation District are to:

1. Properly manage, operate and maintain all parts of the wastewater collection system;
2. Provide adequate capacity to convey peak design flows;
3. Mitigate the impact of SSOs;
4. Protect the health and safety of the residents of the Lower Russian River;
5. Maintain cost effectiveness while maintaining high efficiency;
6. Be responsive to customers.

Chapter 2 Organization

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 Positions Responsible for SSMP Implementation

Figure 2-1 Error! Reference source not found. is the organizational chart and job descriptions for the Russian River County Sanitation District (District) employees who are involved in either preparing the Sanitary Sewer Management Plan or responding to sanitary sewer overflows. Please note that some of the job descriptions refer to "Water Agency". The District is managed by Sonoma Water. Therefore, the District's organizational chart is the same as Sonoma Water's organizational chart (see below). **Table 2-1** summarizes the roles and responsibilities relevant to the sanitary sewer system infrastructure of the key positions shown on the organization chart, and **Table 2-2** identifies the positions responsible for each element of the SSMP. The names and telephone numbers for management, administrative, and maintenance positions are included in Appendix C.

Figure 2-1: SSMP Organization Lines of Authority

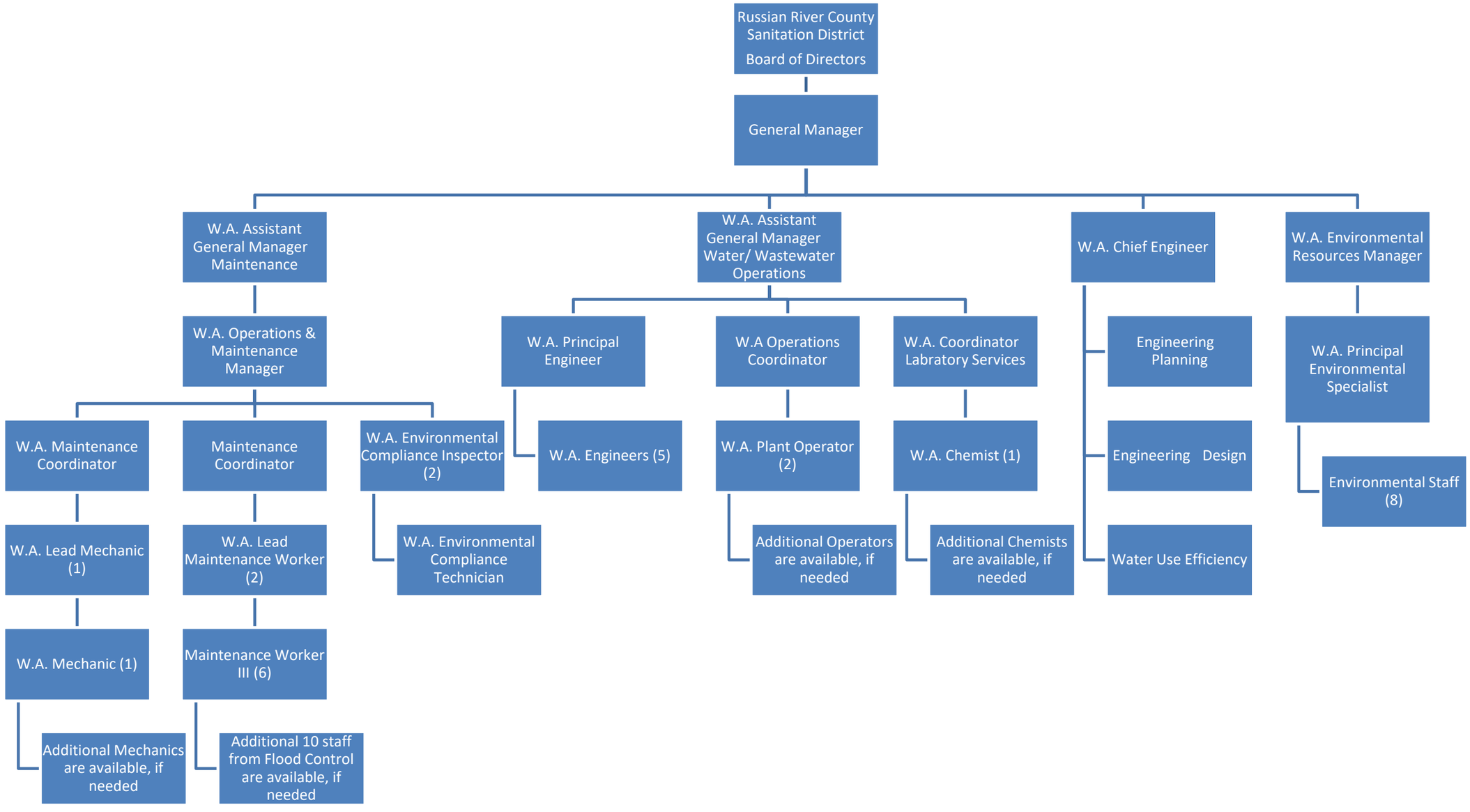


Table 2-1: Narrative Explanation of Responsibilities of SSMP Organization Positions

Board of Directors	Establishes policy and authorizes outside contractors to perform services for the District.
General Manager	The General Manager is the principal administrative person in overall charge of Sonoma Water/Russian River County Sanitation District.
W.A. Chief Engineer	The Chief Engineer is professionally responsible for the engineering activities of the District, and reviews and approves all plans and specifications for engineered works and all reports requiring professional engineering judgment.
W.A. Assistant General Manager – Water/ Wastewater Operations	Plans, organizes, directs, and coordinates the Operations and Engineering section. Directs the operation of systems and facilities, for the collection, treatment, storage, and disposal of wastewater and the reuse of reclaimed water; reviews plans for the operation of new wastewater facilities. Directs the compliance with federal, state and local water quality related regulations and prepares action plans to ensure full compliance with those regulations. Directs negotiations of regulatory permits that relate to the operation of wastewater facilities. Prepares wastewater collection system planning documents, coordinates development and implementation of SSMP. The Assistant General Manager – Water/Wastewater Operations is a designated legally responsible official (LRO) for purposes of SSO reporting.
W.A Principal Engineer	Direct and supervise works on applicable permits, laws, and regulations. Provides support to all parts of operations. Responsible for preparing SSMP. The W.A. Principal Engineer is a designated legally responsible official (LRO) for purposes of SSO reporting
W.A. Operations Coordinator	The Water Agency Coordinator - Operations is expected to possess an understanding of the full spectrum of operations involved in wastewater systems. Responsible for providing relevant information to management, prepares and implements contingency plans, leads emergency response, investigates and reports SSOs. This coordinator is also the Chief Plant Operator for the District. The Operations Coordinator is a designated LRO for purposes of SSO reporting.
W.A. Plant Operator	Manages field operations and maintenance activities, provides relevant information to management, prepares and implements contingency plans, collects and prepares samples.
W.A. Operations Coordinator – Laboratory Services	Coordinates, plans, organizes and directs and evaluates the activities of the water quality laboratory; performs difficult laboratory analyses related to the operation of secondary and tertiary wastewater treatment systems and a potable water supply system; and provides technical staff assistance. Develops and maintains water quality monitoring programs to meet wastewater and drinking water regulations and engineering needs.
W.A. Chemist	Collects and prepares samples of sanitary sewer overflows, when needed. Assists in setting up a county-wide effluent sampling program and industrial waste program, and ensures programs are carried out.

W.A. Assistant General Manager – Maintenance	Plans, organizes, directs, and coordinates the maintenance-oriented sections within Sonoma Water. Directs the maintenance of systems and facilities for the collection, treatment, storage, and disposal of wastewater and the reuse of reclaimed water; directs the reviews plans for maintenance of wastewater facilities. The Assistant General Manager – Maintenance is a designated LRO for purposes of SSO reporting.
W.A. Operation and Maintenance Manager	Directs the maintenance of systems and facilities for the collection, treatment, storage, and disposal of wastewater and the reuse of reclaimed water; directs the reviews plans for maintenance of wastewater facilities. The Operation and Maintenance Manager is a designated LRO for purposes of SSO reporting.
W.A. Maintenance Coordinator	The Water Agency Maintenance Coordinator investigates and reviews SSOs reports, and trains field crews. The Water Agency Maintenance Coordinator is a designated LRO for purposes of SSO reporting.
W.A. Lead Mechanic	Plans, schedules, assigns, and reviews the work of assigned crews and contracted workers; in conjunction with management functions as a project manager by establishing work priorities, monitoring and adjusting timelines, and coordinating the required staffing and equipment needs; coordinates the day-to-day operations of crews performing maintenance, repair, installation, and construction work on the Water Agency's wastewater collection systems and water distribution systems, wastewater treatment facilities,
Maintenance/Industrial Waste Coordinator	Plans, assigns, schedules and prioritizes the work of personnel engaged in flood control, the industrial waste program, and building maintenance and sanitation services. Typical duties include: construction, inspection, maintenance, monitoring and repair of flood control channels, water transmission systems, industrial waste facilities and wastewater collection systems
W.A. Lead Maintenance Worker	The Water Agency Lead Maintenance Worker is responsible for directly leading a crew of employees engaged in the overall technical maintenance and repair of the wastewater treatment and collection systems. Leads emergency response, investigates and reports SSOs to Water Agency Coordinator, and trains field crews. The Water Agency Lead Maintenance Worker is a designated LRO for purposes of SSO reporting.
W.A. Maintenance Workers (II & III)	Maintenance Workers participate in the installation, maintenance and repair of wastewater treatments systems. Determine appropriate action of day to day operations and in emergency situations in the field. Mobilize and respond to notification of stoppages and SSOs (mobilize sewer cleaning equipment, by-pass pumping equipment, and portable generators, etc.).
W.A. Environmental Compliance Inspector	Collects and prepares samples of sanitary sewer overflows, when needed. Assists in setting up a county-wide effluent sampling program and industrial waste program, and ensures programs are carried out.

W.A. Environmental Compliance Technician	The Water Agency Environmental Compliance Technician is a paraprofessional-level class performing technical work. An employee in this class works initially under close and later under general supervision assisting with inspections and evaluations and learning to ensure that wastewater discharge meets mandated requirements
W.A. Environmental Resources Manager	The Water Agency Environmental Resources Coordinator plans, directs, manages, coordinates, and supervises the work of the Environmental Resources Division of Sonoma Water; coordinates and participates in Federal and State legislative efforts; recommends, develops, implements and evaluates policies and procedures; and performs related duties as required.
W.A. Principal Environmental Specialist	Plans, organizes, and supervises the activities of a single section in the Environmental Resources Division in Sonoma Water engaged in environmental related planning or other services such as fish and wildlife; botanical, wetland resource, and soil morphology; arboriculture/revegetation; and environmental document analysis; recommends and implements changes, policies, and procedures; prepares and/or oversees the preparation of related environmental reports; and performs related duties as required.

Table 2-2: Positions Responsible for SSMP Implementation

Introduction	Water Agency Principal Engineer
1 – Goals	Water Agency Principal Engineer
2 – Organization	Water Agency Principal Engineer
3 – Legal Authority	Water Agency Principal Engineer
4 – O&M Program	Maintenance/Industrial Waste Coordinator
5 – Design & Performance Provisions	Water Agency Principal Engineer
6 – Overflow Emergency Response Program	Maintenance/Industrial Waste Coordinator
7 – FOG Control Program	Maintenance/Industrial Waste Coordinator
8 – SECAP	Water Agency Principal Engineer
9 – Monitoring, Measurement, and Program Modifications	Maintenance/Industrial Waste Coordinator
10 – SSMP Program Audits	Water Agency Principal Engineer
11 – Communication	Water Agency Principal Engineer
Change Log	Water Agency Principal Engineer
Appendices	Water Agency Principal Engineer

2.3 Notification and Reporting of SSOs

Information in this section is from Section 3 of the Sewer System Overflow Emergency Response Plan (OERP), which defines the District's chain of communication for reporting spills from sanitary sewers and lift stations. It includes information about overflow notification and reporting procedures.

2.3.1 Notification

The following overflow notification procedures will be followed.

1. The Water Desk Operator shall use Attachment 3-1 (Reporting Procedures for SSO) of the OERP to categorize the overflow and determine the appropriate persons and organizations to report the overflow to.

2. The Operations Coordinator shall notify the people listed on Attachment 3-1 of the OERP. The Assistant General Manager - Maintenance shall be responsible for notifying the General Manager and the Sonoma Water Board of Directors if the spill size and impact warrant notification.

3. The Collection System Maintenance Coordinator shall complete a Maintenance Crew Report of Overflow or Stoppage form (See Appendix A of the OERP, included in Appendix D) within 24 hours of the reported overflow confirmation. The Maintenance Crew Report of Overflow or Stoppage shall be submitted to the appropriate RWQCB. Attachment 3-1 summarizes, in part, the regulatory notification and reporting requirements.

4. Similar to overflows from collection systems, notification of a lift station overflow is received from the Water Desk Operator by the Collection System Maintenance Coordinator who coordinates with the Mechanic Coordinator. The Mechanic Coordinator shall initiate the investigation and correction of the cause of the overflow. The Collection System Maintenance Coordinator will coordinate any overflow cleanup and communicate to the Operations Coordinator if the overflow reached surface water or a storm drain.

2.3.2 Reporting

Significant Overflow to Surface Water and/or Drainage Inlet

In the event of a significant overflow of 1,000 gallons or more to surface water and/or a drainage inlet, a report to California Office of Emergency Services (Cal OES) is necessary within 2 hours in addition to regular overflow response actions.

Major Overflow to Surface Water and/or a Drainage Inlet

In the event of a major overflow of 50,000 gallons or more to surface water and/or a drainage inlet, a report to California Office of Emergency Services (Cal OES) is necessary within 2 hours and sampling must be performed within 48 hours of initial overflow notification in addition to regular overflow response actions.

Chapter 3 Legal Authority

This section of the SSMP discusses the District's legal authority to comply with the SSMP requirements, as provided in its Sanitation Code.

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 Sanitation Code Ordinance

The District's legal authority derives from its Sanitation Code Ordinance. The Sanitation Code Ordinance sets forth uniform requirements for contributors to the wastewater collection and treatment system, and enables the District to comply with all applicable State and Federal laws required by the Clean Water Act of 1977, as amended, and the General Pretreatment Regulations (40 CFR Part 403) which are on file at the Sonoma Water office. The District's Sanitation Code Ordinance can be found at the following: http://www.scwa.ca.gov/sanitation-codes/. **Table 3-1** summarizes the key legal authorities contained in the Ordinance.

Table 3-1: Summary of Legal Authorities

PUBLIC SEWERS	
Ability to prevent illicit discharges into the wastewater collection system	Article I – General Provisions
Ability to require that sewers and connections be properly designed and constructed	Article IV – Terms and Conditions for Construction of Sanitation Facilities
LATERALS	
Ensure access for maintenance, inspection, or repairs for portions of the service lateral owned or maintained by the Enrollee	Article VI – Source Control Program
FOG SOURCE CONTROL	
Ability to limit the discharge of FOG and other debris that may cause blockages	Article X – Grease, Oil, and Sand Interceptor Program
ENFORCEMENT	
Ability to enforce any violation of the Enrollee's sewer ordinances	Article VII - Enforcement

Requirement	Enrollee Code Reference[a]
OTHER RELEVANT CODE SECTIONS	
PUBLIC SEWERS	
Ability to require proper installation, testing, and inspection of new and rehabilitated sewers	Article III – General Conditions for Sewer Service
LATERALS	
Provide clear delineation of Enrollee responsibility (e.g., mains and lower laterals) and policies (e.g., courtesy cleaning, repair, cleanout installation)	Article III – General Conditions for Sewer Service
Define lateral ownership and maintenance responsibility	Article III – General Conditions for Sewer Service
FOG SOURCE CONTROL	
Requirements for the installation of GRDs	Article X – Grease, Oil, and Sand Interceptor Program
Ability to set design standards for GRDs	Article X – Grease, Oil, and Sand Interceptor Program
Authority to inspect grease producing facilities	Article X – Grease, Oil, and Sand Interceptor Program
ENFORCEMENT	
Prescribe prohibited actions (e.g., illicit connections, discharges)	Article VII - Enforcement
Provide notice of alleged violations to sewer user	Article VII - Enforcement

*All codes references can be found in the Russian River County Sanitation District's Sanitation Code Ordinance

Chapter 4 Operations and Maintenance Program

This section of the SSMP provides an overview of the District's sewer system operations and maintenance (O&M) program. The elements of the District's sewer system O&M Program include maintenance of gravity sewers, operational inspection and maintenance of pump stations, and sewer and manhole inspection, rehabilitation and replacement. The details of the District's O&M programs are described in this section.

4.1 Regulatory Requirements for Operations and Maintenance Program Element

The summarized requirements for the Operations and Maintenance 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-term 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 Sanitary Sewer System Mapping

The Russian River County Sanitation District (District) maintains an up-to-date GIS map of the collection system, showing all gravity line segments and manholes, pumping facilities, pressure pipes and valves, and applicable facilities.

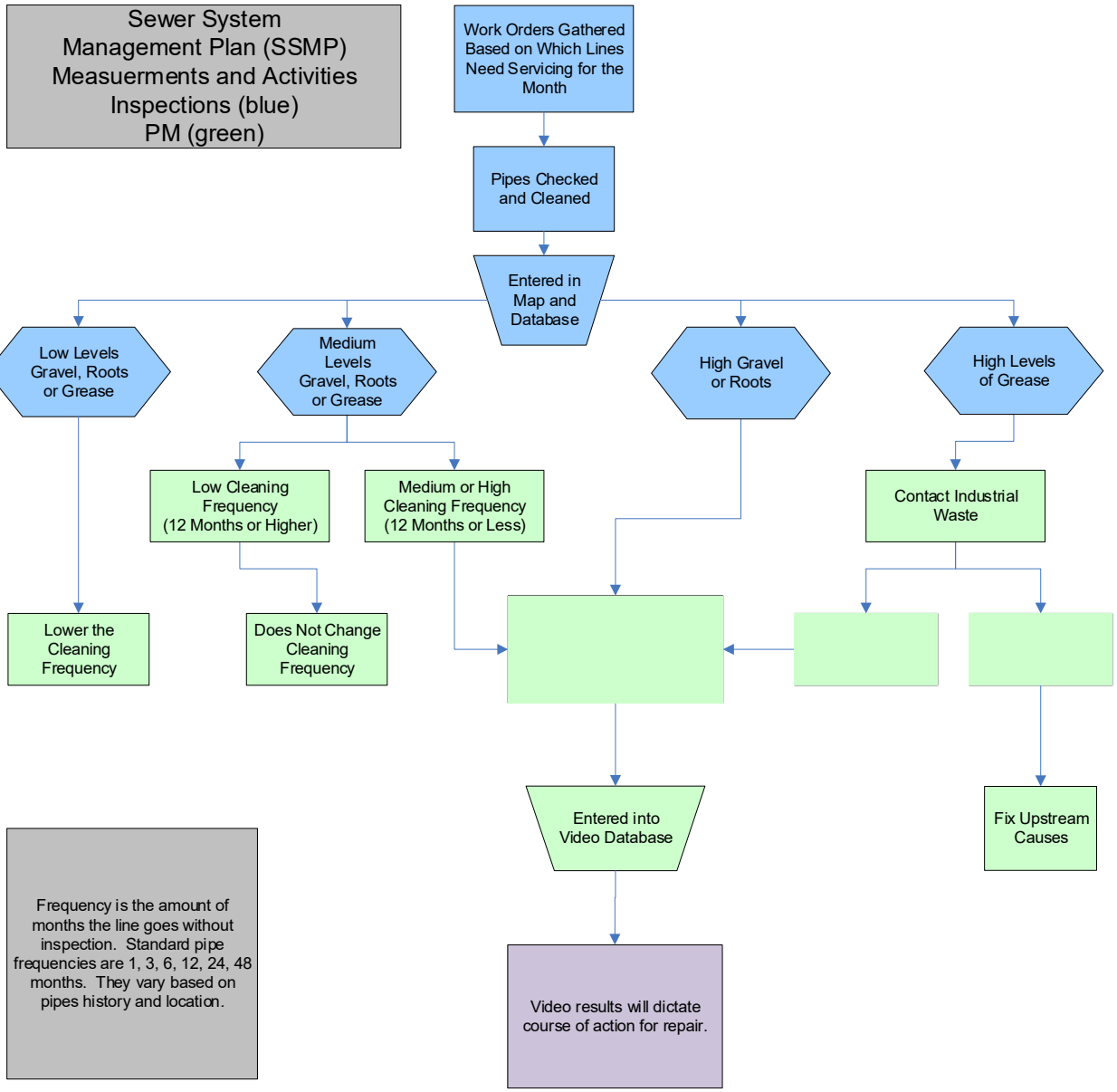
4.3 Preventive Operation and Maintenance

In order to maintain the health of the sewer lines, a step-by-step process is being implemented to ensure that not only will damaged facilities will be fixed quickly but they will be prevented in the future. Although the management of the sewer lines is systematic, subjectivity and maintenance expertise is needed for the evaluation of the lines. All lines are put on an evaluation/cleaning schedule when they are first cleaned. Evaluation/cleaning frequencies start at every month and increase to intervals of 3, 6, 12, 24 and 48 months. The District use the National Association of Sewer Service Companies (NASSCO) Pipeline Assessment and Certification Program (PACP) rating criteria when evaluating its pipelines.

At the beginning of the month sewer lines that are due to be evaluated according to the schedule are placed on a list which is given to the District's maintenance crew. These sewer lines are then evaluated and cleaned and, depending on the level of intrusion, evaluation/cleaning frequencies are updated. Sewer lines are evaluated based on low medium or high amounts of gravel, roots and grease intrusion. Sewer lines with low amounts of intrusions are less prone to SSOs, so the frequency of evaluation/cleaning is reduced. Depending on the area and history of the pipe, an evaluation revealing medium intrusion will either result in the same evaluation/cleaning frequency or an increase in the evaluation/cleaning frequency. Any high intrusion result requires further attention.

For high levels of grease, the District's Industrial Waste staff is contacted in order to inspect upstream discharges. High levels of gravel, roots or grease also requires the sewer lines to be videoed to check for needed maintenance. All of the cleaned sewer lines that have no maintenance or video orders issued are entered into the computer database. Any lines that require video inspection are then entered into the video list database. If a video shows any slight offsets then no repair order is issued but the evaluation/cleaning frequency of the sewer line is increased. If there is a severe obstruction or offset then the sewer line needs repairing and entered into the repair database. These separate databases offer easy access and history to each of the sewer lines in the system. When the sewer line is repaired, a summary, the date and the crew are entered into the database and it then goes on the completed construction list. After repair the sewer line is checked within one month. At that time, the evaluation/cleaning frequency will either be changed or remain the same (See **Figure 4-1** below).

Figure 4-1: Prioritize Preventative Maintenance (PM) and Scheduled Inspections



4.4 Rehabilitation and Replacement Plan

Assessments of pipelines is conducted by closed circuit television (CCTV). Pipeline structural conditions are assigned a grade based on the PACP rating system. The District considers a pipeline to be significantly defective if its condition receives a grade of 4 or 5 based on the PACP rating system. The PACP assigns grades based on the significance of the defect, extent of damage, percentage of flow capacity restriction, and/or the amount of pipe wall loss due to deterioration. Grades are assigned as follows:
5 – Most significant defect
4 – Significant defect
3 – Moderate defect
2 – Minor to moderate defect
1 – Minor defect

A pipeline that receive a grade of a 4 or 5 is immediately scheduled for repair and/or rehabilitation. Most repair and/or rehabilitation occur within two weeks. Some require longer period due to the complexity of the issue.

Each year the District evaluates potential projects. While some projects may remain in the Capital Project Plan (CPP), others may be dropped for a higher priority project. The CPP is a living document and is constantly changing. The District uses the CPP as a planning document. Perspective readers should be aware that this document changes annually. To see the most current version, click on the following link: http://www.scwa.ca.gov/capital-projects/ and select "View Capital Projects Plan".

4.5 Staff Training

The District is operated by Sonoma Water. Sonoma Water's maintenance staff is required to complete 12 Continuing Education Units (CEUs) annually. Workshops and/or conferences must be accredited by the California Water Environment Association (CWEA). Several of the accredited workshops are held at Sonoma Water offices by Sonoma Water staff who are accredited by CWEA. Workshops such as Confined Space, Air Monitoring, CPR, Excavation/Trenching Safety, Hazardous Energy Control, Traffic Control, and Fall Control are available to the maintenance staff.

Maintenance staff are also encouraged to attend workshops and/or conferences on topics such as Collection System Maintenance, Environmental Compliance, Plant Maintenance, and Mechanical Technology.

4.6 Equipment and Parts Inventory

Sonoma Water maintains an inventory of contingency equipment in order to lessen equipment or facility downtime. Contingency equipment such as portable pumps and generators are also kept on hand so as to insure proper response to emergencies. Along with the pumps and generators, other equipment, such as vactor trucks, a router, back hoes, a dump truck, bobtails, a wacker, viber plates, and ten wheelers are kept in inventory. These preparatory measures are made in order to guarantee that in the event of a failure, the District will experience minimal service interruptions. A current list of contingency equipment is included in Appendix E.

Chapter 5 Design and Performance Provisions

This element of the SSMP presents the District's Design and Construction Standards for sewer systems.

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

Sonoma Water's Design and Construction Standards apply to the design and construction of all public sewerage facilities and are consistent with rules and regulations in Sonoma Water's Sanitation Zones and County Sanitation Districts, whether privately financed and/or constructed under permits issued by Sonoma Water or publicly financed and constructed under contract with Sonoma Water.

Sonoma Water's jurisdiction includes the entire sewerage system and its appurtenances from the point of connection with the building plumbing to the discharge terminus of the final disposal or use. Maps showing the sanitation boundaries are available for inspection at Sonoma Water's office.

When deemed necessary by the General Manager or Chief Engineer, special provisions, specifications addenda, and/or notes on the plans shall be provided and shall be considered as part of the specifications for the work.

The Sanitation Code of the Water Agency and County Sanitation Districts comprises Sonoma Water's rules and regulations with respect to the construction and use of sanitary sewerage facilities. In general, the ordinances: 1) provide the Board of Directors for Sonoma Water and the County Sanitation Districts policy and authority of the General Manager; 2) provide regulations for lateral sewer construction and for the use and construction of public sewers; 3) provide for annexation, plan checking, and permit and inspection fees; and 4) provide the establishment of connection charges. A knowledge of the ordinance provisions and polices is essential to those proposing to design and construct sewerage facilities under permit in Sonoma Water's sanitation districts and zones.

Sonoma Water's Design and Construction Standards can be found at: http://www.scwa.ca.gov/sanitation-codes/

Chapter 6 Overflow Emergency Response Plan

The Sewer System Overflow Emergency Response Plan (OERP) defines the District's plans, procedures and requirements for responding, remediating and reporting spills from sanitary sewers and lift stations.

6.1 Regulatory Requirements for OERP Element of SSMP

The WDR includes the following requirements for the development of an Overflow Emergency Response Plan that identifies measures to protect public health and the environment. At a minimum, this plan must include the following:

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

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

(c) Procedures to ensure prompt notification to appropriate regulatory agencies and other potentially affected entities (e.g. health agencies, regional water boards, water suppliers, etc.) of all SSOs that potentially affect public health or reach the waters of the State in accordance with the Monitoring and Reporting Program (MRP). All SSOs shall be reported in accordance with this MRP, the California Water Code, other State Law, and other applicable Regional Water Board Waste Discharge Requirements or National Pollutant Discharge Elimination System (NPDES) permit requirements. The Sewer System Management Plan should identify the officials who will receive immediate notification;

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

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

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

6.2 Overflow Emergency Response

The purpose of the OERP is to assure a prompt and appropriate level of response is made to every reported sewage spill received by the District so that adverse effects to public health, water quality, the environment, and public and private property can be minimized. The OERP further includes provisions to ensure notifications and reports are made to the appropriate local, state and federal authorities, and that response actions taken are properly documented. By responding promptly with adequate resources to sewage spills, and providing regulatory agencies with required spill notification and spill reports, the risk of enforcement actions against the District can be minimized.

The core elements of the OERP are the spill response procedures, and the regulatory agency spill notification and reporting requirements. The OERP provides continuity between primary elements, from the initial receipt of a spill notification through completion of the regulatory spill report. In addition to these primary elements, the OERP also addresses public notification procedures, public education, public outreach, training and OERP updating. These additional elements are essential to the maintenance and development of the OERP.

Sonoma Water's OERP is included in Appendix D.

Chapter 7 Fats, Oils, and Grease (FOG) Control Program

This section presents the District's Fats, Oils, and Grease (FOG) Control Program.

7.1 Regulatory Requirements for the FOG Control Program Element

The WDR requirements for the FOG Control element of the SSMP are:

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 Fats, Oils, and Grease (FOG) Legal Authority

Under the District's Sanitation Code Ordinance, Article X, "Grease, Oil, and Sand Interceptor Program", the District is granted the authority to implement a FOG Program. Article X discusses grease traps, oil and sand interceptors, administration of the interceptor program, and enforcement.

Ordinance, Article X, Section 10.01 states that "All non-domestic users, including restaurants, gas stations, and auto repair establishments with floor drains located in service areas and auto or vehicle washing facilities, shall be required to install and maintain a grease, oil, and sand interceptor at the users own expense when the General Manager finds that it is necessary for the proper handling of (a) liquid waste containing grease, (b) flammable waste, (c) sand, or (d) other harmful constituents which may be properly eliminated from the sewerage system by use of an interceptor or trap.

The District's Ordinance, Article X, "Grease, Oil, and Sand Interceptor Program" can be found at the following link: http://www.scwa.ca.gov/sanitation-codes/ within the Water Agency Sanitation Code.

7.3 FOG Control Measures

In an effort to prevent blockages in the District's collection system from Fats, Oils and Grease (FOG) generated by commercial food service facilities, Sonoma Water requires food service establishments to install grease removal devices. Details of the FOG program are outlined in Article X of the Sanitation Code. The objectives of the District's Source Control Program are to: reduce or eliminate the discharge of incompatible pollutants that may be discharged by commercial and/or industrial dischargers; reduce or eliminate the discharge of pollutants that might pass through the treatment plant to the receiving waters; reduce or eliminate the discharge of pollutants that interfere with treatment plant operation and cause a plant upset or impair the District's ability to dispose of sludge; protect the health and safety of the community, District staff and the environment; and protect the physical integrity of the collection system, treatment plant and equipment.

During 2019 fourteen (14) food service facilities were inspected. Two of the facilities were out of business, two were found not to have a device, two facilities were non-compliant, and the remaining facilities were in compliance. Re-inspections occurred in the same year at the two facilities that were non-compliant and the two that did not have a device.

Since 2016 the District has had 1 SSO attributed to FOG. The data illustrates that FOG is not an issue and that the current FOG control program is sufficient at this time. The District has increased routine inspections of food facilities and is developing a new database to better track inspections and FOG related issues. When a spill occurs that is the result of FOG, the District's Industrial Waste staff walks the area and places FOG door hangers letting residents know the problems FOG can have on the sewer collection system. As a part of the District's normal inspection routine of businesses, a grease scrapper and a guide on "Food Facility Storm Water Pollution Prevention" guidelines are handed out to each home. The guidelines contain information on grease handling as well as spill clean-up, hazardous waste, and the importance of grease traps/interceptors maintenance. In addition, businesses are told of agencies in the area that accept FOG.

The District participates in the Pretreatment, Pollution Prevention, Storm Water (P3S) working group in the North Bay. P3S is a group of public agencies (Air Resources Board, Certified Unified Program Agencies, Storm Water, Regional Board, Hazardous Waste, and Local Authorities) in the North Bay that discusses a number of issues, of which FOG is one of them. The group meets every other month, which allows for a consistent message to be told in the North Bay.

Chapter 8 System Evaluation and Capacity Assurance Plan

This section of the SSMP presents the District's approach to ensuring that its sanitary sewer system has adequate hydraulic capacity through a System Evaluation and Capacity Assurance Plan (SECAP).

8.1 Regulatory Requirements for the SECAP Element

The WDR requirements for the SECAP element of the SSMP are:

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 Capacity Assessment Methodology

In 2016 the District conducted a Sanitary Sewer Capacity Assessment. The Capacity Assessment was prepared by Woodard Curran in close coordination with District staff. A summary of assessment findings is presented below.

The District's sanitary sewer collection system includes sewer pipelines ranging in size from 4 to 30 inches in diameter. The larger pipes, primarily the 10-inch and larger sewers and most of the 8-inch pipes, comprise the trunk sewer system, which is the primary network for conveying flows generated in the service area to the treatment plant. The trunk sewer system was the focus of the capacity assessment in this study. A systematic process was used that incorporated land use planning information, flow monitoring data, and design criteria for estimating wastewater flows, and applied the flows in a computer hydraulic model of the trunk sewer system. The model was used to assess how the system would perform under various planning and flow scenarios and to identify pipes that may not have sufficient capacity to convey the predicted flows under existing or future conditions.

The model integrates various dry and wet weather flow parameters to determine system capacity under different flow and planning scenarios. Key flow components incorporated into the model include: base (dry weather) wastewater flow, representing the sanitary and process flow contributions from existing and future customers; groundwater infiltration, which occurs when water seeps into pipes under the ground through cracks and pipe joints; and rainfall-dependent infiltration and inflow (RDI/I) during storm events. The

model was calibrated to flow monitoring data to ensure that it represents a reasonably accurate depiction of system conditions.

8.3 Capacity Assessment Results

For each of the planning scenarios examined, projected dry and wet weather flows were simulated in the hydraulic model. A 24-hour duration, 10-year return period storm event based on historical rainfall statistics was selected as the design event for evaluating system capacity and sizing required system improvements, if needed.

Model results were examined to determine trunk system capacity needs, as indicated by areas where the flow in the pipes would exceed their capacity and cause surcharge conditions (water levels higher than the crowns of the pipes) to within five (5) feet of manhole rims under peak wet weather flow (PWWF) conditions or above the crown of the pipe under peak dry weather flow (PDWF). Based on the model results, the Capacity Assessment study determined that the District's trunk sewer system has adequate capacity to convey existing and projected future peak dry and wet weather flows, and therefore no capacity enhancement measures are required at this time.

The District initiated an update of its hydraulic model in 2020, and moving forward, will continue to assess system capacity on a periodic basis.

8.4 Design Criteria

Design criteria for sewer system facilities are contained in Sonoma Water's Design and Construction Standards (refer to Chapter 5, Design and Performance Provisions).

Chapter 9 Monitoring, Measurement, and Program Modifications

This section of the SSMP discusses how the District measures the effectiveness of SSMP elements and monitors their implementation.

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 Key Performance Indicators

The effectiveness of SSMP elements is measured by developing and tracking performance indicators on a regular basis. The District maintains and tracks information on routine maintenance activities and SSO abatement programs that allows analysis and evaluation of changed conditions.

Key performance indicators incorporated include:

- Number of dry weathers SSOs over the past 12 months, (12-month average)
- Number and characteristics of wet weather SSOs over the past 12 months,
- SSOs by cause (e.g. roots, grease, debris, pipe failure, pump station failure, capacity, other)
- Volume distribution of SSOs (e.g. number of SSOs < 100 gallons, 100 to 999 gallons, 1,000 to 9,999 gallons, > 10,000 gallons)
- Annual volume of SSOs
- Average time to respond to an SSO
- Total feet inspected by year
- Record of past repair, rehabilitation, and replacement projects
- Record of planned repair, rehabilitation, and replacement projects
- Plans developed for, or implementation of, activities to target specific problems identified, such as roots, structural deficiencies, or fats, oil, and grease (FOG)
- Record of FOG outreach and corrective actions

9.3 SSMP Performance Review

District senior staff and management utilize this information, as well as the other data products produced throughout the year, to periodically review performance of the SSMP elements. There is a focus on the preventative maintenance program to ensure that District resources are being allocated efficiently. The SSMP performance review also looks at SSO trends including frequency, location, volume, and cause. This helps the District to analyze hotspot locations and cleaning frequency, resources, and general areas where

additional attention is required. The outcome of the review may lead to changes in the SSMP to continue to improve collection system performance in a fiscally responsible manner.

Chapter 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 Element

> *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 General

The SSMP Audits element of the SSMP requires that the District conduct a biennial audit of its SSMP that identifies any deficiencies, and steps to correct them that are appropriate to the size of the District's system and the number of overflows.

This audit contains information about successes/failures in implementing the most recent version of the District's SSMP and identifies any revisions necessary for a more effective program.

10.3 SSMP Audits Discussion

Monitoring and measurements data, as are recorded in accordance with Section 9 of this plan, will be used in preparation of the audit. An explanation of the District's SSMP development and accomplishments in improving the sewer system will be included in the audit report, including:

1. Progress made on development of SSMP elements.
2. Comparison of progress with planned schedule.
3. Justification on any delays with development of the SSMP.
4. The District's implementation of SSMP elements in the past year.
5. The effectiveness of implementing SSMP elements.
6. Description of the additions and improvements made to the sanitary sewer collection system in the past reporting year.
7. Description of the additions and improvements planned for the upcoming reporting year with an estimated schedule for implementation.

Appendix F includes a copy of the most recent audit report.

Chapter 11 Communication Program

This section of the SSMP outlines the process involved in communicating with interested members of the public regarding the development, implementation, and performance of this plan.

11.1 Regulatory Requirements for the Communication Program Element

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 Program

The Russian River County Sanitation District will include SSMP updates annually in one of its sanitation newsletters. The public has an opportunity for input into the process at any of the District's Board meetings. Currently, there are no publicly owned sewer collection systems that are tributary and/or satellite to the District's sewer collection system. If a collection system becomes tributary and/or satellite to the District's collection system, the District will develop and maintain regular communication on sewer system issues with that system's staff.

The public may find information about the SSMP by going to the Sonoma Water website (sonomawater.org). Persons who have further questions and comments may email Kevin Booker at Kevin.Booker@scwa.ca.gov.

Russian River County Sanitation District
Sewer System Management Plan

Appendices

Preparation Supported by:

WOODARD &CURRAN

January 2021

Document Version Control

This Sewer System Management Plan (SSMP) is a living document that is anticipated to change over time. This version control sheet is intended to support the Russian River County Sanitation District's efforts to keep copies of the SSMP that have been assigned to District's Staff current. Please contact Kevin Booker at 707-521-1865 prior to making copies for use by others, initiating changes, or for information regarding the current version of this document.

SSMP Copy No. _____

This copy assigned to _____ Telephone No. _____

SSMP Section	Original Version Date	Updated Version Date	Current Version Date
Title Page	June 1, 2016	January 1, 2021	January 1, 2021
Introduction	June 1, 2016	January 1, 2021	January 1, 2021
1. Goals	June 1, 2016	January 1, 2021	January 1, 2021
2. Organization	June 1, 2016	January 1, 2021	January 1, 2021
3. Legal Authority	June 1, 2016	January 1, 2021	January 1, 2021
4. O&M Program	June 1, 2016	January 1, 2021	January 1, 2021
5. Design and Performance Provisions	June 1, 2016	January 1, 2021	January 1, 2021
6. Overflow Emergency Response Plan	June 1, 2016	January 1, 2021	January 1, 2021
7. FOG Control Plan	June 1, 2016	January 1, 2021	January 1, 2021
8. System Evaluation and Capacity Assurance Plan	June 1, 2016	January 1, 2021	January 1, 2021
9. Monitoring, Measurement, and Program Modifications	June 1, 2016	January 1, 2021	January 1, 2021
10. SSMP Program Audit	June 1, 2016	January 1, 2021	January 1, 2021
11. Communications Plan	June 1, 2016	January 1, 2021	January 1, 2021

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Appendix A

SWRCB Order No. 2006-0003 – Statewide General Waste Discharge Requirements for Sanitary Sewer Systems

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

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-DWQ, 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

<table>
<tr><td>Task and Associated Section</td><td colspan="4">Completion Date</td></tr>
<tr><td></td><td>Population > 100,000</td><td>Population between 100,000 and 10,000</td><td>Population between 10,000 and 2,500</td><td>Population < 2,500</td></tr>
<tr><td>Application for Permit Coverage
Section C</td><td colspan="4">6 months after WDRs Adoption</td></tr>
<tr><td>Reporting Program
Section G</td><td colspan="4">6 months after WDRs Adoption[1]</td></tr>
<tr><td>SSMP Development Plan and Schedule
No specific Section</td><td>9 months after WDRs Adoption[2]</td><td>12 months after WDRs Adoption[2]</td><td>15 months after WDRs Adoption[2]</td><td>18 months after WDRs Adoption[2]</td></tr>
<tr><td>Goals and Organization Structure
Section D 13 (i) & (ii)</td><td colspan="2">12 months after WDRs Adoption[2]</td><td colspan="2">18 months after WDRs Adoption[2]</td></tr>
<tr><td>Overflow Emergency Response Program
Section D 13 (vi)</td><td rowspan="3">24 months after WDRs Adoption[2]</td><td rowspan="3">30 months after WDRs Adoption[2]</td><td rowspan="3">36 months after WDRs Adoption[2]</td><td rowspan="3">39 months after WDRs Adoption[2]</td></tr>
<tr><td>Legal Authority
Section D 13 (iii)</td></tr>
<tr><td>Operation and Maintenance Program
Section D 13 (iv)</td></tr>
<tr><td>Grease Control Program
Section D 13 (vii)</td><td rowspan="3">36 months after WDRs Adoption</td><td rowspan="3">39 months after WDRs Adoption</td><td rowspan="3">48 months after WDRs Adoption</td><td rowspan="3">51 months after WDRs Adoption</td></tr>
<tr><td>Design and Performance
Section D 13 (v)</td></tr>
<tr><td>System Evaluation and Capacity Assurance Plan
Section D 13 (viii)</td></tr>
<tr><td>Final SSMP, incorporating all of the SSMP requirements
Section D 13</td><td></td><td></td><td></td><td></td></tr>
</table>

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 30days 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 B

SWRCB Order No. WQ-2013-0058-EXEC – Amended Monitoring and Reporting Program 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 information[2] 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 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.

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[1] Available for download at:
http://www.waterboards.ca.gov/board decisions/adopted orders/water quality/2006/wgo/wgo2006 0003.pdf

[2] Cal OES Hazardous Materials Spill Reports available Online at:
http://w3.calema.ca.gov/operational/malhaz.nsf/$defaultview and
http://w3.calema.ca.gov/operational/malhaz.nsf

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 CIWQS[3] 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 Program[4] 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 September 9, 2013.

8/6/13
Date

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/sso/

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 Sewer Overflow (SSO) definition]
CATEGORY 1	Discharges of untreated or partially treated wastewater of **any volume** resulting from an enrollee's sanitary sewer system failure or flow condition that: • Reach surface water and/or reach a drainage channel tributary to a surface water; or • Reach a Municipal Separate Storm Sewer System (MS4) and are not fully captured and returned to the sanitary sewer system or not otherwise captured and disposed of properly. Any volume of wastewater not recovered from the MS4 is considered to have reached surface water unless the storm drain system discharges to a dedicated storm water or groundwater infiltration basin (e.g., infiltration pit, percolation pond).
CATEGORY 2	Discharges of untreated or partially treated wastewater of **1,000 gallons or greater** resulting from an enrollee's sanitary sewer system failure or flow condition that **do not** reach surface water, a drainage channel, or a MS4 unless the entire SSO discharged to the storm drain system is fully recovered and disposed of properly.
CATEGORY 3	All other discharges of untreated or partially treated wastewater resulting from an enrollee's sanitary sewer system failure or flow condition.

CATEGORIES	DEFINITIONS [see Section A on page 5 of Order 2006-0003-DWQ, for Sewer Overflow (SSO) definition]
PRIVATE LATERAL SEWAGE DISCHARGE (PLSD)	Discharges of untreated or partially treated wastewater resulting from blockages or other problems **within a privately owned sewer lateral** connected to the enrollee's sanitary sewer system or from other private sewer assets. PLSDs that the enrollee becomes aware of may be voluntarily reported to the California Integrated Water Quality System (CIWQS) Online SSO Database.

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

ELEMENT	REQUIREMENT	METHOD
NOTIFICATION (see section B of MRP)	• Within two hours of becoming aware of any Category 1 SSO **greater than or equal to 1,000 gallons discharged to surface water or spilled in a location where it probably will be discharged to surface water**, 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)	• 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)	• Conduct water quality sampling **within 48 hours** after initial SSO notification for Category 1 SSOs in which 50,000 gallons or greater are spilled to surface waters.	Water quality results 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)	• 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 1-5, 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 C

Key Staff Contact Information

Position	Name	Phone Number
General Manager	Grant Davis	707-547-1900
W.A. Chief Engineer	Jay Jasperse	707-547-1900
W.A. Assistant General Manager – Water/ Wastewater Operations	Pam Jeane	707-547-1900
W.A Principal Engineer	Kevin Booker	707-521-1865
W.A. Operations Coordinator – Laboratory Services	Ellen Simm	707-521-1809
W.A. Chemist	Multiple Staff	-
W.A. Operations Coordinator	Bret Beaudreau	707-521-1848
W.A. Plant Operator	Multiple Staff	-
W.A. Assistant General Manager – Maintenance	Mike Thompson	707-547-1900
W.A. Operation and Maintenance Manager	David Royall	707-547-1900
W.A. Maintenance Coordinator	Eric Keel	707-547-1074
W.A. Lead Mechanic	Multiple Staff	-
W.A. Environmental Compliance Inspector	Multiple Staff	-
W.A. Lead Maintenance Worker	Multiple Staff	-
W.A. Maintenance Workers (II & III)	Multiple Staff	-
W.A. Environmental Resources Manager	Jessica Martini-Lamb	707-547-1900
W.A. Principal Environmental Specialist	Greg Horton	707-547-1907

Appendix D

Sewer System Overflow Emergency Response Plan (OERP)

Sonoma County Water Agency,
Sonoma Valley County Sanitation District,
Russian River County Sanitation District,
& Occidental County Sanitation District

Sewer System Overflow
Emergency Response Plan

Last Updated: June 8, 2016

List of Tables

Section 1 - Introduction

The Sonoma County Water Agency manages nine (9) wastewater collection and treatment systems in Sonoma County. They are Airport-Larkfield-Wikiup Sanitation Zone, Geyserville Sanitation Zone, Occidental County Sanitation District, Penngrove Sanitation Zone, Russian River County Sanitation District, Sea Ranch Central Wastewater Sanitation Zone, Sea Ranch North Wastewater Sanitation Zone, Sonoma Valley County Sanitation District, and the South Park County Sanitation District. Throughout this report any one of the above facilities may be mentioned.

The Sewer System Overflow Emergency Response Plan (SSO ERP) defines the Sonoma County Water Agency (Water Agency), Sonoma Valley County Sanitation District, Russian River County Sanitation District, and the Occidental County Sanitation District's plans, procedures and requirements for responding, remediating and reporting overflows from sewers and lift stations and overflows from wastewater treatment plants that have the potential to reach surface waters or drainage channels. The Sewer System Overflow Emergency Response Plan (SSO ERP) was developed for use in the 8 Water Agency-managed sanitation districts and zones (South Park CSD not included), and could be adopted by other water and wastewater agencies in the Russian River and nearby watersheds to provide a consistent regional response to overflows from sewer and lift stations and overflows from wastewater treatment plants that have the potential to reach surface waters or drainage channels. The SSO ERP was developed to satisfy terms and conditions of the, Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (Order No. 2006-003 and Order No. WQ 2013-0058-EXEC), and the Section 13383 Letter from the San Francisco Bay Regional Water Quality Board (May 1, 2008).

The core elements of the SSO ERP are the overflow response procedures, the regulatory agency overflow notification and reporting requirements and employee training. The SSO ERP provides continuity between core elements, from the initial receipt of a overflow notification through completion of the regulatory overflow report. SSO ERPSSO ERPSSO ERP

Purpose of the Sewer System OverflowEmergency Response Plan (SSO ERP)

The purpose of the Sewer System Overflow Emergency Response Plan (SSO ERP) is to assure prompt and appropriate response to every report of a possible sewage overflow received by the Water Agency so that any adverse effects to public health, water quality or customer service due to a confirmed sewer overflow can be minimized. SSO ERP

SSO ERPSSO ERP

For the purpose of the SSO ERP, "confirmed sewage overflow", or "overflow", is also sometimes referred to as "sanitary sewer overflow", or "SSO"; "SO"; "overflow"; or "pumping station overflow".

Objectives

The primary objectives of the SSO ERP are to:

- Protect public health, wastewater treatment plant and collection system personnel, and the environment, and
- Comply with requirements governing the procedures for managing sewer overflows including notification, response procedures, reporting and training.

Additional objectives of the SSO ERP are as follows:

- Protect the collection system, pumping stations, wastewater treatment facilities, and all appurtenances;
- Protect private and public property adjacent to the collection and treatment facilities; and,

Section 2 - Overflow Response Procedure

Receipt of Information Regarding a Sewer Overflow or Lift Station Overflow

The Water Desk Operator

1) The attending Operator shall record as much information as possible that is known about the overflow by the caller and other relevant information regarding the overflow using the "Initial Report of Sewer Syrem Overflow (SSO)" form, Appendix A, including:
   - Time and date the call was received.
   - Full name of reporting party.
   - Phone number(s) of the reporting party.
   - Additional contact information (Reporting party address, current location).
   - Location of problem (Address, cross street, nearby business, landmark, etc.).
   - Whether overflow is in an area with high public traffic.
   - Special circumstances such as vehicle traffic, school proximity, pedestrian traffic.
   - Time overflow was noticed.
   - Overflow continuing or stopped.
   - Description of overflow, such as "Clean" water or sewage (debris, odor, etc.).
   - Estimated volume (description of size of ponded water).
   - Estimated flow (if continuing to flow).
   - Description of downstream area (gutter, ditch, field, storm drain, etc. to determine if overflow can reach a drainage channel or surface water).
   - Additional information.

The Operator will assign a report number to the form. The report number will consist of a nine-digit code. The report number code presented below includes the date, district and overflow count.

- Six digits are used to represent the month, the day of month, and year. For example **120600** is the date for December 6, 2000;
- The district codes are:
  AP-Airport/Larkfield/Wikiup
  GY-Geyserville
  OC-Occidental
  PG-Penngrove
  RR-Russian River
  SO-South Park
  SRC-Sea Ranch Central
  SRN-Sea Ranch North
  SV-Sonoma Valley
- The overflow count is an alphabetical (A, B, C) listing for the multiple overflows occurring in each District/Zone on the same day. A for the first overflow, B for the second overflow and so on.

The combined code for overflows in the Russian River County Sanitation District would be as follows:

120600RRA - First overflow on December 6, 2000 in Russian River
120600RRB - Second overflow on December 6, 2000 in Russian River
120800RRA - First Overflow on December 8, 2000 in Russian River

The report number assigned to the Initial Report of Sewer System Overflow (SSO) form will be used on all other internal Water Agency forms and reports related to this overflow. The completed three-hole form is filed into the "Overflow Response" three-ring loose leaf binder kept at the Water Desk under the appropriate tab. A copy is sent to the Operations Coordinator that is over the district or zone in which the overflow occurred, and the Collection System Maintenance Coordinator. In addition, appropriate journal entries are made in the Operator's Daily Log, which is kept at the Water Desk.

2) The Water Desk Operator should immediately notify the Collection System Maintenance Coordinator of the reported sewage overflows from the collections system and unauthorized discharges from WWTPs to the Operations Coordinator. Notification shall be by telephone using work cell number), then by home or work number depending on the time of day, and day of the week. If no response is received within fifteen (15) minutes, the Water Desk Operator shall notify the next Coordinator in descending order on the telephone/contact list kept at the Water Desk for emergency and overflow response.

3) Sewage overflows or unauthorized discharges from WWTPs detected by any Water Agency personnel in the course of their normal duties shall be reported immediately to the Water Desk Operator by two-way radio or by telephoning "707-523-1070".

4) Until confirmed by a Water Agency staff member, the reported possible spill or overflow should not be referred to as a "sewage overflow" or "unpermitted discharge."

Dispatch of Appropriate Crews to Site of Sewer Overflow

The purpose of immediate response to a failure of any element within the wastewater collection, treatment and lift station systems is to isolate and correct the problem. Collection system and lift station sewage overflows will be given a high priority for crews and equipment. Also, available operations and maintenance personnel, materials and equipment shall be called in if extra resources are needed.

1) Dispatching Crews
   - The Collection System Maintenance Coordinator shall direct the appropriate crews, materials, supplies, and equipment to be deployed. The Collection System Maintenance Coordinator shall dispatch the crews by direct contact, mobile radio, or telephone or will request the Water Desk Operator to make direct contact. All employees dispatched to the site of a sewage overflow shall proceed immediately to that site. Any delays or conflicts in assignments must be immediately reported to the appropriate Coordinator for resolution.
   - The senior level field crew member will be in charge at the incident location and coordinate all on-site activities and communications from the field until directed otherwise by the Collection System Maintenance Coordinator, or other Water Agency Management.
   - If the overflow has reached surface water and is over 50,000 gallons, the responding crew shall contact the Water Desk Operator to notify the Operations Coordinator to send a Wastewater Operator/Environmental Compliance Inspector to the site for sampling and notify a Water Agency Biologist to assess environmental impacts.

- The Water Desk Operator or other personnel communicating with the responding crews shall ensure that the entire communication is received and acknowledged. To avoid delay, all standard communications procedures shall be followed.
- Responding crew shall report their findings, including damage to private and public property, to their Coordinator with updates as frequently as necessary to keep him/her abreast of the conditions.
- Coordinators and the Water Desk Operator shall assist, as necessary, to transfer all pertinent information to the next shift, including any details of the problems and observations described by the person who initially reported the overflow, and the status of ongoing corrections, repairs and cleanup. Overflow response crews being relieved at crew shift changes shall discuss the problems, observations, conditions and the status of ongoing corrections, repairs and cleanup with the next shift. The names of contacts, and notifications made by the overflow response crew shall also be provided to relieving crew.

2) Additional Resources
Based on the information provided by the responding crew leader, the Collection System Maintenance Coordinator shall directly call for additional support if needed.

3) Field Supervision and Inspection
- The Collection System Maintenance Coordinator or other members of the Maintenance Supervision Group should periodically visit overflow sites during all phases of the overflow response, if possible, to assure that provisions of this overflow response plan and other directives are met. If possible, the Collection System Maintenance Coordinator or Operations Coordinator should visit the site at least once during a major overflow event. This will also assist in the overflow event debriefing and the assessment of need for revisions and updates to the SSO ERP.
- The Collection System Maintenance Coordinator shall be responsible for confirming that the Maintenance Crew Report of Overflow or Stoppage form (Appendix A) is received and entered into the California Integrated Quality Water System on the California State Water Resources Control Board within the allowed time limits.

4) Coordination with Hazardous Material Response
- If the responding crew members encounter a suspicious substance or odor (e.g., oil sheen, foamy residue, gasoline) on the ground surface, or surface water not common to the sewer system, the response crew shall immediately notify the Collection System Maintenance Coordinator or the Water Desk Operator if the Collection System Maintenance Coordinator is not available.
- The Collection System Maintenance Coordinator or Water Desk Operator shall contact REDCOM "707-576-1365". The responding crew shall await the arrival of the hazardous response teams to possibly take over the scene.
- Remember that any vehicle engine, portable pump or open flame (e.g., cigarette lighter) can trigger an explosion or fire where flammable fluids or vapors are present. Keep a safe distance and observe caution until assistance arrives.
- The responding crew shall also take measures to keep the general public away from the impacted area. Perimeter control of the overflow area to pedestrian and vehicular traffic shall be established using traffic barricades, barricade warning tape, or temporary barrier/safety fencing with signage, "Caution Do Not Enter" where appropriate.
- Upon arrival of the hazardous material response team, the responding crew shall take direction from the HAZ-MAT lead person. Only when that HAZ-MAT lead person determines it is safe and appropriate for the responding crew to proceed under the SSO ERP with the sewer overflow containment, correction and clean-up activities, shall the responding crew proceed.

Response to Lift Station Failure

Water Agency personnel shall follow the procedure outlined below whenever a lift station fails. The same procedure is followed to repair a lift station to prevent a possible overflow as well as to stop a overflow. The Water Desk Operator or Maintenance Coordinator will dispatch a mechanic to the lift station for lift station troubleshooting and startup. The Water Desk Operator/Mechanic Coordinator will also notify a wastewater plant operator of the lift station failure, and if needed, can provide support for the mechanic. A Collection System Maintenance crew will be notified for site cleanup if required. An electrician may also be required depending on nature of the lift station failure. The steps taken to troubleshoot the lift station or to prevent and control a lift station overflow include:

- Contain the sewer overflow to the maximum extent possible including preventing the discharge of sewage into surface waters or drainage channels.
- The mechanic or operator will switch lift station operation to a backup pump or lag pump. If the backup pump will not operate, continue with steps immediately below.
- Check electrical power, replace fuses or reset breakers. If there is still no power continue with steps immediately below.
- Request delivery of a portable power generator, if required, to the lift station to operate the lift station from the portable power generator.
- If power is available, but pump does not operate, check and clean floats, if necessary. Request delivery of a portable pump and set up a bypass pumping operation when practical.
- Operate portable pump by manual control if necessary to prevent or control an overflow. (Note: Caution shall be observed under manual operation so as not to cause an overflow at a downstream location or intensify an ongoing overflow.)
- Call the Water Desk for assistance.
- The Water Desk should use SCADA to monitor lift station and wet well levels and keep responding crew leader and Coordinators informed.

Overflow Correction, Containment, and Cleanup

This section describes specific actions to be performed by the responding crews during a sewer overflow or lift station overflow.

The objectives of these actions are to:

- Protect public health, environment and property from sewage overflows and restore the surrounding area back to normal as soon as possible.
- Establish perimeters and control zones with appropriate positioning of traffic cones and barricades, service vehicles, or use of natural topography (e.g., hills, berms, embankments) and mounded soil and sandbags.
- Promptly notify regulatory agencies' communication centers of preliminary overflow information .
- Contain the sewer overflow to the maximum extent possible including preventing the discharge of sewage into surface water or drainage channel.

Upon arrival at an overflow from the public sewer, the responding crew shall do the following:

1) Initial Measures for Containment

- Assess Site to ensure area is safe for responders.
- Take immediate steps to contain the overflow, e.g., block or sand bag storm drains, recover through vacuum truck, divert into downstream sanitary sewer manhole, to minimize the impact to public health or the environment.

- Determine the immediate destination of the overflow, e.g. storm drain, surface water, ground surfaces, structure, etc.
- Identify and request the necessary materials and equipment, such as sandbags, hay bales, plastic sheeting, vacuum trucks, or portable pumps and hoses, to contain or isolate the overflow, if not readily available.

2)

During pump-around operation, the crews shall monitor the bypass pumping operation. The Mechanic Coordinator shall be informed of the prolonged pumped bypass situation (e.g., need for redundancy of portable pumping, periodic follow-up notification until the lift station is returned to normal operation) to address regulatory agency issues in conjunction with emergency repairs.

Other methods of control shall be utilized when appropriate, such as fluming and berming to contain flows while repairs are made.

3) Cleanup

- Sewer overflow sites including contaminated soil, stream and riverbanks, and shorelines of other types of bodies of water, shall be thoroughly cleaned after an overflow. Solids and other debris shall be flushed, swept, raked, picked-up and transported to proper disposal area. No readily identifiable residues (e.g., fecal matter, rags, papers, or plastics) shall remain.
- Where practical, the area shall be thoroughly flushed and the wash-down water shall be contained and properly disposed of. Be aware that heavy flushing could make containment of washdown water impractical or not possible.
- The overflow site shall be secured to prevent contact by the public until the site has been thoroughly cleaned. Posting, if required, shall be undertaken pursuant to Section 4 (Public Advisory Procedure).
- In restricted conditions, the overflow site shall be disinfected and deodorized following cleanup of the site. Disinfection and deodorization should be conducted only at the direction of the Sonoma County Department of Health Services, the RWQCB, or the Collection System Maintenance Coordinator. Disinfection should be restricted to overflow near public access areas such as hospitals, schools, parks, or playgrounds, and should only be used if there is no release of chemicals to surface water. The disinfectant and any washwater shall be collected and returned to the sewer or a treatment plant.
- Where sewage has resulted in ponding, the pond shall be pumped, if practical.
- Other measures as directed by the Public Health Officer.

On Site Documentation

1) Documentation of Overflow Conditions and Actions

The maintenance crew dispatched to the overflow site shall complete a Maintenance Crew Report of Overflow or Stoppage form (Stoppage Form) to document conditions and actions taken (See Appendix A). The required information includes but is not limited to:

a. Date and Time of arrival
b. Overflow Report Number (Obtained from Water Desk Operator. The number should be the same Overflow Number as entered on the Initial Report of Overflow or Stoppage Report).
c. Exact Location of the overflow (including GPS coordinates)
d. Type of overflow or stoppage
e. Estimated volume and flow rate

f. Overflow documentation information (maps, pictures, etc.)
g. Time overflow stopped
h. Time cleanup completed and description of cleanup activities
i. Time crew left site and crew involved at site
j. Amount of overflow recovered
k. Amount of flush water used and flush water recovered
l. Time, name, and nature of any regulatory agency and Water Agency upper management notifications made by the maintenance crew.
m. Overflow impact boundaries and name of waterway affected (if any)
n. Cause of overflow
o. Interviews with residents or businesses in the area to document time of spill.
p. Other information as appropriate

The completed Stoppage Form shall be sent to the Collection System Maintenance Coordinator and to the Operations Coordinator if surface water is impacted, once overflow cleanup has been completed. Either Coordinator may request the report earlier.

2) SSO ERP

3) Document Damage to Private Property

The objective is to rapidly resolve the immediate cause of the overflow and contain it to avoid or minimize damage to property and the environment. The responding crew shall provide the owner/tenant with the Customer Information Letter Regarding Sewer Backup Claims form. Responding crews should take still photographs and video footage, if possible, of the impacted outdoor area of the sewer overflow in order to thoroughly document the nature and extent of damage. The responding crew shall forward the photographs, negatives or videotapes to the Collection System Maintenance Coordinator for filing with a copy of the Maintenance Crew Report of Overflow or Stoppage, as appropriate.

Overflows that enter private property but originate from Water Agency facilities or are caused by Water Agency facilities

Permission should be obtained from the property owner or resident if possible.

Overflows that originate from private property and are not caused by a Water Agency owned facility or sewer

These overflows are the responsibility of the property owner. Water Agency staff should provide assistance, overflow control, or cleanup when there is a severe and imminent danger to public health, public or private property, or water quality. Water Agency staff should also make an effort to notify the owner of the affected property.

Contact with Property Owner or Resident

Whenever possible, obtain information from the owner or resident.
Name
Phone
Address

Chain of Custody

1. The person completing the Stoppage Form must sign and date it, and forward it to the Collection System Maintenance Coordinator.
2. The Collection System Maintenance Coordinator signs and dates after review and forwards it to the Operations Coordinator.
3. Operations Coordinator signs and dates Stoppage Form after review.

Section 3 – Notification and Reporting

Notification

The following overflow notification procedures will be followed.

A. The Water Desk Operator shall use Attachment 3-1 (Reporting Procedures for SSO)to categorize the overflow and determine the appropriate persons and organizations to report the overflow to.

B. The Operations Coordinator shall notify the people listed on Attachment 3The Maintenance Assistant General Manager shall be responsible for notifying the General Manager and the Water Agency Board of Directors if the spill size and impact warrant notification.

C. The Collection System Maintenance Coordinator shall complete a Maintenance Crew Report of Overflow or Stoppage form (See Appendix A) within 24 hours of the reported overflow confirmation. The Maintenance Crew Report of Overflow or Stoppage shall be submitted to the appropriate RWQCB. Attachment 3-1 summarizes, in part, the regulatory notification and reporting requirements.

D. Similar to overflows from collection systems, notification of a lift station overflow is received from the Water Desk Operator by the Collection System Maintenance Coordinator who coordinates with the Mechanic Coordinator. The Mechanic Coordinator shall initiate the investigation and correction of the cause of the overflow. The Collection System Maintenance Coordinator will coordinate any overflow cleanup and communicate to the Operations Coordinator if the overflow reached surface water or a storm drain.

<u>Reporting a Significant Overflow to Surface Water and/or a Drainage Inlet</u>

In the event of a significant overflow of 1,000 gallons or more to surface water and/or a drainage inlet, a report to California Office of Emergency Services (Cal OES) is necessary within 2 hours in addition to regular overflow response actions.

<u>Reporting a Major Overflow to Surface Water and/or a Drainage Inlet</u>

In the event of a major overflow of 50,000 gallons or more to surface water and/or a drainage inlet, a report to California Office of Emergency Services (Cal OES) is necessary within 2 hours and sampling must be performed within 48 hours of initial overflow notification in addition to regular overflow response actions.

Documentation

Information regarding the sewage overflow shall include the following:

- Indication of whether there was an actual observation of a sewer line overflow or lift station overflow running into surface water, or whether there was only evidence (e.g. sewage residue on the ground surface leading to the surface water) that sewage had possibly flowed to surface water, but was not actually observed.

- Indication that the sewage overflow had not reached surface water. Guidance in characterizing these overflows to include:
  a) Sewage overflows to underground storm drains (with no public access) where a crew verifies, by inspection, that the entire volume is contained in an impoundment and where complete cleanup occurs, leaving no residue.
  b) Overflows where observation, or on-site evidence, clearly indicates all sewage was retained on land and did not reach surface water or drainage channel, and where complete cleanup occurs leaving no residue.

- A determination of the start time of the sewer overflow using one of the following methods:
  a) Date and time an overflow report was received by the Water Desk Operator.
  b) Date and time of a visual observation by a Water Agency employee.
  c) Lift station flow charts and other recorded data.

  d) Interviews with area residents and businesses

- A determination of the time that the sewer overflow ceased using the following criteria:
  a) When the blockage is cleared and flow is totally contained within the sewer without further aid or Water Agency action.
  b) Visual observations of no overflowing sewage.
  c) Upon return to normal lift station operation.

- An estimate of the rate of sewer overflow or lift station overflow or unauthorized discharge from a WWTP in gallons per minute (gpm) by direct observation of the overflow. See Appendix C for flow estimation aids.

- A determination of the volume of the sewer overflow or lift station overflow:
  a) When the rate of sewer overflow or lift station overflow or unauthorized discharge from a WWTP is known multiply the duration by the rate of flow to determine the volume of the overflow.
  b) When the rate of overflow is not known, investigate the surrounding area for evidence of ponding, obtain dimensions of ponding and calculate volume in gallons. Total volume divided by the appropriate time interval will provide a flow rate.

- Photographs of the event when possible.

- Document what methods were used to determine volume.

Maintenance Crew Report of Overflow or Stoppage Database

The Collection System Maintenance Section maintains a Stoppage database using information from the Initial Report of Overflow or Stoppage and the Maintenance Crew Report of Overflow or Stoppage. The database is an electronic file, which tracks the frequencies, causes and locations of sewer overflows and pumping station overflows. The database assists the Maintenance and Design Sections in directing capital-type corrective measures and to prioritize maintenance activities where chronic problems have been historically encountered.

After an overflow event, the Collection System Maintenance Section will investigate the event to establish the following:

- The cause of a sewage overflow.
- The conditions a minimum distance of one eighth (1/8) of a mile (660 feet) up-stream and down-stream from the site of the sewage overflow that could have contributed to the overflow by conducting the appropriate sewer inspection, such as manhole inspections, CCTV inspection, smoke testing, or grease trap inspections.
- The need to adjust the Preventive Maintenance (PM) schedule for the affected sewer(s) for cleaning and inspecting in order to prevent similar future occurrences. The site of the sewage overflow will remain on the adjusted PM schedule, if necessary, until it is reasonably determined that the site is no longer a risk for a future occurrence. At that time, a new PM schedule will be determined.
- The need to communicate with customers or other parties whose actions may have contributed to an overflow such as employees and managers of restaurants, manufacturers, construction contractors, etc. Communications could include providing: information on relevant codes and ordinances applicable to the given parties and type of business operation; the requirements to comply with the given ordinance; and the measures to take by the given party to eliminate future overflows. The Collection System Maintenance Section will coordinate its investigative efforts with Environmental Compliance Section.

Notification Procedures

After arriving at the overflow site and confirming its occurrence, the overflow response crew will initiate containment and clean-up procedures. Once the overflow response crew determines that an immediate threat to public health and the environment is not a concern, the crew will notify the Collection System Maintenance Coordinator who will alert the Operations Coordinator of the event.

The spill response crew will complete the Maintenance Crew Report of Spill or Stoppage. A sample report is contained in Appendix A. However, in the interest of public health and environmental protection, the spill response crew will focus initially on spill containment and clean up. The report will be completed after the spill has been stopped or controlled

and the site cleanup is complete. The Maintenance and Operations Coordinators will review the completed Maintenance Crew Report of Overflow or Stoppage and supporting documentation as thoroughly as possible within 24 hours of the incident. It is critical that the report be as complete and accurate as possible because it will serve as the basis for documenting the overflow internally within the Water Agency and for notifying regulatory agencies, other interested agencies, and the public.

The Operations Coordinator will be responsible for verbally notifying regulatory agencies of a overflow. S/He will provide each agency with his/her name, overflow location, time, date, estimated volume, name of receiving water, clean-up procedures used, status of clean-up, posting recommendations and names of other regulatory agencies contacted. In addition, s/he will be available to answer other questions that the regulatory agency representative may have. Depending on the size and nature of the overflow, the verbal notification may be followed by written notification.

The following guidelines should be used in determining what regulatory agencies are notified of an overflow event. The notification procedures are identified in Attachment 3-1 located at the end of this section.

Attachment 3-1

Reporting Procedures for SSO

- Report of overflow is phoned into the Water Desk Operator. The operator starts the Initial Report of Sewer System Overflow (SSO) form.
- Collection crew is dispatched, arrives on site and contacts operator with verification of SSO and a description. The operator determines what category the SSO is and responds accordingly.

	Responsible Party	Category 1A **SVCSD NON-STORM RELATED EVENT ONLY**	Category 1	Category 2	Category 3
Definition	Ops	Discharges of 1,000 gallons or greater that reaches surface water and/or a drainage channel tributary to a surface water OR reach a storm drain and are not fully recovered AND during a non-storm event.	Discharges of any volume that reaches surface water and/or a drainage channel tributary to a surface water OR reach a storm drain and are not fully recovered.	Discharges of 1,000 gallons or greater that do not reach surface water.	Any other discharg resulting from a failure in a SCWA sewer system.
Response	-Maint -Ops	• Stop or contain SSO • Clean up SSO • Contact Coordinator - Ops - Maint	• Stop or contain SSO • Clean up SSO • Contact Coordinator - Ops - Maint	• Stop or contain SSO • Clean up SSO • Contact Coordinator - Ops - Maint	• Stop or contai SSO • Clean up SSC • Contact Coordinator - Ops - Maint
Cal OES Notification	Ops	Report all Category 1A SSOs to DDW (Janice Thomas 707-533-4510). Report to Cal OES (1-800-825-7550, FAX 523-0135) and obtain a notification control number no later than ***2 hours*** of becoming aware of SSO.	Report all Category 1 SSOs to DDW (Janice Thomas 707-533-4510). If SSO is 1,000 gallons or greater, report to Cal OES (1-800-825-7550, FAX 523-0135) and obtain a notification control number no later than ***2 hours*** of becoming aware of SSO.	Call Red Comm at (707-576-1365).	Not necessary.
Sampling	Ops	Necessary. No later than ***48 hours*** after initial SSO notification. Wildlife biologist shall evaluate site for impacts.	Necessary if SSO is 50,000 gallons or greater. No later than ***48 hours*** after initial SSO notification.	Not necessary.	Not necessary.

Reporting	Maint	http://ciwqs.waterboards.ca.gov Submit draft report within ***3 business days*** of becoming aware of SSO and **15 days** to certify the report.	http://ciwqs.waterboards.ca.gov Submit draft report within ***3 business days*** of becoming aware of SSO and **15 days** to certify the report.	http://ciwqs.waterboards.ca.gov Submit draft report within ***3 business days*** of becoming aware of SSO and **15 days** to certify the report.	http://ciwqs.waterboards.ca.gov Submit draft report within ***30 calendar days*** of the end of month in which the SSO occurred.

- Operations Coordinator notifies Assistant General Managers for Operations and Maintenance, an in-house Biologist and a Public Information Officer.

- Note: Discharges of untreated or partially treated wastewater resulting from blockages or other problems within a privately owned sewer lateral connected to SCWA collection system do not have to be reported by SCWA.

Section 4 - Sampling of Surface Waters Affected By Sewer Overflows

General Procedures

In the event of a Major Overflow, Water Agency Operations or Environmental Compliance staff should be deployed as soon as practicable to sample the impacts of the overflow on receiving water.

Major Overflows

A Major Overflow is defined as a overflow greater than 50,000 gallons. Sampling is required for all Major Overflows no later than 48 hours after the initial SSO notification.

Operators, Laboratory or Environmental Compliance personnel are responsible for conducting sampling operations. Maintenance personnel may conduct sampling or assist in sampling operations if they have received proper training. Grab samples shall be taken and analyzed for Fecal Coliform, Dissolved Oxygen and Ammonia Nitrogen from points safely accessible approximately one hundred yards upstream, downstream and at the location where the raw sewage enters the waterway. Sample requirements and handling are summarized in Table 4-1. Prepared sample bottles are stored at the Water Agency managed wastewater treatment plants, and at the Water Agency's laboratory at 204 Concourse Blvd, Santa Rosa.

When sample results are available, the Laboratory Section shall send them via fax to the respective RWQCB. This data will also be provided as part of the monthly report submitted to the respective RWQCB. Copies of the sample results shall be provided to the Operations Coordinator.

Table 1: Sample Requirements			
Analysis	**Sample Size**	**Preservative**	**Holding Period**
Ammonia Nitrogen [1]			
Selective Electrode Method 4500- NH_3 D.	500-1000 ml	Store at 4° C Acidify(to pH <2) with H_2SO_4	Up to 24 hours, acidify for longer storage up to 28 days
Titrimetric Method 4500- NH_3 C.	500-1000 ml	Store at 4° C Acidify (to pH <2) with H_2SO_4	Up to 24 hours, acidify for longer storage up to 28 days
Dissolved Oxygen			
Membrane Electrode Method 4500-O G.	Measure in-situ or 300 ml sample	None	Not Applicable
Iodide Azide Modification Method 4500-O C. [2]	300 ml BOD bottle with glass stopper	0.7 ml H_2SO_4 and 1 ml Sodium Azide solution	4-8 hours at collection temp.
Fecal Coliform			
Fecal Coliform Direct Test (EC or A-1 Medium) Method 9221 B, C & E	125-500 ml	Temp < 10° C	6 hours refrigerated

1. Ammonia Nitrogen samples analyzed by outside laboratory.
2. Iodide Method for dissolved oxygen should be used as a backup method if a portable oxygen meter is unavailable. Sample analysis is completed in laboratory.

Benchmark Levels

Table 4-2 provides suggested benchmark levels for surface waters. The benchmark levels provide a comparison of typical values for surface waters and values of concern. The benchmark values are provided as a general reference to compare the required sampling of surface waters impacted by a sewage overflow to typical values and values of concern. The values presented in Table 4-2 are not intended for use to determine if surface waters have been adversely impacted by a sewage overflow, nor to determine if the public should be advised or signs should be posted.

Table 2: Surface Water Benchmark Levels			
Parameter	**Units**	**Typical Values**	**Values of Concern**
Ammonia-N	mg/L	<1	>2
Dissolved Oxygen	mg/L	6-7	<5
Fecal Coliform	MPN/100 ml	20	200

Source: Linvil G. Rich, Environmental Systems Engineering, McGraw-Hill. New York, (1973).

Section 5 - Posting and Public Advisory Procedure

Introduction

This section describes the procedures that the Water Agency will follow to advise the public, including downstream water users, of sewage overflows.

The Water Agency manages several sanitation systems. The service areas cover many rural and urban areas, including many communities with non-English speaking residents. To advise the public of sewage overflows, the Water Agency will work cooperatively with various local, regional and state regulatory and partnering agencies. These agencies include the North Coast RWQCB, the San Francisco Bay RWQCB, Sonoma County Department of Health Services, Sonoma County Fire & Emergency Services, and California State Office of Emergency Services.

Posting and Signage

The Water Agency and the Sonoma County Department of Health Services will determine if signs are needed for sewage overflows. As required by the North Coast and San Francisco Bay RWQCB, signs will include, at a minimum, the wording of "Raw Sewage."

In the event that the RWQCB or Sonoma County Department of Health Services specifically requests public notification, the Water Agency will notify the public in accordance with the specific requirements contained in the request.

Emergency Notification

For situations posing an immediate threat to public safety, the Water Agency, in collaboration with Sonoma County Department of Health Services and Sonoma County Fire & Emergency Services, will immediately notify the affected public via radio and television using the Emergency Alert System, in accordance with the Emergency Operations Plan and the procedures identified in Section 2 "Receipt of Information Regarding a Sewer Overflow or Pumping Station Overflow". The Emergency Alert System reaches a large audience, broadcasting on both local radio and television stations. Emergency alerts will be made in both English and other languages, as appropriate; to make sure non-English speaking residents are notified. In addition, the Water Agency in collaboration with County Fire & Emergency Services may use the automated Telephone Emergency Notification System (TENS) to notify specific residents of an emergency public health concern.

Section 6 - Training Program

Effective training is essential for wastewater and collection personnel to: 1) properly respond to emergency overflows and perform proper notification; 2) satisfy regulatory requirements; and 3) protect the health and safety of wastewater personnel and the general public.

The Water Agency will identify the key personnel to be trained for overflow response,

Training will be conducted annually and for new employees. Training will include overflow response procedures, overflow correction, containment and clean-up, site documentation, notification and reporting procedures, sampling and safety.

Section 7 - Plan Distribution and Updating of SSO ERP

The SSO ERP reflects the procedures established for responding to reports of possible sewer overflows and confirmed overflows from the wastewater collection system and pumping station system so as to:

- Minimize the adverse effects of sewer overflows on public health, water quality and beneficial uses of the receiving waters.
- Minimize the sewer overflow volume that enters surface water.

Submittal and Availability of SSO ERP

Copies of the SSO ERP and any amendments shall be distributed to the following Water Agency Groups:

- Management Group
- Operations Coordinator Group
- Maintenance Coordinator Group
- Public Information
- Other SSO ERP Plan holders within the Water Agency.

All Water Agency staff directly involved with investigating and responding to overflows accordingly shall receive a copy. A copy of the Overflow Response and Notification Plan shall be kept at the Operations Water Desk. The master copy will be kept in the Engineers library. All other Water Agency staff who may become incidentally involved in responding to collection system and pumping station overflows shall be generally familiar with the contents of the SSO ERP.
In addition to the SSO ERP, will be annexed to the Water Agency's Emergency Operations Plan stored in the document control system and posted on Water Agency's Intranet for convenient access by all employees.

Review and Update of SSO ERP

The SSO ERP shall be reviewed and amended as appropriate. The Collection System Maintenance Coordinator will be responsible for coordinating the review and amendment process. The distribution of the plan changes to SSO ERP holders will be delegated to support staff. The Water Agency will:

- Conduct five-year review of the SSO ERP and update it with the issuance of a revised or new NPDES permit, or regulatory agency overflow response requirements.
- Conduct annual training on the use of the SSO ERP with new Water Agency personnel.
- Review and update annually the various contact lists and telephone and FAX numbers included in the SSO ERP for response personnel, regulatory agencies, and public media.

Section 8 - References

Reports

1. Contingency Planning & Notification Requirements for Accidental Spills and Discharges, Order No. 74-151, 1990.
2. Memo re: Notification & Cleanup Procedures for Sewage Spills, May 3, 1999.
3. California Statute, Title 22-66265.56.

Internet Sites

1. State Water Resources Control Board Website, www.swrcb.ca.gov
2. North Coast RWQCB Website, www.swrcb.ca.gov
3. San Francisco Bay RWQCB Website, www.swrcb.ca.gov

Appendices

Appendix A: The Water Agency Internal Overflow Report Forms

SONOMA COUNTY WATER AGENCY

Report No. _____

Initial Report of Sewer System Overflow (SSO)

Name: _____ Phone: _____

Address: _____

Location of Problem: _____

Time caller first noticed issue: _____

Sonoma Valley Sanitation District? Yes: ☐ No: ☐ | Is this Overflow Storm Related? Yes: ☐ No: ☐

Time Crew Arrived
Spill Confirmed: Time Flow Stopped Estimated Flow

Describe Flow (sewage, debris, odor) _____

2 hr Cal OES Notification
Confirmed: (time) **Time Crew left site:**

Description of downstream area (gutter, ditch, field, stormdrain, etc.) Try to determine proximity to creek or waterway.

Did Flow Reach Surface Water? Yes☐ No☐ | >50,000 Gal to Surface Water? Yes☐ No☐ | ≥1,000 Gal? Yes☐ No☐

Additional Information: _____

Signs Posted by: **Samples taken by:**

AGENCY STAFF NOTIFIED				
	✓	Reported To:	Time:	Notes:
Collections Systems Coordinator	☐			
Operations Coordinator	☐			
Other	☐			
Other	☐			

REGULATORY AGENCY SPILL NOTIFICATION				
Agency:	✓	Reported To: (Name)	Time:	Check if reported to voice mail
California OES -1-800-852-7550	☐	**OES#**		
Follow–up OES Notification	☐			
Red Comm (707) 576-1365	☐			
DDW – Category 1 & 1A spills only Janice Thomas 707-533-4510	☐			

Cal OES will notify Dept of Fish & Wildlife, Red Comm, and RWQCBs	☐			

MAINTENANCE CREW REPORT OF SPILL OR STOPPAGE

DATE: _____ **STATE EVENT ID:** _____ OES #

DETERMINE TYPE OF SPILL: CATEGORY 1 2 3 Stoppage Overflow Rept. #

***Estimated Spill volume: GPM Duration in hrs				GALLONS
***Did the spill discharge to a drainage channel and/or surface water	HOW MUCH	Gals	YES	NO
***Did the spill discharge to a storm drainpipe that was not fully captured and returned to the sanitary sewer system?	HOW MUCH	Gals	YES	NO
***Is this a private lateral spill			YES	NO
***Latitude of Spill location (deg/min/sec or decimal degrees)				
***Longitude of spill location (deg/min/sec or decimal degrees)				
***Spill Location Name:				
***Street number		UPSTREAM	MH	CO
***Street Direction (*E / N / NE / NW / S / SE / SW / W*)		Number	--	
***Street name		DOWNSTREAM	MH	CO
***Street Type (*Alley, Ave., Blvd.,Circle, Court, Drive, Lane, Loop, Parkway, Place, Road, Street, Trail or Way*)		Number	--	
***Cross Street				
***City (and District)				
Spill Location Description				

SPILL DETAILS			
***Spill Appearance Point:(*Clean Out/Diversion Structure/Ground/Lamphole/Manhole/Other/Pipe/Pump Station/Riser/Rodding Inlet*)			
***Did the spill discharge to a drainage channel and/or surface water?		YES	NO
***Did the spill discharge to a storm drainpipe that was not fully captured and returned to the sanitary sewer system		YES	NO
***Private Lateral Spill		YES	NO
***Final Spill Destination (*Beach, Building or structure, other paved surface, storm drain, Street/curb and gutter, Surface Water, Unpaved Surface or Other*)	Creek Name (if any)		
***Estimated volume of spill recovered			
Estimated Current spill rate (if applicable)			
***Est SCWA Employee arrival date/time	Est SCWA Employee departure date/time		
***Estimated spill end date/time			
***Spill Cause (*Debris, flow exceeded capacity, grease deposition, operator error, pipe structural problem/failure, pump station failure, rainfall exceeded design storm event, root intrusion, vandalism or Other*)			

*** Required Field-Must be Completed for State Electronic Filing

MAINTENANCE CREW REPORT OF SPILL OR STOPPAGE

***Diameter of sewer pipe at the point of blockage or spill cause (if applicable)	
***Material of sewer pipe at the point of blockage or spill cause (if applicable)	
Description of terrain surrounding the point of blockage or spill cause (if applicable) Flat/Mixed/Steep	
***Spill response activities: Cleaned-up (mitigated effects of spill), Contained all or portion of spill, Inspected sewer using CCTV to determine cause, Restored flow, Returned all or portion of spill to sanitary sewer system, Other-please specify)	Chose 1 or more
*** Spill corrective action taken (Add sewer to preventative maintenance program, Adjust schedule/method of prevention maint program, Enforce action against FOG source, Planned rehab or replacement of sewer system, repaired sewer or Other)	
Visual Inspection results from impacted receiving water:	
Overall Spill Description	
Vacuumed Debris ☐ Flushed Area ☐ Signage Used ☐	
Gals of Flushed Water Used Gals of Flushed Water recovered	
Other Materials Used	
(West County Only) Copy Map pages where SSO occurred. Make 3 copies of those map pages	
Crew: Total Time	
Equipment: Total Time	
Additional Details (if any)	
Additional Info required:	
Tenant/Owner Notified Yes/No Live/Phone Message	
Feet to stoppage downstream MH	
This document prepared by Date:	
Operations Coordinator: Date:	

*** Required Field-Must be Completed for State Electronic Filing

Appendix E

Major Sewer Equipment List

VEH#	VEHICLE DESCRIPTION	STORAGE LOCATION	VEH/EQUIP TYPE	DEPARTMENT
D504	2009 FORD VIDEO VAN E450 SUPER DUTY	800 AVIATION	Van - Video	MNT-GM
D547	2015 FORD VAN E450 SUPER DUTY VIDEO VAN	800 AVIATION	Van - Video	MNT-GM
E409	2013 DODGE RAM 1500 TRADESMAN 4X4 CREW	800 AVIATION	Truck - Pick up	MNT-GM
E446	2013 DODGE RAM 1500 TRADESMAN 4X4 CREW	800 AVIATION	Truck - Pick up	MNT-GM
E447	2013 FORD F350 S.D. 4X4 UTILITY	800 AVIATION	Truck - Utility	MNT-GM
E471	2014 FORD F150 XL 4X4 SUPER CAB	800 AVIATION	Truck - Pick up	MNT-GM
E476	2014 FORD F150 XL 4X4 SUPER CAB W/TRANSFER	800 AVIATION	Truck - Pick up	MNT-GM
E493	2014 FORD ESCAPE AWD	800 AVIATION	SUV - Standard	MNT-GM
E848	2001 GMC 1500 4X4 PICKUP	204 CONCOURSE	Truck - Pick up	MNT-GM
G362	2000-STERLING	800 AVIATION	Truck - Utility w/Crane	MNT-GM
G373	2001 FORD F350 1TN UTILITY	800 AVIATION	Truck - Utility	MNT-GM
G387	2002 FORD F350 1TN UTILITY FLAT BED DUMP	800 AVIATION	Truck - Flatbed	MNT-GM
G448	2009 FORD UTILITY TRUCK W/CRANE F350 4X4	800 AVIATION	Truck - Utility w/Crane	MNT-GM
G459	2011 INT'L CONVENTIONAL VAC CON TRUCK	800 AVIATION	Truck - Vac/Sewer Cleaning	MNT-GM
G462	2012 FORD F350 UTILITY W/CRANE	204 CONCOURSE	Truck - Utility w/Crane	MNT-GM
G469	2013 FORD F350 4X4 UTILITY W/CRANE	800 AVIATION	Truck - Utility w/Crane	MNT-GM
G479	2013 PETERBILT VAC CON TRUCK	800 AVIATION	Truck - Vac/Sewer Cleaning	MNT-GM
G492	2015 FORD F750 W CRANE	204 CONCOURSE	Truck - Utility w/Crane	MNT-GM
G493	2015 FORD SUPERCAB UTILITY W/CRANE	204 CONCOURSE	Truck - Utility w/Crane	MNT-GM
G494	2015 FORD SUPERCAB UTILITY W/CRANE	204 CONCOURSE	Truck - Utility w/Crane	MNT-GM
G496	2015 FORD SUPERCAB UTILITY W/CRANE	204 CONCOURSE	Truck - Utility w/Crane	MNT-GM
G497	2015 FORD SUPERCAB UTILITY W/CRANE	204 CONCOURSE	Truck - Utility w/Crane	MNT-GM
G505	2016 F350 EXT CAB UTILITY BODY W/CRANE	SVTP	Truck - Utility w/Crane	MNT-GM
G506	2016 F350 EXT CAB UTILITY BODY W/CRANE	800 AVIATION	Truck - Utility w/Crane	MNT-GM
G521	2017 PETERBILT VAC-CON TRUCK	800 AVIATION	Truck - Vac/Sewer Cleaning	MNT-GM
G529	2019 PETERBILT 365 TANK TRUCK	800 AVIATION	Truck - Tanker	MNT-GM
G530	2019 PETERBILT 365 TANK TRUCK	800 AVIATION		MNT-GM
G532	2019 FORD F550 RODDER TRUCK	800 AVIATION		MNT-GM

VEH#	VEHICLE DESCRIPTION	STORAGE LOCATION	VEH/EQUIP TYPE	DEPARTMENT	SECTION
E214	54 WEAPONS CARRIER ¾ TON 4X4	800	Truck - Pick up	MNT-GM	FOPS
E402	2012 FORD F350 4WD UTILITY TRUCK	800 AVIATION	Truck - Utility	MNT-GM	FOPS
E403	2012 FORD F350 4WD UTILITY TRUCK	800 AVIATION	Truck - Utility	MNT-GM	FOPS
E470	2014 FORD F150 XL 4X4 SUPER CAB	800 AVIATION	Truck - Pick up	MNT-GM	FOPS
E472	2014 FORD F150 XL 4X4 SUPER CAB	800 AVIATION	Truck - Pick up	MNT-GM	FOPS
E473	2014 FORD F150 XL 4X4 SUPER CAB	800 AVIATION	Truck - Pick up	MNT-GM	FOPS
E474	2014 FORD F150 XL 4X4 SUPER CAB	800 AVIATION	Truck - Pick up	MNT-GM	FOPS
E496	2014 FORD ESCAPE AWD	800 AVIATION	SUV - Standard	MNT-GM	FOPS
E526	2016 TOYOTA TACOMA 4X4 EXT CAB	800 AVIATION	Truck - Pick up	MNT-GM	FOPS
E528	2016 TOYOTA TACOMA 4X4 EXT CAB	800	Truck - Pick up	MNT-GM	FOPS
E552	2016 FORD SUV ESCAPE	800 AVIATION	SUV - Standard	MNT-GM	FOPS
E849	2001 GMC 1500 4X4 PICKUP	800 AVIATION	Truck - Pick up	MNT-GM	FOPS
G458	2012 FORD CHIP TRUCK F550 SUPER DUTY	800 AVIATION	Truck - Chip	MNT-GM	FOPS
G463	2012 FORD F550 NURSERY DUMP TRUCK	800 AVIATION	Truck - Dump	MNT-GM	FOPS
G464	2012 FORD F550 4X4 DUMP TRUCK	800 AVIATION	Truck - Dump	MNT-GM	FOPS
G487	2014 FORD REG CAB FLATBED F550 4X4 SUPER DUT	800 AVIATION	Truck - Flatbed	MNT-GM	FOPS
G489	2015 FORD UTILITY TRUCK F350 2WD	800 AVIATION	Truck - Utility	MNT-GM	FOPS
G510	2016 FORD 4X4 F550 TRUCK W/CHIP BOX	800 AVIATION	Truck - Chip	MNT-GM	FOPS
G522	2017 F550 4x4 CHIP TRUCK	800 AVIATION	Truck - Chip	MNT-GM	FOPS
G533	2019 FORD F550 UTILITY W/MANLIFT	800 AVIATION	Truck - Utlility	MNT-GM	FOPS
G534	2020 PETERBUILT DUMP TRUCK CONVENTIONAL 365	800 AVIATION	Truck - Dump	MNT-GM	FOPS
G535	2020 PETERBUILT DUMP TRUCK CONVENTIONAL 365	800 AVIATION	Truck - Dump	MNT-GM	FOPS
H286	09 CAT SKID STEER 289C	800 AVIATION	LOADER	MNT-GM	FOPS
J054	2002 CAT 420D BACKHOE	800 AVIATION	BACKHOE	MNT-GM	FOPS
J055	2002 CAT 420D BACKHOE	800 AVIATION	BACKHOE	MNT-GM	FOPS
J060	2008 CAT 315DL EXCAVATOR	800 AVIATION	EXCAVATOR	MNT-GM	FOPS
K221	97 GOODWIN 6" PUMP		PUMP	MNT-GM	
K260	04 GOODWIN 6" TOWABLE PUMP		PUMP	MNT-GM	
K273	04 POWER PRIME 6" TOWABLE WATER PUMP	OCCIDENTAL	PUMP	MNT-GM	MS
K295	10 VERMEER TOWABLE CHIPPER BC 1500	800 AVIATION	CHIPPER	MNT-GM	FOPS
K300	12 ATLAS AIR COMPRESSOR	800 AVIATION	COMPRESSOR	MNT-GM	FOPS
K301	12 ATLAS AIR COMPRESSOR	SBS	COMPRESSOR	MNT-GM	FOPS
K305	13 VERMEER TOWABLE CHIPPER BC1500	800 AVIATION	CHIPPER	MNT-GM	FOPS
K306	13 VERMEER TOWABLE CHIPPER BC1500	800 AVIATION	CHIPPER	MNT-GM	FOPS
L001	L001 GREEN UTILITY BEST TRAILER	204 CONCOURSE	TRAILER-	MNT-GM	FOPS
L008	78 LITTLE DUDE BOAT TRAILER	204 CONCOURSE	TRAILER-BOAT	MNT-GM	FOPS
L163	90 STRONGBOY TRAILER (3 TON)		TRAILER	MNT-GM	FOPS
L184	91 TRAILEASE		TRAILER	MNT-GM	FOPS
L208	95 SHORLAND'R TRAILER		TRAILER	MNT-GM	FOPS
L214	96 WELLS CARGO HAZ-MAT TRAILER		TRAILER-	MNT-GM	FOPS
L274	04 TRAILMAX TILT TRAILER 20 TON		TRAILER	MNT-GM	FOPS
L319	2010 INTERSTATE 33TON TILT TRAILER 50 TDL		TRAILER	MNT-GM	FOPS
L320	2009 TRAIL MAX TILT BED T-16-UT		TRAILER	MNT-GM	FOPS
M195	08 KAWASAKI 4X4 TURF TRUCK MULE 3010 KAF950E8F		Truck - Turf	MNT-GM	FOPS
C712	2020 TOYOTA PRIUS	404 AVIATION	Car - Hybrid	ADM-GM	ADM-404POOL
H295	2019 BOBCAT S595 T4 SKID STEER LOADER	SVTP	SKID STEER	MNT-GM	MS
K323	2016 COLUMBIA PARCAR SU5-L GOLF CART	SVTP	CART	MNT-GM	MS
K328	2017 MULTIQUIP TOWABLE LIGHT TOWER	SBS	LIGHT TOWER	MNT-GM	MS
K335	2017 MULTIQUIP WHISPERWATT DCA70SSIU4F TRAILER	SEA RANCH	GENERATOR	MNT-GM	MS
K336	2019 TOYOTA FORKLIFT	MIRABEL STORAGE	FORKLIFT	WWOP-GM	IEM
K337	2019 GENERAC MOBILE PRODUCTIONS GENERATOR	CENTER WAY LIFT	GENERATOR	MNT-GM	MS

Appendix F

2020 SSMP Audit Report

Russian River County Sanitation District

Sewer System Management Plan (SSMP) – 2020 BIENNIAL AUDIT

December 2020

Russian River County Sanitation District

2020 BIENNIAL SSMP AUDIT

December 2020

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Russian River County Sanitation District

2020 BIENNIAL SSMP AUDIT

December 2020

List of Abbreviations

FOG	Fats, Oils, and Grease
GWDR	General Waste Discharge Requirement
LF	Linear Feet
RRCSD, District	Russian River County Sanitation District
SSMP	Sewer System Management Plan
SSO	Sanitary Sewer Overflow
SWRCB	State Water Resources Control Board

1. Introduction

The purpose of the Sewer System Management Plan (SSMP) Audit is to evaluate the effectiveness of Russian River County Sanitation District (RRCSD or District) SSMP and to identify deficiencies, if any, and steps to correct them. The audit is prepared pursuant to the requirements included in the State Water Resources Control Board (SWRCB) Order No. 2006-0003-DWQ (also called General Waste Discharge Requirements, or GWDR).

A summary of compliance with the SWRCB Order is presented in check list form as **Appendix A** of this document.

2. Regulatory Requirements for SSMP Audits

The summarized requirements for SSMP Audits element of the SSMP are:

SWRCB Requirement:

The SWRCB's SSMP audit requirements mandate that the District shall conduct periodic internal audits, appropriate to the size of its system and the number of sanitary sewer overflows (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, including identification of any deficiencies in the SSMP and steps to correct them.

3. 2020 Biennial SSMP Audit

The District conducts periodic audits of its SSMP consistent with regulatory requirements. The goal of the audit is to determine whether the SSMP complies with current requirements of the GWDR, whether the SSMP reflects current practices, and whether the SSMP is effective in controlling SSOs.

Program effectiveness is evaluated by a review of performance indicators and discussion of SSMP and sewer system improvements. An Audit Checklist is also used as part of this evaluation.

4. SSMP Effectiveness

The effectiveness of SSMP elements is measured by developing and tracking performance indicators on a regular basis. The District maintains and tracks information on routine maintenance activities and SSO abatement programs that allows analysis and evaluation of changed conditions.

Key performance indicators incorporated include:

- Number of dry weathers SSOs over the past 12 months, (12-month average)
- Number and characteristics of wet weather SSOs over the past 12 months,
- SSOs by cause (e.g. roots, grease, debris, pipe failure, pump station failure, capacity, other)

- Volume distribution of SSOs (e.g. number of SSOs < 100 gallons, 100 to 999 gallons, 1,000 to 9,999 gallons, > 10,000 gallons)
- Annual volume of SSOs
- Average time to respond to an SSO
- Total feet inspected by year
- Record of past repair, rehabilitation, and replacement projects
- Record of planned repair, rehabilitation, and replacement projects
- Plans developed for, or implementation of, activities to target specific problems identified, such as roots, structural deficiencies, or fats, oil, and grease (FOG)
- Record of FOG outreach and corrective actions

Table 1 includes a list of 11 of these key performance indicators for 2016-2019. The remaining indicators are discussed below.

Table 1: Key Performance Indicators for 2016-2019

Russian River County Sanitation District SSMP Element 9: Measurement, Monitoring, and Program Modifications					
Item	**Performance Indicator**	**2016**	**2017**	**2018**	**2019**
1	Number of dry weather SSOs	0	1	2	0
2	Number of wet weather SSOs	0	5	0	4
3	Total number of SSOs	0	6	2	4
4	Number of SSOs < 100 gallons	0	1	1	0
5	Number of SSOs 100 to 999 gallons	0	0	1	1
6	Number of SSOs 1,000 to 9,999 gallons	0	2	0	0
7	Number of SSOs >10,000 gallons	0	3	0	3
8	Total annual volume of SSOs (gal)	0	1,312,820	105	1,031,770
9	Number of SSOs caused by:				
	Roots	0	1	1	0
	Grease	0	0	0	0
	Debris	0	0	0	0
	Pipe failure	0	0	0	0
	Pump station failure	0	0	0	0
	Capacity-limited pipe segment (no debris)	0	4	0	4
	Other	0	1	1	0
10	Average time to respond to an SSO (min)	0	0	50	0
11	Total feet inspected per year (LF)	78,728	6,333	3,962	4,000

FOG Outreach and Corrective Actions

In an effort to prevent blockages in the District's collection system from Fats, Oils and Grease (FOG) generated by commercial food service facilities, Sonoma Water requires food service establishments to install grease removal devices. Details of the FOG program are outlined in Article X of the Sanitation Code. The objectives of the District's Source Control Program are to: reduce or eliminate the discharge of incompatible pollutants by commercial and/or industrial dischargers; reduce or eliminate the discharge of pollutants that might pass through the treatment

plant to the receiving waters; reduce or eliminate the discharge of pollutants that interfere with treatment plant operation, cause a plant upset, or impair the District's ability to dispose of sludge; protect the health and safety of the community, District staff and the environment; and protect the physical integrity of the collection system, treatment plant and equipment.

During 2019, 14 food service facilities were inspected. Two of the facilities were out of business, two were found not to have a device, two were non-compliant, and the remaining facilities were in compliance. Re-inspections occurred in the same year at the two facilities that were non-compliant and the two that did not have a device.

Pollution Prevention and Source Control

The District continues to improve the Pollution Prevention and Source Control website to convey outreach and educational materials to the public. The website promotes topics geared to both residents and businesses operating in the District and utilizes a campaign featuring Wastewater Woman, a pollution prevention superhero, to keep messaging accessible and easily understandable. The ads are designed to provide quick, eye catching messages that will appeal to children and adults in English and Spanish. Outreach topics covered were safe medicine disposal, "flushable" wipes, and grease down the down. Residential outreach topics include information on the proper disposal of FOG, safe medicine disposal, what can and cannot be flushed down the toilet, household hazardous waste, pest management and inflow/infiltration. Website information geared towards businesses includes information on wastewater discharge permitting, dental waste, commercial FOG, hauled waste and mobile surface cleaners. The website can be found at: www.sonomawater.org/pollutionprevention.

Repair, Rehabilitation, and Replacement Projects

In 2019, staff inspected nearly 4,000 feet and cleaned over 66,000 feet of the District's collection system. Over the last four years, the District has had 12 Sanitary Sewer Overflows (SSOs), the majority of which occurred when the Russian River overtopped its bank and flooded the Guerneville Area. In addition, the majority of the SSOs came during major rain events. Over the years, the District has continuously conducted repair, rehabilitation, and replacement projects of the sewer collection system. Projects have involved removing roots, raising cleanouts, sealing manholes, removing brush, and performing pipe patches where needed. The District is currently in the process of engaging with a consultant to study the replacement of sewer force main and conduct an assessment of the lift stations. This project entails replacement of the approximately 9,000-foot force main between the lift station on Riverside Drive and the treatment plant. Additionally, the project will include a condition assessment of the treatment plant headworks and the 11 lift stations throughout the service area to determine improvements to provide operational and process flow stabilization. Project implementation relies upon securing Prop 1 grant funding.

5. SSMP Compliance

The District uses an Audit Checklist that is based on the GWDR and a checklist developed by another Bay Area sanitary district. The Audit Checklist indicates whether each SSMP element is compliant and current. It describes recent revisions or updates and recommends future actions to

maintain effective SSMP elements that reflect current District practices. The Audit Checklist is included in **Appendix A**.

****

Appendix A: 2020 Biennial SSMP Audit Checklist

WDR Element	Title	Requirement	Compliant	Current	Potential Updates
MRP E.3	**Revision History**	Changes since last certification including which subsection was changed, when, and who authorized			
I	**Goals**	Reduce, prevent & mitigate SSOs	Y	Y	Updated goals.
II	**Organization**	Designate Legally Responsible Official (LRO)	Y	Y	Org Chart, names, phone numbers, chain of communication for reporting SSOs updated in the 2020 update.
		Organization Chart	Y	Y	
		Names & phone numbers of key personnel	Y	Y	
		Chain of Communication for reporting SSOs	Y	Y	
III	**Legal Authority**	Prevent illicit discharges to sanitary sewer system	Y	Y	
		Require sewers and connection be properly designed & constructed	Y	Y	
		Ensure access for inspection, maintenance and repairs	Y	Y	
		Limit discharge of FOG and debris that may cause blockages	Y	Y	
		Enforce violations of the District ordinances	Y	Y	
IV	**O & M Program**	Maintain up-to-date maps of the sanitary sewer system (gravity lines, MHs, pumping facilities, pressure pipes, valves, and applicable stormwater facilities)	Y	Y	

WDR Element	Title	Requirement	Compliant	Current	Potential Updates
		Describe routine preventative maintenance program	Y		
		Document completed preventative maintenance program	Y		
		Rehabilitation and replacement plan that identifies and prioritizes sanitary sewer system defects	Y	Y	
		Provide regular technical training for sewer system staff	Y	Y	
		Require contractors to provide training for their workers who work in the District's sewer system facilities	N/A		
		Maintain equipment inventory	Y	Y	
		Maintain critical spare part inventory	Y	Y	
V	**Design & Performance Provisions**	Design and construction standards for new sanitary sewer system facilities	Y	Y	
		Design and construction standards for repair and rehabilitation of existing sanitary sewer system facilities	Y	Y	
		Procedures for the inspection and acceptance of new sanitary sewer system facilities	Y	Y	
		Procedures for the inspection and acceptance of repaired and rehabilitated sanitary sewer system facilities	Y	Y	
VI	**Overflow Emergency**	Procedure for the notification of primary responders	Y	Y	

WDR Element	Title	Requirement	Compliant	Current	Potential Updates
	Response Plan (OERP)				
		Procedures for the notification of regulatory agencies	Y	Y	
		Program to ensure appropriate response to all overflows	Y	Y	
		Proper reporting of all SSOs	Y	Y	
		Procedure to ensure Staff are aware of and follow OERP	Y	Y	
		Procedure to ensure District staff are trained in the OERP procedures	Y	Y	
		Procedure to ensure contractor personnel are trained in the OERP procedures	N/A		
		Program to prevent the discharge of sewage to surface waters	Y		
		Program to minimize or correct the impacts of any SSOs that occur	Y	Y	
		Program of accelerated or additional monitoring to determine the impacts on surface waters of any SSOs that occur	Y	Y	
VII	**FOG Control Program**	Identification of "hot spots" with FOG-related problems	Y	Y	
		Public outreach program that promotes the proper disposal of FOG	Y	Y	

WDR Element	Title	Requirement	Compliant	Current	Potential Updates
		Plan and schedule for the disposal of FOG generated within the District's service area	N/A		
		Legal authority to prohibit discharges to the system and identify measures to prevent SSOs and blockages caused by FOG	Y	Y	
		Requirements for grease removal devices, BMPs, and record keeping and reporting	Y	Y	
		Demonstrate that the District has allocated adequate resources for FOG control	Y	Y	
		Program of preventative maintenance and source control measures for sanitary sewer system facilities that have FOG-related problems	Y	Y	
VIII	**System Evaluation and Capacity Assurance Program (SECAP)**	Identification of elements of the sanitary sewer system that experience or contribute to SSOs caused by hydraulic deficiencies	Y	Y	
		Establish design criteria that provide adequate capacity	Y	Y	
		Short-term CIP that addresses known hydraulic deficiencies	Y	Y	
		Long-term CIP that provides for future capacity needs	Y	Y	
		The short and long term CIPs include schedules and sources of funding for the correction of each identified hydraulic deficiency	Y	Y	

WDR Element	Title	Requirement	Compliant	Current	Potential Updates
IX	**Monitoring, Measurement and Program Modifications (MMPM)**	Maintain relevant information to establish, evaluate, and prioritize SSMP activities	Y	Y	
		Monitor implementation of the SSMP	Y	Y	
		Measure, where appropriate, performance of the elements of the SSMP	Y	Y	
		Assess success of the preventative maintenance program	Y		
		Update SSMP program elements based on monitoring or performance	Y	Y	
		Identify and illustrate SSO trends including frequency, location, and volume	Y	Y	
X	**SSMP Program Audits**	Conduct periodic audits	Y	Y	
		Record results of the audit in a report	Y	Y	
		Record changes made and/or corrective actions taken	Y	Y	
XI	**Communication Program**	Communicate with the public regarding the preparation and implementation of the SSMP	Y	Y	
		Communicate with the public regarding SSMP performance	Y	Y	

WDR Element	Title	Requirement	Compliant	Current	Potential Updates
		Communicate with satellite sewer systems	N/A		

Russian River County Sanitation District

Sewer System Management Plan (SSMP) – 2020 BIENNIAL AUDIT

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1. Introduction

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A summary of compliance with the SWRCB Order is presented in check list form as **Appendix A** of this document.

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SWRCB Requirement:

The SWRCB's SSMP audit requirements mandate that the District shall conduct periodic internal audits, appropriate to the size of its system and the number of sanitary sewer overflows (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, including identification of any deficiencies in the SSMP and steps to correct them.

3. 2020 Biennial SSMP Audit

The District conducts periodic audits of its SSMP consistent with regulatory requirements. The goal of the audit is to determine whether the SSMP complies with current requirements of the GWDR, whether the SSMP reflects current practices, and whether the SSMP is effective in controlling SSOs.

Program effectiveness is evaluated by a review of performance indicators and discussion of SSMP and sewer system improvements. An Audit Checklist is also used as part of this evaluation.

4. SSMP Effectiveness

The effectiveness of SSMP elements is measured by developing and tracking performance indicators on a regular basis. The District maintains and tracks information on routine maintenance activities and SSO abatement programs that allows analysis and evaluation of changed conditions.

Key performance indicators incorporated include:

- Number of dry weathers SSOs over the past 12 months, (12-month average)
- Number and characteristics of wet weather SSOs over the past 12 months,
- SSOs by cause (e.g. roots, grease, debris, pipe failure, pump station failure, capacity, other)

- Volume distribution of SSOs (e.g. number of SSOs < 100 gallons, 100 to 999 gallons, 1,000 to 9,999 gallons, > 10,000 gallons)
- Annual volume of SSOs
- Average time to respond to an SSO
- Total feet inspected by year
- Record of past repair, rehabilitation, and replacement projects
- Record of planned repair, rehabilitation, and replacement projects
- Plans developed for, or implementation of, activities to target specific problems identified, such as roots, structural deficiencies, or fats, oil, and grease (FOG)
- Record of FOG outreach and corrective actions

Table 1 includes a list of 11 of these key performance indicators for 2016-2019. The remaining indicators are discussed below.

Table 1: Key Performance Indicators for 2016-2019

Russian River County Sanitation District SSMP Element 9: Measurement, Monitoring, and Program Modifications					
Item	**Performance Indicator**	**2016**	**2017**	**2018**	**2019**
1	Number of dry weather SSOs	0	1	2	0
2	Number of wet weather SSOs	0	5	0	4
3	Total number of SSOs	0	6	2	4
4	Number of SSOs < 100 gallons	0	1	1	0
5	Number of SSOs 100 to 999 gallons	0	0	1	1
6	Number of SSOs 1,000 to 9,999 gallons	0	2	0	0
7	Number of SSOs >10,000 gallons	0	3	0	3
8	Total annual volume of SSOs (gal)	0	1,312,820	105	1,031,770
9	Number of SSOs caused by:				
	Roots	0	1	1	0
	Grease	0	0	0	0
	Debris	0	0	0	0
	Pipe failure	0	0	0	0
	Pump station failure	0	0	0	0
	Capacity-limited pipe segment (no debris)	0	4	0	4
	Other	0	1	1	0
10	Average time to respond to an SSO (min)	0	0	50	0
11	Total feet inspected per year (LF)	78,728	6,333	3,962	4,000

FOG Outreach and Corrective Actions

In an effort to prevent blockages in the District's collection system from Fats, Oils and Grease (FOG) generated by commercial food service facilities, Sonoma Water requires food service establishments to install grease removal devices. Details of the FOG program are outlined in Article X of the Sanitation Code. The objectives of the District's Source Control Program are to: reduce or eliminate the discharge of incompatible pollutants by commercial and/or industrial dischargers; reduce or eliminate the discharge of pollutants that might pass through the treatment

plant to the receiving waters; reduce or eliminate the discharge of pollutants that interfere with treatment plant operation, cause a plant upset, or impair the District's ability to dispose of sludge; protect the health and safety of the community, District staff and the environment; and protect the physical integrity of the collection system, treatment plant and equipment.

During 2019, 14 food service facilities were inspected. Two of the facilities were out of business, two were found not to have a device, two were non-compliant, and the remaining facilities were in compliance. Re-inspections occurred in the same year at the two facilities that were non-compliant and the two that did not have a device.

Pollution Prevention and Source Control

The District continues to improve the Pollution Prevention and Source Control website to convey outreach and educational materials to the public. The website promotes topics geared to both residents and businesses operating in the District and utilizes a campaign featuring Wastewater Woman, a pollution prevention superhero, to keep messaging accessible and easily understandable. The ads are designed to provide quick, eye catching messages that will appeal to children and adults in English and Spanish. Outreach topics covered were safe medicine disposal, "flushable" wipes, and grease down the down. Residential outreach topics include information on the proper disposal of FOG, safe medicine disposal, what can and cannot be flushed down the toilet, household hazardous waste, pest management and inflow/infiltration. Website information geared towards businesses includes information on wastewater discharge permitting, dental waste, commercial FOG, hauled waste and mobile surface cleaners. The website can be found at: www.sonomawater.org/pollutionprevention.

Repair, Rehabilitation, and Replacement Projects

In 2019, staff inspected nearly 4,000 feet and cleaned over 66,000 feet of the District's collection system. Over the last four years, the District has had 12 Sanitary Sewer Overflows (SSOs), the majority of which occurred when the Russian River overtopped its bank and flooded the Guerneville Area. In addition, the majority of the SSOs came during major rain events. Over the years, the District has continuously conducted repair, rehabilitation, and replacement projects of the sewer collection system. Projects have involved removing roots, raising cleanouts, sealing manholes, removing brush, and performing pipe patches where needed. The District is currently in the process of engaging with a consultant to study the replacement of sewer force main and conduct an assessment of the lift stations. This project entails replacement of the approximately 9,000-foot force main between the lift station on Riverside Drive and the treatment plant. Additionally, the project will include a condition assessment of the treatment plant headworks and the 11 lift stations throughout the service area to determine improvements to provide operational and process flow stabilization. Project implementation relies upon securing Prop 1 grant funding.

5. SSMP Compliance

The District uses an Audit Checklist that is based on the GWDR and a checklist developed by another Bay Area sanitary district. The Audit Checklist indicates whether each SSMP element is compliant and current. It describes recent revisions or updates and recommends future actions to

maintain effective SSMP elements that reflect current District practices. The Audit Checklist is included in **Appendix A**.

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Appendix A: 2020 Biennial SSMP Audit Checklist

WDR Element	Title	Requirement	Compliant	Current	Potential Updates
MRP E.3	**Revision History**	Changes since last certification including which subsection was changed, when, and who authorized			
I	**Goals**	Reduce, prevent & mitigate SSOs	Y	Y	Updated goals.
II	**Organization**	Designate Legally Responsible Official (LRO)	Y	Y	Org Chart, names, phone numbers, chain of communication for reporting SSOs updated in the 2020 update.
		Organization Chart	Y	Y	
		Names & phone numbers of key personnel	Y	Y	
		Chain of Communication for reporting SSOs	Y	Y	
III	**Legal Authority**	Prevent illicit discharges to sanitary sewer system	Y	Y	
		Require sewers and connection be properly designed & constructed	Y	Y	
		Ensure access for inspection, maintenance and repairs	Y	Y	
		Limit discharge of FOG and debris that may cause blockages	Y	Y	
		Enforce violations of the District ordinances	Y	Y	
IV	**O & M Program**	Maintain up-to-date maps of the sanitary sewer system (gravity lines, MHs, pumping facilities, pressure pipes, valves, and applicable stormwater facilities)	Y	Y	

WDR Element	Title	Requirement	Compliant	Current	Potential Updates
		Describe routine preventative maintenance program	Y		
		Document completed preventative maintenance program	Y		
		Rehabilitation and replacement plan that identifies and prioritizes sanitary sewer system defects	Y	Y	
		Provide regular technical training for sewer system staff	Y	Y	
		Require contractors to provide training for their workers who work in the District's sewer system facilities	N/A		
		Maintain equipment inventory	Y	Y	
		Maintain critical spare part inventory	Y	Y	
V	**Design & Performance Provisions**	Design and construction standards for new sanitary sewer system facilities	Y	Y	
		Design and construction standards for repair and rehabilitation of existing sanitary sewer system facilities	Y	Y	
		Procedures for the inspection and acceptance of new sanitary sewer system facilities	Y	Y	
		Procedures for the inspection and acceptance of repaired and rehabilitated sanitary sewer system facilities	Y	Y	
VI	**Overflow Emergency**	Procedure for the notification of primary responders	Y	Y	

WDR Element	Title	Requirement	Compliant	Current	Potential Updates
	Response Plan (OERP)				
		Procedures for the notification of regulatory agencies	Y	Y	
		Program to ensure appropriate response to all overflows	Y	Y	
		Proper reporting of all SSOs	Y	Y	
		Procedure to ensure Staff are aware of and follow OERP	Y	Y	
		Procedure to ensure District staff are trained in the OERP procedures	Y	Y	
		Procedure to ensure contractor personnel are trained in the OERP procedures	N/A		
		Program to prevent the discharge of sewage to surface waters	Y		
		Program to minimize or correct the impacts of any SSOs that occur	Y	Y	
		Program of accelerated or additional monitoring to determine the impacts on surface waters of any SSOs that occur	Y	Y	
VII	**FOG Control Program**	Identification of "hot spots" with FOG-related problems	Y	Y	
		Public outreach program that promotes the proper disposal of FOG	Y	Y	

WDR Element	Title	Requirement	Compliant	Current	Potential Updates
		Plan and schedule for the disposal of FOG generated within the District's service area	N/A		
		Legal authority to prohibit discharges to the system and identify measures to prevent SSOs and blockages caused by FOG	Y	Y	
		Requirements for grease removal devices, BMPs, and record keeping and reporting	Y	Y	
		Demonstrate that the District has allocated adequate resources for FOG control	Y	Y	
		Program of preventative maintenance and source control measures for sanitary sewer system facilities that have FOG-related problems	Y	Y	
VIII	**System Evaluation and Capacity Assurance Program (SECAP)**	Identification of elements of the sanitary sewer system that experience or contribute to SSOs caused by hydraulic deficiencies	Y	Y	
		Establish design criteria that provide adequate capacity	Y	Y	
		Short-term CIP that addresses known hydraulic deficiencies	Y	Y	
		Long-term CIP that provides for future capacity needs	Y	Y	
		The short and long term CIPs include schedules and sources of funding for the correction of each identified hydraulic deficiency	Y	Y	

WDR Element	Title	Requirement	Compliant	Current	Potential Updates
IX	**Monitoring, Measurement and Program Modifications (MMPM)**	Maintain relevant information to establish, evaluate, and prioritize SSMP activities	Y	Y	
		Monitor implementation of the SSMP	Y	Y	
		Measure, where appropriate, performance of the elements of the SSMP	Y	Y	
		Assess success of the preventative maintenance program	Y		
		Update SSMP program elements based on monitoring or performance	Y	Y	
		Identify and illustrate SSO trends including frequency, location, and volume	Y	Y	
X	**SSMP Program Audits**	Conduct periodic audits	Y	Y	
		Record results of the audit in a report	Y	Y	
		Record changes made and/or corrective actions taken	Y	Y	
XI	**Communication Program**	Communicate with the public regarding the preparation and implementation of the SSMP	Y	Y	
		Communicate with the public regarding SSMP performance	Y	Y	

WDR Element	Title	Requirement	Compliant	Current	Potential Updates
		Communicate with satellite sewer systems	N/A		