

# SEWER SYSTEM MANAGEMENT PLAN 2021



# 2021

# CITY OF WATSONVILLE SEWER SYSTEM MANAGEMENT PLAN

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#### **ABBREVIATIONS & DEFINITIONS**

**CIP** - Capital Improvement Program

**COW** - City of Watsonville

**Enrollee** – The legal public entity that owns a sanitary sewer system, as defined by the GWDR, which has submitted a complete and approved application for coverage under the GWDR.

**FOG** – Fats, Oils, and Grease

**FPE** – Food Preparation Establishment

GIS – Geographical Information System: A database linked with mapping, which includes various layers of information used by government officials. Examples of information found on a GIS can include a sewer map; sewer features such as pipe location, diameter, material, condition, last date cleaned or repaired. The GIS also typically contains base information such as streets and parcels.

**GWDR** – General Waste Discharge Requirements: See WDR.

I/I -Infiltration and Inflow

**LRO** – Legally Responsible Official

MRP - Monitoring and Reporting Program

**NPDES** - National Pollution Discharge Elimination System

**O&M** – Operations and Maintenance

**OERP** – Overflow Emergency Response Plan **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.

**SCADA** – Supervisory Control and Data Acquisition

**SECAP** – System Evaluation and Capacity Assurance Plan

**SSMP** – Sewer System Management Plan: A series of written site specific programs that address how a collection system owner/operator conducts their daily business as is outlined in the WDR.

**SSO** – Sanitary Sewer Overflow

**SWRCB** – State Water Resources Control Board (California)

**WDR** – Waste Discharge Requirements: Similar to a NPDES permit, but with significant differences. A WDR is an authorization to discharge waste with certain conditions, which can be issued on an individual basis or to a group of dischargers. WDRs do not sunset, unlike NPDES permits, and are most commonly issued by the Regional Water Boards. The Statewide General WDR for Sanitary Sewer Systems was adopted by the SWCRB and will be implemented by the Regional Water Boards and SWRCB.

#### **EXECUTIVE SUMMARY**

Situated in the heart of the Monterey Bay area in the Pajaro Valley, the City of Watsonville lies 95 miles south of San Francisco at the southern end of Santa Cruz County. The City covers 6.6 square miles, and has a population of 53,800.¹ The City of Watsonville is a full service city, which provides water, solid waste and wastewater collection & treatment services for the residents of Watsonville, California. In addition, the City provides wastewater treatment for the Freedom County Sanitation District, and Salsipuedes Sanitary District in Santa Cruz County; and the Pajaro County Sanitation District in Monterey County.

The City of Watsonville owns and maintains approximately 686,400 linear feet, or approximately 120 miles, of gravity sewers and force main lines, along with 12 sanitary sewer lift stations. The City employs six full-time personnel who maintain the wastewater collection system: one manager and five operators.

In May 2006, the California State Water Resources Control Board adopted order No. 2006-0003-DWQ, Statewide General Waste Discharge Requirements for Wastewater Collection Agencies. The WDR affects all sewer agencies in the state and regulates the discharge of sanitary sewer overflows to receiving waters. The WDR requires the electronic reporting of all sanitary sewer overflows as well as the development of a Sewer System Management Plan and specifies monitoring, reporting and SSMP implementation requirements. The City of Watsonville began electronic reporting on May 2, 2007.

In August 2013, the California State Water Resources Control Board adopted order No. 2013-0058-EXEC, amending the Monitoring and Reporting Program (MRP). It establishes monitoring, record keeping, reporting, and public notification requirements that are codified in this SSMP.

The purpose of this SSMP is to:

- Properly manage, operate and maintain all portions of the City of Watsonville's wastewater collection system
- Provide adequate capacity to convey peak wastewater flows
- Minimize frequency of sanitary sewer overflows
- Mitigate impacts of sanitary sewer overflows that may occur
- Meet notification and reporting requirements

<sup>&</sup>lt;sup>1</sup> According to the 2019 American Community Survey

#### 1 **GOALS**

### 1.1 Section Requirements

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 occur.

#### 1.2 City of Watsonville Goals

The City of Watsonville's goals for the wastewater collection system are:

- Minimize the number and the magnitude of SSO's.
- Respond to emergency sewer calls within one hour.
- Accurately report SSOs within WDR guidelines
- Conduct appropriate analysis and evaluation of SSO's utilizing historical maintenance records and develop strategies to reduce future risk.
- Clean every wastewater pipeline within the wastewater collection system every 3 years, and every 8 weeks for problem lines, to limit the occurrence of SSO's and ensure reliable service.
- Operate all pump stations efficiently and perform routine preventive maintenance on equipment at all wastewater pump stations.
- Plan for power outages and system failures
- Maintain records of the wastewater collection system
- Maintain a 5-year capital improvement and replacement program directed at maintaining the current wastewater system assets, improving system reliability and providing adequate capacity to limit the occurrence of SSO's.

#### **ORGANIZATION**

#### 2.1 Section Requirements

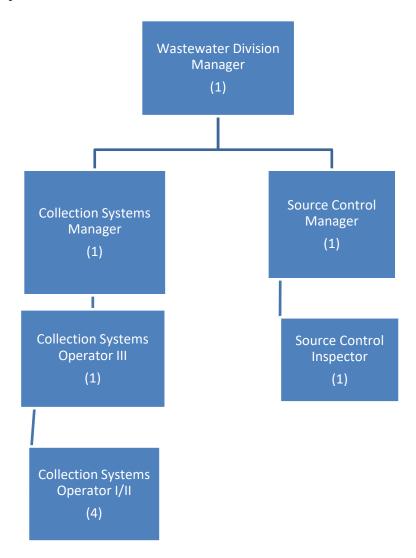
The SSMP must identify:

- a. The name of the agency's responsible or authorized representative
- b. The names and telephone numbers for management, administrative, and maintenance positions for implementing specific measures in the SSMP program.

- c. The SSMP must identify lines of authority through an organization chart or similar document with a narrative explanation.
- d. 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 Quality Control Boards, County Environmental Health Department, California Fish & Wildlife Department, California State Office of Emergency Services (OES) and other agencies, as applicable.

#### 2.2 **City of Watsonville Organization Chart**

The following section identifies the City of Watsonville staff members that are responsible for implementing, managing, and updating the SSMP, as well as reporting SSOs to the appropriate parties.



#### 2.3 City of Watsonville Staff Descriptions

Descriptions of the general responsibilities for the positions shown in the Organization Chart in Section 2.2 are as follows:

**Wastewater Division Manager** – Maintains overall responsibility for the sanitary sewer collection system, wastewater treatment facility, and discharge/reuse systems.

**Collection Systems Manager** – Is the Legally Responsible Official (LRO) in the preparation of the SSMP. Establishes goals, establishes maintenance and preventative maintenance schedules for the collection system, submits map updates to GIS, develops rehabilitation and replacement plans and prioritizes system deficiencies, provides regular training for personnel, purchases equipment and replacement parts, prepares emergency response plans, completes phone and written agency SSO notifications, prepares and reviews plans and specifications, may conduct system repair and construction inspections and assists engineering in the development of construction project plans and specifications.

Collection Systems Operator III - Leads field crews in preventative maintenance activities, leads emergency response, investigates and reports SSOs, establishes and prioritizes hot spot maintenance, establishes work and maintenance schedules, provides map correction information, conducts personnel training, conducts video and smoke testing operations, notifies source control of possible illicit discharges and insures proper stock of emergency and critical replacement parts.

**Collection Systems Operator I/II** – Staffs preventative maintenance activities, mobilizes and responds to reports of stoppages and SSOs, ensures all equipment is in proper working order, responds to power outages with portable generators, notifies source control of possible illicit discharges and conducts video and smoke testing operations.

**Source Control Manager** - May report SSOs to the proper agencies, investigates and prevents illicit discharges to the sewer system, conducts inspections and establishes proper cleaning schedules of grease traps, enforces any violations of the sewer ordinances. establishes, oversees and enforces the FOG program.

**Source Control Inspector** – Supports with SSO response and reporting as needed.

#### 2.4 City of Watsonville Staff Contacts

Contact information for city staff in positions to implement changes to the SSMP, conduct collection system maintenance, SSO response and reporting, GIS map updating and other duties as described in this SSMP and attached addendums.

Interim Public Works and Utilities Director - Christian Di Renzo, (831)768-3160

Wastewater Division Manager - Ryan Smith, (831)768-3175

Public Works Engineering – Danielle Green, (831)768-3102

Public Works Inspection - Bob Barry (831)768-3100

Source Control Manager - Jim Crowley, (831)768-3173

<u>Collection Systems Manager</u> – Ruben Tellez, (831)768-3178

Collection Systems Operator III - Edgar Quintero, (831)768-3170

**GIS Coordinator** – [currently vacant]

**GIS Technician II** – [2 new employees in hiring process]

#### 3 LEGAL AUTHORITY

#### 3.1 Section Requirements

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, including
- b. Reduce infiltration and inflow (I/I) into the wastewater collection system
- c. Require proper design and construction of sewers and connections
- d. Ensure private sewer laterals comply with City standards
- e. Ensure access for maintenance, inspection and repairs to publicly owned portions of
- f. Limit the discharge of FOG and other debris that may cause blockages
- g. Enforce violations of its sewer ordinances

#### 3.2 City of Watsonville Legal Authority

The City of Watsonville has the following municipal code sections that have been adopted by the City Council and establish the required necessary legal authority:

1-2.08, Code Violations - Civil Penalties

- 6-3.130.01, Sanitary sewer lateral
- **6-3.508**, Maintenance of sanitary sewer laterals and private sanitary sewer collection systems; Reimbursement for Regulatory Fines
- 6-3.512, Sanitary sewer construction permits required
- 6-3.513, Waste discharge regulations for the use of publicly owned treatment works (POTW)
- **6-3.514**, Preliminary treatment or control of waste
- 6-3.515, Protection from accidental discharges
- 6-3.516, Administration
- **6-3.526**, Illicit discharge and illicit connections
- **6-3.701**, Duties of the director

A copy of the City of Watsonville's ordinances are located at the following link:

http://www.codepublishing.com/ca/watsonville/

#### **OVERFLOW EMERGENCY RESPONSE PLAN (OERP)**

#### 4.1 Section Requirements

Each Enrollee shall develop and implement an OERP 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; and
- b. A program to ensure an appropriate response to all overflows; and
- 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 waters of the State in accordance with the MRP; and
- d. Procedures to ensure that appropriate staff and contractor personnel are aware of and follow the OERP and are appropriately trained; and
- 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 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.

#### 4.2 City of Watsonville SSO Response Plan

Sanitary sewer overflows can occur during periods of wet or dry weather. Wet weather SSOs occur when I/I exceeds system capacity, and dry weather SSOs occur due to pipe breaks blockages. An SSO response plan is maintained by the Collection Systems Manager for all City of Watsonville personnel to use as guidance in responding to SSOs.

A copy of the City of Watsonville's Collection Systems Incident Call-out Guidelines and Pump Station Check Sheets are provided in Appendix A of this document.

An Incident Report will be completed by the responding party as soon as they are notified of a sewer problem. An Incident Report form is provided in Appendix B.

#### 5 OPERATIONS AND MAINTENANCE PROGRAM

#### **5.1 Section Requirements**

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

- a. Each wastewater collection system agency shall maintain up-to-date maps of its wastewater collection system facilities, showing all gravity line segments and manholes, pumping facilities, pressure pipes and valves, and applicable storm water pumping and piping facilities.
- b. Describe routine preventative 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 system for ranking the conditions 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 to implement 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.
- e. Provide equipment and replacement part inventories, including identification of critical replacement parts.

#### **5.2 Collection System Overview**

The City of Watsonville owns and maintains approximately 120 miles of sanitary sewer gravity and force main lines. The system includes sizes ranging from 6-inch to 39-inch diameter lines. Predominately, the system is comprised of VCP, with sections of PVC pipe, truss pipe and HDPE pipe. After the 1989 Loma Prieta earthquake, the City of Watsonville, with the assistance of FEMA began an extensive rehabilitation program. The rehabilitation program included video inspection of all sewer lines within the city limits and Pajaro Dunes, with the exception of a small amount of truss pipe. During the course of the project, approximately 60% of the sewer system was replaced and all 6" gravity sewer lines slated for replacement were upgraded to 8".

#### **5.3 Pump Station Overview**

The City of Watsonville owns and maintains 12 sewer lift stations. All of these lift stations have back-up power to ensure full operation of equipment during power outages. In addition, all sewer lift stations are connected to a SCADA alarm system. This system monitors the performance and condition at each station and reports to the main computer approximately every 45 seconds. The main computer has a dialer program that will notify the proper personnel of an alarm condition. Responding personnel have been instructed to follow the directions in the City's Incident Call-out Guidelines and/or the Pump Station Check sheets to mitigate the problem. Those procedures are attached and located in Appendix A.

The following map shows the locations of the City's sewer pump stations.

Figure 1 - City of Watsonville Pump Station Vicinity Map

### Pump Station # 1 Pajaro Dunes – Master Station

- PG&E meter number: 1008828356
- 200 amp. Main circuit breaker, 230 volts, 3 phase, 4 wire supply line. 100 amp/230 volt pump breakers.
- Two Gorman-Rupp self-priming pumps rated at 20 HP.
- EPS bubbler style level control unit with air pump.
- Wisconsin 4 cylinder propane powered back-up engine.
- This station is equipped with an alarm system.

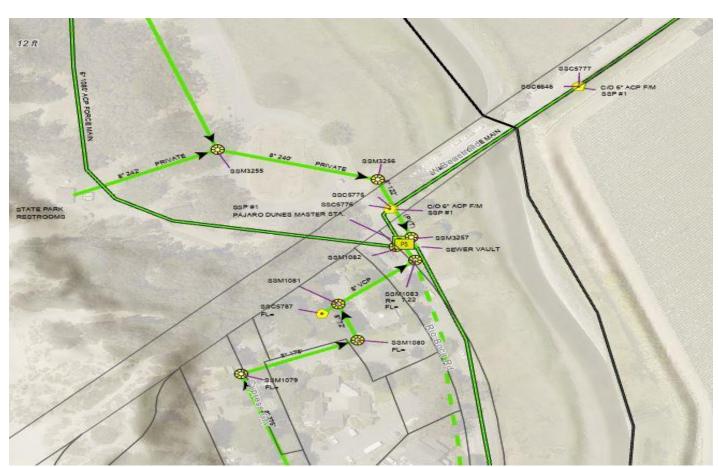


Figure 2 - Location of Pump Station # 1 Pajaro Dunes - Master Station

### Pump Station # 2 Sanderling Circle

- **PG&E meter number: 1008828353**
- 100 amp. Main circuit breaker, 220 volts, 1 phase, 3 wire supply line. 30 amp/220 volt pump breakers.
- Two Gorman-Rupp self-priming pumps rated at 3 HP.
- EPS bubbler style level control unit with an air pump.
- Wisconsin 4 cylinder propane powered back-up engine.
- This station is equipped with an alarm system.



Figure 3 - Location of Pump Station # 2 Sanderling Circle

### Pump Station # 3 Puffin Lane

- **PG&E** meter number: 1008828322
- 100 amp. Main circuit breaker, 208 volts, 3 phase, 4 wire supply line. 30 amp/220 volt pump breakers.
- Two Flygt 3085 submersible pumps rated at 3 HP.
- TESCO L2000 PLC control panel.
- Pressure transducer connected to L2000 for level control.
- DMT 20 kw propane generator and ASCO automatic transfer switch.
- This station is equipped with an alarm system.



Figure 4 - Location of Pump Station # 3 Puffin Lane

### Pump Station # 4 Pajaro Dunes – North

- PG&E meter number: 1009549244
- 100 amp. Main circuit breaker, 208 volts, 3 phase, 4 wire supply line. 30 amp/220 volt pump breakers.
- Two Flygt 3085 submersible pumps rated at 3 HP.
- TESCO L2000 PLC control panel.
- Pressure transducer connected to L2000 for level control.
- DMT 20 kw propane generator and ASCO automatic transfer switch.
- This station is equipped with an alarm system.



Figure 5 - Location of Pump Station # 4 Pajaro Dunes - North

### Pump Station # 9 Bay Breeze

- **PG&E meter number: 1008831823**
- 100 amp. Main circuit breaker, 240 volts, 3 phase, 4 wire supply line. 30 amp/240 volt pump breakers.
- Two Flygt 3127 submersible pumps rated at 7.5 HP.
- TESCO L2000 PLC control panel.
- Pressure transducer connected to L2000 for level control.
- Caterpillar 40 kW propane generator and ASCO automatic transfer switch.
- This station is equipped with an alarm system.



Figure 6 - Location of Pump Station # 9 Bay Breeze

### Pump Station # 10 Miles Lane

- PG&E meter number: 1008831750
- 100 amp. Main circuit breaker, 230 volts, 3 phase, 4 wire supply line. 20 amp/230 volt pump breakers.
- Two Gorman-Rupp self-priming pumps rated at 3 HP.
- EPS bubbler style level control unit with an air pump.
- Wisconsin 4 cylinder propane powered back-up engine.
- This station is equipped with an alarm system.



Figure 7 - Location of Pump Station # 10 Miles Lane

### Pump Station # 12 Marigold Meadows

- **PG&E meter number: 1008828621**
- 200 amp. Main circuit breaker, 230 volts, 3 phase, 4 wire supply line. 70 amp/230 volt pump breakers.
- Two Gorman-Rupp self-priming pumps rated at 15 HP.
- EPS bubbler style level control unit with an air pump.
- Wisconsin 4 cylinder propane powered back-up engine.
- This station is equipped with an alarm system.



Figure 8 - Location of Pump Station # 12 Marigold Meadows

### Pump Station # 13 Oakridge

- **PG&E meter number: 1008828339**
- 200 amp. main circuit breaker, 230 volts, 3 phase, 4 wire supply line, 90 amp/230 volt pump breakers.
- Two Flygt submersible pumps rated at 20 HP.
- Tesco bubbler style level control unit.
- DMT 100 kW diesel generator and ASCO automatic transfer switch.
- This station is equipped with an alarm system.



Figure 9 - Location of Pump Station # 13 Oakridge

### Pump Station # 14 Madonna Vista

- PG&E meter number: 1008831754
- 100 amp. Main circuit breaker, 230 volts, 3 phase, 4 wire supply line. 30 amp/230 volt pump breakers.
- Two Gorman-Rupp self-priming pumps rated at 5 HP.
- EPS bubbler style level control unit with an air pump.
- Wisconsin 4 cylinder propane powered back-up engine.
- This station is equipped with an alarm system.

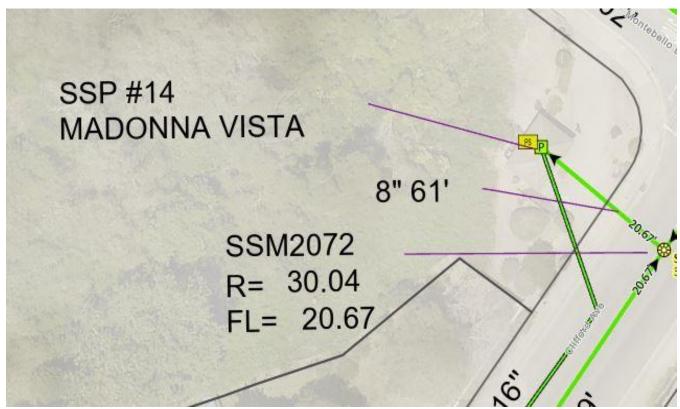


Figure 10 - Location of Pump Station # 14 Madonna Vista

### Pump Station # 15 North Main

- **PG&E meter number: 1008828349**
- 100 amp. Main circuit breaker, 208 volts, 3 phase, 4 wire supply line. 30 amp./230 volt pump breakers.
- Three voltage boost transformers on the inside wall to step the pump supply voltage up to 230 volts.
- Two Gorman-Rupp self-priming pumps rated at 5 HP.
- EPS bubbler style level control unit with an air pump.
- Wisconsin 4 cylinder propane powered back-up engine.
- This station is equipped with an alarm system.

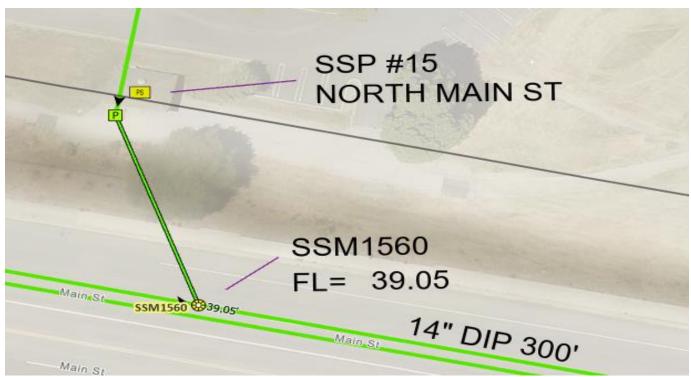


Figure 11 - Location of Pump Station # 15 North Main

### Pump Station # 16 Westgate

- **PG&E** meter number: 1009547839
- 100 amp. Main circuit breaker, 230 volts, 3 phase, 4 wire supply line, 40 amp./230 volt pump breakers, 15 amp/120 control breaker.
- Two Flygt submersible pumps rated at 9.4 HP.
- Tesco bubbler style level control unit.
- GENERAC 40 kW generator and an Asco automatic transfer switch.
- This station is equipped with an alarm system.

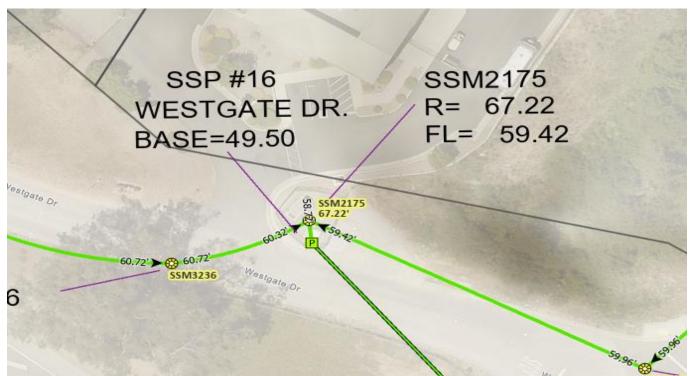


Figure 12 - Location of Pump Station # 16 Westgate

### Pump Station # 17 Harkins Slough

- **PG&E meter number: 1008828383**
- 100 amp. main circuit breaker, 230 volts, 3 phase, 4 wire supply line, 40 amp./230 volt pump breakers.
- Two Flygt submersible pumps rated at 9.4 HP.
- Tesco bubbler style level control unit.
- Generac 40 kW diesel generator and ASCO automatic transfer switch.
- This station is equipped with an alarm system.

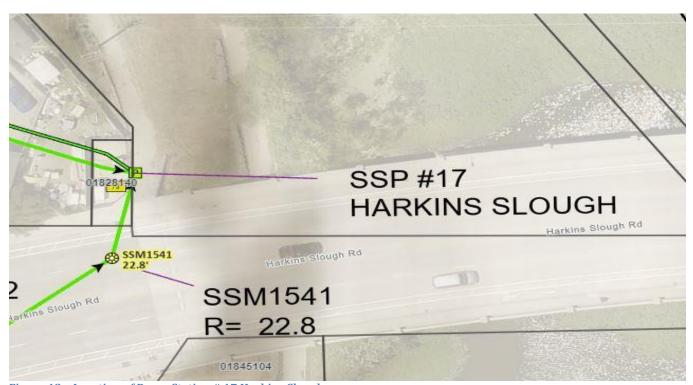
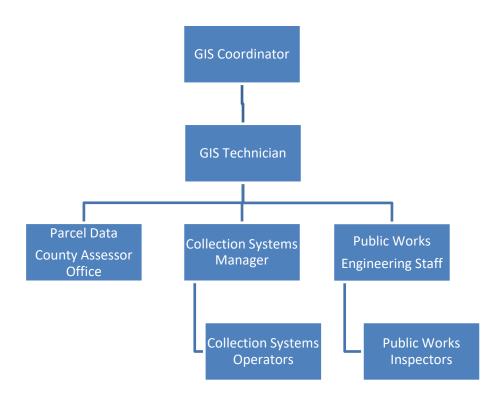


Figure 13 - Location of Pump Station # 17 Harkins Slough

#### 5.4 Wastewater Collection System Mapping

The City of Watsonville maintains a Geographic Information System (GIS) database, which is a tool to store, perform analysis and geographically show the wastewater collection system. The GIS data can be viewed and queried using ESRI's ArcGIS software from any City workstation. The GIS Division of the IT Department, in conjunction with the Engineering Division of the Public Works & Utilities Department, maintain utility map books, which are based on GIS data, GPS data and recorded drawings. The utility map books are distributed to field crew and engineering staff. Corrections and new additions to the wastewater collection system are noted and submitted to the GIS Staff. GIS Staff will maintain the wastewater collection system GIS data and track all updates to the wastewater collection system. Updated hard-copy maps and utility map book pages are redistributed as appropriate, and will display a date-stamp.

City of Watsonville mapping will be managed through the following organization chart:



NOTE: All GIS changes to the mapping system shall be approved by the GIS Coordinator.

#### **5.5** Routine Preventative Operations & Maintenance

Almost all collection system operations, preventative maintenance and repair work is completed by the Collection Systems Operations Staff, normally comprised of the Collection Systems Manager, 1 Collection Systems Operator III and 3 Collection Systems Operator I-II full-time positions. Additional resources are also available from the City's Utilities Maintenance, Field Services, and Water Services crews or outside contractors. A summary of routine preventative operations & maintenance (O&M) includes, but is not limited to, the following:

### Daily O&M Procedures

- 1. Review SCADA System each morning, after lunch, and at the end of the day to ensure proper system operation.
- 2. Daily inspection of Vactor hydro-flushing equipment
- 3. Line cleaning/Televise lines with 2 crews.
- 4. Log the line segments flushed and/or inspected each day.

### Weekly O&M Procedures

1. Inspect all lift stations as outlined on the weekly inspection form for each station.

Perform weekly maintenance on the Vactor hydro-flushing combination trucks Monthly O&M Procedures

- 1. Perform monthly maintenance at all pump stations
- 2. Perform monthly maintenance on the Vactor hydro-flushing trucks

#### Annual O&M Procedures

- 1. Clean 35% of sanitary sewer pipelines to achieve 3-year cleaning cycle goal
- 2. Perform annual pump station maintenance
- 3. Paint interior/exterior of each pump station

### Additional O&M Procedures

- 1. Conduct additional line cleaning maintenance to the sewer systems "hot spots", typically every 6 to 8 weeks
- 2. Clean grease and grit from wet wells every 4-6 months
- 3. CCTV sanitary sewer pipelines once every 10 years to identify problems or more often as necessary
- 4. Replace manhole frames and covers as necessary
- 5. Replace pump seals as necessary
- 6. Replace back-up alarm batteries at each pump station every 2 years
- 7. Replace uninterruptable power supply (UPS) at each pump station every 2 years

#### 5.6 Rehabilitation and Replacement Program

The City of Watsonville has a Long-Term Capital Improvement Program to upgrade and rehabilitate the existing infrastructure within the wastewater collection system. The Capital Improvement Program provides a cost estimate of the proposed capital improvement projects or equipment purchases for the next 20 years. This 20 year plan is updated every year.

Included in the budget are allocations sufficient for sewer line repair or replacement projects, and other system improvements. The Collection System Manager, operational staff and Engineering Division staff, review the history of SSOs and maintenance records to identify areas of concern, and plan the appropriate response. Prioritization of projects is adjusted often to keep the system functioning as designed.

It is the responsibility of a variety of City staff to manage the projects from inception to completion. City staff are assigned accordingly based on the type of project or purchase.

A copy of the Watsonville Capital Improvement Program is contained within the City's bi-Annual budget.

#### 5.7 Training

The City of Watsonville conducts weekly safety training meetings and also provides training for all levels of staff to address skills necessary to perform proper operations and maintenance to all equipment used in its day to day operations, to provide timely and effective emergency response, and to incorporate recognized safety practices.

The City of Watsonville will use a combination of in-house courses; on-the-job training; and conferences, seminars and other training opportunities provided by local, state and national organizations to train its staff.

### 5.8 Inventory

The City of Watsonville keeps inventory equipment and replacement parts for critical components of the sanitary sewer collection system to help ensure uninterrupted service in the event of a failure. A summary of inventory items includes, but is not limited to, the following:

### **5.8.1** Replacement Parts

SIZE	DESCRIPTION	APPROXIMATE QUANTITY	
6" to 18"	Pipe – PVC	40' each	
6" to 12"	Compression Couplings	2 to 8 each	
4" to 18"	Coupling - Clay to Plastic/CIP	2 to 4 each	
4" to 18"	4" to 18" Coupling – Clay to Clay		
6"	6" Full Circle Repair Clamps-various OD's		
Various	Various Flygt brand pumps, replacement for various locations		
Various	Drive Motors, replacements for various locations	4	
Various	Electronic components, level controllers, pressure transducers for various locations, air pumps, UPS units, Gorman-Rupp auto-start controller		
Various	Mechanical equipment, G/R rotating assemblies, back- up engine starter, generator block heater, pump impellers, bearings and seals.		

#### 5.8.2 Vehicles

YEAR	YEAR DESCRIPTION			
1997	Ford F-450 Maintenance Utility Truck w/ 2 ton crane			
2020	Chevy 3500 Maintenance Utility Truck			
2020	Peterbuilt / Vactor 2100i Series Combination Truck			
2021	Peterbuilt / Vactor 2100i Series Combination Truck			
2006	Sterling / Vactor 2100 Series Combination Truck			
2008	Chevrolet 4500 / Cues Video Inspection Truck			
2020	Ford 3500 4x4 Crew Cab Utility Truck			
2009	Ford Ranger Pickup			
In addition to these vehicles in the Collection Systems Division, additional				
equipment and rolling stock is available from other City departments and divisions.				

#### 5.8.3 Equipment

QUANTITY	QUANTITY DESCRIPTION		
1	Gorman-Rupp Silent Giant Auto Start 6" Portable Pump		
1	Gorman-Rupp 6" Portable Pump		
1 Cues Mini Portable TV Lateral Inspection System			
In addition to this equipment, the Collection Systems Division has access to equipment and rolling stock from other City departments and divisions.			

### 5.8.4 Replacing Equipment and Vehicles

Capital equipment and vehicles are scheduled for replacement in the Capital Improvement Program, which provides an estimate of Watsonville's capital equipment requirements for the next 5 years.

The Capital Improvement Program is reviewed and updated at a minimum every two years and more often as required. The Collection System Manager, operational staff and Engineering Division staff conduct this review.

A copy of the Capital Improvement Program is contained within the City's Bi-Annual budget.

#### FATS, OILS, AND GREASE (FOG) CONTROL PROGRAM

#### **6.1 Section Requirements**

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 as to 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.

#### 6.2 City of Watsonville FOG Ordinance

The City of Watsonville has been implementing grease control measures for food preparation establishments for over 10 years (Section 6-3.514(e)(1) in the Watsonville Municipal Code. The program consists of construction plan checks, business license review, site inspections, BMP brochures and informational handout, maintain database of inspections and enforcement actions. The City of Watsonville Public Works & Utilities Department uses Source Control staff to implement the Fats, Oils, and Grease (FOG) Control Program.

#### City of Watsonville FOG Public Outreach

Each food preparation establishment that files a business license application in the City of Watsonville receives a Best Management Practices for Food Preparation Establishments brochure from Source Control specifying the best management practices (BMP's) required by the City to ensure the proper disposal and management of FOG at their facility. FOG outreach to residents is implemented on a case-by-case basis when problems are identified by Collections or Customer Service staff.

#### City of Watsonville FOG Disposal Plan

Each food preparation establishment is informed by Source Control as to the required frequency of maintenance of the grease trap or interceptor. Source Control provides to each food preparation establishment under the City's jurisdiction a list of commercial mobile waste haulers permitted to dispose of FOG at the City of Watsonville WWTF. In 2003 the City of Watsonville WWTF began accepting loads of FOG for co-digestion in the anaerobic digesters. In 2020, 3,255,090 gallons were received at the City's FOG receiving station, an average of 271,258 gallons per month. The WWTF currently has 11 mobile waste haulers permitted to discharge grease at the facility.

#### 6.5 City of Watsonville FOG Legal Authorities

The City has the legal authorities needed to conduct the FOG Control Program. The City of Watsonville Municipal Code establishes the authorities needed for the FOG Control Program, as discussed in Watsonville Municipal Code Title 6 Sanitation and Health, Chapter 3 City Utilities. Copies of the ordinances can be found on the City's web site at: http://www.codepublishing.com/ca/watsonville/.

#### 6.6 City of Watsonville FOG Grease Removal Devices/Best Management Practices

All plans submitted to the City of Watsonville Planning Department relating to the construction of new or remodeled food preparation establishments (FPE) are checked by City of Watsonville Source Control. The plans are evaluated by Source Control for appropriate grease trap/interceptor size, location, and as to what drains are discharging through the grease trap/interceptor.

Source Control evaluates the business license applications as they are received. Each FPE is then inspected to evaluate compliance with the grease trap/interceptor requirements. If a facility is determined to be lacking in adequate pretreatment of the waste, corrective actions are required before the business license will be approved by Source Control.

Source Control endeavors to inspect each of the food service facilities annually. Site inspections typically comprise of request for documentation of grease trap/interceptor maintenance, inspection of the grease trap, discussion of maintenance frequency and method, reporting requirements, and BMP implementation. The location of the tallow barrel is assessed at this point as well.

#### 6.7 City of Watsonville FOG Legal Authorities Enforcement Staff

Source Control performs the enforcement of the FOG Control Program. A range of enforcement actions are available as needed to obtain compliance with the City's FOG control requirements. Enforcement actions may involve a verbal warning, a Corrective Action citation, a Notice of Violation, an Administrative Order, or fines. If determined to be necessary, Source Control will require the installation of additional or larger capacity FOG control devices.

#### 6.8 City of Watsonville FOG Problem Areas

The City Collections staff maintains a list of "hot spots" within the collection system that require cleaning every 6 to 8 weeks to prevent potential overflows. Source Control works with collections staff to ensure that adequate pretreatment for FOG is being maintained upstream of these trouble spots. If excessive FOG is identified by Collections staff during routine maintenance or following a sanitary sewer overflow, Source Control is directed to inspect upstream sources to identify and ensure that the sources of FOG are being

controlled, that the required BMPs are being followed, and to implement enforcement if necessary.

#### **DESIGN AND PERFORMANCE PROVISIONS**

#### 7.1 Section Requirements

The SSMP must identify design and construction standards and specifications for the installation of new sanitary sewer collection systems, pump stations and other appurtenances; and for the rehabilitation and repair of existing sanitary sewer systems.

#### 7.2 The City of Watsonville Wastewater Collection System Standard Specifications

Standard specifications and drawings are maintained by the City of Watsonville's Public Works & Utilities Department to use as guidance for city personnel, engineers, architects and contractors in designing, rehabilitating, repairing, and installing sanitary sewer collection system components.

A copy of the City of Watsonville's Public Improvement Standards for sanitary sewers can be found at the following link:

https://www.cityofwatsonville.org/DocumentCenter/View/11056/Storm-and-Sewer-**Standards** 

#### SYSTEM EVALUATION AND CAPACITY ASSURANCE PLAN (SECAP)

#### 8.1 Section Requirements<sup>2</sup>

The Enrollee shall prepare and implement a capital improvement plan that will provide hydraulic capacity of key wastewater collection 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. Evaluations Actions needed to evaluate those portions of the wastewater collection system that are experiencing or contributing to an SSO discharge caused by hydraulic deficiency. The evaluation must provide estimates of peak flows (including flows from SSOs that escape 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.

<sup>&</sup>lt;sup>2</sup> Requirements pulled directly from Statewide General WDR, Order No. 2006-0003-DWQ

- c. Capacity Enhancement Measures The steps needed to establish a short- and longterm CIP to address identified hydraulic deficiencies, including prioritization, alternatives analysis, and schedules. The CIP may include increases in pipe size, I/I reduction, 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.

#### 8.2 System Evaluation

In February 2007 flow monitoring was conducted during wet and dry weather conditions. Based on the results of the monitoring a hydraulic model was then used to evaluate collection system performance. Evaluation criteria, defined based on the level of surcharge (i.e., flow depth above the top of the pipe) that would be considered acceptable, were developed and used to identify problem areas.

The collection system was evaluated under both dry weather and wet weather conditions as well as under current and future flow conditions. Existing and future scenarios were run with the 5-year design storm to evaluate the system capacity for wet weather flows.

Based on the model runs, the peak flow condition was determined for each pipe and the locations with deficiencies were identified.

No capacity deficiencies were identified for current or future dry weather conditions, but portions of the system were found to have inadequate capacity for wet weather flows.

All pump stations are able to meet demands under dry and wet weather flow conditions for existing and future flow conditions. The only exception is Westgate Pump Station, which was determined to be under capacity for future wet weather flows, primarily due to additional flow from future (10 – 20 Years) developments in the South Manfre and Buena Vista Roads areas.

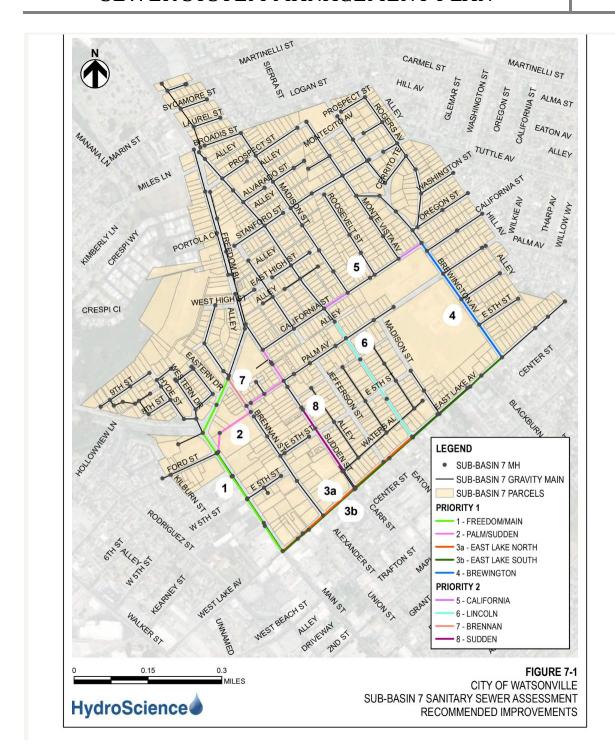
A CD copy of the 2007 Sanitary Sewer SECAP is contained in Appendix D.

#### 8.3 Improvement Projects

Eighteen improvement projects were developed to address deficiencies found during the capacity analysis. Each project was given a priority rating based on the overflow potential. Through various capital improvement projects all the highest rated projects have been completed.

In January 2021 the evaluation of Sub Basin 7 was completed. Basin 7 was chosen because it had the most sewer lines needing a higher frequency of cleaning called "hot spots". There have been documented areas in this basin that are choke points and have been the cause of overflows during high water events. The evaluation performed by HydroScience found the following hydraulic deficiencies were grouped together into two priority levels. Priority 1 projects address potential sanitary sewer overflows (SSOs) during the design event. Priority 2 projects address additional hydraulic deficiencies that result in less than 5 feet of freeboard, or the distance between the hydraulic grade line and the ground surface. The projects recommended to address the hydraulic deficiencies are listed in Table 7-1 and shown in Figure 7-1. There are four recommended Priority 1 projects (Projects 1 through 4) and four Priority 2 projects (Projects 5 through 8). Project 3 runs along East Lake Avenue where there are currently two parallel sewer pipes running southwest, a smaller line on the northern side of the street consisting of 6-inch and 8-inch pipe and a 10inch pipe that runs parallel, south of the smaller pipeline. Both pipes are under capacity under design conditions. Option 1 for Project 3 assumes both parallel pipes will be upsized. Both lines require up to two pipe sizes larger than the existing diameter. This is on the upper end of what is possible for replacing the pipe via trenchless methods. When there is more than a two pipes size increase, open-cut construction is required. Option 2 for Project 3 replaces only one of the parallel pipes (the larger of the two pipes)

Project Priority	Project #	Location	Existing Diam (in)	Replacement Diam (in)	Length (LF)
	1 Free	Freedom/Main	8	12	644
			10	15	1,534
			Projec	Project Total	
	2	Palm/Sudden	6 & 8	10	1,527
		East Lake N	6 & 8	10	1,850
	3, Option 1	East Lake S	10	15	3,150
1			Project Total		5,000
	3, Option 2 East Lake S		10	15	1,285
		S 10	18	1,865	
		Project Total		3,150	
	4 Brewington		8	10	738
		Brewington	8	12	761
			Projec	ct Total	1,498
	5 California 6	6	8	305	
		6	10	299	
			Projec	ct Total	604
2	6	Lincoln	8	10	1,489
	7	Brennan St	8	10	355
	8 Sudden St.	6	8	269	
		8	10	544	
			Projec	ct Total	813



#### 8.4 Capacity Enhancement Measures and Design Criteria

As previously mentioned, The City of Watsonville has a Long-Term Capital Improvement Program to rehabilitate and replace the Watsonville sanitary sewer collection system. The CIP provides an estimate of Watsonville's capital improvement requirements for the next 5 vears.

Included in the CIP are budgetary cost information for sewer line repair and replacement projects and other capital improvement projects. The sewer lines identified for replacement are based on history of SSOs, maintenance records, wet and dry weather capacity and street reconstruction projects.

On a case by case basis, evaluations of pump stations are ongoing. Components the City considers during the preliminary design phase of each pump station rehabilitation project are flow projections, storage calculations, efficiency evaluation, redundancy evaluation, force main evaluation, power evaluation, design criteria, available alternatives, etc. Based on future flow projections there are no plans to add any new pump stations to the system, only to upgrade or replace the existing ones.

The Long-Term CIP is reviewed and updated on an annual basis by the Collection System Manager, field operations personnel, and Engineering Division staff.

The Public Works Engineering staff are assigned to manage the projects outlined in the Long-Term CIP from inception to completion.

#### 8.5 Schedule

The schedule for capital improvement projects are as outlined in the Long-Term CIP as outlined in the City's Bi-Annual Budget.

#### MONITORING, MEASUREMENT, AND PROGRAM MODIFICATIONS 9

#### 9.1 Section Requirements

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 preventive maintenance program.
- d. Update program elements, as appropriate, based on monitoring or performance
- e. Identify and illustrate SSO trends, including: frequency, location, and volume.

#### 9.2 Performance Measures

The City of Watsonville's main goal is to minimize the number and the magnitude of SSOs. Therefore, the City of Watsonville will measure the performance of its sanitary sewer collection system and the effectiveness of its SSMP based on the following:

- Number of SSOs
- Magnitude of SSOs
- Cause of SSOs
- Location of SSOs
- Volume of wastewater contained of total volume of SSO
- Number of miles flushed per year
- Number of miles of CCTV per year
- Hot spot cleaning frequency

#### 9.3 Program Monitoring and Modifications

The City of Watsonville will evaluate the performance of its sanitary sewer collection system annually, at a minimum, using the performance measures as stated above in Section 9.2. The annual evaluation will be completed prior to identifying annual capital improvement projects.

It is the City of Watsonville's intent to maintain this SSMP as a beneficial working document; therefore, the City of Watsonville will evaluate the effectiveness of the SSMP annually. The City of Watsonville may use other performance measures in its evaluation and will prioritize its actions and make modifications to the SSMP based on the results of the evaluation.

#### 10 SSMP PROGRAM AUDITS

#### **10.1 Section Requirements**

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 section, including identification of any deficiencies in the SSMP and steps to correct them.

#### 10.2 Audits

The City of Watsonville will audit its implementation and compliance with the provisions of this SSMP at a minimum of every two years. The audit shall be completed according the following schedule:

SCHEDULED	COMPLETED
2023	
2025	
2027	
2029	
2031	

The audit team will consist of City of Watsonville staff, and may include members from outside agencies, consultants, or contractors. The audit will examine each section of this SSMP. At the conclusion of each audit, the results, including the identification of any deficiencies and the recommendations to correct the deficiencies, shall be included in an Audit Report.

#### **10.3 SSMP Updates**

The City of Watsonville will update the SSMP as needed based on the Audit Report and the results of the monitoring as performed according to Section 9. If city staff determines an update to the SSMP is necessary, the process to complete the update shall be identified. The City of Watsonville will complete the update within one year of the completed audit.

#### 11 COMMUNICATIONS PROGRAM

#### 11.1 Section Requirements

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.

#### 11.2 Communications Program

The City of Watsonville provides information on the performance of the wastewater collection system within the Wastewater Division Annual Report and the Annual City Budget. City staff is also available during normal business hours to answer questions from the public related to the collection system. Information is also provided to the public by staff of the Public Works & Utilities Department's Public Outreach and Education Team who give group presentations and conduct tours of the wastewater treatment facilities. They also produce and distribute brochures regarding SSOs and the FOG program. Information is also posted on the web page at https://www.cityofwatsonville.org/973/Public-Education

When applicable, the status of any capital improvement projects is available to the public at the City Council meetings which occur twice monthly. The public has the opportunity to provide comment or express concerns at these regularly scheduled meetings.

Watsonville also reports SSOs electronically to the California Integrated Water Quality System (CIWQS), and other regulatory agencies as required.

#### 12 SSMP COMPLETION AND CERTIFICATION

#### 12.1 Section Requirements

Both the SSMP and the City of Watsonville's program to implement the SSMP must be certified by the Enrollee to be in compliance with the requirements set forth in the Statewide General WDR, Order No. 2006-0003-DWQ. The SSMP must be presented to the Watsonville City Council for approval at a public meeting. Watsonville staff shall certify that the SSMP and the subparts thereof, are in compliance with the general WDRs within the time frames identified in the time schedule provided.

In order to complete the certification, the Wastewater Division Manager or Collection Systems Manager will 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 the State Water Board at:

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

#### 12.2 Certification

A copy of the form submitted to the State Water Resources Control Board indicating completion and certification of this SSMP is included in Appendix B.

#### APPENDIX A

# CITY OF WATSONVILLE COLLECTION SYSTEMS INCIDENT CALL-OUT GUIDELINES Revised: August 2021

These guidelines will cover what to do under most circumstances in the event of a call-out for a "Collection Systems Incident" involving a sewage line or pumping facility problem within the Watsonville City Limits or Pajaro Dunes. City of Watsonville personnel shall use these guidelines to inspect, repair, maintain, cleanup and monitor conditions that may be encountered at a "Collection Systems Incident" call-out scene. If further guidance is needed you should contact a supervisor or manager for that assistance.

#### SECTION I. CELL PHONE NOTIFICATION

Here are some examples of ways that you may be notified of a "Collection Systems Incident".

- **1. Collection Systems Alarm Computer;** the automatic dial out system will call you for a problem at a sewage or storm pump station if it is equipped with an alarm package. The following sewage pump stations are equipped with alarm systems; #1, #2, #3, #4, #9, #10, #11, #12, #13, #14, #15, #16, #17, #18 as well as **the entire** storm water pumping stations. This is what will happen;
  - A) You will receive a call on the Duty cell phone from the Alarm Computer.
  - B) The call will give you a greeting and then the first step will be to enter your access code, (the four (4) digit code you preselected), followed by the pound (#) sign. The computer may tell you "I did not get your access code, please try again". With some phones you may have to enter it more than once due to interference. It helps to press and hold each number for just a second.
  - C) It will then announce it is a storm or sewer pump station, the station number and name.
  - D) Then it will tell you the station IS or WAS under an alarm condition and to press the star (\*) key to repeat the message or any other key to continue. **If the station "IS" under alarm condition, it will be necessary to respond further.** If the station "WAS" under alarm condition, the alarm has already cleared and it will not be necessary to respond.
  - E) After you have written down all the information about the alarm for the "Collection

**Systems Incident Report**" described in **Section II**, it will tell you to enter your acknowledgment code, (the four(4) digit code you preselected), followed by the pound (#) sign. It will then tell you "the alarm has been acknowledged, thank you, good bye". You may then hang up and respond to the alarm location if needed.

- 2. Wastewater Treatment Facility Personnel, between 0630 hours and 1700 hours, every day of the week, including holidays, the staff of the wastewater treatment plant may contact you. Get all the information from them and respond to the scene. Treatment Plant personnel are unable to respond to any outside calls.
- 3. Emergency Dispatch Center, You may receive a call from NET Comm, the emergency dispatch center, regarding a sewer or storm drain problem reported by the public. Be sure to write down all information for the "Collection Systems Incident Report" such as: the reporting party's name, address, phone number, etc. and respond to the scene.

#### SECTION II. COLLECTION SYSTEMS INCIDENT REPORT:

Upon receiving a call reporting a sewage incident or pump station problem, a "COLLECTION SYSTEMS INCIDENT REPORT" will be started and Section I of that report will be completed in full while the reporting party is on the line or immediately thereafter. The report is to be taken into the field by the responding party and Section II will be completed in full if a sewage overflow condition exists. Section III is to be used to record time and events as they occur, some examples are; time of arrival on the scene; path of the overflow; the time the overflow was stopped; the cause of the overflow; action taken to stop the overflow; the time cleanup was started and completed and what steps were taken in the cleanup procedure. Record all other information regarding the incident response, regardless if a sewage overflow occurred or not. If a sewage overflow did occur, you also need to follow the steps outlined in **Section IV. - 5.** 

#### **SECTION III. RESPONSE:**

Immediately go to the scene of the reported problem and assess the situation to determine what course of action needs to be taken and call additional personnel and/or equipment if required. As a First Responder you are required to remain on the scene until all necessary actions have been completed. Responsibilities include traffic and pedestrian control, containment of the spill; cleanup of the spill, notification of the spill to proper agencies and completion of all documentation on the spill.

1. CUSTOMER SERVICES PERSONNEL are First Responders from 8:00 AM to 4:30 PM on Monday through Friday, on regular workdays. As "First Responder" you must remain on scene until all necessary actions have been completed. First Responder is responsible for containment, clean-up and initial notification of agencies on all spills.

After recording the information for the "Collection Systems Incident" report, City personnel will contact the Customer Services personnel, Max Brandenburg (831)234-7136 or Customer Services (831)768-3133. Customer Services personnel will go to the scene and determine what the problem is and what course of action needs to be taken. If it is determined that the City's sewer line is the problem, Customer Services personnel should contact Collection Systems personnel between the hours of 0700 and 1530, Monday through Friday, cell phone, (831)247-1014 or (831)750-9619; and relay the incident report above so they may respond to the incident scene. After those hours you will need to contact the Collection Systems On-call personnel to respond to the problem (831)750-9619. If hydro-jet sewer cleaning equipment is needed to open a blocked main sewer line use the phone list in **Section IV - 2**, to contact personnel to respond to the scene.

2. Collection Systems Call Duty Personnel are First Responders after regular business hours from 3:30 PM TO 7:00 AM week days and all day on Saturday, Sunday and all City holidays. As "First Responder" you must remain on scene until all necessary actions have been completed. First Responder is responsible for containment, clean-up and initial notification of agencies on all spills.

After recording the information for the "Collection Systems Incident" report, City personnel will contact the Collection Systems On-call personnel using the duty call cell phone number (831)750-9619. Collection Systems personnel will go to the scene and determine what the problem is and what course of action needs to be taken. Traffic and pedestrian control to prevent access to the spill site should be started as soon as possible. If it is determined that the City's main sewer line is blocked, Collection Systems personnel should use the phone list in **Section IV. - 2**, to contact personnel to respond to the scene with line cleaning equipment. While the Call-duty personnel are waiting for the cleaning equipment to arrive they should utilize the sewer map book to locate the manhole downstream from the blockage so they can direct them to the proper manhole.

#### **SECTION IV. CONDITIONS AND ACTIONS:**

#### 1. PUMP STATION FAILURE

Use the maps located in this binder to find the location of the sewer pump station facility. Follow the appropriate pump station check out procedures located in this binder and at each pump station to try to solve the problem you are having. If a sewer overflow occurred follow the instructions in **Section IV. - 5 Sewage Overflow**.

A) Power or Phase Failure; If you receive an alarm of a power failure, you must notify P G & E as soon as possible by following the directions in **Section V. - P.G.& E.** Notification.

B) **Electrical Assistance:** If you have followed the pump station check out procedures and have arrived to the point that "electrical assistance" is needed, call from this list:

**Brad Stokes Utility Elec/Inst Tech** 

(cell) 682-0916

If the above people are unavailable, use the following list of electrical contractors to assist you in solving the problem:

> **Central Electric Company**; **724-6321** (business hours)

**Central Electric Emergencies:** 

**Tony Kulich 724-7016** (home) 251-7100(cell) **685-4346**(pager)

**Sharon Jurach** 724-7628 (home) **Larry Bastian 724-8160** (home)

**Steve DuFour 724-5373** (home - owner)

**Pajaro Valley Electric**; **724-4757**(business hours)

**Emergencies**; Paul Lauesen **728-4856**(home) or **320-2664**(cell)

**State Electric Company; 457-3911** (all hours)

#### 2. LINE BLOCKAGE;

If you are called to a sewer problem and find that a manhole on the main line is filled (stacked) with sewage you will need to contact personnel to use cleaning equipment to clear the blockage. Use the Sewer Maps to locate the downstream manhole from the blockage and direct the cleaning personnel to this location to clear the blockage. The Vactor requires a minimum of two persons for proper safe operations and so the first responder will need to stay and assist the Vactor operator. If a sewer overflow occurred follow the instructions in **Section IV. - 5 Sewage Overflow**.

A) Vactor Operator Personnel:

City Personnel:

(cell)	818-8101
(cell)	770-9933
(cell)	750-5251
(cell)	588-7821
(cell)	840-1871
(cell)	345-6139
	(cell) (cell) (cell) (cell)

B) Green Line Septic Office 722-6771 or 423-4003

#### 3. RESIDENTIAL OR BUSINESS BACKFLOW DUE TO LINE BLOCKAGE;

The first goal will be to stop the overflow and the second goal will be to clean up the residence or business as quickly as possible, these steps will be in addition to the instructions in **Section IV. - 5 Sewage Overflow**.

A) NOTIFY MANAGEMENT PERSONNEL AS SOON AS POSSIBLE FOR FURTHER INSTRUCTIONS. Ruben Tellez, cell / (831)818-8101; Ryan Smith, office/ (831)768-3170; Christian Di Renzo (831)768-3160

B) Contact one of the following companies for cleanup assistance:

Serv-Pro;	457-1997	(all hours)
Valley Cleaning Service;	722-6100	(all hours)
Bob's Restoration;	728-0400	(all hours)
Disaster Kleanup Specialists;	899-3938	(all hours)
Service Master Cleaning;	722-9810	(business hours)

C) Management personnel will notify the City's Risk Manager the next working day.

NOTE;

In the event that a cleaning company is not readily available, city personnel can be used for the startup of initial clean up in conjunction with the help of a septic hauler until a cleaning company can take over.

#### 4. LINE BREAKAGE - EMERGENCY REPAIRS REQUIRED;

In the event of a broken gravity sewer line or force main line that is not repairable by city personnel, notify one of the following companies for assistance. The Collection Systems Division has emergency repair materials located at the Wastewater Treatment facility. If a sewer overflow occurred follow the instructions in **Section IV - 5 Sewage Overflow**.

Don Chapin Company;	(831)449-4273	(for all hours)
<b>Durden General Engineering</b>	(831)443-4753	(for all hours)
Granite Construction Co;	(800)472-6483	(for all hours)
Emergencies; Chris Sveum Jim Gaither	(831)750-0438 (831)750-0313	(cell) (cell)

**Betz Construction** (831)761-2363 (business hours)

Monterey Peninsula Eng.; (831)384-4081 (business hours)

**Cabrillo Plumbing**; (831)728-2324 (6:00 AM - 4:00 PM)

#### 5. SEWAGE OVERFLOW - PUBLIC;

The primary duty is to stop the overflow. When more personnel are available, or as soon as time permits, begin to complete the following instructions related to the spill. In addition to following these instructions, you will also need to follow the instructions in SECTION IX. SPILL NOTIFICATION AND REPORTING PROCEDURES TO THE REGULATORY AGENCIES.

- A) If sewage is flowing into a storm drain or drainage ditch use any means available to stop the sewage from entering the storm drain, contain it in the storm drain system or the drainage ditch. In example, damming with dirt or sand bags, closing a gravity gate valve at a storm pump station, covering or filtering the drain inlet.
- B) Set up a perimeter around the spill site to prevent vehicle and pedestrian traffic from entering the spill site.
- C) Clean up all standing wastewater and solids from the ground, the storm drain system or from any stream, water way or slough where it may be trapped, as soon as possible, if it is possible. You may also utilize septic hauling companies for assistance in the cleanup procedures. If you are not sure how to handle the cleanup procedure, contact a supervisor or the Santa Cruz County Environmental Health Dept. at (831)454-2022. Santa Cruz County Environmental Health may be reached after hours by contacting Net-Comm (emergency dispatch center) at (831)471-1170 and ask that they return your call. Give S.C.C.E.H. the full information regarding the spill and they can advise you on the appropriate cleanup steps to take. They may ask that the contaminated area be posted with warning signs and those signs are located at the wastewater treatment plant.
- D) Once all of the overflow area has been appropriately cleaned, then flush the entire spill area with large amounts of fresh water and vacuum all wash water.
- E) Go to **Section IX "SPILL NOTIFICATION AND REPORTING PROCEDURES"** to notify the appropriate regulatory agencies of the sewage spill.
- F) Be sure to log the times that pertinent events happened or were completed. What time the overflow was stopped, the estimated gallons per minute and the total volume of the overflow, what time was the area cleaned, what steps were taken in the cleanup procedure and what time the appropriate regulatory agencies were notified.
- G) Return the completed collection system incident report to the Collection Systems Manager or the Source Control Manager the next working day so the appropriate written reports can be sent to the proper regulatory agencies.
- H) If hazardous materials are involved, call Net-Comm at (831)471-1170 and have

them dispatch Watsonville Fire Department. Control and command of a hazardous material spill scene will be relinquished to the Fire Department upon their arrival. (THE VACTOR WILL NOT BE USED TO REMOVE ANY HAZARDOUS MATERIALS, INCLUDING OILS, FUEL OR PAINT FROM ANY SPILL SITE)

#### 6. SEWAGE OVERFLOW - PRIVATE PROPERTY;

The primary duty is to stop the overflow. When more personnel are available, or as soon as time permits, begin to complete the following instructions related to the spill. In addition to following these instructions, you will also need to follow the instructions in SPILL NOTIFICATION AND REPORTING PROCEDURES TO THE REGULATORY AGENCIES.

- A) **Spill only on private property** call Customer Service and have them notify the resident and the property owner. No further action is needed.
- B) **Spill on private property, but is likely to enter public property** such as a storm drain or the street knock on the door to see if the resident is available. If not, call Customer Service to contact the owner to inform them of the problem. Notify the owner that the water will be turned off if the spill is not stopped by the anticipated time that the sewage will exit the property.
- C) **Spill flowing onto public property** call Customer Service and have personnel respond immediately to turn the water off. Call Duty personnel turn the water off if the problem is during their call-duty time. Contact resident, and or property owner and tell them:
  - a) Sewage is flowing from their property onto public property and the City has, or will be, turning the water off until repairs are completed.
  - b) Notify the owner that the entire spill, on both public and private property, needs to be cleaned up immediately.

If the owner is not available at the location, or unable to contact, leave message that;

- a) Sewage from their property is spilling onto public property and that the City has turned the water off.
- b) The City will clean up the spill, or will have a private septic hauler clean up the spill. Leave the name of the company with the owner, and property owner will be billed for the cleanup.
- c) The cause of the spill must be fixed before the water will be turned back on.
- d) Notify resident, or place a sign on the door to let residents know that the water has been turned off.
- D) Go to **Section IX "SPILL NOTIFICATION AND REPORTING PROCEDURES"** to notify the appropriate regulatory agencies of the sewage spill.
- E) Be sure to log the times that pertinent events happened or were completed. What time the overflow was stopped, the estimated gallons per minute and the total volume of the overflow, what time was the area cleaned, what steps were taken in the cleanup procedure and what time the appropriate regulatory agencies were notified.

- F) Return the completed collection system incident report to the Collection Systems Manager or the Source Control Manager the next working day so the appropriate written reports can be sent to the proper regulatory agencies.
- G) If hazardous materials are involved, call Net-Comm at 471-1170 and have them dispatch Watsonville Fire Department. Control and command of a hazardous material spill scene will be relinquished to the Fire Department upon their arrival. (THE VACTOR WILL NOT BE USED TO REMOVE ANY HAZARDOUS MATERIALS, INCLUDING OILS, FUEL OR PAINT FROM ANY SPILL SITE)

#### SECTION V. PG&E NOTIFICATION;

**1.** If you have followed the procedures and arrived to the point that PG&E needs to be notified look up the meter number(s) for the stations affected on the following list, PG&E will need this information.

#1	Master Station	Pajaro Dunes	1008828356	has back up power.
#2	Sanderling Circle	Pajaro Dunes	1008828353	has back up power.
#3	Puffin Lane	Pajaro Dunes	1008828322	has back up power.
#4	Pajaro Dunes North	Pajaro Dunes	1009549244	has back up power.
#9	Bay Breeze	Watsonville	1008831823	has back up power.
#10	Miles Lane	Watsonville	1008831750	has back up power.
#11	Parking Garage	Watsonville	85R377	Minimal flows can be off 3 days.
#12	Marigold Meadows	Watsonville	1008828621	has back up power.
#13	Oakridge	Watsonville	1008828339	has back up power.
#14	Madonna Vista	Watsonville	1008831754	has back up power.
#15	North Main	Watsonville	1008828349	has back up power.
#16	Westgate	Watsonville	1009547839	has back up power.
#17	Harkins Slough	Watsonville	1008828383	has back up power.
#18	Callaghan Park	Watsonville	1008717955	Minimal flow, can be off 3 days.

- 2. Call PG&E at the emergency pager number (1-800-888-8889 or 784-3567) and follow the reporting instructions. Relay all of the information regarding the outage that you have obtained. Let them know what type of station the outage is affecting (sewer or storm pump station, etc.) and the severity of restoring the power ASAP. If it is a sewage lift station, let them know there is the possibility of a sewer overflow. Once you have completed your message press the one (1) key, a recording will come back on and give you further instructions with options to mark your message urgent.
- **3.** The PG&E Call Duty personnel may ask you to inform the PG&E Call Center about the problem and relay all the information from above, that number is **(1-800-468-4743)**.
- **4.** If the power has been out or will not be restored for some time, one or more septic hauling companies may need to be called for pumping assistance to control the wet well

levels depending on the number of stations without power. Most stations have backup power, further information on that is located on the pump station check sheets in the notes section at the end.

#### **SECTION VI. RESOURCES:**

The responding party shall have at their disposal, all resources available to the City:

**1. Wastewater Division** vehicles and equipment, after 5:30 PM by pager at 687-1867.

#### **Vactor Operator Personnel:**

Ruben Tellez	(cell)	818-8101
Edgar Quintero	(cell)	770-9933
Jaime Preciado	(cell)	750-5251
Marcos Lona	(cell)	588-7821
Rudy Zaragoza	(cell)	840-1871
Erik Lopez	(cell)	345-6139

- 2. Water Services vehicles and equipment, after normal hours notify Call Duty personnel at 247-1019
- 3. **Pump Trucks**; if the possibility of a sewage overflow exists at a sewage pump station, or on private property, a septic hauling company will need to be summoned to pump the station level down, or clean up (vacuum) a spill, until any repairs are completed. At some stations, or if you have multiple stations without power, more than one truck may be needed. Let them know they may be dumping into a manhole to unload. Use the following list to call for assistance.

Titus Septic Tank Service;	688-2245	(business hours)
Pete's Outflow Technicians;	475-0959	(business hours)
	699-1564	(home)
Greenline Septic Tank Service;	722-6771	(all hours or emergencies)
Al's Septic Tank Service;	443-0545	(home)
	754-6466	(Al's pager)
	683-2362	(answering service)
Art Edsberg and Son;	722-1837	(all hours or emergencies)

**4. Plumbing Companies;** if there is a sewer spill on private property, or a problem with a City owned building, due to a blocked sewer lateral, responding City personnel should use this list to contact a plumbing company to respond to the site and restore flow in the sewer lateral. Ask for a time of arrival, and if the response time is significant, call another company to perform the work.

Tino's Plumbing; 724-4300 (all hours) Watsonville Plumbing; (business hours) 761-3332

Mario's plumbing 588-4521

Roto-Rooter 722-2330 (all hours)

**SEPTIC HAULER DUMP PROCEDURES**; to arrange for dumping of pump trucks if required, you may use the sewer map book to locate a sewage line with a minimum diameter of 18". The pump truck can then dump in a convenient manhole on that line. Here are some appropriate locations; the main parking lot at Ramsey Park; First St. off of Locust St. and Riverside Dr. or Ohlone Pkwy. Just off of Beach Rd.

#### SECTION VII. SANITARY SEWER OVERFLOW CLEANUP AND MONITORING PROGRAM:

In the event of a sanitary sewer overflow, personnel responding will comply with the following procedures for cleanup monitoring.

- 1. After a sanitary sewer system overflow has been cleaned up a visual inspection of the spill area will be performed to determine if any additional clean up measures should be undertaken. The visual inspection shall consist of walking the perimeter of the spill area or effected waterway looking for any residual solids that need to be removed. If the spill entered a waterway, personnel shall observe the waterway downstream of the overflow for signs of any distressed aquatic life. (Examples may be crawdads that are attempting to leave the waterway or fish that are exhibiting abnormal behavior.)
- 2. If a waterway was affected and distressed aquatic life is observed, personnel shall perform dissolved oxygen (D.O.) level readings using a portable D.O. meter. These readings shall be taken every 10 feet along the effected waterway beginning 50 feet upstream of the overflow entry point and continuing until D.O. readings are similar to those observed upstream. A diagram shall be sketched of the affected area and it shall indicate the areas where the D.O. readings were taken and the D.O. levels observed.
- 3. If the dissolved oxygen readings taken downstream of the spill site are lower than the dissolved oxygen readings taken upstream of the spill site, bacterial samples will need to be taken. The City's Utilities Laboratory will analyze the samples for total coliform, fecal coliform and enterococcus. These tests are consistent with the County of Santa Cruz Health Department sewage sampling protocols. Samples will be refrigerated until they are delivered to the City's Utilities Laboratory.

# SECTION VIII. SPILL NOTIFICATION AND REPORTING PROCEDURES TO THE REGULATORY AGENCIES:

- 1. PHONE NOTIFICATION 8:00 AM to 5:00 PM, Monday thru Friday;
  - A) All sanitary sewer overflows:

Regional Water Quality Control Board: (805)549-3147 Santa Cruz County Environmental Health: (831)454-2022 California State Office of Emergency Services: (800)852-7550

B) Any spill which enters a storm drain or waterway:

California Department of Fish & Wildlife: (707)428-2002

C) If the Pajaro River is effected:

Monterey County Environmental Health: (831)755-4544

- 2. PHONE NOTIFICATION 5:00 PM to 8:00 AM, Monday thru Friday, and all day on holidays and weekends:
  - A) All sanitary sewer overflows:

Regional Water Quality Control Board: (805)549-3147
Santa Cruz County Environmental Health: Net-Comm. at (831)471-1170
California State Office of Emergency Services: (800)852-7550

B) Any spill which enters a storm drain that flows to a waterway:

California Department of Fish & Game: Net-Comm at 831-471-1170

C) If the Pajaro River is effected:

Monterey County Environmental Health: (831)755-4500

3. STATE WATER RESOURCES CONTROL BOARD - ONLINE REPORTING

To be completed in accordance with WDR Order No. 2006-0003-DWQ, these instructions are for the following personnel that have been registered with the CIWQSas Data Submitters for sewer spill reporting purposes. The first available Data Submitter, from the following list, should report the sewer spill. It is not

necessary to report a spill to this agency if it was contained, cleaned up and did not enter a waterway.

> Ruben Tellez **Edgar Quintero** Ryan Smith

- A) Using a PC, go to the web page at: http://ciwgs.waterboards.ca.gov/ciwgs/index.jsp
- B) Enter your user ID (shown above) and password (given to you by the SWRCB), then click the "LOG ON" box.
- C) On the left side of the screen Main Menu click on the "SSO" link.
- D) On the left side of the screen, click on the "Reporting New SSO" link.
- E) Complete the form as instructed.

In the event that you are encountering problems during the reporting process, you may call the SWRCB's / CIWQS Help Center at (866)792-4977 for assistance in completing the report.

#### 4. WRITTEN REPORTING:

To be completed in accordance with MRP 2006-0003-DWQ by Ruben Tellez, Edgar Quintero, or Ryan Smith. For spills greater than 20 gallons, a completed "RWQCB Report" form must be faxed, to the following individuals or agencies within 5 days:

A) Regional Water Quality Control Board,

- (fax) 1-805-543-0397
- B) John Ricker, Santa Cruz County Environmental Health, (fax) 831-454-3128

If a waterway was affected:

- C) Bay Delta Region 3 Regional Manager (707) 428-2037
  - If the Pajaro River was affected:
- D) Monterey Co. Environmental Health (fax) 831-755-4880

### **APPENDIX B**

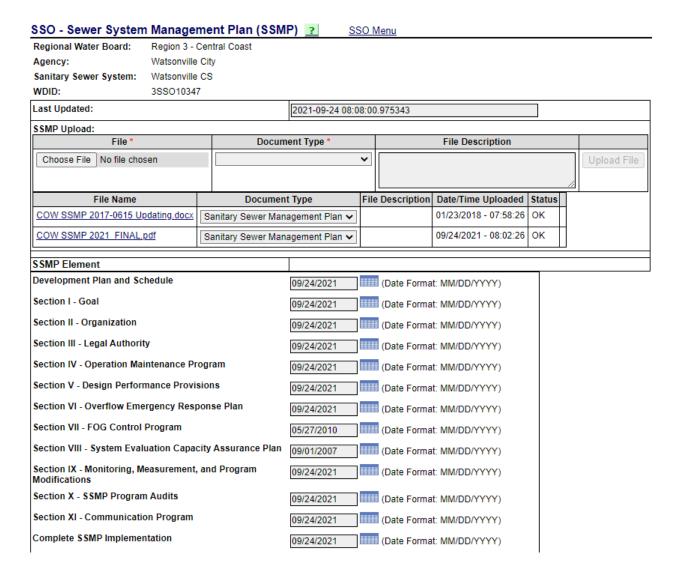
# CITY OF WATSONVILLE COLLECTION SYSTEM INCIDENT REPORT

Revised: March 10, 2009

DATE: _	TIME:
NAME O	F REPORTING PARTY:
PHONE :	NUMBER OF REPORTING PARTY:
LOCATION	ON OF INCIDENT:
PERSON	I TAKING REPORT:
	(complete this area if incident involved a sewage overflow)
•	ESTIMATED AMOUNT OF FLOW:
•	ESTIMATED TOTAL GALLONS OF SPILL:
	AREAS OF SPILL IMPACT i.e.; storm drains, water ways, ground, etc.
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TIME AN	ND EVENTS INFORMATION:
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#### APPENDIX C

#### SSMP CERTIFICATION



# 2021

## CITY OF WATSONVILLE SEWER SYSTEM MANAGEMENT PLAN

### APPENDIX D

CD COPY OF 2007 - SANITARY SEWER SYSTEM EVALUATION AND CAPACITY ASSURANCE PLAN (SECAP)