Oceano Community Services District

Mission Statement: **to provide the citizens of the District quality, innovative, and cost-effective services, including water, sewer, fire protection, and street lighting services, and other miscellaneous items, through responsive and responsible local government to meet the changing needs of the community.**

Sewer System Management Plan

2020 UPDATE

Last update: April 2015

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List of Acronyms

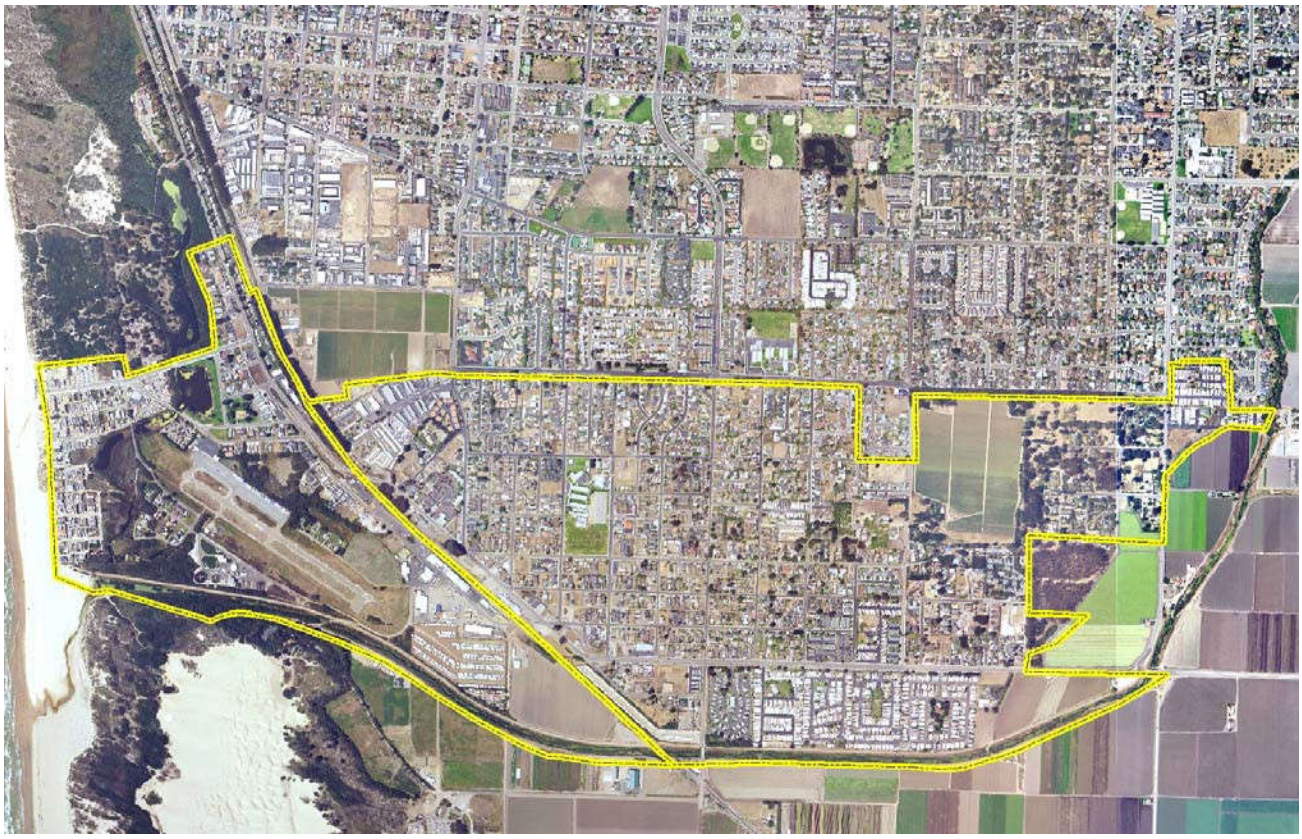
Cal EMA	California Emergency Management Agency (replaced State OES)
CAP	Capacity Assessment Plan
CCTV	Closed circuit television
CDFG	California Department of Fish and Game
CIP	Capital Improvement Plan
CIWQS	California Integrated Water Quality System
CWEA	California Water Environment Association
District	Oceano Community Services District
EH	Environmental Health
FOG	Fats, Oils and Grease
FSE	Food Services Establishment
mgd	Million Gallons per Day
NPDES	National Pollution Discharge Elimination System
OCSD	Oceano Community Services District
OERP	Overflow Emergency Response Plan
OES	Office of Emergency Services (County)
RWQCB	Regional Water Quality Control Board
SHECAP	Sewer Hydraulic Evaluation and Capacity Assessment Plan
SSLOCSD	South San Luis Obispo County Sanitation District
SSMP	Sewer System Management Plan
SWRCB	State Water Resource Control Board
WDR	Waste Discharge Requirement

Introduction

Background

Oceano Community Services District (District) is an unincorporated coastal community on the south coast of San Luis Obispo County. The community is adjacent to the Cities of Grover Beach and Arroyo Grande to the north, agriculture to the east and south-east, the Oceano Dunes to the south-west and the Pacific Ocean to the west. The District has a population of approximately 7,600 residents, located by way of latitude 35.10 North and longitude 120.61 West and encompasses an area of approximately 1.7 square miles.

Figure 1: Aerial View of Oceano Community Services District



The purpose of this 2020 update to the Sewer System Management Plan (SSMP) is to provide for the 5 year update to the 2015 SSMP update. Consistent with the original 2010 SSMP and the 2015 SSMP update, the 2020 SSMP sets forth policies and practices to minimize the potential for sewer spills. It identifies how the District will respond to spills and regulatory reporting requirements to help ensure that the District is prompt when and if spills occur, including communication with other agencies and minimizing risks to public health and safety.

This SSMP is designed so that it will meet the regulatory requirements of both the RWQCB and the Statewide Waste Discharge Requirements. The organization of this document is consistent with the 11 SSMP "Elements." It also includes appendices that provide additional details. Some details are incorporated by reference when they are included in other official documents of the District, and when those other documents are formally updated more frequently than the SSMP. Other details that were included in the 2010 SSMP and excluded in the 2015 and 2020 update, these include education and other reference material that is maintained by the District in its

SSMP administrative files and available to regulatory agencies immediately upon request. By reducing the details in appendices, it is the District's position that the 2020 SSMP provides a better document for staff training and for use in an emergency.

The SSMP includes eleven sections, as follows:

1. Goals
2. Organization
3. Legal Authority
4. Operations and Maintenance
5. Design and Construction Standards
6. Overflow Emergency Response Plan
7. Fats, Oils & Grease Control Program
8. System Evaluation and Capacity Assurance Plan
9. Monitoring, Measurement and Program Modifications
10. Sewer System Management Plan Audits
11. Communication Plan

System Overview

The District maintains its own sewer collection system which encompasses over 22 miles of sewer mains with corresponding manholes, approximately two thousand and five (2,005) active service laterals, and one lift station. The district also provides service to two thousand seventy-two (2,072) active accounts. Of these, one thousand nine hundred sixty-three (1,963) are residential, one hundred one (101) are commercial, and eight (8) serve local Public Agencies. System Maps are maintained by the District Engineer.

The District is responsible for the wastewater collection and transport systems up to the point of discharge into the South San Luis Obispo County Sanitation District trunk system. The District recognizes its responsibility to protect public health and safety, and the environment, while carrying out its duties in operating the collection system, including the ongoing implementation of this SSMP.

Element 1 - Goals

The "Goals" of the SSMP were updated from the original 2010 SMMP to include objective performance measurements. Appendix "A" of the 2010 SSMP was eliminated since it was primarily focused on the original plan development. The purpose of adding objective performance measurements is to help ensure that the District is accountable to meet the ongoing requirements of the SSMP.

1.1 Regulatory Requirements

The summarized requirements for the Goals element of the SSMP are as follows:

RWQCB Requirement:

The Collection system agency must develop goals to manage and maintain all parts of the collections system. The goals should address the provisions of adequate capacity to convey peak wastewater flows, as well as a reduction in the frequency of sanitary sewer overflows (SSOs) and the mitigation of their impacts.

SWRCB Requirement:

The Collection system agency must develop goals to properly manage, operate and maintain all parts of its wastewater collection system in order to reduce and prevent SSOs, as well as to mitigate any SSOs that occur.

1.2 Goals Discussion

The Oceano Community Services District seeks to provide a dependable and properly maintained system for wastewater collection for its constituents by meeting the following goals:

- To be available and responsive to the needs of the public in reference to the public sewer system;
- To work cooperatively with local, state and federal agencies to reduce, mitigate and properly report SSOs;
- To properly manage and maintain the District public sewer system lines to minimize SSOs;
- To meet all applicable regulatory notification and reporting requirements; and
- To comply with the following objective performance measurements:

  - 100% of monthly CIWQS reports are submitted accurately and on time.
  - 100% of notifications and reportable spills, if any, are made timely and in accordance with the regulatory requirements.
  - 100% of work orders are completed, documented and filed in accordance with the SSMP.
  - 100% of FOG inspections are completed on time.
  - 100% of jetting and maintenance is completed, including for High Maintenance Areas.
  - An audit is placed on the Board of Directors agenda every other year, no later than February 28th, which provides the statistics on these objective performance measurements for the prior two calendar years.

Element 2 - Organization

The intent of this section of the SSMP is to identify the District staff responsible for the implementation of the SSMP, responding to SSO events, and meeting the SSO notification and reporting requirements. This section also includes the designation of the Legally Responsible Official (LRO) to comply with the SWRCB requirements for completing and certifying spill reporting.

Element 2: Organization Appendix "A"

Supporting information for Element 2 is included in Appendix A which contains the following:

- **Utility Operations Department Contact Numbers (updated as needed)**
- **District Board of Directors Members names (updated as needed)**
- **Chain of Communication of Sanitary Sewer Overflows (updated as needed)**
- **Organizational Chart (updated as needed)**

2.1 Regulatory Requirements

The summarized requirements for the Organization element of the SSMP are as follows:

RWQCB Requirement:

The collection system agency's SSMP must identify staff responsible for implementing measures outlined in the SSMP, including management, administration and maintenance positions, and identify the chain of communication for reporting and responding to SSOs.

SWRCB Requirement:

The collection system agency's SSMP must identify:

- The name of the responsible and authorized representative
- 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 documents with a narrative explanation

2.2 Chain of Communications

The chain of communication for reporting SSOs, from receipt of a complaint or other information, including persons responsible for notifications to the California Office of Emergency Services and for reporting SSOs to CIWQS in accordance with "State of California Water Resources Control Board Order No. WQ 2013-0058-EXEC." Copies of this SSMP and WQ 2013-0058-EXEC are maintained together in binders at the District's Administrative Office, Field Office, and each field vehicle to enhance access during emergencies.

2.3 Oceano Community Services District Organization

The District is governed by a five member body, known as the Board of Directors, with each Board Member normally serving a term of four (4) years. The Board of Directors is an elected body that makes decisions that are in the best interest of residents and the District. The Board of Directors establishes policy, sets goals and objectives, approves the annual budget, approves expenditures and performs other related functions.

The Utility Operations Manager is responsible for all Wastewater Collection operations and reports directly to the District General Manager who reports to the District Board of Directors.

The role of the Utility Operations Manager is the authorized representative responsible for implementation of the Sewer System Management Plan (SSMP), including, but not limited to the following:

- Preventative maintenance work
- Responding to spills if and when they occur
- Complying with all SSMP regulatory notification and reporting requirements.

The District General Manager is responsible for management oversight and ensuring that the Utility Operations Manager is implementing the SSMP, including but not limited to, the following:

- Ensuring that administrative procedures and work orders are documented and filed in an organized manner, and available for inspection immediately by regulatory agencies
- Ensuring that any items requiring consideration by the Board of Directors are timely
- Ensuring that the SSMP audits and plan updates are completed in a timely manner
- Ensuring the SSMP information on the District website is updated in a timely manner
- Ensuring that the Utility Operation Manager has met the District's responsibilities in preventative maintenance, responding to SSOs, and requirements for notification and reporting.

Other staff members include Utility System Operators and Administrative staff.

The District has operating staff on-call twenty four (24) hours per day.

Office & 24 Hr. Emergency

The Oceano Community Services District Office is open Monday through Friday from 8 am to 5 pm, excluding holidays. All emergency Utility Operations Department calls can be directed to the District's direct line and on-call staff will respond.

Oceano Community Services District
1655 Front Street
Oceano, CA 93445
(805) 481-6730

2.4 Responsibility for SSMP Implementation

The following table illustrates the responsibilities for implementing each of the SSMP Elements.

Table 2-1: Responsibility for SSMP Implementation by Element

Element	SSMP Description	Responsible Person(s)
1	Goals	General Manager
2	Organization	General Manager
3	Legal Authority	General Manager
4	Operations and Maintenance	Utility Operations Manager
5	Design and Performance Standards	Utility Operations Manager, District Engineer
6	Overflow Emergency Response Plan	Utility Operations Manager
7	Fats, Oils and Grease Control Plan	Utility Operations Manager
8	System Evaluation and Capacity Assurance Plan	Utility Operations Manager, District Engineer
9	Monitoring, Measurement and Program Modifications	General Manager
10	SSMP Audits	General Manager
11	Communication Plan	General Manager

2.5 Chain of Communication for Responding to SSOs

The Chain of Communication for responding to SSOs begins with contact to the Oceano Community Services District.

The Oceano Community Services District contact number is (805) 481-6730 and is answered 24/7 hours per day.

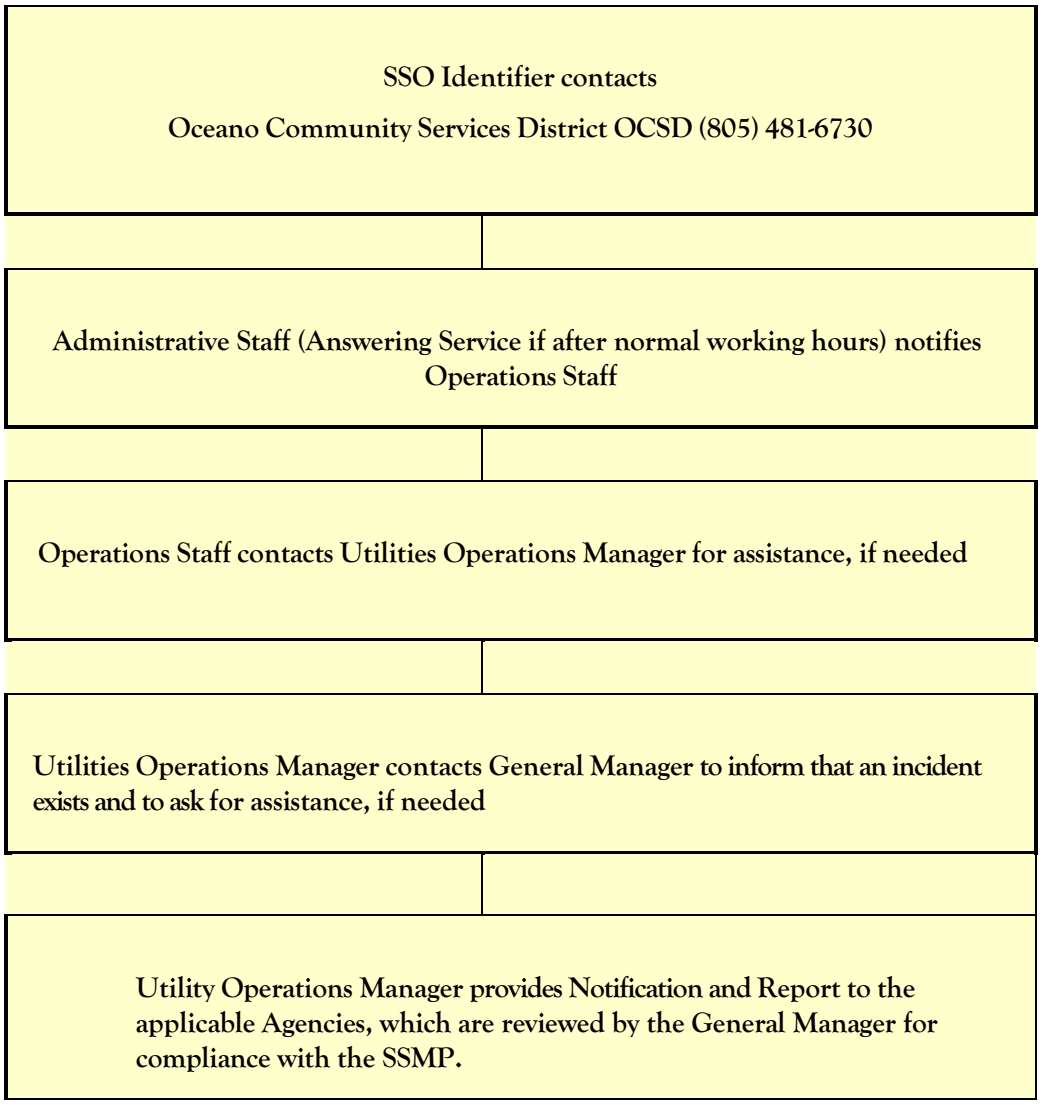
All after hours emergencies are forwarded to the on-call Utility System operator by the District's answering service.

Specific documentation has been developed and implemented for all operational staff's use in responding to calls including spills. Work orders are established for all calls, including documentation in the event of a spill. The spill documentation is then transferred to the State using the mandated on-line reporting system located at: https://ciwqs.waterboards.ca.gov/. Below are the step-by-step procedures that are followed in the event of a spill in order to protect the public and the waterways.

In the event of a possible wastewater spill, or when staff is contacted concerning odors, standing water or an overflowing manhole, the following steps are taken to verify the report and ensure the safety of the public:

1. The receiver of the call (District Staff) will obtain the location from the contact person and record any description they may have of the problem using all proper documentation. Additionally, District Staff will obtain the caller's name and phone number for any follow-up information.
    a. Lift station alarms are set up with automatic dialers that call all four District field personnel.
2. The District Staff will contact the on-call Utility Operations personnel by phone immediately and direct staff to the described location. The sewer system overflow report is initiated and provided to the responding staff.
3. Operations Staff will proceed to the location to verify report.
4. The on-call Utility Operations personnel may request further support. If a staff member is dispatched they will keep administrative staff informed of progress as necessary.
5. Operations Staff will notify the Utility Operations Manager or their delegate.
6. The Utility Operations Manager or their delegate will notify the California Office of Emergency Services in the event of a spill equal to or greater than 1,000 gallons that contacts or is probable to contact surface water.
7. Upon completion of containment and clean-up, Utilities Operations Manager will use the Sewer System Overflow Report (SSOR) to complete the final spill report to the SWRCB CIWQS database, and the Regional Water Quality Control Board (RWQCB) (An example of the SSOR is found in Appendix C).

Figure 2-2 - Chain of Communication for Responding to SSOs



Element 3 – Legal Authority

The District established comprehensive Sanitary Sewer System Rules and Regulations through the adoption of Ordinance 1984-2 (District Code 9.02.030 – 9.14.010), which is on the District website and is available to the public by request.

Element 3: Legal Authority Appendix

There is no appendix associated with Element 3.

3.1 Regulatory Requirements

The District will demonstrate, through its sewer ordinances, service agreements, or other legally binding procedures, that it possesses the necessary legal authority to:

- Prevent illicit discharges into its sanitary sewer system (examples may include Inflow & Infiltration (I/I), storm water, chemical dumping, unauthorized debris and cut roots, etc.);
- Require that sewers and connections be properly designed and constructed;
- Ensure access for maintenance, inspection, or repairs for portions of the lateral owned or maintained by the Public Agency; and
- Limit the discharge of fats, oils, grease and other debris that may cause blockages.

3.2 Legal Authority Discussion

The sections of the District's legal authority to prevent illicit discharges into the sewer system including I/I from laterals, storm water, unauthorized debris, etc. can be found in:

- District Code 9.02.030 - 9.14.010:
    - District Code 9.12.020 - Drainage into Sanitary Sewers Prohibited
    - District Code 9.12.030 - Types of Wastes Prohibited
    - District Code 9.12.040 - Other Wastes Prohibited
    - District Code 9.10.030 - Interceptors Required
    - District Code 9.04.030 - Design and Construction Requirements
    - District Code 9.12.090 - Manner of Connection of Building Sewer to Lateral Sewer
    - District Code 9.10.070 - All Work to be Inspected
- South San Luis Obispo County Sanitation District's 2011-1 Pretreatment Ordinance and Requirements
- South San Luis Obispo County Sanitation District's 2008-01 FOG Ordinance

The District is a satellite wastewater collection system which discharges into the South San Luis Obispo County Sanitation District's (SSLOCSD) trunk line.

3.3 Design and Construction

This section of Legal Authority defines requirements for the proper design and construction of sewers. The purpose of the Standards and Specifications is to provide minimum standards for the design, acceptable types and uses of materials, and the preparation of plans for construction, repair, or alteration of District sewer and water facilities.

- District Code 9.02.030 - 9.14.010:

    - District Code 9.06.020 - Permits required
    - District Code 9.02.030 - Uniform Plumbing Code
    - District Code 9.04.030 - Design and Construction Requirements
    - District Code 9.12.090 - Manner of Connection of Building Sewer to Lateral Sewer
    - District Code 9.10.070 - All Work to be Inspected

The sections above do not address the pipe size that should be used. The applicant must receive approval for all work proposed by the County of San Luis Obispo and the South San Luis Obispo Sanitation District prior to commencement of work.

The standards and specifications used are obtained from San Luis Obispo County or the State of California.

3.4 Ensure Access for Maintenance, Inspection and Repairs

The District's current Ordinance permits District Staff with proper identification to enter premises for inspection, sampling and testing.

- District Code 6.12.090 – Admittance of District's Employees to Customers' Premises

3.5 FOG Control

The District has developed a FOG Control and Inspection Program. The District, as a member agency, falls under the jurisdiction of the South San Luis Obispo County Sanitation District's FOG Ordinance. The FOG Ordinance and the District's FOG Control Program work in conjunction to govern the sewer system regarding FOG discharges.

- District Code 6.14.010 - Promulgating the Rules and Regulations of the Oceano Community Services District, District Code 9.12.060 - Interceptors Required
- Pretreatment Ordinance 2011-1 (South San Luis Obispo County Sanitation District)
- FOG Ordinance 2008-01 (South San Luis Obispo County Sanitation District)

See Element 7 for detailed information pertaining to the FOG Control Program.

3.6 Enforce Violations of its Sewer Ordinance

It is essential to protect the District from chronic violators of illegal discharges or manipulations of the sewer system. In the event that a person fails to comply with the current regulations, violations will be issued. The right to do so is found in:

- District Code 6.04.020:

    - Section M - Liability for Violation of Ordinances, Rules and Regulations
    - Section N - Continued Violation is a Public Nuisance
    - Section O - Disconnection for Violation
    - Section Q - Means of Enforcement

- Section R - Violations of Ordinances, Rules and Regulations is a Misdemeanor
- Section S - Violator Liable for Any Expense, Loss or Damage to the District

The above sections allow the District to serve a written notification for correction to any person who is in violation of the District Code, and that person will be held liable for any damages resulting from such violation.

3.7 Sewer Use Fees

Sewer fees are periodically reviewed for proper fee structure and applicability. This is further discussed in:

- District Code 9.08.020:

  Section A– Rates and Fees

Rates, fees and charges assigned and collected and the terms, provisions and conditions to be effective respecting such rates for any service performed or provided by the District shall be fixed and established by the Board by separate ordinance. The Board also reserves the right to change the schedule of fees, rates and other charges at any time.

Element 4 – Operations and Maintenance

The Oceano Community Services District understands that the responsibility for the operation and maintenance of the collection system extends beyond that of the maintenance staff. An efficient system involves the joint cooperation of agency engineers, management, maintenance staff and the District's customers.

The District's operation and maintenance of its collection system ensures that the system is kept in good working condition. It requires that the system be regularly maintained, so that the wastewater enters the treatment plant in an efficient way. As maintenance staff performs regular repairs and upkeep, they provide practical experience and knowledge, which are vital to the operation of the sewer system.

Element 4: Operations and Maintenance

Supporting information for Element 4 is included in either an external document such as the District's Annual Budget, and hereby incorporated by reference, or in Appendix **B** which contains the following:

- **Capital Improvement Budget (See Annual Budget Fiscal Year 2019-20)**
- **High Maintenance Areas (HMA) and Sewer System Cleaning Schedule (Appendix B)**
- **Collection system map (Appendix B)**
- **Inventory List (Support Schedules for the District's Annual Audit)**
- **Investigative Form (Appendix B)**
- **Maintenance Work Order Form (Appendix B)**

4.1 Regulatory Requirements

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

4.1a Collection System Map

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 stormwater pumping and piping facilities.

4.1b Preventive Operation and Maintenance

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 Preventive Maintenance (PM) program should have a system to document scheduled and conducted activities, such as work orders.

4.1c Rehabilitation and Replacement Plan

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 of 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 for implementing the short and long-term plans plus a schedule for developing the funds needed for the capital improvement plan.

4.1d Training

Provide training on a regular basis for staff in sanitary sewer system operations and maintenance, and require contractors to be appropriately trained.

4.1e Inventory

Provide equipment and replacement part inventories, including identification of critical replacement parts.

4.2 Collection System Map – See Appendix B

The District maintains a collection system map that identifies all of the following features: location of the sewer lines, manholes, cleanouts, pipe sizes and pipe materials. The pump station and other special structures are also identified.

As-built plans and construction drawings are used to update the system map as it is altered or new appurtenances are added. The field crews and contractors make notations where installation deviates from construction documents and the District Engineer updates the drawings.

4.3 Preventative Operations & Maintenance

The District's maintenance Staff is trained to think of maintenance in terms of two different types.

Corrective maintenance referring to immediate maintenance: This can be an actual collapse of an existing sewer; stoppage due to roots, grease, or other foreign materials; or excessive inflow or infiltration. These conditions require immediate action to correct the problem and are further discussed in Section 6 – Overflow Emergency Response Plan.

Preventive maintenance which involves inspection of the sewer system and analysis of existing data to identify trouble areas: This provides guidance in developing the type, degree, and frequency of maintenance required.

4.3a Pipeline Maintenance

The Oceano Community Services District has developed a year-round pipeline maintenance program with an emphasis on preventive maintenance, including the following:

- Known trouble locations are identified on the collection system map as "Hot Spots" and are jetted twice per year, or more frequently as needed.
- Trouble areas are videotaped when needed.
- 15 miles of pipeline is jetted per year with video prepared when obstructions or other issues are observed during the jetting efforts. This preventative maintenance effort was initiated in 2014 in an overall effort to provide for more extensive jetting than previous years. As the District proceeds in this higher level of effort, it will be able to identify any additional high maintenance areas, as well as those that do not require as much maintenance, and develop a more efficient program over time.
- Based on cleaning and videos, the District determines which areas of the pipeline system would benefit the most from rehabilitation or replacement.

- The District also implements and oversees an active Fats, Oils, and Grease (FOG) Control Program.

The District's collection system includes a pipeline under the Airpark Drive Bridge which was replaced in 2018.

4.3b Manholes

The Oceano Community Services District uses visual manhole inspections as part of day to day maintenance. It is an inexpensive and quick method of detecting inflow / infiltration sources, the general structural condition of the manhole, and the accuracy of previous system mapping. Visual and video inspections are used to determine the following:

- Location of manholes;
- Condition of cover and frame (defects of which may allow inflow);
- Determination if the cover is subject to ponding or surface run off;
- Potential areas that drain to any defects;
- Condition of benching, risers, grade rings and collar; and
- Condition of sewer pipe entering manhole.

Manhole repairs are required to correct structural deficiencies, effects of corrosion on the internal surface, and to eliminate the entrance of surface inflow or groundwater infiltration. Oceano Community Services District installs manhole inflow covers to minimize potential inflow when defects are discovered.

4.3c Lift Station Maintenance

The District maintains one (1) lift station with duplicate equipment and functions. This provides the flexibility necessary for continued operation during shutdowns due to scheduled maintenance or emergencies. Regular inspections are performed on the lift station that include the bearings, seals and scheduled lubrication, electrical equipment, instrumentation, wet well, screening devices, venting and general housekeeping. Field crews inspect the lift station regularly as part of other maintenance activities.

4.3d Investigation (Complaints)

The investigative form is used to record complaints from the public or from another governmental agency. This report becomes a permanent record and is subject to review. The operators ensure that entries are complete and accurate. The District makes every effort to respond immediately to all sewer-related complaints followed by prompt correction of any defective condition.

4.3e Maintenance Records

The District uses a maintenance request form. This form provides written documentation of specific work that is completed in the field. It includes the day and time the work was requested along with its location, description of the problem and the action that Staff took to resolve the problem. This tool is essential to the District. It allows a basic method of determining HMA locations or areas that may require more attention than previously known.

4.4 Rehab (Repair) and Replacement Program

There are a number of measures that can be adopted to keep the existing sewer collection system functional. These range from local rehabilitation to complete replacement of a section of the sewer.

Rehabilitation is employed when a section of the sewer collection system fails or appears to be about to fail, resulting in inflow/infiltration (I/I) problems, or the potential for blockage of flow. There are several repair methods available. The choice of method or combination of methods depends on the physical condition of the sewer system components (i.e., pipeline sections, manholes, and service connections) and the nature and magnitude of the problems. If the problem does not involve the structural integrity of the system's components or the need to increase the capacity of the existing system, rehabilitation can be an effective way of restoring the utility of the failing system component.

Replacement involves the removal of the existing damaged pipes or manholes and replacing them with new ones. The cost of this method, however, is generally much higher than rehabilitation alternatives, and the duration of work is generally longer.

The District considers many factors when deciding between rehabilitation and replacement. The District cleans and inspects the system regularly and the operations Staff determines if potential problems with the sewer system require rehabilitation or replacement. Lift Station repairs are normally done in-house. Mechanical repairs are performed at the maintenance yard. Minor electrical repairs are undertaken at the lift station by operations staff; otherwise, the District has two on-call electrical contractors when needed. In general, the District maintains in stock a recommended list of spare parts. Repairs requiring outside job contracts are those considered major or more complex in nature such as control systems, motors, variable speed drives, and valves and are subcontracted.

4.5 Capital Improvement Program (CIP)

A sewer system evaluation was completed in 2009 and results showed no need for Capital Improvements at that time. Other than regular maintenance of the system and lift station, the collection is adequate for the services provided. Future evaluations will be performed. The lift station from 1964 is a high priority on the District's capital improvement program.

4.6 Employee Training

Training is provided as a part of various programs and includes formal classroom training, informal on-the-job training and hands-on training. Training is facilitated by both district Staff and outside training workshops. On-the-Job cross training is pursued to ensure Staff has a proficient working knowledge of the sewer system. District Staff is cross-trained so that critical tasks can be done without interruption even when the crew members change. Task proficiency is a requirement for all job positions and promotions, and training records are maintained to monitor completed classes and to schedule employee training.

Utilities Operations Staff is initially trained in the proper operation and maintenance of all new major mobile equipment and facilities by the contractor/manufacturer. Written operation and maintenance manuals are used as a resource material for initial start-up training as well as new Staff training.

Safety training is an integral part of the District's program. Every Staff member receives formal training on the following topics:

- Confined space entry, as needed.
- Traffic Control, as needed
- Hazardous materials management, as needed
- Spill Containment techniques & related field measures that may need to be implemented in responding to a spill (based on current industry information)
- The SSMP itself:
    - Annually upon completion of Annual Performance Measurement Calculations):
    - To confirm annual preventative maintenance efforts
    - To confirm spill and other work order response protocols
    - To confirm documentation requirements
    - To confirm reporting protocols
    - To identify other annual training goals
    - To identify budget requests for the subsequent fiscal year.

The District implements and oversees an active Fats, Oils, and Grease (FOG) Control Program. As part of the FOG Control Program, the District authorized and provided funding for staff as Environmental Compliance Inspectors to review Best Management Practices by Food Service Establishments.

4.7 Equipment and Replacement Inventory

District crews maintain the pump station but do not perform repair or replacement of underground pipelines. Repair and replacement of underground pipelines is contracted out to licensed contractors who have the equipment, materials and staff to complete the work. Parts that are needed for preventive maintenance are identified ahead of time for each specific maintenance task. Parts are secured prior to the start of preventive maintenance.

Redundancy is provided for key pump station equipment and the pump station has backup power to minimize the risk of a complete shut-down. As a backup, the Utility Operations Manager has credit authority to purchase needed materials and supplies from local vendors of non-stock items when they are critically needed.

The District maintains equipment such as sump pumps, portable generators, traffic control and night lighting systems in a ready state for immediate deployment in an emergency. The District also shares resources with neighboring cities.

The District has a procedure for pre-qualifying manufacturers and equipment vendors and, in some cases, purchasing sole-source equipment to standardize equipment and parts. This additional procurement option reduces inventories, simplifies procurement procedures, and reduces training and operation and maintenance costs.

Contractor Training

The District's SSMP does not include measures for contractor training since the District does not issue building or other construction permits. (i.e. Cities and Counties issue building and construction permits). For Oceano, the County of San Luis Obispo issues building and other construction permits.

Element 5 – Design and Performance Standards

This Element of the SSMP covers the standards used by Oceano CSD to ensure proper design and construction of any additions to the collection system. Also covered is the procedure used for inspection and testing of repair and rehabilitation projects.

Element 5 – Design & Standards Appendix

There are no appendices associated with Element 5.

5.1 Regulatory Requirements

The SSMP must identify 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.

The SSMP must identify the procedures and standards for inspection and testing of the installation of new sewers, pumps, and other appurtenances and for rehabilitation and repair projects.

5.2 Design and Construction Standards

Oceano CSD has developed Construction Standards and Specifications that are to be used on all construction in the District. In District Code 6.04.020 Section G, the requirements are set forth as follows: "The minimum standards for design and construction of sewer services to be operated and maintained by the District shall be in accordance with the District Standards and Specifications except where requirements of the State, County or Federal government are more restrictive, in which case the more restrictive requirement shall apply. The administration, inspection, enforcement and acceptance shall be by the District. The District may permit modifications or may require higher standards. Before acceptance of any public service by the District such public service shall have been tested and all work shall have been completed in full compliance with District Standards and Specifications to the satisfaction of the District's Engineer, General Manager or authorized representative."

5.3 Inspection Standards

All construction within the District will be inspected and tested for compliance with the District Standards and Specifications to the satisfaction of the District before being placed into service.

Element 6 – Overflow Emergency Response Plan

This element of the SSMP discusses the Overflow Emergency Response Plan (OERP) for the Oceano Community Services District.

The OERP addresses issues such as spill response, spill detection, mitigation, clean up, investigation, documentation and reporting.

Element 6 - OERP Appendix "C"

Supporting information for Element 6 is included in **Appendix C** which contains the following:

- **Chain of Communicating SSOs**
- **List of Agencies and Contact Information for Reporting SSOs (updated as needed).**
- **Sewer System Overflow Report (SSOR);**
- **Table 1 - SWB Order No. WQ 2013-0058-EXEC "Spill Categories and Definitions"**
- **Table 2 – SWB Order No. WQ 2013-0058-EXEC "Notification, Reporting, Monitoring and Record Keeping Requirements"**

6.1 Regulatory Requirements

The Agency must implement an OERP that identifies measures to protect public health and the environment. At a minimum, the plan will include the following:

- A program to ensure appropriate response to all overflows;
- Procedures to ensure prompt notification to appropriate regulatory agencies and other potentially affected entities. All SSOs shall be reported in accordance with the California Water Code, other State Laws, and other applicable RWQCB WDR or permit requirements, and particularly State Water Board Order No. WQ 2013-0058-EXEC. The OERP Appendix identifies the contact information for officials who will receive immediate notification;
- Procedures to ensure that appropriate Staff and contractor personnel are aware of and follow the OERP and are appropriately trained;
- Procedures to address emergency operations, such as traffic and crowd control and other necessary response activities; and
- A program to ensure that all reasonable steps are taken to contain untreated wastewater and prevent discharge of untreated wastewater to waters of the State and minimize or correct any adverse impact on the environment resulting from the SSO, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the discharge.

6.2 Sewer System Overflow Notification

The District receives telephone calls at one main telephone number (805-481-6730) during business hours and emergency after hours. The District publishes this telephone number in the utility bills and on the District's website, http://www.oceanocsd.org/

When District Staff members notice an SSO during the course of their regular activities, they are instructed to call in to the Utilities Operations Manager and to begin responding to the situation

immediately. The Utilities Operations Manager or delegated maintenance staff is available twenty-four (24) hours per day, seven (7) days per week and are trained on areas that may have the highest risk of overflow. In the event of a spill, containment followed by dry chlorine and wash-down protocol is used. If the event occurs during non-office hours, the District's 24 hour number will contact on-call staff.

6.3 Sewer System Overflow Response

During regular business hours, District office Staff dispatches one or more maintenance staff to respond to a potential SSO. The District's goal for responding to an SSO during business hours is immediate from the receipt of call. During non-business hours, a 24 hour phone number calls on-call staff to respond to a potential SSO. The District's goal for responding to an SSO during non-business hours is 30 minutes. The collection system on-call staff becomes the SSO first responder and is responsible for mitigation, documentation, most reporting, and follow-up.

District policy is to respond to all spills within the service area boundary, to provide mutual aid outside the District boundary, and to take all steps possible to prevent the spills from reaching the storm drains, flood control channels, or waters of the State. Element 2 addresses the organizational structure of the District and details the lines of authority along with the responsibilities of Staff during an emergency.

Utility Operations Staff has basic traffic control equipment, including safety tape and cones, for use in the event of an SSO. The Sherriff's Department can also be contacted to conduct crowd control, if necessary.

6.4 Chain of Communication for Responding to SSOs

See Element 2 for narrative on Chain of Command and Communication for Responding to SSOs.

Organization	Contact Person	Phone Number
California Office of Emergency Services (Contact within 2 hours Cat 1 SSO >1,000 With actual of probable surface water contact	Dispatch	(800) 852-7550

6.5 Reporting Procedures

The District is registered with the SWRCB CIWQS electronic sewage spill reporting system, and shall routinely utilize these procedures. An SSOR will be completed for all reportable spills. The information recorded on the SSOR is entered into CIWQS in accordance with the mandated reporting timelines. Copies of the SSOR are located in the District office.

All reporting shall comply with State Water Resources Control Board Order No. WQ 2013-0058-EXEC, which is hereby incorporated by reference. Copies are kept with this SSMP in District offices and vehicles. Table 1 & 2 are included in Appendix "D."

Sewage Spill Notifications and Reporting shall comply with the requirements of State Water Resources Control Board Order No. WQ 2013-0058-EXEC, which are hereby incorporated by reference. Copies are kept with this SSMP in District offices and vehicles.

6.6 Training

Currently, the District's four (4) member field crew does not have sufficient staff to handle a large scale SSO event. Although the District staffing is limited, it has three options for immediately obtaining support:

i. On call private operators
ii. Other local agencies participating in the CALWarn emergency response program (The District's Board approved its participation in 2014).
iii. Emergency support from the County of San Luis Obispo's disaster planning program:
    a. Countywide Hazardous Materials Response Team in the event of a spill that includes Hazardous Materials, or
    b. The Incident Management Team for support in large scale events that cannot be contained by on-call private operators or from assistance response from other utilities providing mutual aid under the CALWarn agreement.

The OERP Appendix lists the contact information for emergency response assistance identified above.

6.7 Sewer System Overflow Impact Mitigation

The OERP covers spill mitigation and cleanup, including procedures for handling a prolonged SSO situation. The OERP also covers SSO responses for different situations, including wet weather overflows and force main breaks. Mitigation efforts include instructions for setting up parameters and control zones to contain SSOs and prevent sewage from reaching surface waters, storm drains, or other sensitive environmental areas. The OERP includes discussion about public notification procedures when an SSO has the potential to endanger public health.

Utility Operations Staff has basic traffic control equipment, including safety tape and cones, for use in the event of an SSO. The Sherriff's Department can also be contacted to conduct crowd control, if necessary.

The District takes all reasonable steps to contain sewage and prevent sewage discharges to surface waters and minimize or correct any adverse impact on the environment resulting from the SSO, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the discharge.

The Utilities Operations Staff will use suitable materials to block catch basin entrances to storm drains and will also vacuum up spills and provide wash down water where appropriate. The District may use the storm drain system as a containment device, if needed. This is accomplished by using the outlet to the storm drain, blocking the spill and washing the area down with water and then vacuuming the line.

Element 7 – Fats, Oils and Grease Control Program

The Oceano Community Services District has an active FOG control and inspection program. To date, eighteen (18) facilities are enrolled in the FOG Control Program. The District is very proactive in addressing its high maintenance areas attributed to grease that have a history of minor blockages created by these substances.

Element 7 Operations and Maintenance Appendix

Supporting information for Element 7 is included in **Appendix D**:

- **List of Food Service Establishments (FSEs) (Appendix "D").**
- **FOG inspection forms (Appendix "D")**
- **Public Outreach Materials for both residential and commercial customers; Maintained by the District**
- **CalFOG List of approved Grease Haulers; Maintained by the District**

7.1 Regulatory Requirements

The FOG source control program includes the following as appropriate:

- Public education outreach material that promote proper disposal of FOG;
- An Ordinance establishing the legal authority of the District to prohibit FOG discharges to the system and identify measures to prevent SSOs and blockages caused by FOG;
- Requirements to install grease removal devices (such as traps or interceptors) and the development of design standards for such devices, maintenance requirements, Best Management Practices (BMP) requirements, record keeping and reporting requirements;
- Authority to inspect grease producing facilities, enforcement authorities, and whether the District has sufficient staff to inspect and enforce the FOG ordinance;
- An identification of sewer system sections subject to FOG blockages and establishment of a cleaning maintenance schedule for each section; and
- Development and implementation of source control measures, for all sources of FOG discharged to the sewer system.

7.2 FOG Control Program Discussion

The District implements a FOG control and inspection program. The District is responsible for any enforcement needed in situations where the FSE is not compliant after notifications of violation (NOVs) are issued. The District is also responsible for preventative maintenance requirements in High Maintenance Areas.

The goal of the FOG Control Program is to inspect all Food Service Establishments (FSEs), provide education to FSEs and reduce maintenance costs from grease related problems. Doing so should reduce the risk of Sanitary Sewer Overflows and increase the longevity of the collection system sewer lines.

The District's FOG Control Program meets all the guidelines required by the State and Regional Water Quality Control Board and includes the following:

- Restaurants or any food service establishments (FSE) that maintains a food preparation area are required to obtain a FOG Permit.

- FSEs are inspected a minimum of twice per year. FSEs may be inspected more frequently as determined by District needs and/or as warranted by current stages of program compliance and past history.
- All FSEs are required to use best management practices (BMPs) to reduce grease discharged to the sewer system (e.g.; store waste grease in barrels to haul off site, scrape remaining food off plates and into trash receptacle before washing).
- Any FSE planning a remodel is required to include the installation of a grease trap/interceptor.
- All new construction of FSEs will require installation of a grease trap/interceptor, regardless of size or value (type of foods produced may negate the need for trap installation; a variance will be issued in lieu of a permit for trap installation).
- Variances shall be available to FSEs that do not generate grease and do not cause related sewer blockages.
- Food grinders are prohibited in all restaurants except where specifically allowed by the District.

Several options regarding program fees will be evaluated annually. Program fees are intended to help alleviate the burden of program costs and assist in facilitating a successful FOG Control Program. The District currently charges a fee up to $60 bi-monthly that is added to sewer bills for program and inspection costs.

7.3 FOG Control Program Outreach

Each FSE within the District can obtain a Best Management Practices Booklet and training, Grease Hauler List, Cleaning Record Form (in English and Spanish), and a No Grease Poster. These items are available from inspectors when an FSE is inspected.

Residential outreach is also an important element for reducing the amount of FOG entering the collection system. While requiring grease traps and interceptors is not possible to the residential community, education is. The District has started implementing a residential outreach program through flyers in homeowners' utility bills. Flyers intended for sewer bill distribution may involve multiple topics in addition to FOG in order to provide public education in an economically feasible manner. For example, a flyer may incorporate FOG information along with a discussion of proper disposal of prescription medication.

The District's flyer development and distribution is an ongoing process.

7.4 Legal Authority

As a Member Agency the District has adopted South San Luis Obispo Sanitation District's FOG Control Ordinance – 2008-01.

The FOG Ordinance includes:

- Establishment of enforcement authority;
- Limits on types of wastes discharged to public sewers;
- Requirements on specific design and construction of grease interceptors and/or traps;
- Requirements for the installation of grease interceptors;
- Requirements for maintenance of grease interceptors;
- Enforcement; and
- Implementation measures, as appropriate.

If the District finds that a grease interceptor or gravity separating device installed prior to the effective date of the ordinance is incapable of adequately retaining the grease or oil in the wastewater flow, the District shall notify the user, in writing, that an adequate interceptor or gravity separating device must be installed within a specific, reasonable time period.

7.5 Identify HMA

The District's maintenance Staff continues to identify sections of the sewer collections system subject to grease blockages and establish a cleaning maintenance schedule for each section. The District has compiled a list of 'hot spots', or HMAs, within the community. These areas of concern have been put on an increased cleaning schedule and will be monitored annually for any required changes in cleaning frequency.

The District's Maintenance Staff maintains a sewer atlas indicating each manhole location. This data is used in conjunction with cleaning logs, in which Staff will note the date and time of flushing as well as debris type and severity.

Additional information about cleaning and maintenance is included in Element 4: Operations and Maintenance.

7.6 FOG Control Measures

The District has implemented FOG control measures for all sources of FOG discharged to the sewer system. One of the elements that is provided to FSEs or interested parties is the Best Management Practices (BMP) manual. This manual helps to provide guidance and suggestions to FSEs in reducing the amount of FOG discharged. Many of the simple inexpensive procedures can reduce the amount of FOG discharged by up to 90%.

The current list of BMPs consists of the following:

1. Train kitchen Staff and other employees about how they can help ensure BMPs are implemented;
2. Post "No Grease" signs above all sinks and on the front of dishwashers;
3. Use water temperatures less than 140° F in all sinks, especially the pre-rinse sink before the mechanical dishwasher;
4. Recycle waste cooking oil;
5. "Dry wipe" pots, pans, and dishware prior to dishwashing;
6. Dispose of food waste by recycling and/or solid waste removal;
7. Properly Maintain Grease Trap/Interceptors;

8. Witness grease trap or interceptor cleaning/maintenance activities to ensure the device is properly operating;
9. Clean under-the-sink grease traps weekly or according to your permit;
10. Clean grease interceptors quarterly or according to your permit;
11. Keep a maintenance log (recordkeeping);
12. Cover outdoor grease and oil storage containers;
13. Locate grease dumpsters and storage containers away from storm drain catch basins;
14. Use absorbent pads or other similar materials in the storm drain catch basins if grease dumpsters and containers must be located nearby (absorbent pads may be required if the basin is within 20 feet of grease dumpsters or containers or if there are signs of grease in the catch basin at any distance); and
15. Routinely clean kitchen exhaust system filters.

7.7 FOG Control Program Funding

The FOG Control Program is funded annually through the Wastewater Fund. The costs of the FOG Control Program are used to establish the District's fee for FSEs participating in the FOG program.

7.8 FOG Inspections and Results

The District inspects all FSEs that are located within its jurisdiction. Each is closely evaluated to determine if the FSE is in compliance with the current regulations. Facilities that contain high FOG menu items are inspected for properly working grease traps and/or interceptors. If a facility fails an inspection, they are given a reasonable amount of time to remedy the problem. At the end of that time, the Environmental Compliance Inspector will return to re-inspect the facility. To cover the cost of these re-inspects, a fine may be charged and should minimize the number of re-inspects required.

Facilities are also required to maintain proper documentation for each time their trap or interceptor is cleaned. These records must be made available for a minimum of three years on-site. In some cases, where a facility does not currently maintain a grease trap or interceptor, one may be required to be installed. This is based upon current regulatory requirements. The current Uniform Plumbing Code is also closely followed in determining type and size of the unit that will be required. Justification for trap versus interceptor installation is based upon foods served and prepared, number of drains within the facility, type of dishwasher (if any), and size and history of SSOs related to the establishment. Dye testing is also conducted, when necessary, to determine specific drainage.

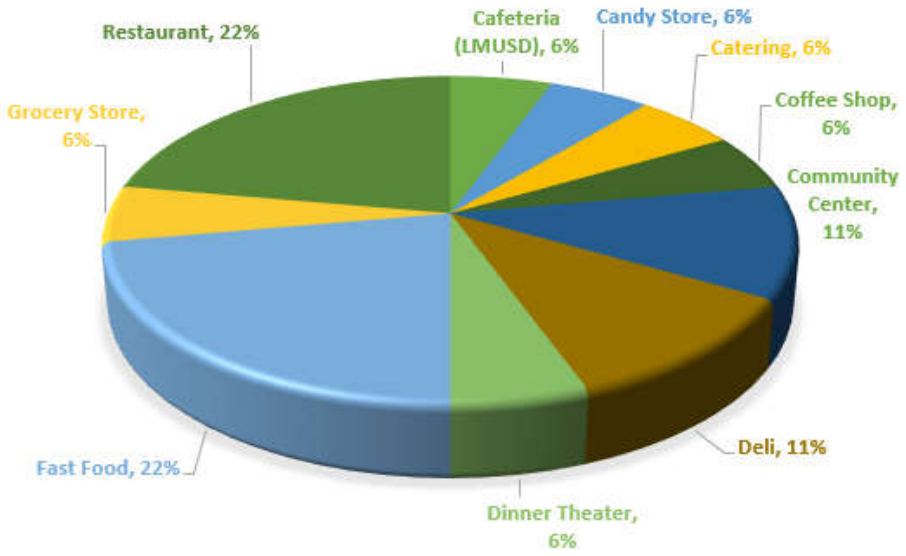
There are three types of permits currently being issued. The first is the standard FOG Permit. This permit is issued to all typical FSEs that discharge FOG into the sewer system in amounts estimated to be above 100ppm. Typically, this includes all facilities that have fryers, facilities that serve high quantities of creams, soups, cheeses and dairy or FSEs that perform meat cutting.

Alternatively, the Variance Permit (or in some cases an Interceptor Permit) is issued to FSEs that do not discharge high quantities of FOG. These facilities can include coffee houses, small sandwich shops, prepackaged grocery stores, or candy stores. Should a facility with a Variance Permit sell, the new owners must obtain a new permit. An evaluation of the menu items and BMPs in place will be performed and a new Permit will be issued at that time.

The charts below show the average type of facilities found within the District and the percentages of Standard Permits issued versus Variances. An itemized list of the FSE locations and permits is maintained by the District with inspection schedules, inspection reports and

other related information. Records will be updated on an ongoing basis to reflect any facility openings or closings and changes in permittees.

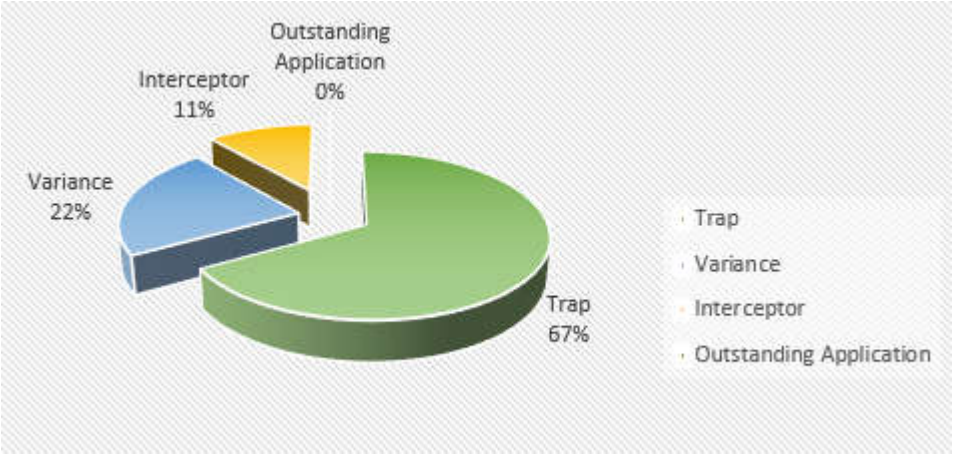
Figure 7-1 Types of Food Service Establishments



When an FSE is found to be out of compliance, the facility is re-inspected for compliance. Additionally, when Operations Staff is sent out on an emergency or is conducting regular maintenance and identifies high levels of FOG they notify the Environmental Compliance Inspector staff member. The FSE of concern is then inspected, regardless of last inspection date. The FSE is informed of the reason for the inspection and any required remedies to compliance issues are documented at that time. The inspector may be required to conduct a follow-up visit prior to returning the FSE to its regular facility visit schedule.

Facility inspection paperwork is maintained in the District Administrative office and is available electronically upon request.

Figure7-2 Permitted Food Service Establishments



The FOG Control Program is an ongoing process of education and compliance. The District is proud to be a part of it and is very grateful for its FSEs understanding the need for program success. Together, the District and its customers work to protect the collection system and the area's beautiful beaches and landscape, thereby promoting economic growth and prosperity.

Element 8 – System Evaluation and Capacity Assurance Plan

This element discusses the steps taken by the District to ensure adequate capacity for dry and wet weather peak flow conditions. This includes evaluation, design criteria and capacity enhancement measures.

Element 8: System Evaluation and Capacity Assurance Plan Appendix

Supporting information for Element 8 is included in **Appendix E** which contains the following:

- **Wastewater Collection System Study (2009)**

8.1 Regulatory Requirements

The requirements for the System Evaluation and Capacity Assurance element of the SSMP are summarized below:

1. Evaluation: Actions needed to evaluate those portions of the sanitary sewer system that are experiencing or contributing to an SSO discharge deficiency. The evaluation should provide estimates of peak flows associated with conditions similar to those causing overflow events, estimates of the treatment plant's 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;
2. Design Criteria: Where design criteria do not exist or are deficient, undertake the evaluation identified above to establish appropriate design criteria;
3. 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 may include an implementation schedule and may also identify sources of funding; and
4. Schedule: The District will develop a schedule of completion dates for all portions of the capital improvement program developed in (1)-(3) above. This schedule may be reviewed and updated consistent with the SSMP requirements as described by the SWRCB GWDR.

8.2 System Hydraulic Evaluation and Capacity Assurance Plan

A Wastewater Collection System Study was completed for Oceano CSD in September of 2009 by Wallace Group. The study included estimates of peak flows for wet and dry weather conditions, recommendations for capacity enhancements and recommendations for capital improvements. The study included the following findings:

1. Lift Station: Existing pump capacity for this station is greater than buildout peak wet weather flow and thus no hydraulic upgrade recommendations are warranted. At this time no other capital improvements are warranted for this lift station;

2. Capital Improvements: At this time there are no identified system capacity concerns and therefore no capital improvement projects are recommended. It is recommended the District consider an annual budget line item for periodic and as-needed sewer videotaping. The District has dedicated more time to maintenance and jetting the sewer system rather than videotaping, and only videotaping sections of the system when an issue arises. Periodic sewer cleaning/jetting should continue on an on-going basis and manholes should be inspected as needed, consistent with current practices for signs of sulfuric acid attack and general deterioration, as well as any issues with solids build up and debris; and

3. Gravity Collection System: No Capital Improvement Projects for the existing collection system are recommended at this time.

The conclusion of the study states that “The District has done an excellent job maintaining the collection system facilities. While periodic replacement of aging infrastructure will be required, a continued maintenance and inspection program will continue to further the lifetime of the system.”

Element 9 - Monitoring, Measurement and Program Modifications

This section of the SSMP discusses monitoring, measurement and program modifications employed by the District. The District may prepare and implement program modifications as appropriate to address deficiencies, or as preventative measures for improving the overall collection system. This section fulfills the Monitoring, Measurement and Program Modification requirements for both the RWQCB and SWRCB.

Element 9: Monitoring, Measurement and Program Modifications Appendix F

Supporting information for Element 9 is included in which contains the following:

- **Preventative Maintenance (PM) Program Documents (Appendix F)**
- **SSO Logs and Trend Data:** https://oceanocsd.org/resources/operational-reports/sso-reports/

9.1 Regulatory Requirements

The Agency will develop a monitoring, measurement and modifications program to maintain the relevant information that can be used to establish and prioritize appropriate policies, procedures, processes and program funding within the SSMP. This program shall:

- Maintain relevant information that can be used to establish and prioritize appropriate processes within the SSMP;
- Monitor the implementation and, where appropriate, measure the effectiveness of each element of the SSMP;
- Assess the success of the preventative maintenance program;
- Update program elements, as appropriate, based on monitoring or performance evaluations; and
- Identify and illustrate SSO trends, including frequency, location, and volume.

9.2 Maintenance Records

The District uses a "work order" maintenance request form. This form provides written documentation of specific work that is completed in the field. It includes the day and time the work was requested along with its location, description of the problem and the action that Staff took to resolve the problem. Work orders are also established for preventative maintenance and rehabilitation efforts. The work orders are categorized according to type. Hard copies are filed in the District's Administrative Office, in files that are organized by calendar year and by category, after review by the General Manager.

The work order system is essential to the District. It allows a basic method of determining HMA locations or areas that may require more attention than previously known. The District will maintain relevant information to establish and prioritize appropriate SSMP revisions or updates. If an SSO occurs within the District, the data collected and all relevant information will be documented. The Utility Operations Manager shall keep an annual record of the incidents and assumed causes of the spills. This information is reported monthly to the SWRCB via the CIWQS database. The information is also used to plan activities, programs and policies that are designed to help eliminate future SSOs.

9.3 Updates

The SSMP is a living document and will be updated as needed. The intention of the District is to use the SSMP for training, planning and regular maintenance of the collection system. As the document is used, any deficiencies or discrepancies should be observed and corrected. Staff

meetings are held on a regular basis and any changes that should be made will be discussed as appropriate.

9.4 Identifying Trends

The District plans to identify and illustrate SSO trends including frequency, location and volume as part of the SSMP updates. A trend of either frequency or volume could indicate a chronic problem that should be specifically identified within the collection system. Should the District identify an area prone to problems, known as “hot spots” or HMAs, maintenance and inspection services to these areas will be increased as discussed in Element 4. If increased maintenance is not enough, repair or replacement will be considered. The location of each work order is tracked to help identify trends and possible development of new High Maintenance Areas or repair and rehabilitation needs.

9.5 Program Modifications

The District shall update program elements, as appropriate, based on monitoring or performance evaluations. The SSMP and its elements will be updated in accordance with the results of the monitoring and staff recommendations. Performance evaluations are ongoing because the daily operation of the District includes all of the elements in this program.

Element 10 - Sewer System Management Plan Audits

This section discusses and outlines the procedure for conducting audits of the SSMP. Audits are to be performed every two years after completion of even number calendar years.

Element 10: SSMP Audits Appendix

Supporting information for Element 10 is included in **Appendix G** which contains the following:

- **Audit Report Form (Appendix G)**
- **10.1 Regulatory**

Requirements

As part of the SSMP, the District 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 compliance with the SSMP requirements identified in the SWRCB General Order 2006-0003-DWQ, including identification of any deficiencies in the SSMP and steps to correct them.

10.2 SSMP Program Audits

The District will perform an internal audit using the Audit Report Form to evaluate its SSMP and its compliance with the SWRCB and RWQCB every two (2) years following the end of even number calendar years within 90 days of the completion of the calendar year. The District will prepare a report of the results of the audits, along with recommendations and suggested improvements which will be kept on file. Updates for the District's SSMP will be completed as warranted. The audit reports will be submitted to the Board of Directors on their agenda.

Element 11 - Communication Plan

This section discusses the communication program employed by the District. It provides multiple opportunities for interested parties to provide the District with input on the SSMP and associated programs.

Element 11: Communication Plan Appendix

There are no appendices associated with Element 11.

11.1 Regulatory Requirements

The District shall, on a regular basis, communicate with the public on the development, implementation, and performance of its SSMP. The communication system shall provide the public with the opportunity to provide input to the District's program both during development and prior to implementation.

11.2 Communication Program

The District's Utility Systems Manager provides status updates to the OCSD Board at the regular Board Meetings. The public is welcome to attend these meetings and comment on the SSMP and its implementation at that time. The Board will consider such comments and act accordingly. OCSD Board Meetings are held on the 2nd and 4th Wednesdays of each month at 6:00 p.m. in the OCSD meeting room at 1655 Front Street, Oceano. The District office is located directly across the street from the Oceano Depot, with parking in the rear. Board Meetings are also being televised on Charter Cable on Channel 21. In addition to status updates at regular Board meetings, the SSMP is posted in its draft form on the District website at www.oceanocsd.org.

As updates to the SSMP occur, staff training will be scheduled as necessary to ensure staff is kept current on the SSMP requirements and proper use.

Appendix A - Organization

Current District Emergency Contact Information:

Paavo Ogren, Interim General Manager
1655 Front Street / PO Box 599, Oceano, CA 93475
paavo@oceanocsd.org

(805) 481-6730 Office
(805) 481-6836 Fax

Tony Marraccino, Utilities Operations Manager
1655 Front Street / PO Box 599, Oceano, CA 93475
tony@oceanocsd.org

(805) 481-6730 Office
(805) 481-6836 Fax

After Hours Contact Number – (805) 481-6730

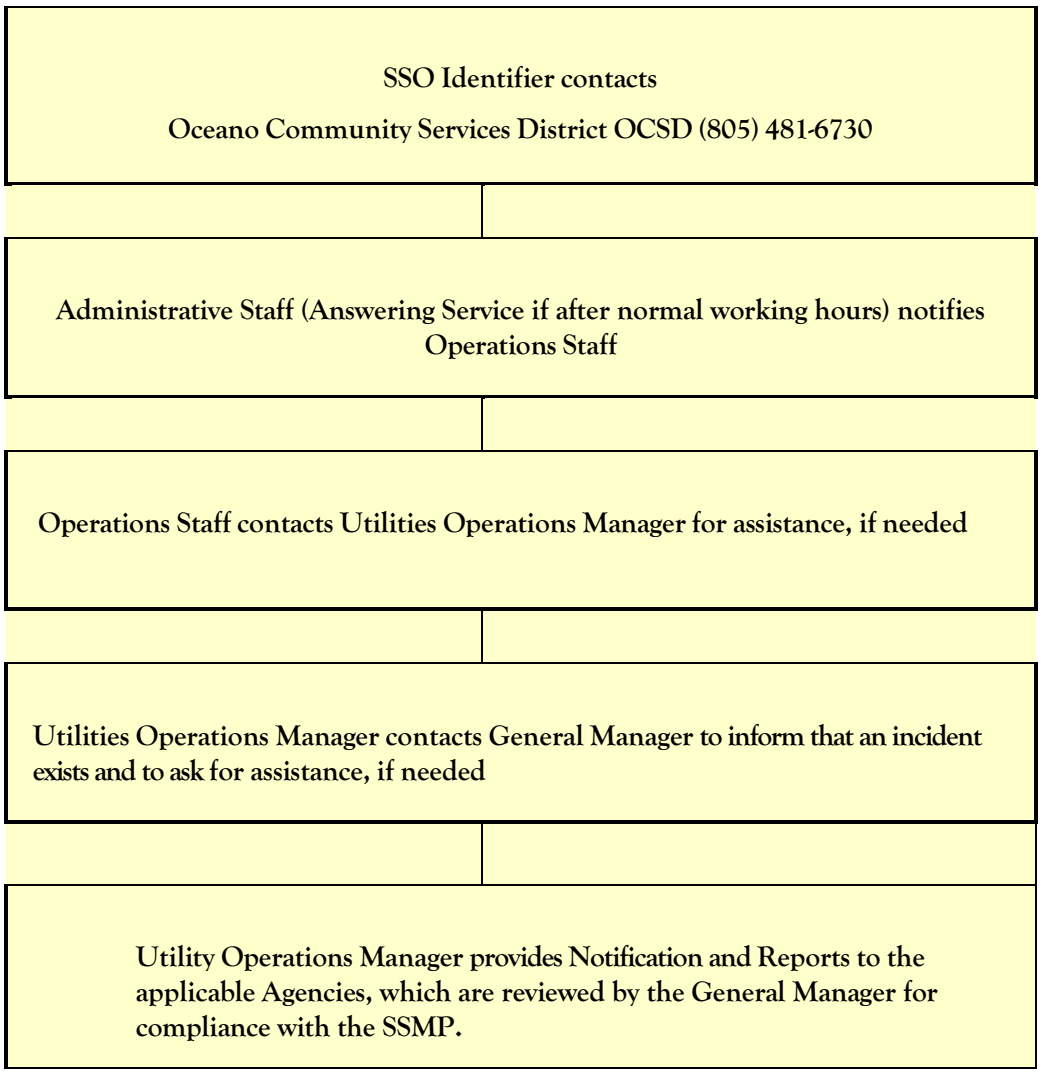
Emergency Numbers - (805) 481-6730
Oceano Community Services District
1655 Front Street / PO Box 599, Oceano, CA 93475

Other Emergency Contact Numbers:
Sheriff Department (South Station)
1681 Front Street, Oceano, CA 93445
Sheriff Department Watch Commander
(805) 781-4550

Current Board Members as of December 2023:

Charles Varni	**President**
Beverly Joyce-Suneson	**Board Vice President**
Linda Austin	**Director**
Shirley Gibson	**Director**
Allene Villa	**Director**

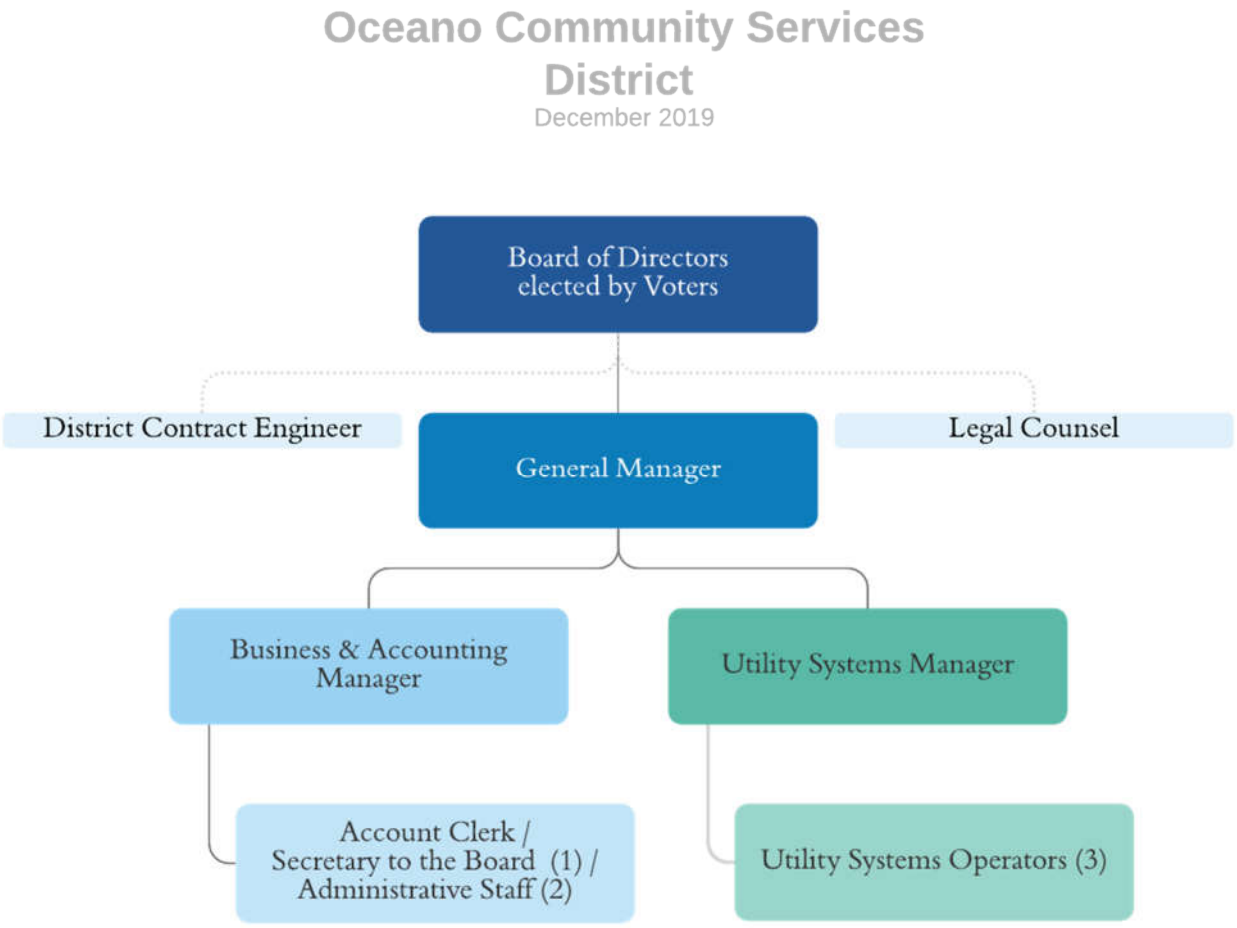
Chain of Communications in Responding to SSOs



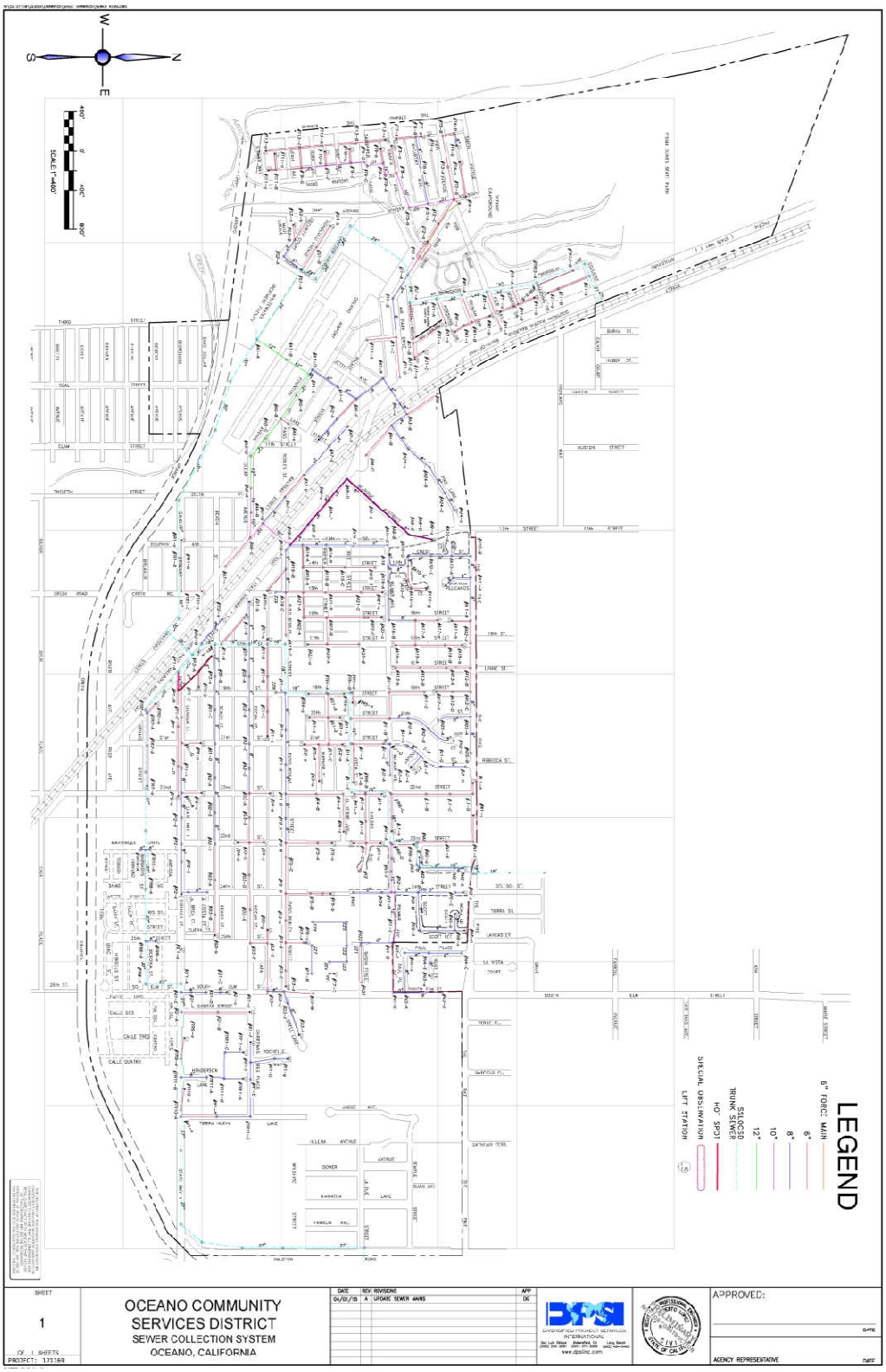
Chain of Communication of Sewer System Overflow Notifications:

Organization	Contact Person	Phone Number
California Office of Emergency Services (Contact within 2 hours Cat 1 SSO >1,000 With actual or probable surface water contact)	Dispatch	(800) 852-7550

Oceano CSD Organizational Chart



Appendix B – Operations & Maintenance



Capital Improvement Plan and Budget

As of the date of this 2020 SSMP, the District does not have a 5 year CIP Budget. Beginning with fiscal year 2020-21, the District will incorporate the 5 year CIP Budget into the District's Annual Budget.

The District's significant expenditures over the past seven years include the following

- Vacuum / Jetter - Pipe Hunter 4500-RS01 (2013)
- Utility Truck – F550 Dump Truck (2015)
- Video – Rigid Sea Snake RM200 (2013)
- Rodder – Rigid K3800 (2013)

High Maintenance Areas and Sewer System Cleaning Schedule

High Maintenance Areas (laterals, mainlines & manholes) are in the system maps maintained by the District Engineer.

Manhole Areas:

- A9-A, B & C, A8-A, B, C & D; P1-A, B & E & P5-A.
- A27-A - Avenida de Pelicanos roots in MH
- A22-C - 16th roots in MH
- R1-B - Tierra Nueva roots in MH

Mainline Areas:

- ZZ4 to YY1 - Hass roots
- H1-A to H1-B - 20th roots
- K1-C to K2 - Holden roots

Lateral Areas:

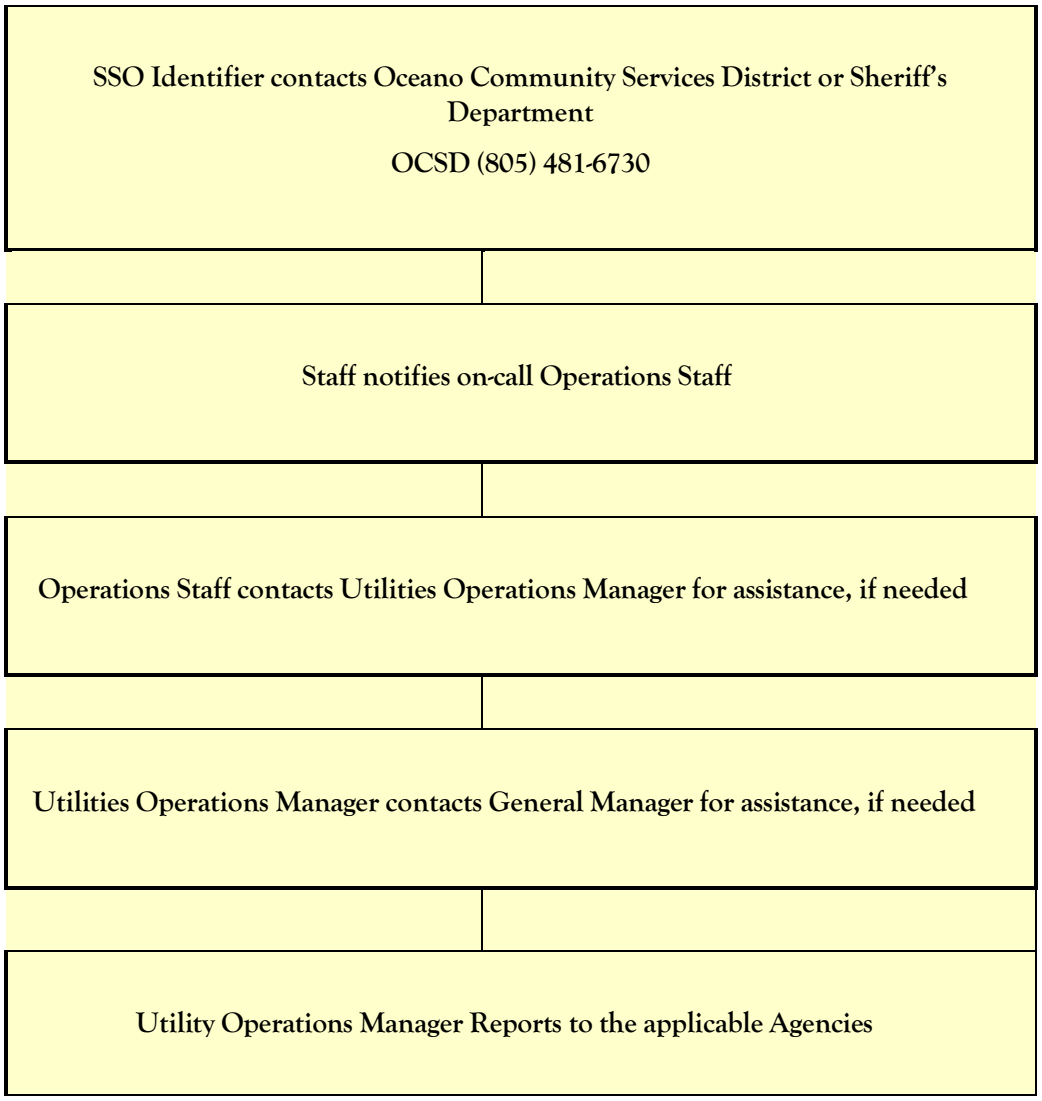
- 1381 S. 4th St.
- 1351 S. 4th St.
- 1323 19th St.
- 1761 Beach St.
- 1630 Warner
- 2160 Nipomo

The following maintenance activities occur on a regular basis:

- Quarterly wet well cleaning of the lift station, or more frequently if needed, based on weekly inspections to determine if removal of grease, sludge and sand is warranted to ensure proper operations; and
- The quarterly cleaning (or more frequently) includes grease and sludge removal and cleaning of trash and debris collection baskets.

Appendix C – Overflow Emergency Response Plan

Chain of Communication of Sewer System Overflows



Contact Information for Reporting SSOs

Organization	Contact Person	Phone Number
California Office of Emergency Services (Notify within 2 hours of a Category 1 spill discharge or probable discharge to surface water)	Dispatch	800-852-7550

Contact Information for Emergency Assistance:

On call Private Operators:

Fluid Resource Management: (805) 365-5157

Schwind Electric: (805) 459-2518 Mark

Auto Systems (Electrical): (805) 835-9595

Local Agencies Participating in CALWarn mutual aid program:

City of Arroyo Grande: Shane Taylor cell (805) 459-4859

South San Luis Obispo County Sanitation District: On call operator: (805) 489-6670

City of San Luis Obispo: Dave Hix (805) 781-7039 and Bud Nance cell (805) 459-4859

Other Emergency Assistance:

Five Cities Fire Authority (805) 473-5490, including requests for County Hazardous Materials Response Team

San Luis Obispo County Sheriff Watch Commander (805) 781-4553, including requests for assistance from the County Incident Management Team

Table 1 – Spill Categories and Definitions

CATEGORIES	DEFINITIONS [see Section A on page 5 of Order 2006-0003-DWQ, for Sanitary Sewer Overflow (SSO) definition]
CATEGORY 1	Discharges of untreated or partially treated wastewater of **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.
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.

Sewer System Overflow Report (SSOR)

SEWER SYSTEM OVERFLOW REPORT

CIWQS - SSO FORM

DISCHARGER

Oceano Community Services District

1655 Front Street P.O. Box 599, Oceano, Ca 93475

(805) 481-6730

SSO TYPE (Select Category 1 or 2)

1- Category 1 (>= 1000 Gals or reached a body of water)

2- Category 2 <1000 Gals, not discharged into a body of water)

SPILL NAME

NO SPILL CERTIFICATION

No Spill MM/DD/YY

Confirmation Number

Entered Date and Time MM/DD/YY Time: _____

SSO DESCRIPTION

Estimated Spill Start Date/Time: MM/DD/YY Time: _____

Date/Time Sewer System Agency was notified or discovered spill: MM/DD/YY Time: _____

Estimated Operator Arrival Date/Time: MM/DD/YY Time: _____

Estimate Spill End Date/Time: MM/DD/YY Time: _____

Estimated Date/Time Clean-Up Began: MM/DD/YY Time:

Estimate Date/Time Clean-Up Completed: MM/DD/YY Time: _____

Estimated Spill Volume (Gals)

Estimated Spill Rate (Gals per minute)

SSO LOCATION

Physical Location Details _____

Latitude of Spill Location _____

Longitude of Spill Location

Street Number | Street Direction | Ste/Apt#

Street Name

City | State | Zip

Cross Street

County: San Luis Obispo County

Spill Location Description & Path of Spill

SPILL DETAILS

Spill Appearance Point: *(Circle all which are applicable)*

- Building/Structure
- Force Main / Pressure system
- Gravity Sewer
- Manhole
- Other Sewer System Structure
- Pump Station
- Other (Specify)

If Other; required explanation:

Did 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

Was this a Private Lateral Spill? YES / NO

Name of responsible party (for private lateral spill only)

Final Spill Destination? *(Circle all which are applicable)*

- Beach
- Building Structure
- Other Paved
- Surface Storm Drain

[Y / N] Follow up with property owner or other individual regarding spill cause and/or further prevention.

Street/Curb and gutter

Surface Water

Unpaved surface

Other (Specify)

If Other; required explanation:

Spill Cause:

(Circle all which are applicable)

Debris

Flow exceeded capacity

Grease (FOG)

Operator Error

Pipe Structural problem/failure

Pump Station Failure

Rainfall exceeded design

root intrusion

vandalism

Other (Specify)

If Other; required explanation:

Were Public Health Warnings Posted: YES _____ NO _____

Number of SSOs in Same Location in past five (5) years: _____

If spilled caused by wet weather, choose size of storm:

1, 2, 5, 10, 50, 100 >100 year storm _____

Diameter of sewer pipe at the point of blockage or spill: _____

Material of sewer pipe at point of blockage or spill: _____

Estimated age of sewer pipe at point of blockage or spill: _____

Description of surrounding terrain:

(Circle all which are applicable)

flat

mixed

steep

SPILL RESPONSE:

Spill Response Activities (Can Select Multiple Answers)

cleaned Up (mitigation effects of the 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 (Specify)

If Other; required explanation:

Visual Inspection results from impacted receiving water:

Overall Spill Description:

NOTIFICATION DETAILS

OES Control Number *(Required for Category 1: >= 1000 gallons and spilled reached surface water or storm drainpipe)*

_____

OES Called Date/Time: MM/DD/YY _____ Time:

RWQCB Notified Date/Time: MM/DD/YY _____ Time: _____

(Circle Applicable Notification Methods) Fax Phone Letter _____

Other Agency Notified (OES, County Health, F&G, Other) _____

Was the Spill report submitted via fax to the RQWCB: Yes _____ NO _____

Date and Time Spill Report of faxed: MM/DD/YY Time: _____

Reported By (NAME): _____

SSO Report Submitted to RWQCB Representative: _____

CIWQS REPORTING

Signature of Responding Operator: _____

Report Entered into CIWQS: DATE TIME INTLS:

CIWQS / SSO EVENT ID: _____

Signature of Reporting Personnel: _____

Date: _____

Appendix "D" - Sample FOG Inspection Form

Oceano Community Services District

In collaboration with South San Luis Obispo County Sanitation District

Fats, Oils and Grease (FOG) Inspection Form

Tel: (805) 481-6730 | Fax: (805) 481-6836

Facility Name:_____ ☐ Inspect ☐ Re-inspect

Contact:_____ Date of Inspection:_____

Address:_____

Telephone:_____ Permit #:_____ exp:_____

Email:_____

Type of food service:

☐ **Full Serve Restaurant**	☐ **Caterer**	☐ **School**
☐ **Take-Out**	☐ **Grocery**	☐ **Other**: _____
☐ **Butcher**	☐ **Care Facility**	

Trap / Interceptor Inspection

- Does this facility have a grease trap or interceptor?

  ☐ Grease Trap Interceptor ☐ Location: _____

  ☐ None (violation) ☐ Variance ☐ Variance Requested

		Violation	No Violation	N/A
General:	**Maintenance documents available/current.**	☐	☐	☐
	Detergent is not being used *in* excess to decrease FOG.	☐	☐	☐
	Chemicals/Enzymes/Bacteria are not being used.	☐	☐	☐
	☐ **Overall condition** ☐ **cover** ☐ **baffles** ☐ **inlet tee** ☐ **outlet tees**	☐	☐	☐
	Grease build-up is <25% of depth; discharge pipe is clear	☐	☐	☐
	Solids accumulation is <10% of depth; discharge pipe is clear.	☐	☐	☐
	Plumbing (vented flow control)	☐	☐	☐
Trap:	**Trap is easily accessible.**	☐	☐	☐
	Dishwasher does not discharge to trap.	☐	☐	☐
	Discharge Drain has Filter Screen.	☐	☐	☐
Interceptor:	**Downstream sewer lines are clear of solidifying grease and solids.**	☐	☐	☐
	Effluent is clear of grease or solids pass-through.	☐	☐	☐

- Does this Facility use deep fryers? ☐ Yes ☐ No

  If yes, where is the recyclable grease stored (location)? _____

  ☐ Tight fitting lids ☐ Labeled ☐ On Solid Surface

Violations must be corrected within _____days.

Comments:_____

_____

_____

_____

_____

_____

_____

Inspector Signature:_____ Facility Signature: _____

Printed Name: _____ Printed Name: _____

TECHNICAL MEMORANDUM

WASTEWATER COLLECTION SYSTEM STUDY

FOR

OCEANO COMMUNITY SERVICES DISTRICT

PREPARED BY:

WALLACE GROUP

September 16, 2009

TECHNICAL MEMORANDUM

This technical memorandum (TM) addresses the Oceano CSD's (District) wastewater collection system needs. addressing existing and future build-out needs. This TM provides information to identify system needs to budget accordingly, and assist with evaluation of sewer collection system rates.

The District provides its customers with wastewater collection services: conveying wastewater to the South San Luis Obispo County Sanitation District (SSLOCSD) trunk sewer and wastewater treatment facilities. This TM focuses specifically on the Oceano CSD wastewater collection system.

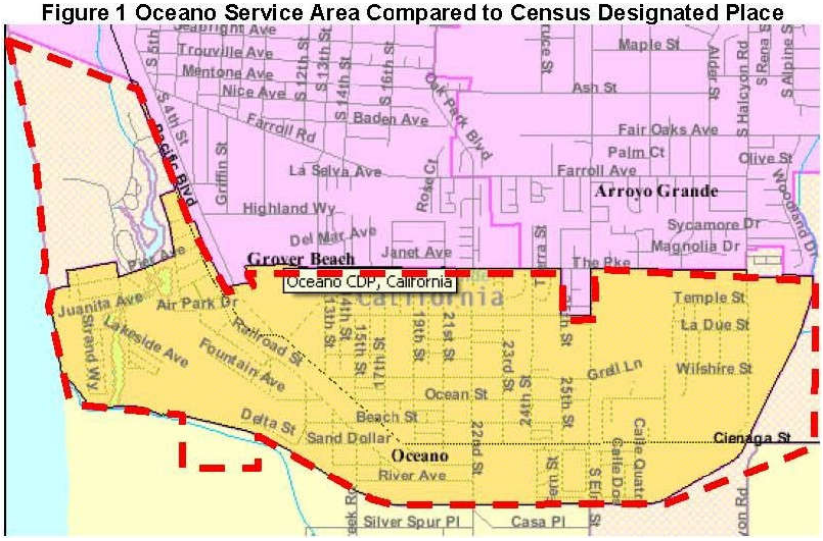
LAND USE AND SERVICE POPULATION

Population

The population of the District service area for wastewater services has a large impact on the use of and demand for those services. Determining the service population is not always a simple process and estimates are key components to forecasting system and community needs. Population can be estimated with several different approaches. Consideration must also be given to those provided sewer service living outside the official District boundary.

Figure 1 shows the Census Designated Place (CDP) in orange and the District's service area shown by the dashed red line. While they are not an exact match. most of the additional area included by the CDP is undeveloped. Also. there are other areas the District provides sewer service which are outside the District Boundary and the CDP. \I\Ihile the service population and the CDP are not the same. the 2000 census still provides a reasonable estimate of the typical household size (2.96) and a population of 7260 within the service area can still be used as a base point for population estimates.

Figure 1 Oceano Service Area Compared to Census Designated Place



Currently the District provides sewer collection for approximately 115 people on Paul Place and Russ Court (39 units) which is outside the District service area boundary. The current population served can be estimated several ways, detailed as follows:

1. 2005-2006 County General Plan: Appendix A of the 2005-2006 County General Plan (General Plan) estimated the population of Oceano at 7,446 in 2005 and projected it to be 7,826 in 2010. From this, it is reasonable to interpolate a population of 7,750 in 2009 within the District. By adding the population outside the District boundary we can estimate the total sewer service population to be 7,865.

2. Sewer Billing Information: The previous estimate is based on data projections rather than current information. The most up-to-date information the District has concerning its customers is billing information. Billing information can be used to estimate population by multiplying the household size of 2.96 by the 2,770 residential units with sewer service to obtain a total population served of 8,199 people. The internal District population can be back calculated by subtracting out the 115 customers outside the District to arrive at a population of 8,084.

Of the two population estimating methods described above and summarized in Table 1 the sewer service based approach uses information that is both current and produces the more conservative estimate so will be used as the basis of analysis throughout the remainder of this study.

Table 1 Current District Population

Estimation Method	District	Sewer Customers
General Plan	7,750	7,865
Sewer Billini:i	8,084	8,199

While the preceding approach works well to estimate current population, the District's population in 20 years and at build-out will also impact planning for collection system improvements.

Future Population

Though the G&T 2004 WMP estimates future population, the update population information warrants an updated approach and estimates. It is worth noting that population projections can be developed in a number of different ways, and thus discrepancies between County and District population estimates will exist.

The 2002 Oceano specific plan estimates the build-out population under the existing County General Plan to be 9,601. Although the Oceano specific plan recognizes that the build-out population is often never reached because it represents a maximum, the population provided water service can be larger than the build-out population because land use within the District can be rezoned, the service area of the District can expand, and the District can provide service to people outside its service area. Current sewer service agreements already add 115 users not included in the Oceano Specific Plan and there are no further agreements planned.

The General Plan contains population projections to 2030. From this data we can back calculate an average population growth rate of 0.67% that can be applied to the District's current population. By this method the current population of 8,199 (including the additional 115 customers outside the service boundary) will increase to 9,416 in 2030.

Since population projections by year are difficult, a build-out population estimate provides additional perspective of potential future demands. Further, these populations correlate to the construction of new units within the District service area. Even if the year's population is no longer representative of the District projected population, the number of new units since 2009 can be used to project collection system capacity. The build-out population for the District may be affected heavily by the rezoning of agricultural land for residential housing. Build-out population of the existing service area (plus the current agreement outside the service area) was calculated to be as much as 12,299. If the zoning changes, the District expands service area. and/or outside District agreements are carried out the effective build-out population served could be as much as 15,430. These build-out population projects are based on the 2004 G&T WMP and existing information. Several key populations and their corresponding unit equivalent are summarized in Table 2 and all other populations required for this report will be calculated from this data. This collection system analysis is based on a build-out population of 12,299.

Table 2 Calculated Populations

Year	Population	Additional Units
2000	7,260	-
2009	8,199	-
2010	8,253	18
2015	8,530	112
2030	9,416	411
Build-out same zoning	12,299	1,385
Build-out rezoning	15,430	2,443

A future planned development. the Coker-Ellsworth development, is envisioned to include seven units, plus a 20-unit mini storage facility. Wastewater from this future development will be collected via the City of Arroyo Grande's sewage collection system.

WASTEWATER FLOWS

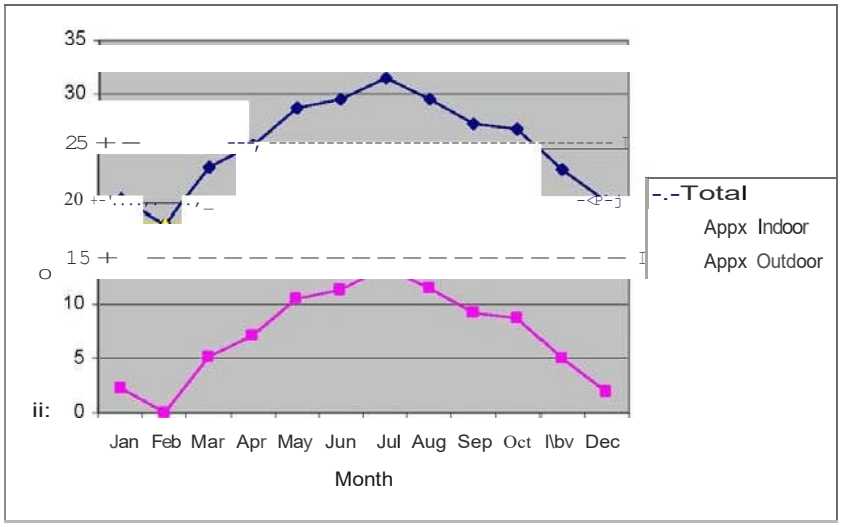
There are several wastewater production parameters used for the evaluation of a collection system under different conditions. For this analysis, average day, maximum day, and peak flows will be used to evaluate the hydraulic loading of the collection system. The time. intensity, and duration of these flows are typically described by a diurnal curve. Since wastewater flows are not metered like water demand, it is more challenging to determine the behavior of these flows. Although flow data is available at the treatment plant, the District shares the trunk collection system with two other cities making it difficult to determine the District's portion of the flow. In-line flow monitoring can also be done but is expensive for a system that has so many points of connection to the trunk collection system. For this reason wastewater parameters are estimated as follows.

1. SSLOCSD Long Range Plan: The 2002 Long Range Plan for SSLOCSD estimated per capita daily wastewater flows at 81 gpcd of wastewater flow. While OCSD, Grover Beach, and Arroyo Grande all contribute to SSLOCSD wastewater flows. one can reasonably assume that Oceano's per capita flow rates are comparable to its neighboring communities. The 81 gpcd represents an average daily flow for the District

and would equate to a present day flow of 0.66 MGD based on the preceding population estimates .

2. Water Use: Alternatively, per capita wastewater flows can be estimated from water use. The average 2007/2008 monthly water use is graphed in Figure 2. Assuming that the low water demand month of February is comprised predominantly of indoor water use, that indoor use is mostly discharged to the sewer, and that indoor water use does not appreciably change seasonally, the water demand in excess of the low demand rate during the rest of the year can be assumed to be for outdoor water use. Therefore, we can determine what fraction of water use is indoor and outdoor. From this analysis we can determine that approximately 72% of ADD and per capita water use is released to the collection system. Thus, average daily wastewater flows are 0.60 MGD and per capita wastewater flows are 67 gpcd. This per capita wastewater flow estimate is relatively low, even for communities with good water conservation programs.

Figure 2 Seasonal Flows



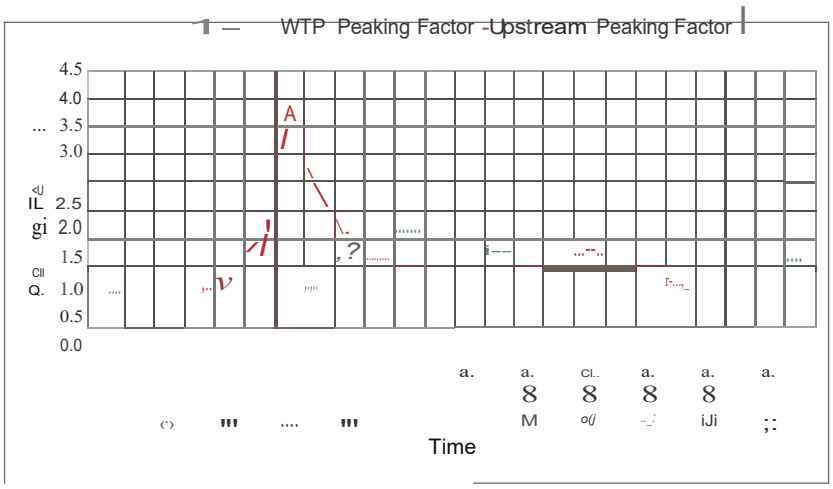
The two methods of estimating wastewater flow result in significantly different results. The 2002 long range plan is based on a study of multiple communities with different development patterns and therefore is not an ideal representation of the District's wastewater flows. The water demand approach assumes that there are no seasonal impacts on wastewater flows which may under or over estimate the actual flows. It also assumes that all of the February flow is discharged to the collection system, which will likely overestimate the flow. To determine a reasonable estimate for the purpose of analysis, the average of the two methods (74 gpcd) will be used for the collection system analysis.

Regardless of the per capita wastewater flows, a diurnal curve will explain how wastewater flows fluctuate throughout the day. Figure 3 illustrates the diurnal curve developed based on actual in-line flow readings at the SSLOCSD wastewater treatment plant (WWTP) in July 2000.

While this is not for the District directly, the shape of the diurnal curve will be similar. Figure 3 plots peaking factors over the course of a typical day at the WWTP that can be multiplied by daily flows to determine typical flows at that time of day.

However, this curve is based on flows as they enter the SSLOCSD WWTP. Typically, the further upstream a sewer is in relation to the WWTP, the earlier and more pronounced the peak will be. For this reason the peaking factors in Figure 3 are not representative of peaking factors in the upstream portions of the collection system. As an alternative, Metcalf and Eddy's Wastewater Treatment estimates a typical peaking factor for a community of the District's size to be 3.8 for peak hourly flow. This peaking factor is larger, as expected, and will be conservative enough to account for inflow and infiltration (as discussed below), so it will be used as a worst case scenario for the collection system evaluation. Using the peak hour flow peaking factor, the WWTP peaking factor data, and waste use behavior, an upstream diurnal curve was developed to be applied to daily average inflows illustrated in Figure 3.

Figure 3 Diurnal Curve of Peaking Factors



Inflow and Infiltration

Inflow and infiltration is excess water that enters into the wastewater collection system due to rainfall runoff or high groundwater seeping into manholes and collection system pipes. Inflow and infiltration can increase flows in a collection system two to three times or more in problem areas. It is important to determine the extent of inflow and infiltration in the District's collection system in order to size collection system piping and infrastructure. However, an I/I analysis was beyond the scope of this study. Thus, to account for I/I in the wastewater collection system model, a larger peaking factor discussed above will account for this.

Existing Wastewater Flows

Based on the existing population estimate (8,199) and per capita wastewater flows (74 gpcd) calculated above, the current average daily wastewater flow is approximately 0.6 MGD. Applying the peaking factor of 3.8 yields a peak hour flow of 2.3 MGD. The application of these

wastewater flows is based on proportionate amounts of water use records by meter type for different land use types.

Future Wastewater Flows

Based on the projected population build-out under existing zoning conditions (12,299) and per capita wastewater flows calculated above remaining constant in the future, the projected build-out wastewater flow is approximately 0.91 MGD. In the future the peaking factor is likely to be lower due to the increasing population. Applying the projected peaking factor of 3.6 yields a peak hour flow of 3.3 MGD.

COLLECTION SYSTEM

The Oceano collection system conveys wastewater from the District's service area to the SSLOCSD trunk lines. To accomplish this goal the District utilizes a single lift station and force main as well as a variety of gravity sewer sizes and materials. The distribution of these facilities is illustrated in Figure 4 (next page). The length of pipe corresponding to each pipe material is unknown but the vitrified clay pipe (VCP) is the primary material with some PVC in the newer developments. The lengths by size are summarized in Table 3.

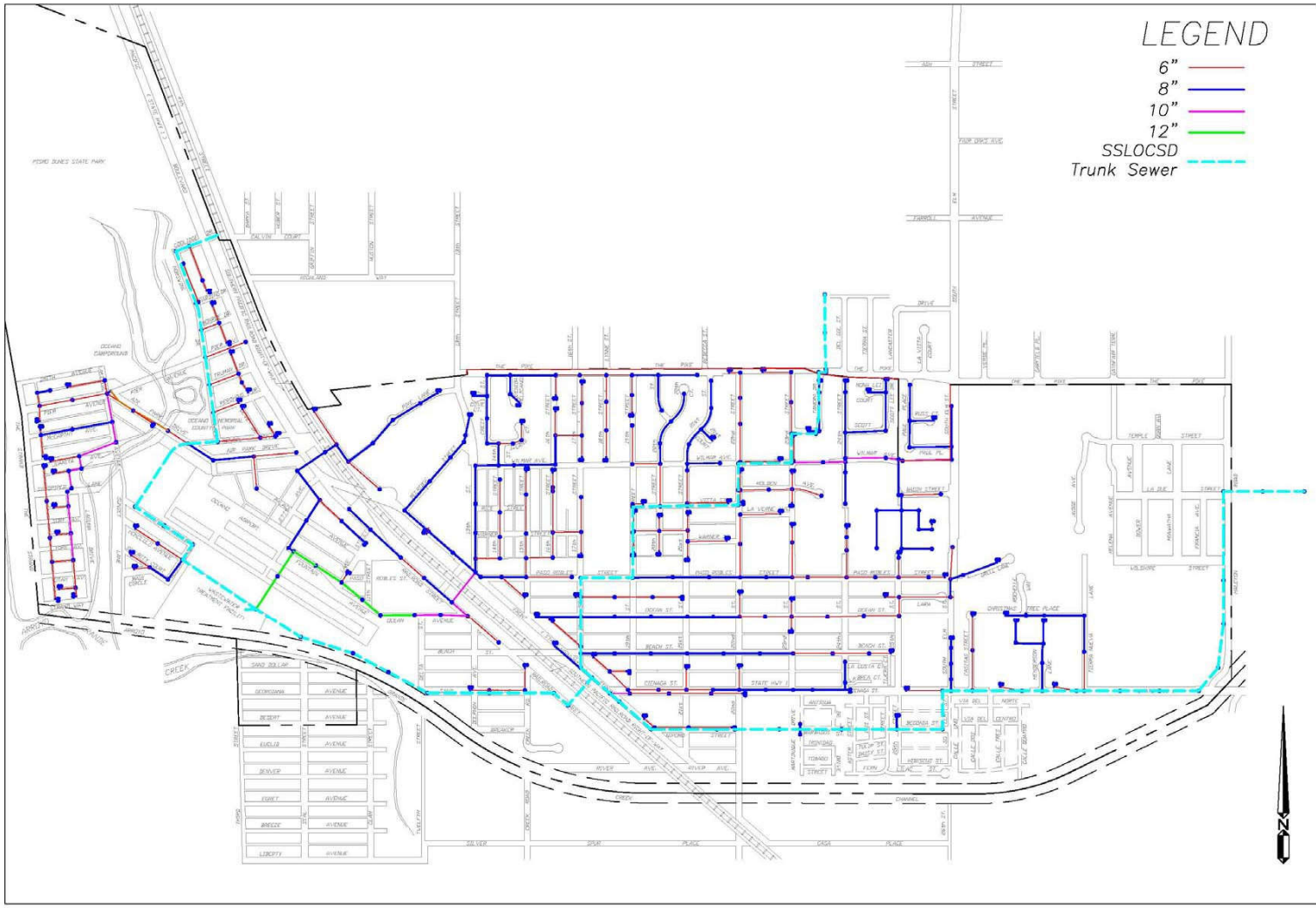
Table 3 Collection System Diameter and Length

Diameter (in)	Length (ft)
6	47,740
8	31,350
10	4,820
12	2,030

Figure 5 illustrates the approximate tributary areas that convey wastewaters to the SSLOCSD trunk system. While there are several even smaller connection to the trunk these 32 areas suffice to show the various points of connection to the SSLOCSD trunk system.

In order to determine capacity constraints of the existing collection system, a model of the District's sewer system was prepared. With a sewer model, existing and projected flows can be applied to determine remaining capacity of collection system infrastructure. Background flows from outside the District's service (Grover Beach and Arroyo Grande) area were added to the trunk system to accurately represent the effect of backwater on shallow sewer lines. For the District sewer model, two separate scenarios were prepared:

> Scenario 1 – existing wastewater flows, according to the current layout of the District's collection system.
>
> Scenario 2 – future wastewater flows, according to the current layout of the District's collection system, and distributing future flows to areas of future development within the service area.



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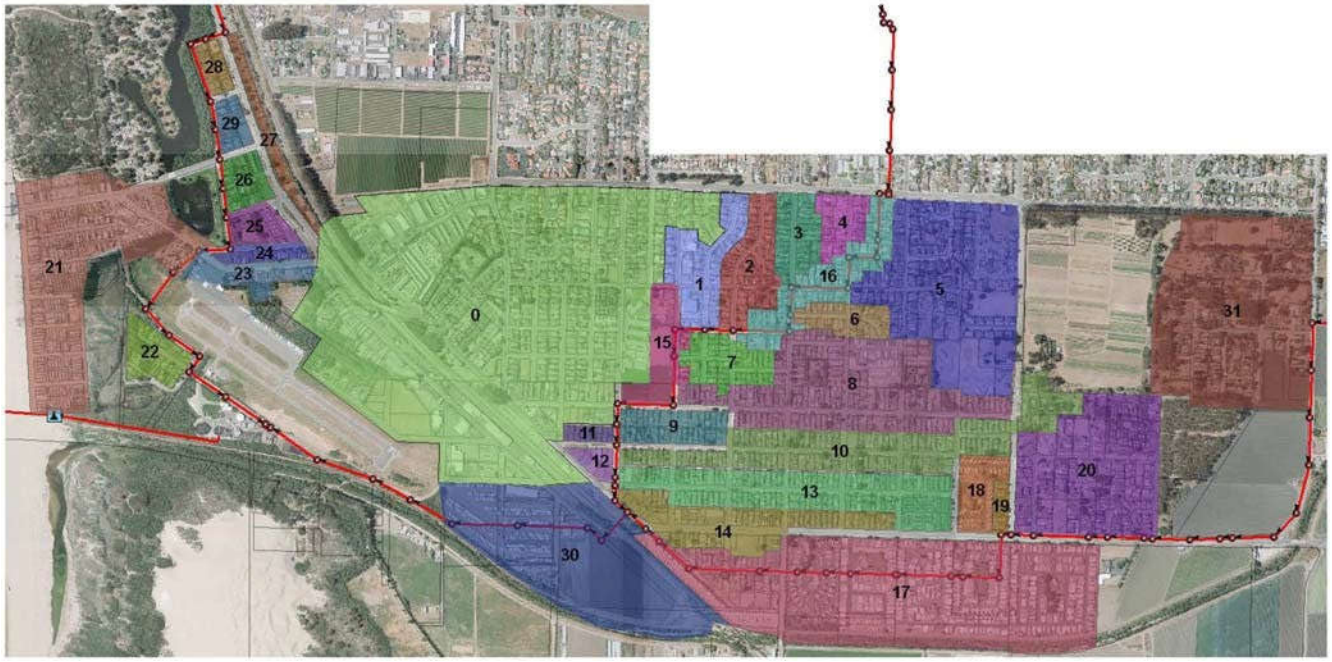
OCEANO COMMUNITY SERVICES DISTRICT (OCSD)
SEWER COLLECTION SYSTEM
FIGURE 4

JOB No. :	825-002-007
DRAWING :	Sewer Atlas
DRAWN BY:	MJB
DATE :	08/05/2009
SCALE :	NTS

Figure 5 District Tributary Areas to the SSLOCSD Trunk Sewer



Sufficient capacity in pipes is defined by the ratio of depth of flow under peak hour conditions to the diameter of the pipe (d/D). Acceptable d/D values are summarized in Table 4.

Table 4 Capacity Criteria

Pipe Diameter (in)	Acceptable d/D
6	0.5
8	0.5
10	0.75
12	0.75

Based on Table 4 criteria for existing and future conditions during peak hour wet weather flow conditions there are no improvements needed based on hydraulic capacity criteria.

LIFT STATION

Wallace Group evaluated the existing lift station located on Pier Avenue, west of the Oceano State Park. The lift station and associated force main was evaluated for service, operational and reliability parameters. The objective of this study was to identify near-term and long-term improvements to this lift station, if necessary, to serve the City through projected build-out. Hydraulic capacity and the ability of the lift station to service future needs was addressed as part of this evaluation. Recommended improvements and/or replacement, and corresponding capital costs were developed and incorporated into this evaluation. A follow up site visit was conducted with Oceano CSD staff on July 16, 2009.

Summary of Existing Lift Station

The existing conditions and design parameters for this lift station are summarized in Table 5. Hydraulic parameters are summarized in Table 6.

Table 5 Summary of Lift Station Conditions

Item	Description
Year Built	1966/67
Lift Station Type	S&L Wetwell w/Drypit and Vertical Non-Clog Pumps
Standby Power	Receptacle for Portable Generator
Alarms	Dial Uo to Staff
Level Sensor	Bubbler for Pump Control. Float for High Level Alarm
Wetwell Material	Concrete
Wetwell Coatino	Yes
Site Security/Fencing	None

Table 6 Summary of Hydraulic Characteristics

tem	Description
Pump Type	Vertical Non-CloQ
Pump Manufacturer/Model	Smith & Loveless/07-4213
No. of Pumps	2
Pump Motor HP	5'
Motor Speed, rpm	875 (constant)
Impeller Size	8 1/8"
Date of Last Pump Upgrade/Overhaul	November 2005/bearing service & replacement
Design Flow/Head <aom@TDH)	200 at 13'
Pumo Desian Flow Condition	Simplex
Wetwell OperatinQ Volume, Gallons	-S00
Force Main Diameter, Inches	6
Pump Invert EL	-2.80
Force Main Hiqh Point EL	-9.0
Force Main Lenath. ft.	600
Force Main Velocity, ft/s, Simplex (Duplex')	2.3/4.0

Duplex operating cond1ons estimated from simplex pump curves. Duplex pump curves not provided by manufacturer.

Pump motors upsized from 3 HP to 5 HP approximately 8 to 9 years ago. v.tlen Pacific Plaza Hotel was developed.

Existing and Future Demands

The existing and future wastewater flows/demands for this area were calculated based on the quantity of developed and undeveloped residential lots tributary to the lift station, State Park and other commercial areas. Infiltration/inflow data is not available; thus, reasonable estimates of wet weather flow were provided in Table 7.

Table 7 Flow Summary[1]

Flow Parameter[1]	Value
ExistinQ Drv Weather Peak Flow, aom	80
Existing Wet Weather Peak Flow. gpm	105
Future Orv Weather Peak Flow, aom	93
Future Wet Weather Peak Flow. qpm[1]	170

Includes 3.5 diurnal peaking factor.

Lift Station General Evaluation (Non-hydraulic)

This evaluation included review of existing information. record drawings. and a site visit to the lift station. A summary of the pertinent non-hydraulic parameters of the lift stations is presented in Table 5.

The lift station is located on Pier Avenue. adjacent to Oceano State Park. The lift station receives flow from the park. and residential/tourist demands from this area. Sewage discharges through a 6-inch cast iron force main that flows southerly, crossing the lagoon/slough, then to Manhole T1-A. SSLOCSD trunk sewer.

- *Lift Station/Dry Pit:* The lift station and dry pit is a Smith & Loveless package lift station. The station was installed in 1966. Removing and replacing pumps can be difficult due to the depth of the dry pit. small opening. location of opening (not centered over pumps). and required confined space entry procedures. According to District staff. they generally contract out this type of service to pull the pumps from the drypit.
- *Wetwell:* The wetwell is a circular lined concrete wetwell. This wetwell was re-lined approximately one to two years ago. and is in good condition. Two gravity sewers discharge to this wetwell, and both have been equipped with stainless steel baskets to catch large debris (to avoid pump clogs). The baskets. which must be cleaned weekly, are working wellto minimize the potential for large debris entering the wetwell and clogging the pumps.

- *Site Conditions:* The lift station is on the north shoulder of Pier Avenue. next to a PGE vault. The site is open (not fenced). Hatches are padlocked for security.
- *Site Power:* The lift station has a receptacle to receive a portable standby generator. which is stored at the City's water yard less than a mile away.
- *Telemetry/Alarms:* The station is equipped with an auto dialer. which telephones an alarm company when a high level or other alarm triggers at the lift station.

Lift Station Hydraulic Performance Evaluation

The hydraulic characteristics of the lift station were analyzed and deficiencies were noted. Design criteria that apply to the lift station and force main is summarized below. Table 6 summarizes the hydraulic parameters of the lift station.

- Force main velocities should be greater that 2.0 feet per second to maintain self cleaning properties but less than 6.0 feet per second to minimize head loss and water hammer.

  Lift stations should be able to convey peak flows with the largest pump out of service. Station "capacity" is therefore calculated with the largest pump out of service.

- Lift station wet wells should be sized to limit the number of pump starts per hour to acceptable limits as defined by the pump manufacturer.

- Lift stations should have a means of conveying peak flows during a power outage. Lift stations serving a small number of customers could use wetwell storage to meet this requirement.

Force Main Velocities
As indicated in Table 7, the force main velocities, in simplex or duplex mode, are acceptable and within normal ranges.

Lift Station Wet Well Capacity
The lift station operating volume was calculated/estimated (due to the conical shape of the bottom of the wetwell, exact volumes could not be computed) and pump cycle times were computed for each station, based on peak dry and wet weather flows (running in simplex mode). Operating volumes do not account for storage volume available between the lead (simplex) pump on elevation and lag (duplex) pump on elevation. Table 8 summarizes the wetwell cycle time calculations.

According to staff, in the event of a power failure, the District generally has more than one hour of response time to provide the portable standby generator, before any potential spill may occur. This provides adequate time for the District to respond.

Table 8 Summary of Lift Station Cycle Times

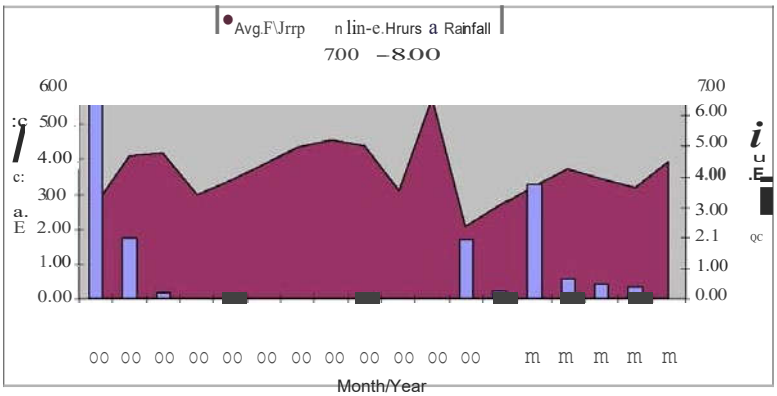
Item	Value
Wetwell Ooeratina Volume, aallons	-500
Cycles oer Hour at Existina ADWF	2.6
Cycles per Hour at Max. Day Flow	3.1
Cycles oer Hour at Existina PWWF	9.8
Cycles oer Hour at Future PDWF	3.1
Cycles per Hour at Max. Day Flow	3.4
Cycles per Hour at Future PWWF	10.3

Lift station pumps should typically cycle not more than 5 to 6 times per hour during average and normal flow conditions, to limit pump starts and avoid motor burnout. This recommendation, however, should be based on the actual pump manufacturer's information. The general range of cycles for this lift station are normal and satisfactory. Only on very few occasions will the lift station cycle over 10 times per hour, and that will be during wet weather flow conditions with significant inflow. It should be noted again that I/I information is not available, thus this evaluation could only be based on assumed inflow values. Regardless, the lift station appears to have more than adequate capacity for existing and future years.

Review of Lift Station Pump Run Hours
Sometimes a plot of lift station pump run times can reveal trends with inflow/infiltration, or peak summer trends. January 2008 through June 2009 pump run times were calculated, and plotted versus monthly rainfall for the same period. Figure 6 depicts this data. From a review of the chart, no clear trend can be seen between precipitation and increased response to pump run

times; however, it appears that the summer tourist demands can be seen in summer months as run pump times increase.

Figure 6 Lift Station Run Times vs. Rainfall



Recommendations

Existing pump capacity for this station is greater than buildout peak wet weather flow. and thus no hydraulic upgrade recommendations are warranted. The lift station pump motors, impellers, bearings, and other components will continue to need service, maintenance, and replacements throughout the years to come. At this time, no other capital improvement recommendations are warranted for this lift station.

CAPITAL IMPROVEMENTS

At this time, there are no identified system capacity concerns and therefore no capital improvement projects are recommended. Other general recommendations are as follows:

- Sewer Videotaping - The District should consider an annual budget line item for periodic and as-needed sewer videotaping. Such review of existing collection system is part of the overall operation and maintenance program described in the Sewer System Management Plan (SSMP). At this time, focused inspections in "trouble-spots" areas is sufficient.
- Sewer Cleaning - Periodic sewer cleaning/jetting should be performed on an on-going basis.
- Manholes - Manholes should be inspected as needed consistent with current practices for signs of sulfuric acid attack and general deterioration, as well as any issues with solids build up and debris. If it is suspected that a manhole may be the source of inflow, gaskets or covers to minimize inflow through the manholes should be considered.

Lift Station

- No CIPs for the existing lift station are recommended at this time.

Gravity Collection System

- No CIPs for the existing collection system are recommended at this time.

Conclusion

The District has done an excellent job maintaining the collection system facilities. While periodic replacement of aging infrastructure will be required, a continued maintenance and inspection program will continue to further the lifetime of the system.

Appendix G – Sewer System Management Plan Audits