South San Luis Obispo County
SANITATION DISTRICT

South San Luis Obispo County Sanitation District

2025 Sewer System Management Plan

Original Plan Prepared by South San Luis Obispo County Sanitation District:	July 2009
Updated by Wallace Group:	May 2011
Updated by South San Luis Obispo County Sanitation District:	August 2013
Updated by Michael K. Nunley & Associates, Inc.:	February 2025

Certification Statement

I certify under penalty of perjury under the laws of the State of California that the electronically submitted information was prepared under my direction or supervision. Based on my inquiry of the person(s) directly responsible for gathering the information, to the best of my knowledge and belief, the information submitted is true, accurate and complete, and complies with the Statewide Sanitary Sewer Systems General Order. I am aware that there are significant penalties for submitting false information.

_____

Mychal Jones
Plant Superintendent

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List of Acronyms

BMP	Best Management Practice
CCTV	Closed Circuit Television
CIP	Capital Improvement Plan or Capital Improvement Program or Capital Improvement Project
CIWQS	California Integrated Water Quality System
CDFW	California Department of Fish and Wildlife
FOG	Fats, Oils, and Grease
FSE	Food Service Establishments
GIS	Geographic Information System
GWDR	General Waste Discharge Requirements and/or Waste Discharge Requirements (WDR)
HMA	High Maintenance Area
I/I	Inflow / Infiltration
LRO	Legally Responsible Official
MGD	Million Gallons Per Day
MKN	Michael K. Nunley & Associates
MS4	Municipal Separate Storm Sewer System
NPDES	National Pollutant Discharge Elimination System
O&M	Operation and Maintenance
OERP	Overflow Emergency Response Plan
OES	Office of Emergency Services
PM	Preventative Maintenance
PMP	Preventative Maintenance Program
POTW	Public Owned Treatment Works
R&R	Rehabilitation and Replacement
RWQCB	Regional Water Quality Control Board
SSMP	Sewer System Management Plan
SSO	Sanitary Sewer Overflow
SSOR	Sewer System Overflow Report
SSORP	Sanitary Sewer Overflow Response Plan
SSS	Sanitary Sewer System
SWRCB	State Water Resources Control Board
UPC	Uniform Plumbing Code
WDR	Waste Discharge Requirements and/or General Waste Discharge Requirements (GWDR)
WWTP	Wastewater Treatment Plant

INTRODUCTION

This section provides background information on the purpose and organization of this Sewer System Management Plan (SSMP) and provides a brief overview of the South San Luis Obispo County Sanitation District's (District) sewer service area and collection system.

District Service Area and Sewer System

The County Board of Directors formed the District in 1963 which includes Arroyo Grande, Oceano, Halcyon and several unincorporated areas in the vicinity. Additionally, the City of Grover Beach is a contract agency. This service area amounts to a population of approximately 38,000 residents (2016 Wastewater Financial Plan and Rate Study). The purpose of the District is to provide wastewater treatment to these communities. It is the District's responsibility to protect the environment including preventing Sanitary Sewer Overflows (SSOs) from the District's trunk system.

Located on a 7.6 acre site on Aloha Place in Oceano between the Oceano Airport and the Arroyo Grande Creek Channel, the District constructed the Wastewater Treatment Plant (WWTP) in 1965. Member Agencies (the City of Arroyo Grande, City of Grover Beach, and the Oceano Community Services District) of the District provide sewage collection services. Sewage is transported through their collection systems into 9 miles of District owned, operated, and maintained trunk sewers which then feed to the WWTP. Currently, the WWTP operates using a fixed film rector for secondary treatment with a design capacity flow rate of 5 million gallons per day (mgd) and a 9 mgd peak wet weather flow.

The District's service and boundary area is shown in **Figure 1** and serves 85% residential and 15% non-residential connections. The District's Waste Discharge Identification (WDID) Number (WDID) is 3SSO10337.

SSMP Requirement Background

On May 2, 2006, The State Water Resources Control Board (SWRCB) adopted Water Quality Order No. 2006-0003 (Order No. WQ 2006-0003-DWQ), requiring all public wastewater collection system agencies in California with greater than one mile of sewers to be regulated under General Waste Discharge Requirements (GWDR). The SWRCB action mandates the development of an SSMP and the reporting of SSOs using an electronic reporting system. An audit of the plan is required every two years to identify the effectiveness of the SSMP, and an overall update of the SSMP (using the audits to identify the sections and content of the SSMP to update) is required every five years from the date the original document was approved and certified.

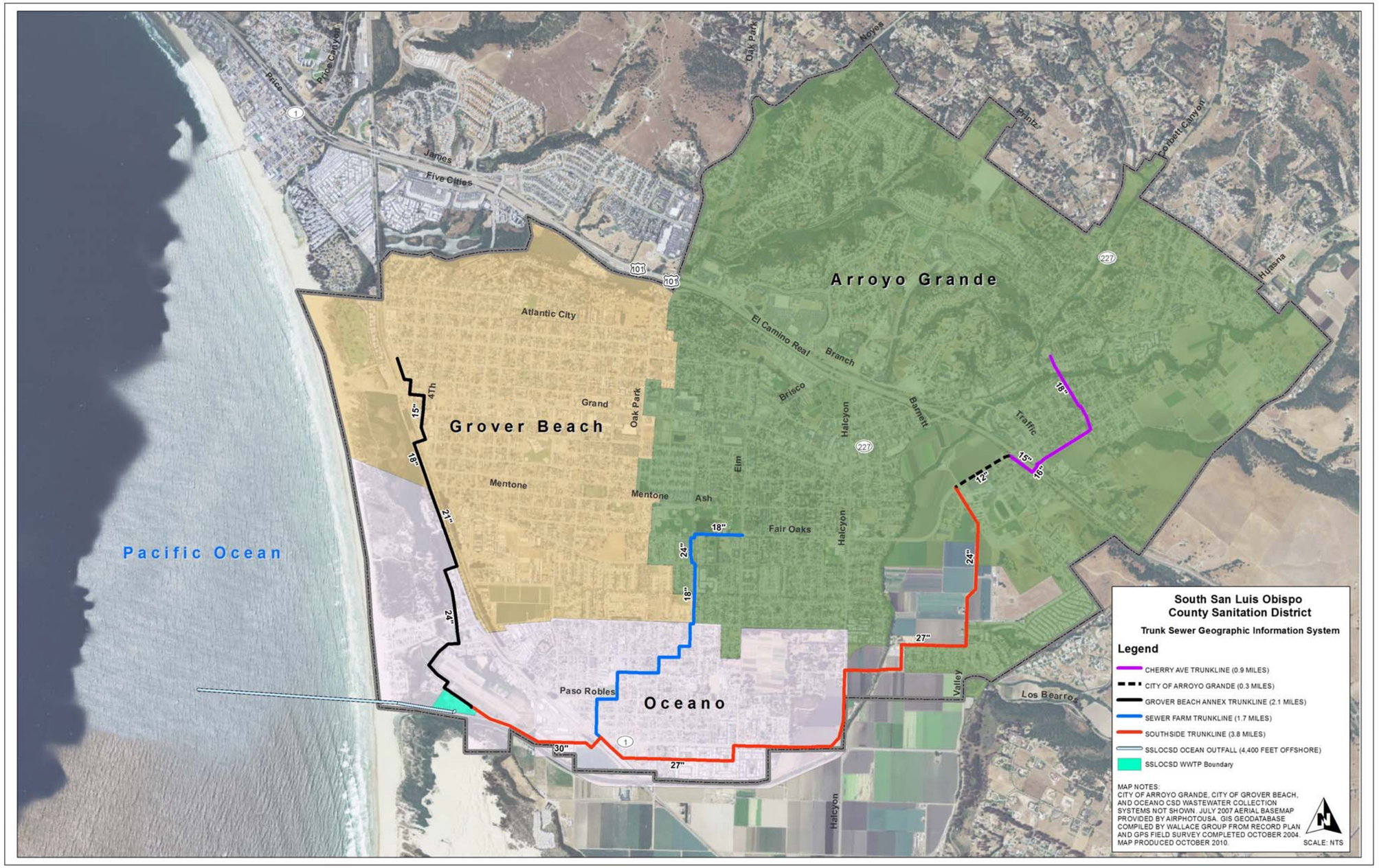
On February 20, 2008, Attachment A to the Order was promulgated and is known as Attachment A, SWRCB Order No. WQO 2008-0002-EXEC, amending the Monitoring RWQC and Reporting Program for Statewide GWDR for Sanitary Sewer System (SSS). Together these documents constitute the SSS Waste Discharge Requirements (WDR).

On July 30, 2013, Attachment A to the Order was promulgated and became effective on September 9, 2013 and is known as Attachment A, SWRCB Order No. WQO 2013-0058-EXEC, amending the Monitoring RWQC and Reporting Program for Statewide GWDR for Sanitary Sewer System (SSS). Together these documents constitute the SSS Waste Discharge Requirements (WDR).

On December 6, 2022, the SWRCB adopted Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, Water Quality Order No. 2022-0103-DWQ (Sanitary Sewer Systems General Order) to provide a consistent, statewide regulatory approach to address sanitary sewer spills. In addition, updates to SSMPs are required every six (6) years and audits completed every three (3) years.

The District's SSMP was originally developed in 2009 and approved by the Board of Directors on July 15, 2009. The District completed its first revision, audit, and follow up revision in 2011. The District completed its third revision in 2014. The 2025 SSMP update serves as the fourth significant update to the plan. This SSMP will be audited and updated per the required schedule.

Figure 1: Trunk Sewer Geographic Information System Map



Document Organization

This SSMP is intended to meet the requirements of both the Regional Water Quality Control Board (RWQCB) and the Statewide GWDR. The SSMP includes eleven elements:

1. Goal
2. Organization
3. Legal Authority
4. Operation and Maintenance
5. Design and Performance Provisions
6. Overflow Emergency Response Plan
7. FOG Control Program
8. System Evaluation and Capacity Assurance Plan
9. Monitoring, Measurement, and Program Modifications
10. SSMP Program Audits
11. Communication Program

Plan & Schedule Regulatory Requirement:

Both the SSMP and the program to implement the SSMP must be certified by the District's Board of Directors to comply with the requirements set forth above and must be presented to the Board for approval at a public meeting. The current update to the District's SSMP was approved/certified in February 2025. The tables below identify the required SSMP updates and Audit due dates.

Table 1-1: SSMP & Subsequent Update Due Dates

Original Plan Required Due Date	Required Plan Update Due Date	Required Plan Update Due Date	Required Plan Update Due Date*
8/2/2009	8/2/2014	8/2/2019	8/2/2025
Notes: *Per Section 5.5 and Attachment E1, Section 3.11 of the General Order, Plan updates are due within six years after the required due date of the Enrollee's last Plan Update			

Table 1-2: Audit Due Dates

Original Required Plan Audit Due Date	**Required Plan Audit Due Date**	**Required Plan Audit Due Date**	**Required Plan Audit Due Date**	**Required Plan Audit Due Date**	**Required Plan Audit Due Date**	End of Required 3-Year Audit Period**
8/2/2011	8/2/2013	8/2/2015	8/2/2017	8/2/2019	8/2/2021	8/2/2024
Notes: ** Per Section 5.4 and Attachment E1, Section 3.10 of the General Order, the Audit Report is due within six months after the end of the required 3-year audit period						

ELEMENT 1 GOAL

This section identifies the goals that the District has set for the management and O&M of the sewer system and discusses the role of the SSMP in supporting these goals.

This element was last updated in February 2025.

1.1 Purpose of Report

These goals provide focus for the District staff to continue high-quality work and to implement improvements in the management of the District's wastewater collection system.

1.2 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 address the provisions of adequate capacity to convey peak wastewater flows, as well as a reduction in the frequency of 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 to reduce and prevent SSOs, as well as to mitigate any SSOs that occur.

1.2.1 Element 1 – Goal Appendix A

Supporting information for Element 1 is included in **Appendix A** which contains the following document:

- SSMP Schedule
- Minutes of Board Meetings for SSMP Approval (October 2007, July 2009 and February 2025)

1.3 Goal Discussion

Providing safe, responsive, and reliable sewer services is a key component to fulfilling the District's commitment to public health, including mitigating environmental impact.

In support of this mission, the District has developed the following goals and priorities for their staff. This document outlines responsibilities and provides procedures and guidelines for sewer system maintenance and cleaning activities.

1. Be available and responsive to the needs of the public, and work cooperatively with local, state, and federal agencies to reduce, mitigate, and properly report SSOs.
2. Properly manage and maintain the District trunk sanitary sewer collection system to minimize SSOs.
3. Identify, prioritize, and continuously renew and/or replace sewer collection system to maintain reliability now and into the future.
4. Provide adequate capacity for peak wet weather wastewater flows.

ELEMENT 2 ORGANIZATION

This section identifies District Staff who are responsible for implementing this SSMP, responding to SSO events, and meeting the SSO reporting requirements. This section also includes the designation of the Legally Responsible Official (LRO) to meet SWRCB requirements for completing and certifying spill reports.

This element was last updated in February 2025.

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. 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; and
- The chain of communication for reporting SSOs, from receipt of a complaint or other information, including persons responsible for reporting SSOs to the State and RWQCB and other agencies if applicable (such as County Health Officers, County Environmental Health Agency, California Department of Fish and Wildlife (CDFW), Coast Guard, and/or State Office of Emergency Services (OES)).

2.1.1 Element 2 - Organization Appendix B

Supporting information for Element 2 is included in **Appendix B** which contains the following documents:

- Current List of Board of Directors
- Current List of Staff
- Agency Notification List for SSOs
- District Organizational Chart

2.2 District Organization

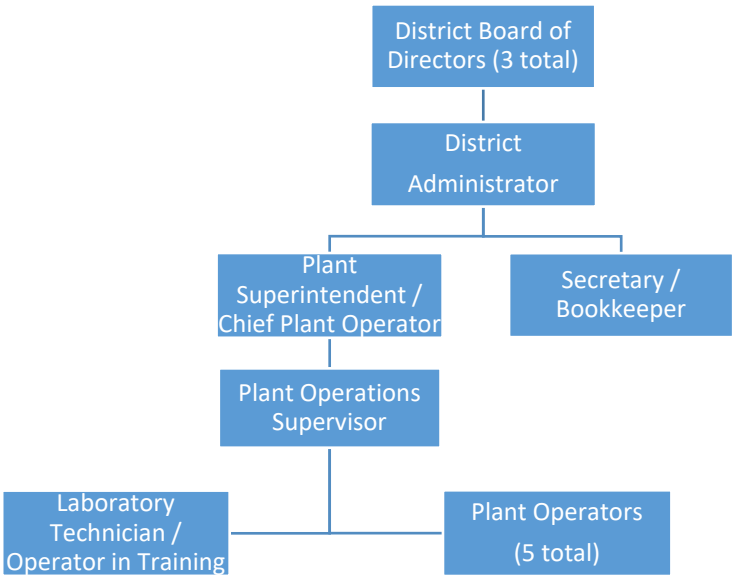
The District Board of Directors consists of three members, each appointed by the respective Member Agencies on a yearly basis. One representative comes from each of: the City of Arroyo Grande, City of Grover Beach, and the Oceano Community Services District.

The Board of Directors governs and makes decisions in the best interest of the District. Policy and operational decisions are made in conjunction with the District Administrator and District Staff who are responsible for the WWTP and District trunk system. Additionally, the Board of Directors establishes policy, sets goals and objectives, approves the annual budget, approves expenditures, and performs other related functions. For names of the current Board members see **Appendix B**.

2.3 Description of General Responsibilities

This section includes a brief description of the job title, authority, and respective responsibilities associated with each position. **Figure 2-1** depicts the District's organizational chart.

Figure 2-1: Organization Chart



2.4 Authorized Representative

The District has a designated LRO pursuant to Section J., Report Declaration, of the State General WDR (Order No. 2006-0003) who is responsible for data submittals and reporting. The District's LRO is the Plant Superintendent / Chief Plant Operator. Their contact information is provided in **Appendix B**.

2.5 Responsibility for SSMP Implementation (Revised February 2025)

The District Administrator and Plant Superintendent / Chief Plant Operator are responsible for overseeing implementation and maintenance of all elements of this SSMP.

Responsibility for Element 1 – Goals

The District Administrator is responsible for leading staff in the implementation of the District's goals.

Responsibility for Element 2 – Organization

The District Administrator is responsible for updating the organizational structure, SSMP implementation assignments, and SSO response and reporting chain of communication, as needed.

Responsibility for Element 3 – Legal Authority

The District Administrator is responsible for upholding the relevant Sanitary Code and for drafting new ordinances, as needed.

Responsibility for Element 4 – Operations and Maintenance (O&M)

The District Administrator and Plant Superintendent / Chief Plant Operator are responsible for 1) resources and budget, 2) outreach to contractors, 3) prioritizing Preventative Maintenance (PM), 4) purchasing contingency equipment and replacement inventories, 5) training for staff, 6) updating the collection systems map, and 7) scheduling inspections and condition assessment.

Responsibility for Element 5 – Design & Performance Standards

The District Administrator or designee is responsible for reviewing design and construction documents to ensure that all construction projects meet the proper standards.

Responsibility for Element 6 – Overflow Emergency Response Plan (OERP)

The District Administrator and Plant Superintendent / Chief Plant Operator are responsible for implementation of the OERP, including revisions to the plan and annual training for maintenance crew members and staff.

Responsibility for Element 7 – FOG Control Program

The District Administrator or their delegate is responsible for identifying grease High Maintenance Areas (HMAs) and maintaining an effective cleaning program for problematic grease-prone sewers. The Environmental Compliance Inspectors are responsible for inspecting grease traps/interceptors that have been installed at non-residential locations and for enforcing discharge regulations for the Member Agencies.

Responsibility for Element 8 – System Evaluation and Capacity Assurance Plan

The District Administrator or their delegate is responsible for establishing and assessing capacity requirements for the District's trunk lines and for preparing and implementing the System Evaluation and Capacity Assurance Plan. They are also responsible for the development and implementation of the District's long-term Capital Improvement Plan (CIP), including updating budgets and schedules.

Responsibility for Element 9 – Monitoring, Measurement and Program Modification

The District Administrator is responsible for monitoring the implementation of and assessing success of the overall SSMP program elements, with the assistance of the Plant Superintendent / Chief Plant Operator. This position is responsible for identifying trends in SSO occurrences and providing recommendations to the District Board.

Responsibility for Element 10 – SSMP Audits

The District Administrator is responsible for overseeing the SSMP audits.

Responsibility for Element 11 – Communication Plan

The District Administrator is responsible for communicating with the public and regulatory agencies regarding the status of the District's SSMP.

2.6 Chain of Communication for Responding to SSO

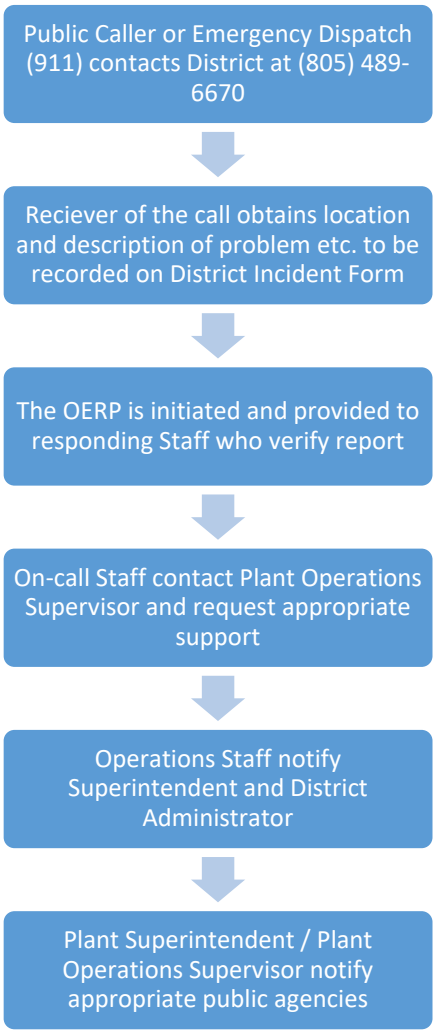
The District has procedures that provide for effective notification of each category of SSOs through a clear and step-by-step method of communication by staff at different levels. The procedures for SSO reporting are reviewed and updated as needed to ensure full compliance with all regulatory and legal requirements.

The public may report a sewer spill by calling District Staff Investigation at (805) 489-6670.

All spill reports start with this contact and gathering of information as required by the California Integrated Water Quality System (CIWQS) Sewer System Overflow Report (SSOR). Guidance on completing the SSOR is provided in the CIWQS SSO Discharger Work Book and is provided in **Appendix B**. The office staff or on-call operator notifies Operations staff via handheld radios or cell phone of the overflow and response to the SSO is conducted. The Superintendent and/or Plant Operations Supervisor are responsible for reporting the SSO as required by the GWDR.

In the event of a report of a possible wastewater spill, or when Staff is contacted concerning odors, standing water or an overflowing manhole, the necessary steps are taken to verify the report and ensure the safety of the public as shown in **Figure 2-2**.

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



The applicable agencies that are to be contacted include: (For a complete list of current personnel to be contacted see **Appendix B**).

1. San Luis Obispo County Environmental Health Department
    a. Contact immediately if public contact; contact within 2 hours if spill over 1,000 gallons or reaches waters of the state.
2. Central Coast Regional Water Quality Control Board (RWQCB)
    a. Contact within 2 hours if spill over 1,000 gallons or reaches waters of the state; RWQCB staff require a 24-hour written report and may require a 5-day technical report.
3. San Luis Obispo County OES
    a. Contact within 2 hours if spill over 1,000 gallons or reaches waters of the state.
4. Cal OES Warning Center
    a. Contact within 2 hours if spill over 1,000 gallons or reaches waters of the state.
5. CA Department of Fish & Wildlife
    a. Contact within 2 hours if spill affects fish and/or wildlife.

Upon completion of containment and clean-up, the Plant Superintendent / Chief Plant Operator will use the CIWQS SSO Discharger Work Book to initiate the draft SSO reports to the SWRCB's California Integrated Water Quality System (CIWQS) database.

ELEMENT 3 LEGAL AUTHORITY

This element includes legal authority, through sewer use ordinances, service agreements or other legally binding procedures, to prevent illicit discharges into the SSS. It will also address the legal authority in place to ensure proper design and construction of any additions or repairs to the sewer system.

The District's General Sewerage Regulations, as described in Resolution 22A, maintain the Legal Authority for the trunk system, including a Pretreatment Ordinance and a FOG Ordinance. The Member Agencies requested that the District administer and enforce their Pretreatment and FOG Programs. The District itself sets forth resolutions regarding sewer rate fees as the District does not have any direct customers. The Member Agencies bill their respective customers then pay the agreed resolution portion to the District for treatment of the sewage at the plant. The Member Agencies, and where legal authority falls outside their jurisdiction, San Luis Obispo County, are responsible for maintaining proper records, new construction, building permits, enforcing construction codes and ordinances. The District is additionally responsible for the maintenance and upkeep of the WWTP and the trunk lines.

This element was last updated in February 2025.

3.1 Regulatory Requirements

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

- Prevent illicit discharges into its SSS (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 sewer system owned or maintained by the Public Agency;
- Limit the discharge of FOG and other debris that may cause blockages;

3.1.1 Element 3 – Legal Authority Appendix

There is no Appendix related to Element 3.

3.2 Prevent Illicit Discharges

The proper functioning of the collection system and WWTP is essential, so any interfering illicit discharges must be prohibited. The District's current regulatory abilities are found in the following ordinances:

SSLOCSD Resolution 22A – General Sewerage Regulations 1966

- Article VII, Section 2 – Prohibited Wastes

SSLOCSD Pretreatment Ordinance 1994-1

- Article I, Section 3 – Prohibited Discharges

SSLOCSD Sewer Use Ordinance 2011-1

- Article III, Section 3.01 – Discharge Prohibitions

SSLOCSD Fats, Oils, and Grease Ordinance

- Article II, Section 2.3 – Prohibited FOG Discharges

3.3 Design and Construction

Standards and Design Specifications provide minimum standards for the design, types and uses of materials, and the preparation of plans for construction, repair, or alteration of District treatment facilities. This ensures the sewer lines and connections are properly designed and constructed.

The District's current regulatory abilities to establish design and construction standards are found in the following ordinance:

SSLOCSD Resolution 22A – General Sewerage Regulations 1966

- Article III, Section 4 – General Regulations and Materials House Sewers to be/or Connected to a House Sewer
- Article IV, Section 1 – General Regulations and Materials Main Sewers
- Article V, Section 1 – General Rules, Standard Specifications

SSLOCSD Sewer Ordinance 2011-1

- Article II, Section 2.07 – Construction Provisions

The District will contract out engineering design services that use the Standards and Specifications approved by the District along with the current version of the San Luis Obispo County Department of Public Works Standard Improvement Specifications and Drawings for the construction of all new and rehabilitated sewer related projects.

3.4 Ensure Access for Maintenance, Inspection and Repairs

The District's current regulatory abilities to ensure access for maintenance, inspection, and repairs are found in the following ordinances:

SSLOCSD Resolution 22A – General Sewerage Regulations 1966

- Article IV, Section 4 – Investigative Powers
- Article VI, Section 7 – Maintenance of Connections
- Article VIII, Section 5 – Inspections

SSLOCSD Pretreatment Ordinance 1994-1

- Article I, Section 10 – Powers and Authority of Inspectors

SSLOCSD FOG Ordinance 1008-01

- Article V, Section 5.4 – Right of Entry, Inspection and Sampling
- Article V, Section 5.5 – Right to Inspect

SSLOCSD Sewer Use Ordinance 2011-1

- Article II, Section 2.08 – Inspection Provisions
- Article II, Section 2.10 – Maintenance

3.5 FOG Control

The legal authority for each Member Agency to regulate the Food Service Establishments (FSEs) within the District Service area is established by the District's FOG Ordinance. The District adopted the FOG Ordinance to comply with WDR Orders No. 2006-0003-DWQ and WQ 2008-0002-EXEC in 2008, because FOG was an identified problem in the District's and Member Agencies' sanitary sewer system. FSEs are permitted and inspected semi-annually by each Member Agency who perform their own Environmental Compliance Inspection services.

3.6 Enforcement of its Sewer Ordinance

If the Member Agencies are unable to obtain correction by a chronic violator of the sewer ordinance, the District shall become involved. The District has the authority to become involved if the violation pertains to general sewerage use, Pretreatment, or FOG. The District's current regulatory abilities to prohibit illegal discharge are found in the following Ordinances:

SSLOCSD Resolution 22 – General Sewerage Regulations 1966

- Article V, Section 6 – Liability for Violation

SSLOCSD Pretreatment Ordinance 1994-1

- Article V, Section 23 – Remedies
- Article V, Section 24 – Declaration of Public Nuisance
- Article V, Section 25 – Assessment of Cost
- Article V, Section 26 – Civil Remedies/Administrative Complaint
- Article V, Section 27 – Criminal Penalties
- Article V, Section 28 – Termination of Service

SSLOCSD Sewer Use Ordinance 2011-1

- Article V, Section 5.01 – Enforcement

SSLOCSD FOG Ordinance 208-01

- Article VI, Section 6.1 – General Procedure
- Article VI, Section 6.2 – Determination of Non-Compliance
- Article VI, Section 6.3 – Permit Suspension
- Article VI, Section 6.4 – Permit Revocation
- Article VI, Section 6.5 – Bypass
- Article VII, Section 7.1 – Criminal Prosecution
- Article VII, Section 7.2 – Remedies Non-exclusive

The Pretreatment Ordinance Article V and FOG Ordinance Articles VI and VII allow the District to order temporary or permanent injunctive relief with the assistance of Legal Counsel.

3.7 Sewer Use Fees

The Member Agencies collect fees from their customers which they use to pay fees to the District to discharge into the District owned and operated trunk lines which then discharge into the WWTP. The fees fund the daily operation, maintenance and administration of the WWTP and trunk lines. Fees are reviewed and adopted by the Board of Directors. This is further discussed in:

SSLOCSD Ordinance 2006-1

- Exhibit A – Rates by Classification
- Exhibit B – Connection Fees

SSLOCSD Sewer Ordinance 2016-1

- Article VI, Section 4.05 – Fees

ELEMENT 4 OPERATIONS AND MAINTENANCE PROGRAM

This element discusses the actions that are performed (mostly contracted out) to accomplish the optimal Operation and Maintenance of the District's collection system. This ensures that the system is kept in good working condition. In particular, the wastewater must enter the WWTP in an efficient way. Due to the large diameter size of the trunk system, repairs and upkeep are performed infrequently.

This element was last updated in February 2025.

4.1 Regulatory Requirements

Element 4 of the SSMP must identify how the District meets the following regulatory requirements:

- Maintain an up-to-date map of the SSS, showing all gravity line segments and manholes, pumping facilities, pressure pipes and valves, and applicable storm water conveyance facilities;
- Describe routine preventive O&M activities by staff and contractors; including a system for scheduling regular maintenance and cleaning of the SSS with more frequent cleaning and maintenance targeted at known problem areas. The Preventative Maintenance Program (PMP) program should have a system to document scheduled and conducted activities, such as work orders;
- Develop Rehabilitation and Replacement (R&R) plan to identify and prioritize system deficiencies and implement short-term and long-term rehabilitation actions to address each deficiency. The program should include regular visual and TV inspections of manholes and sewer pipes, and a system for ranking the condition of sewer pipes and scheduling rehabilitation. R&R should focus on sewer pipes that are at risk of collapse or prone to more frequent blockages due to pipe defects. Finally, the R&R plan should include a CIP that addresses proper management and protection of 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 CIP;
- Provide training on a regular basis for staff in SSS operations, maintenance, and require contractors to be appropriately trained; and
- Provide equipment and replacement part inventories, including identification of critical replacement parts.

4.1.1 Element 4: O&M Appendix C

Supporting information for Element 4 is included in **Appendix C** which contains the following documents:

- Trunk Sewer Geographic Information System Sample Map

4.2 Map of Sanitary Sewer System

The Plant Superintendent / Chief Plant Operator oversees the creation and maintenance of electronic collection system maps using a Geographic Information System (GIS). The maps are overlaid onto aerial images and provide detailed locations of the system's components with references to roads, homes, trees, etc. within District boundaries. The electronic maps additionally include precise information relating to the general characteristics of the system components. This includes material composition, pipe diameters, segment lengths, slopes, grade elevations, invert elevations, and survey data. Interactive links also provide immediate access to system photos, Closed Circuit Television (CCTV) inspection videos and the trunk system's construction drawings.

Hard copy maps are printed and provided to the District's staff and contractors for use during routine maintenance and operations and during Capital Improvement Projects (CIPs). As-built plans and construction drawings are maintained and the system is improved through the CIP, and data is routinely integrated back into collection system mapping.

4.3 Preventative Operation and Maintenance Activities

The District's routine and non-routine maintenance consists of line cleaning, video, and visual inspection. A contractor conducts Closed Circuit Television (CCTV) sanitary sewer line inspections for the District to identify and clean any FOG, debris, cut roots, or any other blockages in the SSS. Inspection in conjunction with cleaning provides quality control to the District by providing real time visual verification that the debris encountered is completely removed from the system. After a cleaning, the next round of maintenance will be scheduled according to the findings from the last round of inspection and maintenance. Given that these are larger diameter lines subjected to higher scouring velocity, it is appropriate to perform the maintenance at least once every three years and more where necessitated.

The District has also identified several hotspots throughout the trunk line system, which are cleaned a minimum of once every three years. These spots generally consist of areas of known Inflow/ Infiltration, root intrusion, grease, dips, and those areas located upstream of a system "bottle neck."

4.4 Rehabilitation and Replacement Plan

The risk for deterioration, blockages, and collapse increases considerably with sewer system age. To mitigate those risks, the District currently budgets for and conducts bi-annual visual and contracted CCTV inspections of the manholes and sewer pipes on half of the trunk sewer system. The District completes engineering reviews and assessments on the information obtained from the CCTV inspections to prioritize noted system deficiencies. Short-term and long-term rehabilitation actions are implemented to address each deficiency.

Long-term rehabilitation actions are incorporated into upcoming fiscal year budgets as capital improvement projects (CIP). Short-term rehabilitation actions are funded through the annual operating budget developed for collection system maintenance. Work for short-term and long-term rehabilitation actions are performed by area contractors through publicly bid service contracts awarded by the District. Examples of short- and long-term rehabilitation actions implemented by the District are described below.

The District has completed multiple maintenance projects including the relining of influent pipelines in their system. In 2016, the District completed the Cherry Avenue Pipe Bridge Maintenance project which included the removal of existing paint and debris, in addition to the application of an anti-corrosion coating system. The District also completed the Valley Road Manhole Raising Project in 2019. This short-term rehabilitation action was funded through the annual operating budget developed for collection system maintenance.

The District completed hydro-jetting manhole inspections and pipeline cleaning of the entire existing trunk system in 2020.

4.5 Training

Training, including formal classroom and on-the-job are facilitated by both District staff and by outside training workshops. On-the-job cross training is pursued to ensure staff have a proficient working knowledge of the sewer system and tasks can be performed without interruption. Task proficiency is a requirement for all job positions and promotions, and training records are maintained by the Plant Superintendent / Chief Plant Operator to schedule further training.

Crews are 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 resource material for start-up training and new staff training.

Safety training is also an integral aspect of the District's program. Every staff member receives formal safety training. Staff are trained in confined space entry. Employees are trained in hazardous materials management, as required.

The staff is also annually trained to maintain proficiency in the Overflow Emergency Response Plan and reporting procedures for SSOs.

4.6 Equipment Inventory

The District does not operate any lift stations in their collection system, so there is not a need for a lift station emergency inventory.

Utilizing contracted services for the components which comprise the Operations and Maintenance Plan eliminates the need for the District to maintain inventoried parts and equipment for the repair and replacement of system components. The contracts executed are inclusive of all equipment and parts necessary for completion of work. In the event of an emergency, local retailers are available to supply needed equipment and parts at short notice.

ELEMENT 5 DESIGN AND PERFORMANCE PROVISIONS

This section fulfills the Design and Construction requirements for both the RWQCB and SWRCB. The District is responsible for reviewing design and construction documents to ensure that all construction projects meet the District's standards. The District is responsible for updating standards for installation, and rehabilitation and repair, as needed. The District retains the responsibility for inspections of construction projects to ensure District and County standards have been followed.

This element was last updated in February 2025.

5.1 Regulatory Requirements

Element 5 of the SSMP must identify:

- Design and construction standards and specifications for the installation of new SSSs, pump stations, and other appurtenances; and for the rehabilitation and repair of existing SSSs; and
- Procedures and standards for inspection and testing the installation of new sewers, pumps, and other appurtenances and for rehabilitation and repair projects.

5.1.1 Element 5: Design and Performance Provisions Appendix D.

Supporting information for Element 5 is included in **Appendix D** which contains the following documents:

- District's Standard Procedure for Trunk Sewer Connections

Reference will also be made to the following documents:

- Green Book of Standard Public Works Construction

5.2 Design and Construction Standards

The District follows the standards and specifications of the Member Agency that has jurisdiction over the area where the work is done. Design and construction standards for each Member Agency are available on the following websites:

City of Arroyo Grande

- City of Arroyo Grande Engineering Standards for Sewers and Sanitation: http://www.arroyogrande.org/document-center/standards/engineeringstandards/section-2/

City of Grover Beach

- City of Grover Beach Standards and Specifications, Section 6 Sewerage: http://www.grover.org/DocumentView.aspx?DID=268

Oceano CSD

- San Luis Obispo County Department of Public Works Standard Improvement Specifications and Drawings: http://www.slocounty.ca.gov/PW/DevServ/PublicImprovementStandards.htm.

When the District has jurisdiction over a connection to the trunk system, the current version of the San Luis Obispo County Department of Public Works Standard Improvement Specifications and Drawings are utilized. These standards are located at the San Luis Obispo County website at:

http://www.slocounty.ca.gov/PW/DevServ/PublicImprovementStandards.htm.

The District may use a combination of measures, such as spot repairs, linings, coatings, etc., depending on the site-specific conditions to restore trunk system performance to acceptable levels when rehabilitating or repairing a sewer line. The current version of the Greenbook Standard Specifications for Public Works Construction, Part 5 System Rehabilitation is used as the basis for design.

5.3 Procedures and Standards

The District provides inspections during the construction and repair of sewer facilities along the trunk lines through a licensed contractor. The District's standard procedure requires work to be placed into service only after it is accepted by the District Administrator or their delegate following satisfactory inspection and testing. A copy of the District's standard procedure for trunk sewer connections is included in **Appendix D**.

Inspection and testing requirements for sanitary sewer system components are followed as described by the current version of the Greenbook: Standard Specifications for Public Works Construction and include closed-circuit television inspection and air-pressure and mandrel testing of gravity sewer mains. The sections of the Greenbook utilized by the District are:

- Section 207 Pipe
- Section 500 System Rehabilitation

The District has the authority to enforce inspection and testing of new, rehabilitated, and repaired facilities, as described in SSMP Element 3: Legal Authority. The District currently contracts out this work.

ELEMENT 6 OVERFLOW EMERGENCY RESPONSE PLAN

This section outlines the steps taken in an emergency to respond to, contain, and mitigate SSOs. This section also details the procedure for notification of the various agencies, both State and local.

This element was last updated in February 2025.

6.1 Regulatory Requirements

The District will implement a Sanitary Sewer Overflow Response Plan (SSORP) agreement that identifies measures to protect public health and the environment. At a minimum, the plan includes:

- Proper notification procedures so that the primary responders and regulatory agencies are informed of all SSO in a timely manner;
- A program to ensure appropriate response to all overflows;
- Procedures to ensure prompt notification to appropriate regulatory agencies and other potentially affected entities (e.g. health agencies, regional water boards, water suppliers, etc.) of all SSO that potentially affect public health or reach the waters of the State. All SSO shall be reported in accordance with the California Water Code, other State Laws, and other applicable RWQCB GWDR or permit requirements. The SSMP identifies the officials who will receive immediate notification;
- Procedures to ensure that appropriate contract staff and contractor personnel are aware of and follow the SSORP 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 United States 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.

6.1.1 Element 6 – Overflow Emergency Response Plan Appendix E

Supporting information for Element 6 shall be included in **Appendix E** which consists of the following documents:

- District Overflow Emergency Response Plan
- SSO Report Forms – Incident and Telephone Log

6.2 Sewer System Overflow Notification and Reporting

The District is responsible for spills caused by a blockage or overflow in the District trunk lines only. The Plant Superintendent / Chief Plant Operator and/or on-call person is on standby twenty-four (24) hours per day, seven (7) days per week and is aware of low manholes and system bottlenecks that may overflow during an emergency.

The District may receive calls reporting sewer spills at the WWTP office (805-489-6670) or through 9-1-1 emergency calls. During regular business hours, (Monday through Friday, 7:30am to 4:00pm) the Superintendent sends one or more Operations staff to respond to an SSO notification. During non-business hours the office phone number is forwarded to the on-call person.

6.3 Sewer System Overflow Response

The District's goal for responding to an SSO during business hours is immediate from receipt of call. The District's goal for responding to SSOs during non-business hours is 45 minutes. The District's on-call person is usually the SSO first responder and is responsible for mitigation, documentation, most reporting, and follow-up.

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. District staff obtains the location and any description of the problem as well as the name and contact information of the caller for follow-up information.
2. A SSOR is initiated by the call recipient and will be provided to the first responder.
3. The Plant Superintendent / Chief Plant Operator is contacted and dispatches a first responder to the scene.
4. The first responder may request additional support by contacting administrative staff. Administrative staff will coordinate with the Plant Superintendent / Chief Plant Operator to contact appropriate District staff and contract support as required.
5. The Plant Superintendent / Chief Plant Operator may notify the District Administrator or other staff as necessary.
6. The Plant Superintendent / Chief Plant Operator or first responder will notify all appropriate regulatory agencies as required by the category of spill (Category 1 or Category 2).
7. Upon mitigation, containment, and clean-up of the spill the Plant Superintendent / Chief Plant Operator or first responder will use the SSOR to complete the spill report(s) to the State Water Board CIWQS database, the RWQCB, County OES, Cal OES and the San Luis Obispo County Environmental Health Department as necessary. The LRO will certify the CIWQS spill report within 15 days of a Category 1 and Category 2 SSOs. The LRO will certify the CIWQS spill report within 30 days after the end of the month of which Category 3 and Category 4 SSOs occur.

6.4 Sewer System Overflow Reporting

The District is registered with the SWRCB CIWQS electronic sewage spill reporting system. The Plant Superintendent / Chief Plant Operator is the Legally Responsible Official (LRO) and is responsible for certifying electronic spill reports submitted via CIWQS.

A SSOR will be completed for all SSOs resulting from back-ups and/or blockages in the District's trunk lines. The information recorded on the SSOR is entered into CIWQS in accordance with the mandated reporting timelines (shown in **Figure 6-1**) and certified by the LRO. Copies of the SSOR will be located in the District WWTP office.

Category 1 SSO:

1. Spills to surface water or spilled in a location where it probably will be discharged to surface water– call Plant Superintendent / Chief Plant Operator. Within 2 hours call Cal OES, SLO County OES, SLO County Environmental Health, and RWQCB. A written report must be sent to RWQCB within 24 hours. A five (5) day written report may additionally be requested by RWQCB.
2. If a spill of any size flows into a body of surface water or drainage swale call Cal OES, SLO County OES, SLO County Environmental Health, and RWQCB, within 2 hours.
3. Submit a draft report within three (3) business days of becoming aware of the SSO and certify within 15 calendar days of the SSO end date.
4. Conduct water quality sampling of the receiving water within 18 hours of initial knowledge of spill of 50,000 gallons or greater to surface waters.

Category 2 SSO:

1. Discharges of untreated or partially treated wastewater of 1,000 gallons or greater resulting from an enrollee's SSS failure or flow condition that do not reach surface water, a drainage channel, or a Municipal Separate Storm Sewer System (MS4) unless the entire SSO discharged to the storm drain system is fully recovered and disposed of properly report to Plant Superintendent / Chief Plant Operator. Within 2 hours call Cal OES, SLO County OES, SLO County Environmental Health, and RWQCB.
2. Submit a draft report within three (3) business days of becoming aware of the SSO and certify within 15 calendar days of the SSO end date.

Category 3 SSO:

1. Spills of equal or greater than 50 gallons and less than 1,000 gallons that do not reach surface water, a drainage channel, or a Municipal Separate Storm Sewer System (MS4) - call Plant Superintendent / Chief Plant Operator.
2. Submit a certified report within 30 calendar days of the end of month in which the SSO event occurred.

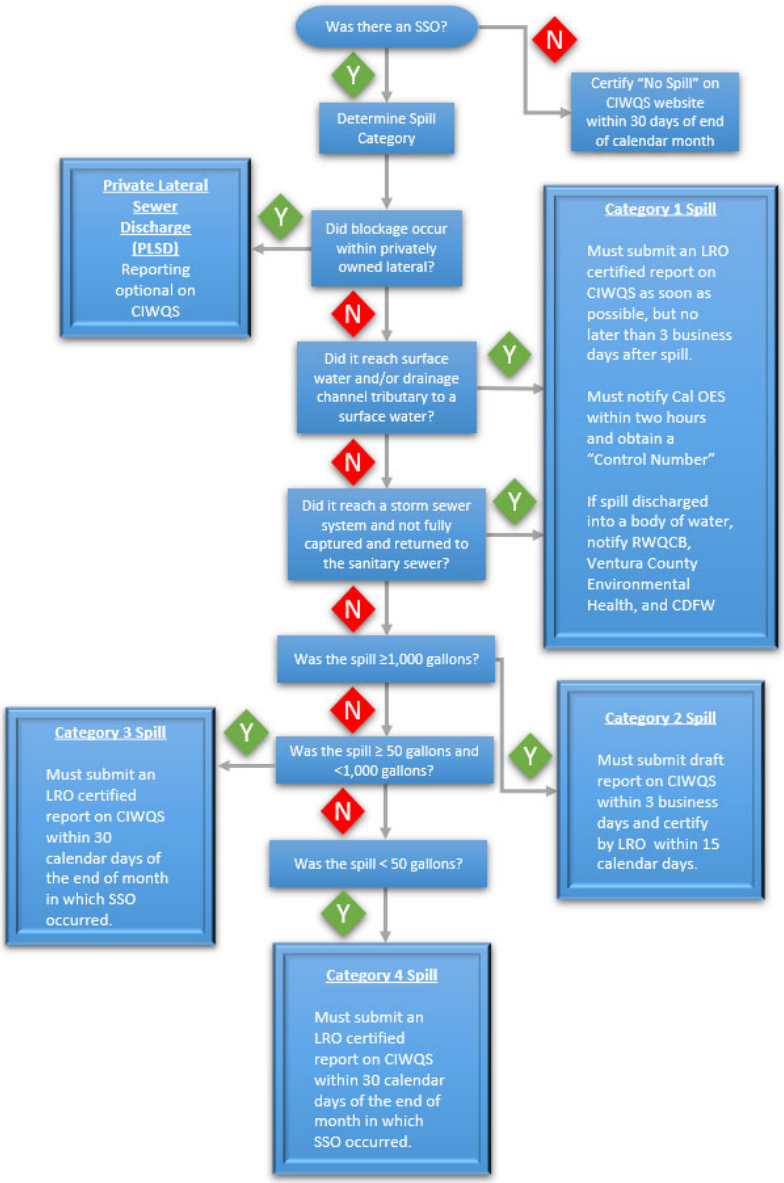
Category 4 SSO:

1. Spills less than 50 gallons that do not reach surface water, a drainage channel, or a Municipal Separate Storm Sewer System (MS4) – call Plant Superintendent / Chief Plant Operator.
2. Submit a certified report within 30 calendar days of the end of month in which the SSO event occurred.
3. Submit certified a report of all Category 4 spills, by February 1st after the end of the calendar year in which the spills occur.

Public Notification:

Potential public notification measures may include temporary signage to indicate pollution of surface water or ground water due to an SSO or notification through media outlets. The District Administrator will be the contact person for media notification. In addition to media notification canvassing of the neighborhoods around the spill may be done to acquire more information and to inform the public of the processes being followed to mitigate the impact of the spill. **Appendix B** includes current contact information for agency reporting.

Figure 6-1: CIWQS Reporting Requirements



1. These reporting requirements do not preclude other emergency notification requirements and timeframes mandated by other regulatory agencies.
2. If the CIWQS website is not available, you must Fax the report to RWQCB and reattempt as soon as possible.
3. Reports on CIWQS can be amended at any time; however, any amended reports will need to be certified by the LRO.

6.5 Training

District staff are trained annually in the requirements of the OERP. Training includes review of the OERP in a classroom setting, practice in response to an SSO event, and practice in SSO reporting using SSOR form and CIWQS.

6.6 Traffic and Crowd Control

SSOs often occur where public contact is likely. To minimize the possibility of contact, District staff is trained in the use of basic traffic control equipment, including safety tape and traffic cones, which are available for use in an emergency. Depending on the location of the SSO, the County Sherriff's Department (Oceano CSD), Grover Beach City Police or Arroyo Grande City Police may be contacted to assist with crowd control.

6.7 Sewer System Overflow Impact Mitigation

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

The District takes all reasonable steps to contain sewage and prevent sewage discharges to storm drains and minimize or correct any adverse impact on the environment resulting from the SSO, including such accelerated or additional monitoring as necessary to determine the nature and impact of the discharge. Operations staff will use suitable materials, to block catch basin entrances to storm drains and will recover spills that entered the system with a vacuum truck. SSO sites are thoroughly cleaned with appropriate steps for each unique situation.

Table 6-1: Hydro Jet/ Vacuum/ Pump Trunks Emergency Call-Out List

Business/ Location	Phone Number
Clay's Septic and Jetting 925 Live Oak Ridge Road Nipomo, CA 93444	(800) 928-2529
Fluid Resource Management 2385 Precision Dr. Arroyo Grande, CA 93420	(805) 546-3619
Valley Septic Service 1337 W Betteravia Santa Maria, CA 93458	(805) 356-3592

The District may use the storm drain system as a containment device if needed. The outlet to the storm drain is blocked and the spill and wash down water are then vacuumed from the line.

For mitigation purposes, the SLO EH Department can provide the District assistance in post-SSOs monitoring. In the event of a Category 1 spill, the SLO EH Department is notified immediately along with other applicable agencies. The District then utilizes the SLO EH Department for the service of monitoring water quality following the SSO. The District will also provide any necessary support, equipment, or Staff as requested to assist in the water quality monitoring.

ELEMENT 7 FOG CONTROL PROGRAM

This section of the SSMP describes the FOG Program for the District. Currently, there is no need to specifically design a FOG Program for the District. The justification for this decision is that the District does not have any Food Service Establishments (FSEs) within its own permitted jurisdiction. The District Member Agencies do have FSEs and contract the District to provide their FOG inspection programs. Their main goal is to decrease the amount of FOG that is entering the sewer system and minimize the risk of SSOs.

This element was last updated in February 2025.

7.1 Regulatory Requirements

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

- An implementation plan and schedule for a public education and outreach program that promotes proper disposal of pipe-blocking substances:
- A plan and schedule for the disposal of pipe-blocking substances generated within the sanitary sewer system service area. This may include a list of acceptable disposal facilities and/or additional facilities needed to adequately dispose of substances generated within a sanitary sewer system service area;
- The legal authority to prohibit discharges to the system and identify measures to prevent SSOs and blockages;
- Requirements to install grease removal devices (such as traps or interceptors) and the development of design standards for such devices, maintenance requirements, Best Management Practice (BMP) requirements, record keeping and reporting requirements;
- Authority to inspect grease producing facilities, enforcement authorities, and whether the District has sufficient contract staff to inspect and enforce the FOG ordinance;
- An identification of sewer system sections subject to FOG blockages and establish a cleaning maintenance schedule for identified sections; and
- Development and implementation of source control measures, for all sources of FOG discharged to the sewer system.

Reference will be made to the following documents not included in **Appendix F**:

- District FOG Ordinance
- FOG Best Management Practices Booklet
- Commercial Flyer
- No Grease Door Hanger

7.2 FOG Control Program Discussion and Outreach

The District does not have any FSEs discharging directly to its own trunk lines. However, all three Member Agencies maintain proactive FOG Control Programs, which are managed by the District. The District's FOG Program for the Member Agencies is predominantly composed of educational outreach, permitting, and inspection of FSE's.

7.3 Identification of Grease Problem Areas and Sewer Cleaning

One objective of a FOG control program is the identification of trouble spots, or High Maintenance Areas (HMAs), that are likely to have grease accumulation. The District trunk lines do not have a history of problems associated with FOG accumulation. If the District determines that FOG HMAs exist, District staff will track locations and causes of dry weather blockages and any grease attributed SSOs.

On behalf of the Member Agencies, the District began educating, inspecting, and permitting FOG producing FSEs within their jurisdiction in 2008 as specified in the District FOG ordinance included in **Appendix F.**

As a preventative measure, the District will continue with its routine cleaning schedule for its responsible trunk line. In addition to these cleanings, Operations staff will focus on instances of identified HMA. Cleaning frequency will depend upon the history of stoppages or overflows of a sewer line.

The District information pertaining specifically to the cleaning and maintenance of sewer lines is included in Element 4: Operations and Maintenance.

7.4 Legal Authority

The District developed and adopted a FOG Ordinance in 2008. The Ordinance is designed to protect the trunk line and WWTP. The FOG Ordinance provides an extension to the District Pretreatment Ordinance which each Member Agency adopted in 1995.

The fundamental goals of 2008-01 FOG Ordinance are:

- To aid in the prevention of SSOs from the contribution and accumulation of FOG into the sewer system from industrial and commercial establishments, particularly food preparation and serving facilities.
- To prevent the introduction of discharges into the District Sanitary Sewer System that will interfere with the operation of the system, which includes, but is not limited to, any gravity type sanitary sewer system, force main system, or the Public Owned Treatment Works (POTW).
- To protect the District Sanitary Sewer System and its Member Agencies, its personnel, and members of the public, who may be affected by sewer blockages and obstructions.
- To prevent the pass through of FOG to receiving waters.
- To improve the opportunity to reclaim and recycle all FOG from FSE grease traps or interceptors.
- To provide for fees which equitably distribute the cost of testing for FOG at the FSE.
- To enable the District to comply with its National Pollutant Discharge Elimination System (NPDES) permit and non-discharge requirement conditions, sludge use and disposal requirements, and any other Federal or State laws to which the District is subject.

The District FOG Ordinance also includes:

- Requirements for Grease Interceptors and Gravity Separating Devices at the user's expense when, in the opinion of the District, they are necessary for the proper handling of liquid wastes containing grease.
- Requirements for all interceptors to be sized using the Uniform Plumbing Code (UPC), current edition.
- Requirements for Interceptors to be of a sufficient capacity to provide the appropriate quality of effluent as per Member Agency Standards and to be in an easily accessible location for the purposes of cleaning and inspection. A sample box or tee is required on all interceptors and separators.
- Requirements for interceptors and separators to be properly maintained to ensure compliance with Ordinance requirements.
- Requirements for the installation of a grease interceptor or trap shall be determined on a case-by-case basis by the District Administrative Staff using the UPC as a guide.
- Requirements for the installation of a gravity separation device shall be determined on a case-by-case basis by the District Staff using the UPC as a guide.

Inspections of FOG producing FSEs are conducted twice a year. If inspectors find that a grease interceptor or gravity separating device installed prior to the effective date of the ordinance is incapable of adequately retaining the FOG in the wastewater flow, the District shall notify the user, in writing, that an adequate interceptor or gravity separating device shall be installed within a specific, reasonable time period.

ELEMENT 8 SYSTEM EVALUATION AND CAPACITY ASSURANCE PLAN

This section discusses the evaluation and capacity enhancement of the collection system. Element 8 also discusses design criteria used and steps taken to correct any deficiencies found in the evaluation.

This element was last updated in February 2025.

8.1 Regulatory Requirements

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

- Evaluation: Actions needed to evaluate those portions of the SSS 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 WWTP'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;
- Design Criteria: Where design criteria do not exist or are deficient, undertake the evaluation identified above to establish appropriate design criteria; and
- 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 identify sources of funding.
- Schedule: The District will develop a schedule of completion dates for all portions of the CIP developed in the bullet points above. This schedule may be reviewed and updated consistent with the SSMP requirements as described by the SWRCB GWDR.

8.1.1 Element 8 –Capital Improvements Appendix G

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

- Capital Improvement Plan and Budget
- Manhole Inspection and Pipeline Cleaning Documentation
- System Hydraulic Evaluation & Capacity Assurance Study

8.2 System Evaluation and Condition Assessment

The District completed manhole inspections and pipeline cleaning of the existing trunk system in 2020. The manhole inspections and pipeline cleaning are included in **Appendix G**.

8.3 Capacity Assessment and Design Criteria

A Trunk Sewer System Capacity Study was completed in 2006; the Trunk Sewer System Capacity Study is provided in **Appendix G**. It was concluded in the report that overall flow capacities were within the design flow capacities. Michael K. Nunley & Associates (MKN) is currently analyzing the data as part of a Trunk Sewer Capacity System Study. As part of the Study, MKN will identify potential capacity limitations to serve existing and future flow conditions. The Capacity Study is expected to be completed in Winter 2024.

8.4 Prioritization of Corrective Action

MKN is preparing an updated CIP as part of the Trunk Sewer Capacity System Study. The updated CIP will include priorities, triggers, and estimated project schedules.

8.5 Capital Improvement Plan

The District maintains an annual CIP and budget to ensure the WWTP and trunk system are in good working order and have sufficient capacity. Within the CIP and budget, Expansion Fund 20 provides for major expenses to increase capacity as required. Additionally, Replacement Fund 26 provides for the replacement of WWWTP equipment and future solids handling requirements. MKN is preparing an updated CIP as part of the Trunk Sewer Capacity System Study. The current CIP is included in **Appendix G**.

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 a preventative measure for improving the overall collection system. This section fulfills the Monitoring, Measurement and Program Modification requirements for both the RWQCB and SWRCB.

This element was last updated in February 2025.

9.1 Regulatory Requirements

The District shall:

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

9.1.1 Element 9 – Monitoring, Measurement & Program Modification Appendix H

Supporting information for Element 9 is included in **Appendix H** which contains the following documents:

- SSO Logs and Trend Data

9.2 Monitoring and Measurement

The District uses an electronic maintenance work order system. This provides written documentation of specific work that has been completed, including the date and time the work was completed. This tool provides the District with vital information needed to determine areas of high maintenance or locations, which may need further attention. Maintenance records are reviewed weekly by the Plant Superintendent / Chief Plant Operator to prioritize activities, programs and policies that may help to eliminate future SSOs.

9.3 Identifying Trends

The District shall 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 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.

9.4 SSMP Updates

The SSMP is a living document and will be revised 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 will be corrected. Program elements will be updated based on performance evaluations, organizational changes, new regulatory requirements, and other changing conditions. The District Administrator will be responsible for revising the SSMP and maintain a revision record to track changes. In addition, the appendices, which include telephone lists and other variable information, will be revised as staffing changes are made.

ELEMENT 10 SSMP PROGRAM AUDITS

This section discusses and outlines the procedure for conducting audits of the SSMP. These audits ensure the SSMP programs are implemented as intended. This element will include a Gap Analysis form and will identify individuals to perform the audits.

The element was last updated in February 2025.

10.1 Regulatory Requirements

As part of the SSMP, the District shall conduct periodic internal audits, appropriate to the size of the system and number of SSOs. At a minimum, these audits must occur every three years and a report must be prepared and kept on file. This audit shall focus on evaluating the effectiveness of the SSMP and the Agency's compliance with the SSMP requirements including identification of any deficiencies in the SSMP and steps to correct them. At a minimum, audits will occur every three (3) years.

10.1.1 Element 10 – Internal Audits Appendix I

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

- SSMP Audit Report Form

10.2 SSMP Audit Procedure

The District Administrator or their delegate will be responsible for conducting the SSMP Audit with cooperation from the Plant Superintendent / Chief Plant Operator. The SSMP Report shall be prepared using the SSMP Audit Report Form in **Appendix I**. When completing the SSMP Audit Report Form, designated District Staff must evaluate the effectiveness of each element of the District's SSMP Program. A written explanation must be included for each yes or no response.

The final SSMP Audit report must be submitted to the District Administrator for review and approval. SSMP Audit Reports and resulting revisions to the SSMP will be kept on file with the SSMP in the District office.

ELEMENT 11 COMMUNICATION PROGRAM

This section discusses the communication program employed by the District. This communication includes with the public as well as the Member Agencies and regulatory agencies. It provides multiple opportunities for interested parties to provide the District with input as the SSMP and associated programs are being developed.

This element was last updated in February 2025.

11.1 Regulatory Requirements

The District shall communicate on a regular basis with the public on the development, implementation, and performance of its SSMP. The communication system shall provide the public the opportunity to provide input to the District as the program is developed and implemented. The District shall also create a plan of communication with systems that are tributary and/or satellite to the District's SSS.

11.1.1 Element 11 – Communication Plan Appendix J

Supporting information for Element 11 is included in **Appendix J** which contains the following document:

- Record of Training

11.2 Communication Program

Public meetings are held in city facilities of each Member Agency (i.e., Arroyo Grande Council Chambers, Grover Beach City Hall Council Chambers, Oceano Community Services District) on a rotating basis at 6:00 p.m. on the first Wednesday of each month. However, if a regular meeting date falls on a holiday, meetings are scheduled for the third Wednesday of the respective month or postponed to the regularly scheduled Board meeting. When substantial SSMP revisions occur, the District Administrator will present the revisions to the Board at a public meeting.

In addition to discussion at the public meetings the SSMP is posted on the District's website: www.SSLOCSD.org under Environmental Programs. The public is welcome to comment at any time. The SSMP webpage on the District website is to be updated as new information is available, such as new SSMP revisions or new policies are developed, or new regulatory information is received.

The District Board of Directors includes one representative from each Member Agency. During board meetings implementation of different SSMP elements (e.g. FOG) are presented and this information is then brought back to the Member Agencies.

Education on prevention of SSOs and information regarding SSOs that may occur will be provided when necessary by direction of the District Administrator.

11.3 Staff Training and Communication

District Staff will be trained by the Plant Superintendent / Chief Plant Operator in a classroom setting in the use and implementation of the SSMP relative to any major revisions after they occur. District Staff will also be kept informed regarding minor changes (i.e., phone numbers, staff changes, etc.) as they occur via District e-mail or memos. In addition all new District employees will receive SSMP training as part of their orientation. Records will be kept on-site by the Plant Superintendent / Chief Plant Operator on who received training and when. A record of training as of February 2025 is included in **Appendix J**.

Appendix A

SSMP Schedule

Minutes of Board Meetings for SSMP Approval

Sewer System Management Plan Schedule

South San Luis Obispo County Sanitation District

Main Task / Sub-task	Actions	Date / Status
(i) SSMP Development Plan and Schedule	**Initial plan on how the agency intends on developing and implementing their SSMP.**	
District Board certification of Development Plan and Schedule	Present SSMP Development plan to District Board for approval.	Completed
(ii) Goals – Ele 1	**The goal of the SSMP is to provide a plan and schedule to properly manage, operate and maintain all parts of the sanitary sewer system.**	
SSMP Goal	Stated goals for SSMP	Completed
(iii) Organization – Ele 2	**Names and contract staff positions responsible for developing and implementing the SSMP.**	
Organizational chart	Develop organizational chart of management, administration and maintenance personnel.	Completed
SSO Chain of Communications	Develop the internal chain of communications for reporting SSO's	Completed
(iv) Legal Authority – Ele 3	**Agency's legal authority to operate and maintain its sewage collection system.**	
Ordinance development for preventing prohibited discharges	SSLOCSD Resolution 22 A SSLOCSD Pretreatment Ordinance 1994-1	Already in Place
Ordinance development requiring proper design and construction	SSLOCSD Resolution 22 A	Already in Place
Ordinance development requiring inspections during and following construction	SSLOCSD Resolution 22 A SSLOCSD Pretreatment Ordinance 1994-1	Already in Place
Ordinance development for the limiting of the Fats, Oils & Grease	SSLOCSD Fats, Oils, and Grease Ordinance	Already in Place
Ordinance development to enforce violations	SSLOCSD Resolution 22	Already in Place
(v) Operation and Maintenance Program– Ele 4	**Collection System operations program and procedures.**	
Mapping	Up to date mapping of the sewage collection system facilities.	Completed
Mapping updates	Develop procedures for maintain mapping data.	Completed

Preventative Maintenance Program	Develop a written description of the preventative maintenance activities the District employs.	Completed
Pipeline maintenance	Develop a schedule for line cleaning and maintenance.	Completed
Pumping and other facilities	Develop a schedule for maintenance of pumping and other facilities.	Completed
Problem areas	Identify problem areas *high maintenance areas: HMA and develop procedures for their maintenance.	Completed
Rehabilitation and replacement program	Develop a short and long term plan for the rehabilitation of replacement of piping due to system deficiencies, including funding (CIP).	Completed
Inspection Program	Develop a program and schedule for the regular visual inspection of the system.	Completed
Inspection Schedule	Develop a schedule for ongoing inspection of the entire collection system.	Completed
Work orders	Develop a system to track and schedule all maintenance activities.	Completed
Equipment and parts inventory	Develop an inventory of equipment and replacement parts.	NA
Critical parts	Develop an inventory of critical replacement parts including procedures for acquisition.	Completed
(vi) Design and Performance Provisions – Ele 5	**Develop and implement the Capital Improvement Plan that will provide for equipment and system replacements.**	
Design standards	Develop and/or adopt design and construction standards and specifications for the installation of new sewer systems.	Completed
Inspection and testing standards	Develop and/or adopt procedures and standards for inspecting and testing	Completed
(vii) Spill Emergency Response Plan – Ele 6	**Written procedures defining how the District responds to SSO's**	
Overflow response procedures	Develop standard operating procedures for SSO response.	Completed
Notification procedures	Develop notification procedures to ensure all required regulators (and others) are properly and timely notified of an SSO event.	Completed

Emergency response training	Develop and implement Emergency Response Training Program for contract staff or contractors, if utilized.	Completed
Traffic and crowd control	Develop procedures for traffic and crowd control to be utilized during an SSO event.	Completed
Monitoring and sampling	Develop procedures for monitoring and sampling, if required, for an SSO event.	Completed
Follow-up	Develop procedures for following up on an SSO event, including investigation for the cause or responsible party.	Completed
(viii) Sewer Pipe Blockage Control Program – Ele 7	**Prepare and implement a FOG Control Program to reduce the amount of these substances from being discharged into the collection system**	
Identification of Grease Problem Areas	Evaluate system to determine if FOG related problems exist.	Completed
FOG Program	Develop a program to reduce and/or eliminate FOG related sources.	Completed
Public outreach	Develop an appropriate public education, outreach program and marketing materials designed to assist in the reduction of FOG.	Completed
Legal Authority	Develop a list of authorized parties for enforcing sewer pipe blockage control.	Completed
High Maintenance Areas	Develop and implement a inspection program of high maintenance areas.	Completed
(ix) System Evaluation, Capacity Assurance, and Capital Improvements Plan– Ele 8	**Evaluate current capacity of collection system and provide solutions to areas with needed improvement.**	
Inflow and infiltration (I&I)	Develop procedures to detect and remediate I&I problems.	Completed
Identify deficiencies	Identify areas of the system that exhibit capacity deficiencies.	Completed
Analyze defects	Analyze and prioritize repairs/replacement of pipeline defects.	Completed
Capital Improvement Projects	Annual planning	Completed
(x) Monitoring, Measurements and Plan Modifications – Ele 9	**The ongoing evaluation of the performance of the SSMP document and it's ability to achieve its stated goals.**	
Data management	Develop procedures for accumulating and analyzing system maintenance, repairs,	Completed

	projects, reductions of SSO's, and any other pertinent data.	
Program Effectiveness	Develop procedures, report, etc. to measure the effectiveness of the SSMP.	Completed
Program changes	Develop procedures to initiate changes, enhancements, or correct deficiencies in the SSMP.	Completed
(xi) Internal Program Audits – Ele 10	**Program audits are required every two years following the adoption of the final SSMP (August 2, 2011). Audits shall document the success of the SSMP and improvements made to it.**	
Document control	Develop procedure for SSMP document control.	In place
Key individual(s)	Identify key individual(s) responsible for the SSMP audit (every 2 years). Development of an SSMP Adhoc Audit team consisting of local agencies for peer review and direction.	In place
Checklist	Develop a checklist to assist and ensure the SSMP is in compliance and effective.	Completed
Reports	Develop reports to assist with analyzing the effectiveness of the SSMP.	Completed
Milestones	Develop milestones (time, events, etc.) that denote program review.	Completed
(xii) Communication Program – Ele 11	**The communication program in the District's outreach to the community and satellite contributors about the public collection system and the SSMP document.**	
Public outreach	Develop a protocol for soliciting and responding to public input.	Completed
Staff SSMP awareness	Develop a program to ensure contract staff awareness of SSMP procedures, protocol, etc.	Completed
FINAL SSMP CERTIFICATION	**Final SSMP document, after all elements have been developed, documented, and implemented.**	
Review by District Attorney	Review of completed SSMP by the legal counsel.	
Adoption/Certification of SSMP by District Board	Adoption and certification of final SSMP document by District's governing body.	
SSMP Update 2009	Initial Release of SSMP	July 15, 2009

SSMP Update 2011	Revision of each element of SSMP based on SWRCB inspections March 7, August 11, and December 19, 2010.	May 31, 2011
SSMP Update 2014	Revision #3 of SSMP	August 2014
SSMP Update 2025	Updated in compliance with State Water Resources Control Board – General Order for Sanitary Sewer Systems effective June 5, 2023.	February 2025
Adoption/Certification of SSMP by District Board	Adoption and certification of final SSMP document by District's governing body.	Pending

SOUTH SAN LUIS OBISPO COUNTY SANITATION DISTRICT

Wastewater Treatment Plant
1600 Aloha Place
Oceano, CA 93445

Wednesday July 15, 2009 6:20 p.m.

1. ROLL CALL

Present: Chairman Bill Nicolls, City of Grover Beach; Director Barbara Mann, Oceano Community Services District.

Absent: Vice Chairman Jim Hill, Oceano Community Services District; Director Tony Ferrara, City of Arroyo Grande.

Others in Attendance: John Wallace, District Administrator; Tom Zehnder, District Engineer; Mike Seitz, District Counsel; Jeff Appleton, Plant Superintendent.

2. PUBLIC COMMENT ON ITEMS NOT APPEARING ON AGENDA

There were no public comments at this time.

3. REVIEW AND APPROVAL OF MINUTES

The minutes of July 1, 2009 were presented for review and approval. This item was carried over to the next scheduled agenda for a vote by directors present at that meeting.

4. CONSIDERATION OF WARRANTS

The warrants for the past period were presented. **It was moved by Director Mann, seconded by Chairman Nicolls to approve warrants in the amount of $94,375.74 for 7/15/2009 P/Y and $38,833.43 for 7/1/2009 current year. Motion carried.**

5. REVIEW OF CURRENT FINANCIAL STATEMENT

Administrator Wallace presented the District's current financial statement for review and file.

6. PLANT SUPERINTENDENT'S REPORT

Superintendent Appleton reported the average flow for the month to date at 2.72 MGD, the BOD average was 28.30 mg/l, and the suspended solids average was 30.15 mg/l. He reported a problem regarding the chlorine probe and software, during trouble shooting and correction of this issue during which time a bacti result came in over the District's limit. This will be classified as a violation by Water Quality. The District now has three minor violations on record; the fourth within a six-month period will initiate a finable situation.

Installation of the new Ferric Chloride Storage tank, piping system, and seismic restraint system has been completed.

Administrator Wallace provided an update regarding Yo Banana Boy. He stated that the cease and desist order had not been issued as yet, instead the District locked the dump station located at the Yo Banana Boy site. He also stated that a meeting was held with State Parks regarding the LeSage

Dump Station and to discuss improvements that could be made to alleviate the problems that station posed to the plant.

7. BOARD ACTION ON INDIVIDUAL ITEMS

A. Approval of Sewer System Management Plan (SSMP)

Administrator Wallace introduced Ms. Heather Billing of Wallace Group who gave an overview of this plan.

She stated that the State Water Resources Control Board and the Central Coast Regional Water Quality Control Board, Region 3, notified the District of new Sanitary Sewer Overflow requirements imposed by the adoption of the State Water Board Waste Discharge Requirement Order No. 2006-0003-DWQ. The order requires the District to: enroll in the new statewide system by November 2, 2006; begin Sewer System Overflows (SSO) reporting and SSMP phase certification by enrolling and using the California Integrated Water Quality System (CIWQS) by May 2, 2007; and develop a SSMP with a final document certified complete on CIWQS by August 2, 2009. The first two requirements have previously been met. The District's final SSMP has now been prepared in response to the third requirement. The SSMP documents the District's sewer program, defines the District's goals for improving the sewer system infrastructure, and provides an implementation plan and schedule for achieving these goals.

The Board was presented with a complete copy of the Sewer System Management Plan.

It was moved by Director Mann, seconded by Chairman Nicolls to approve and implement the completed Sewer System Management Plan prepared in accordance with the State Water Resources Control Board Statewide General Waste Discharge Requirements Order No. 2006-0003-DWQ. Motion carried.

B. Special District Risk Management Authority (SDRMA) Board of Directors Election

Administrator Wallace stated that the District has received a mail-in ballot to elect four representatives to the SDRMA Board of Directors. In accordance with the election guidelines for Director elections, our District must adopt a resolution indicating which of the candidates the District selects. The Board was presented with eight candidate statements of qualifications for consideration.

Chairman Nicolls stated that after reviewing the information provided, he suggested the four candidates to receive District votes to be Jean Bracy, Ed Gray, Vincent C. Ferrante, and John C. Yeakley.

It was moved by Chairman Nicolls, seconded by Director Mann to approve Resolution No. 263 "A RESOLUTION OF THE GOVERNING BODY OF THE SOUTH SAN LUIS OBISPO COUNTY SANITATION DISTRICT FOR THE ELECTION OF DIRECTORS TO THE SPECIAL DISTRICT RISK MANAGEMENT AUTHORITY BOARD OF DIRECTORS. CASTING THE DISTRICT'S VOTE FOR: JEAN BRACY, ED GRAY, VINCENT C. FERANTE, AND JOHN C. YEAKLEY". And on the following roll call vote to wit:

AYES: Chairman Nicolls, Director Mann

NOES: None

ABSENT: Director Ferrara

The foregoing resolution was hereby adopted this 15th day of July, 2009.

C. Adoption of FY 2009-10 Budget.

Administrator Wallace presented the District's proposed budget for the 2009/10 Fiscal Year.

District Counsel Seitz stated that this item should be continued to the next meeting as the public hearing was inadvertently advertised to be held at the Oceano Community Services District.

9. MISCELLANEOUS ITEMS

A. Miscellaneous Oral Communications

District Counsel Seitz stated that the District has resolved all contract issues with Andritz regarding the new centrifuge purchase.

The District has received a draft of the District's proposed new Waste Discharge Orders.

10. ADJOURNMENT

There being no further business to come before the Board the meeting was adjourned at approximately 7:20 p.m.

Appendix B

Current List of Board of Directors

Current List of Staff

Agency Notification List for SSOs

District Organizational Chart

SSO Discharger Work Book

Introduction:

Registering for CIWQS

Welcome to the Sanitary Sewer Overflow (SSO) Discharger Work Book. This guide is designed to help you through the SSO database. The SSO database is the newest module of the California Integrated Water Quality System (CIWQS). However, before you are allowed to use CIWQS, you must first register and receive a CIWQS username and password. At this time, registration for both data submitters and legally responsible officials (see discussion below for an explanation of these terms) is handled by paper. The data submitter and legally responsible official registration forms can be found on the CIWQS Help Center webpage at http://www.waterboards.ca.gov/ciwqs/chc.html. The instructions for submitting the completed forms can be found at the bottom of each form.

SSO Database Overview

This section describes the general workflow for the sanitary sewer overflow (SSO) database, which is utilized by an agency (enrollee) that has applied for coverage under Statewide General Waste Discharge Requirements for Sanitary Sewer Systems - Water Quality Order No. 2006-0003-DWQ (Sanitary Sewer Order) to comply with the SSO reporting requirements.

An enrollee must report two types of information into the SSO database: sanitary sewer system/agency characteristics – collection system questionnaire and spill details – SSO report. The collection system questionnaire must be initially completed before any SSO reports can be submitted. Additionally, the collection system questionnaire must be updated annually. All SSOs (aka spills) from an enrollee's sanitary sewer system must be reported to the SSO database. The reporting deadline for submittal of a SSO report depends on the classification of the spill, which is either Category 1 (greater threat) or Category 2 (lesser threat). For a Category 1 spill, the enrollee must submit an initial, uncertified report of the spill as soon as possible but no later than 3 business days after being made aware of the SSO. The final, certified report for a Category 1 spill must be submitted within 15 calendar days of the conclusion of SSO response activities. For a Category 2 spill, the enrollee must submit a final, certified report (no initial, uncertified report required) within 30 calendar days after the end of the calendar month in which the SSO occurred.

The process of entering information into the SSO database begins with the enrollee specifying the pertinent sanitary sewer system. If the enrollee is responsible for multiple sanitary sewer systems, then, after selecting the "SSO" link from the CIWQS main menu, the enrollee needs to identify the appropriate sanitary sewer system from the "Sanitary Sewer System" screen. If the enrollee is responsible for only one sanitary sewer system, then the SSO database

automatically correlates the information to it and the “Sanitary Sewer System” screen doesn’t appear.

The collection system questionnaire is an online form which contains questions regarding the relevant characteristics of an enrollee’s sanitary sewer system and agency. After initial login, the first major task an enrollee needs to perform is completing the collection system questionnaire. A new collection system questionnaire is accessed through the “Collection System Questionnaire” link on the SSO menu. The collection system questionnaire must be updated at least every 12 months, and this is done through the “Collection System Questionnaire” link on the SSO menu.

Along with completing the collection system questionnaire, an enrollee must also report all SSOs to the database. To begin a new spill report, the enrollee selects the “Reporting New SSO” link from the SSO menu. Then, the enrollee enters the information requested on the form. A spill report can exist at several different levels of completion: “work in progress”, “draft”, “ready to certify”, and “certified”. A “work in progress” SSO report is a preparatory draft of the report with limited required information and is intended only for the enrollee’s use. To save a spill report as a “work in progress”, the enrollee selects the “Save Work in Progress” button on the “SSO – General Information” screen. A SSO report in “draft” status is a working draft of the report with more required information than “work in progress” status. By submitting a report in “draft” status, the enrollee fulfills the initial, uncertified reporting requirement for a Category 1 spill. The enrollee selects the “Submit Draft” button on the “SSO – General Information” screen to submit a report as a “draft”. Once the spill report contains all the required information, it can be submitted for certification by selecting the “Ready to Certify” button on the “SSO – General Information” screen. A “ready to certify” SSO report that is complete and accurate is certified by the enrollee through first selecting the “Modify Existing SSO” link on the SSO menu. Then, the spill report to be certified must be located by using the “SSO – Search” screen. Next, the “Certify” button on the “SSO – General Information” screen for the specified report is selected. Finally, the report is certified by selecting the “Certify” button on the “SSO – Certifying an SSO Report” screen. The database will then display a confirmation of the report certification. An enrollee has fulfilled the final, certified reporting requirement for a Category 1 or Category 2 spill by submitting a certified report in the SSO database. A spill report can be submitted directly as “ready to certify” without being submitted as a “work in progress” or “draft”, assuming the enrollee has entered all the necessary information.

When submitting a spill report, the enrollee can add supporting documentation such as pictures and reports by using the “Attachments” tab on the “SSO – General Information” screen. Additionally, the enrollee can include details about related parties (e.g., fire or police department responders) by selecting the “Spill Related Parties” tab on the “SSO – General Information” screen.

A “certified” SSO report can be modified by an enrollee to correct or add information, if necessary. To do this, an enrollee begins by locating the “certified” spill report through the “SSO – Search” screen after selecting the “Modify Existing SSO” link on the SSO menu. The “Amend” button on the “SSO – General Information” screen for the designated “certified” SSO report is then selected. The spill report is returned to “Submit Draft” status and can be modified. Finally, the spill report needs to be re-certified after the necessary modifications have been completed.

If a sanitary sewer system doesn’t have any SSOs for an entire calendar month, a “no spill certification” must be submitted (“Generate No Spill Certification” link from the SSO menu) by the enrollee. A “no spill certification” must be submitted within 30 calendar days after the end of each calendar month in which no spills occur. The database will display a confirmation of the “no spill certification” when completed.

The SSO database automatically sends email notifications to interested parties when spill reports are generated. When a SSO report is submitted in “draft” form (“Submit Draft” button selected) for the first time, an email notification is sent to the enrollee, responsible Regional Water Quality Control Board, and County Health Official (if known – this is a courtesy and not required by the Sanitary Sewer Order). Every time a report is submitted as ready for certification (“Ready to Certify” button) or certified (“Certify” button) results in email notifications being sent to the enrollee, responsible Regional Water Quality Control Board, and County Health Official (if known – this is a courtesy and not required by the Sanitary Sewer Order). However if a SSO report is saved as a “work in progress” (“Save Work in Progress” button), no email notifications are generated because the report is preliminary and only intended to be viewed by the enrollee.

As for database use by an enrollee, there are two levels of access available to staff entering the information: legally responsible officials (LROs) and data submitters. LROs have full access to enter information and certify spill reports. Data submitters, on the other hand, only have authority to enter information - they can’t certify SSO reports, including a “No Spill Certification”. An enrollee can have multiple LROs and data submitters to enter the necessary information into the SSO database for their sanitary sewer system.

Part 1: Logging in and Changing Personal Information.

To get you started we are going to show you how to log into the system and how to make changes to your personal information. While these are very basic tasks it is one of the best beginner demonstrations to the module system in CIWQS and it will introduce you to the methods with which all information is changed in the system.

User roles that need to review this section: All

1. Start by going to the CIWQS login screen at: http://ciwqs.waterboards.ca.gov/.

2. Once the page loads enter your CIWQS username into the "User ID:" field and your password into the "Password:" field.

3. Press "Login".

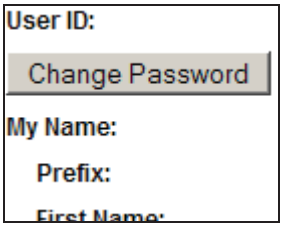
4. After you press "Login" the CIWQS main menu will appear. Depending on your access you will be provided with the links to various CIWQS modules. Including but not limited to:

   - Submit/Review a Self Monitoring Report (SMR)
   - Run Reports
   - View/Change My Personal Information
   - Create/Maintain Places
   - Create/Maintain Parties
   - Create/Maintain Regulatory Measures
   - Create/Maintain Violations
   - Create/Maintain Inspections
   - Create/Maintain Invoices
   - GeoWBS Online Editor
   - Map It!
   - Administer System
   - SSO

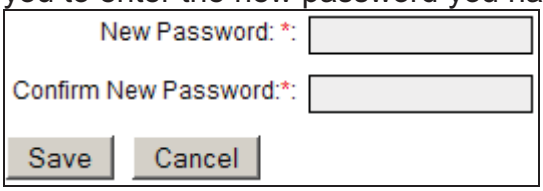
5. Select the "View/Change My Personal Information" module hyperlink.

6. You will be taken to the Personal Information page, here you can update your contact information, add a new facility, change your password, or request a more serious change.

7. Let's start with changing your password. To change your password; press the "Change Password" button.



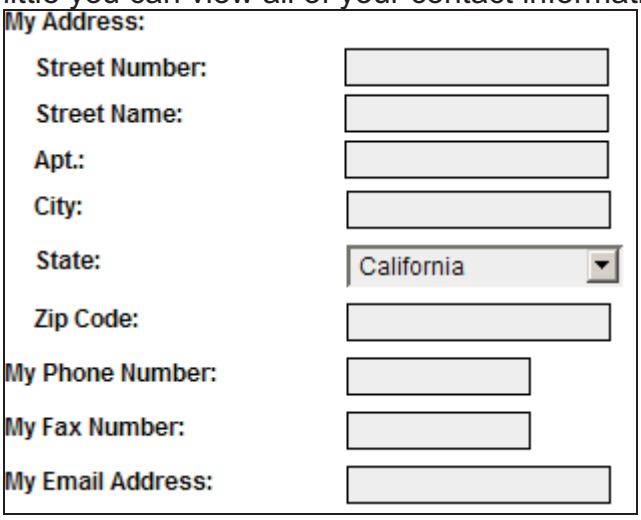
8. After pressing “Change Password” you will be taken to a new screen asking you to enter the new password you have chosen twice.



9. Once you have entered your new password press “Save”.

10. After pressing “Save” you will be asked to verify that you wish to save, press “Ok”.

11. You will be returned to the personal information screen. If you scroll down a little you can view all of your contact information.



12. If you make any changes to your contact information they have to be saved by pressing the “Save Changes” button at the bottom of the page.

13. After pressing “Save Changes” you will see a screen verifying that your changes were logged. You will also be provided with two hyperlinks. Press the first “here” hyperlink to return to the personal information screen.

14. To request another change to your account that you don't have access to make yourself press the "Request Another Change" button near the bottom of the view/change my personal information page.

15. After pressing the button your computer's email client will launch a new email window with the CIWQS Help Center email address in the "To:" field. Describe the change you wish to have made to your account and send the email. Be sure to include your name and username.

16. We are now done with this module; press the "Menu" hyperlink available at the top right corner of the page to return to the CIWQS main menu.

Part 2: Completing the SSO Collection System Questionnaire

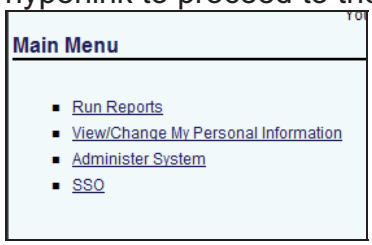
One of the first things that must be done by an enrollee is to complete the Collection System Questionnaire. For the new Sanitary Sewer Order the State has decided that instead of including a questionnaire with the Notice of Intent form they will require this online questionnaire to be filled out for each facility. This is a better system than the old one because employees at each facility can easily update the questionnaire at any time if something changes.

Note: All fields in this section, with the exception of one dropdown, are for numeric characters only. Also, the questionnaire must be updated every twelve months but can be modified more often if the enrollee desires.

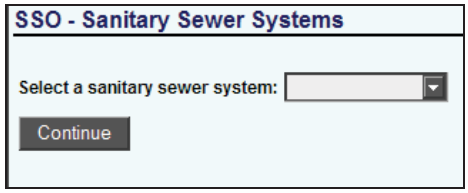
User roles that need to review this section: LRO

1. If you are not already logged into the CIWQS system proceed to this URL http://ciwqs.waterboards.ca.gov/ and login.

2. After logging in you will see the CIWQS main menu. Select the "SSO" hyperlink to proceed to the SSO module.



3. Upon entering the SSO module you will be required to select the collection system you wish to submit information for from the "Select a Sanitary Sewer System:" dropdown. After selecting the appropriate system press the "Continue" button.



4. When a collection system has been selected you will be taken to the SSO main menu. At the top of this menu will be the "Collection System Questionnaire" hyperlink. Select that hyperlink.

- Collection System Questionnaire ?
  Pertinent information regarding your collection system.
- Reporting New SSO ?
  Report new SSO.
- Modifying Existing SSO ?
  View/Modify existing SSO Report.
- Generate No Spill Certification ?
  Certify that no spills occurred within a certain time period.

5. You will be taken to the collection system questionnaire page. It has a series of fields that need to be filled in with current information from your facility.

6. Question 1 requires you to enter the number of people served by your collection system.

Collection System Questionnaire ?

1) What is the population served by your agency's sanitary sewer system?	78,778

7. Questions 2 and 3 require annual budget information for the collection system. The values entered should be as close to the actual amount of money spent as possible (i.e., excluding funds planned for reserve).

2) What is your current annual operation and maintenance budget for sanitary sewer system facilities?	5,678,900
3) What is your current annual capital expenditure budget for sanitary sewer system facilities?	4,500,000

8. Sections 4 through 7 require you to enter number of employees you have in each of four experience levels and the number of employees in each of the four grades of California Water Environment Association (CWEA) collection system operator certification. There is no dependent relationship between these two numbers. For example, an enrollee can potentially have more Grade I certified employees than the total number of employees with less than 2 years experience. The number of employees can be entered as fractional values, if necessary (e.g., 1.5).

General Classifications

4) Entry Level (Less than 2 years experience)

Number of agency employees?	6
Number of certified (CWEA Grade I) agency employees?	4

5) Journey Level (Greater than or equal 2 years experience)

Number of agency employees?	6
Number of Certified (CWEA Grade II) agency employees?	8

6) Supervisory Level

Number of agency employees?	2
Number of Certified (CWEA Grade III) agency employees?	3

7) Managerial Level

Number of agency employees?	10
Number of Certified (CWEA Grade IV) agency employees?	10

9. Question 8 requires you to enter the number of miles of forced mains and pressure systems used in your collection system.

8) How many miles of forced mains and other pressure systems?	7.6

10. Question 9 asks the mileage of the combined gravity lines within the system.

9) How many miles of gravity sewers?	103

11. Questions 10 through 13 require information about the sewer laterals within the collection system. Including: their total mileage, the portion your agency is responsible for, the total mileage of that portion, and the number of service connections. The responsibility for maintaining a lateral can be split between the enrollee and private property owner. The terms “upper” and “lower” lateral indicates this. The enrollee would be responsible for the “lower” lateral section, which is connected to the main, and the private property owner would be responsible for the “upper” lateral section, which is connected to the home/building.

10) Estimated total miles of laterals (upper and lower)?	128
11) Which portion of laterals is your agency responsible for?	Upper and lower
12) Estimated total miles of laterals your agency is responsible for?	65
13) Number of service lateral connections?	889

12. Section 14 is for you to enter what percentage of your collection system was constructed during various time periods. The total sum of the 7 fields in this section must equal 100.

14) Approximately, what percentage of your sanitary sewer system was constructed between the years of: (note: total must sum to 100%)

10	%, 2000 - Present
10	%, 1980 - 1999
3	%, 1960 - 1979
17	%, 1940 - 1959
40	%, 1920 - 1939
10	%, 1900 - 1919
10	%, Before 1900

13. Question 15 is for you to enter the total miles of your collection system that is not accessible by vehicle.

15) Estimated total miles of your sanitary sewer system not accessible by vehicle? .2

14. Question 16 requires the total mileage of the collection system that is cleaned per year.

16) What is your total gravity sewer system cleaning production in miles/year? 198.2

15. Question 17 is for the total mileage of the collection system that is inspected per year.

17) What is your total gravity sewer system condition inspection (e.g., CCTV) production in miles/year? 36.8

16. Once all the fields are complete look back over the questionnaire to make sure that all of the information is accurate.

17. Your questionnaire is now complete. Press one of the “Save” buttons that can be found either at the bottom left or top left of the page.

Part 3: Creating and Editing an SSO

This section describes the core purpose of the SSO module; which is the ability to report SSOs online. Before the enrollee is able to complete this task they must have a completed Collection System Questionnaire. There are two types of SSOs, Category 1 and Category 2, and both of them will be discussed and demonstrated here.

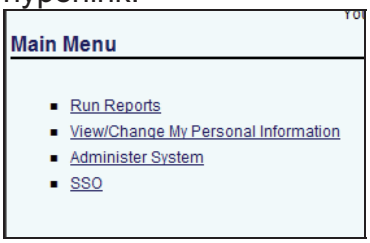
Note: In the SSO report screens only the fields with asterisks must be filled out before the report can be readied for certification or certified. This document goes over every field in the order they appear. Fewer fields must be completed to save a work in progress and to submit a draft. These mandatory fields are noted in the discussion below.

User roles that need to review this section: All

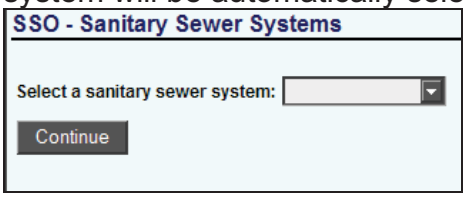
1. If you are not already in the system, proceed to the CIWQS Login page at: http://ciwqs.waterboards.ca.gov/.

2. Using your username and password log into the system.

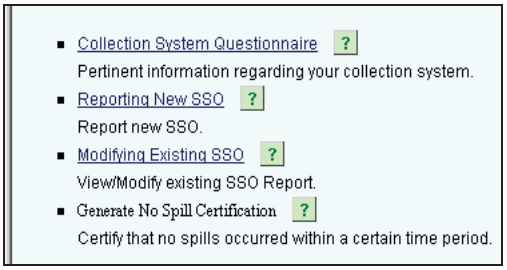
3. You will be taken to the CIWQS main menu. From that menu press the "SSO" hyperlink.



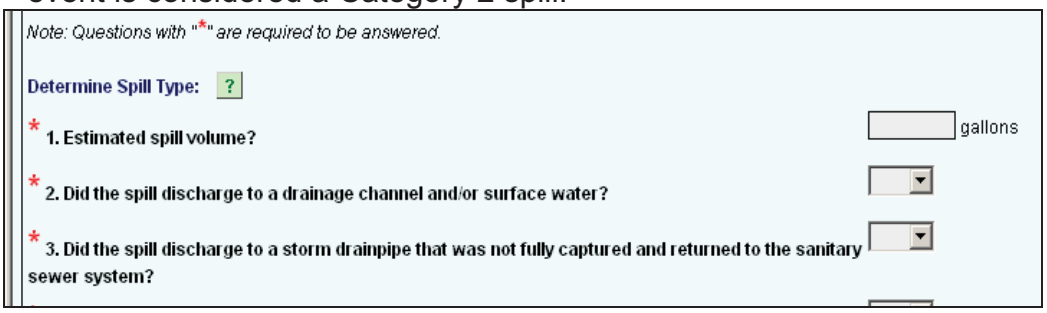
4. Upon entering the SSO module you will be required to select the sanitary sewer system (aka collection system) you wish to submit information for from the "Select a Sanitary Sewer System:" dropdown. After selecting the appropriate collection system press the "Continue" button. If your agency only has one collection system this screen will be bypassed and the collection system will be automatically selected.



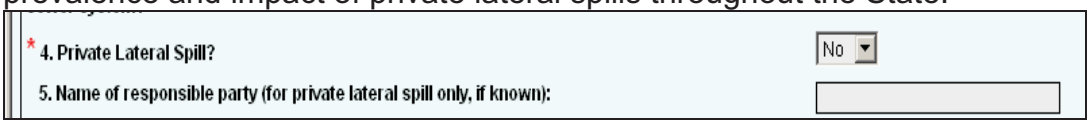
5. The SSO menu will appear. Press the "Reporting New SSO" hyperlink. It is the second one down on the page.



6. The first screen in reporting a new SSO helps you determine whether or not the SSO is a Category 1 or a Category 2 spill.
   a. If you answer yes to questions 2 or 3 and/or the spill amount is over 1000 the event is considered a Category 1 spill.
   b. If you answer no to both questions and the spill amount is under 1000 the event is considered a Category 2 spill.

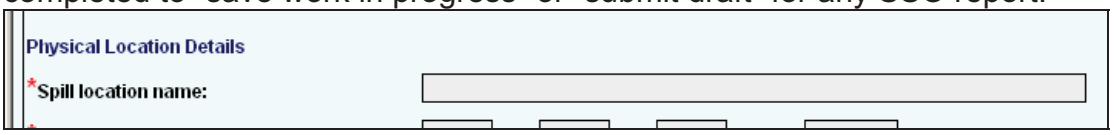


7. After entering your information in those three fields select whether or not the spill was a private lateral spill. If it was, list the responsible agency in the box provided. The reporting of private lateral SSOs is voluntary, based on the terms of the Sanitary Sewer Order, but enrollees are strongly encouraged to do so. This additional information will provide a better understanding of the prevalence and impact of private lateral spills throughout the State.

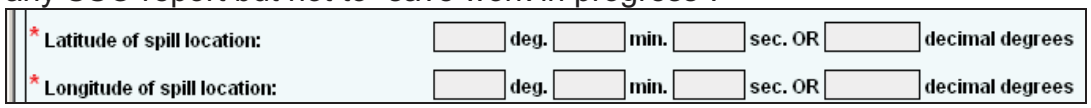


8. Check to make sure the information you entered is accurate then press the "Continue" button.

9. The SSO General Info tab will appear. Start by entering the name of the location where the spill occurred in the "Spill Location Name:" field. This entry should be a general descriptor of the spill location (e.g., street address, intersection, or manhole number). The "Spill Location Name:" field must be completed to "save work in progress" or "submit draft" for any SSO report.

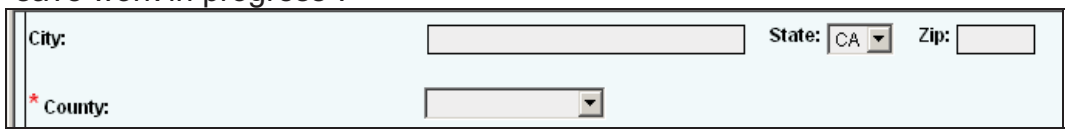


10. Enter the latitude and longitude of the spill location. Using a handheld GPS unit or referencing a web-based mapping site such as earth.google.com can determine this information. This field must be completed to “submit draft” for any SSO report but not to “save work in progress”.

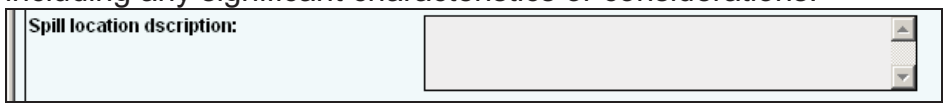


11. Enter the street address of the spill location and a cross street, if there was one.

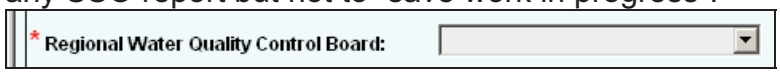
12. Enter the City, State, Zip, and county of the spill site in their corresponding fields. These fields can be found just above the “Location Description” field. This field must be completed to “submit draft” for any SSO report but not to “save work in progress”.



13. Enter a description of the spill site in the “Spill Location Description:” field. This field is optional and allows for a detailed description of the spill site including any significant characteristics or considerations.

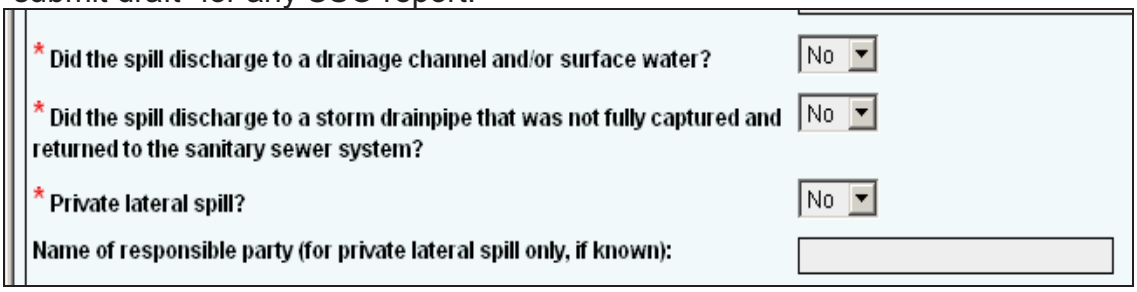


14. Select the region in which the spill occurred from the “Regional Water Quality Control Board:” dropdown. This field must be completed to “submit draft” for any SSO report but not to “save work in progress”.

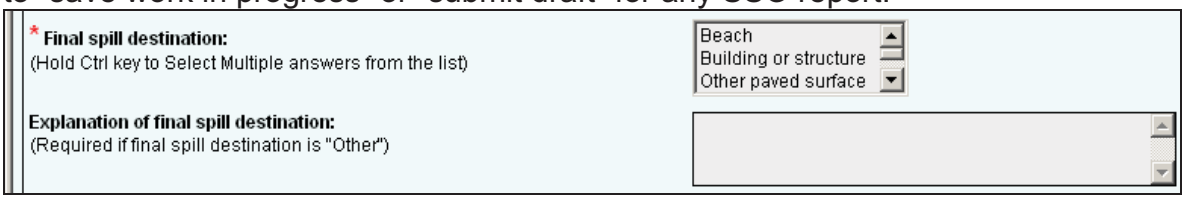


15. Select the spill appearance point from the “Spill Appearance Point:” dropdown. If you selected “other” you are required to enter a description in the text box available immediately below this field. The “Spill Appearance Point:” is where wastewater first surfaced on the spill site. This field must be completed to “submit draft” for any SSO report but not to “save work in progress”.

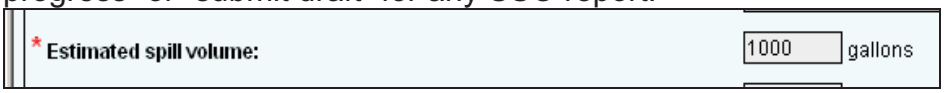
16. The next four questions were answered in step 6 when you were determining your spill type. If, at any time, you need to change the answers you can do so in this screen. These fields must be completed to “save work in progress” or “submit draft” for any SSO report.



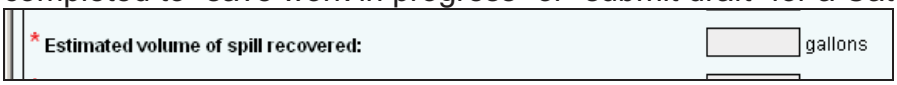
17. Select the final destinations of the spill in the “Final Spill Destination:” box. Hold CTRL on your keyboard if you wish to select multiple. If “other” was among your selections you are required to enter an explanation in the available text box. The “Final Spill Destination:” describes the areas that wastewater flowed through and ultimately reached, which means multiple entries can be selected if necessary. This field doesn’t need to be completed to “save work in progress” or “submit draft” for any SSO report.



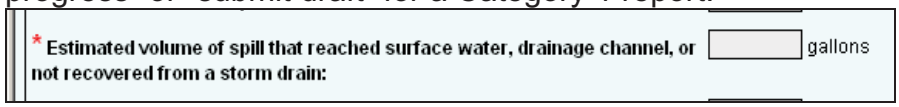
18. The field “Estimated Spill Volume:” was completed when determining your spill type. If, at any time, this number changes you can return to this screen and update the information. This field must be completed to “save work in progress” or “submit draft” for any SSO report.



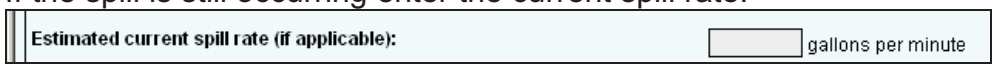
19. **This field will only appear if the spill is a Category 1.** It requires you to enter the volume of the spill that was recovered. This field doesn’t need to be completed to “save work in progress” or “submit draft” for a Category 1 report.



20. **This field will only appear if the spill is a Category 1.** Enter the volume of the spill that reached surface water, drainage channel, or was not recovered from a storm drain. This field doesn't need to be completed to "save work in progress" or "submit draft" for a Category 1 report.

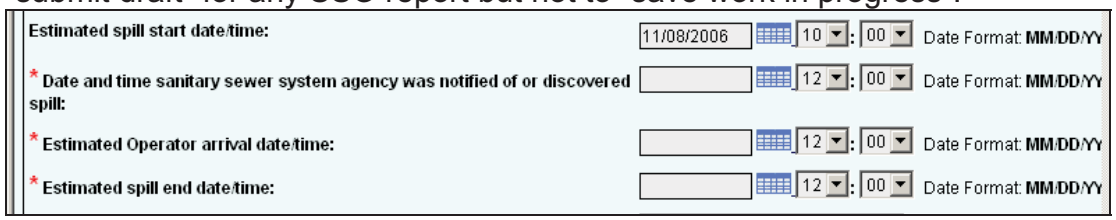


21. If the spill is still occurring enter the current spill rate.



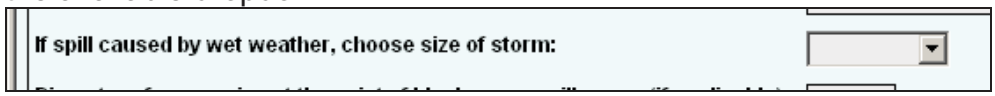
22. The next four fields require you to enter date and time information:
    a. Enter the "Estimated Spill Start Date/Time"
    b. Enter the Date/Time your agency discovered or was notified of the spill.
    c. Enter the "Estimated Operator Arrival Date/Time"
    d. Enter the "Estimated Spill End Date/Time"

    Item (a) above must be completed to "save work in progress" or "submit draft" for any SSO report. Items (b), (c), and (d) above must be completed to "submit draft" for any SSO report but not to "save work in progress".



23. Please select a cause for the spill from the available dropdown. If the cause you selected was other you are required to enter an explanation in the available text box. This field must be completed to "submit draft" for any SSO report but not to "save work in progress".

24. If the spill was cause by wet weather please select the size of the storm from the available dropdown.



25. If applicable to the spill cause you selected, the next three fields ask information about the point of blockage for the pipe or spill cause. The information asked is the diameter (in inches) of the pipe, the material of the pipe, and the age of the pipe. For material of pipe, abbreviations such as PVC and VCP are acceptable.

Diameter of sewer pipe at the point of blockage or spill cause (if applicable): inches

Material of sewer pipe at the point of blockage or spill cause (if applicable):

Estimated age of sewer pipe at the point of blockage or spill cause (if applicable):

26. In this field, please enter the response activities that your agency initiated because of the spill. If your selection is other, you are required to enter an explanation of the activities. This field doesn't need to be completed to "save work in progress" or "submit draft" for any SSO report.

* **Spill response activities:**
(Hold Ctrl key to Select Multiple answers from the list)

Cleaned-up (mitigated effects of spill)
Contained all or portion of spill
Inspected sewer using CCTV to determine cause

Explanation of spill response activities:
(Required if spill response activities is "Other")

27. **This field will only appear if the spill is a Category 1.** This field requires the user to enter the date/time they completed their spill response activities. This field doesn't need to be completed to "save work in progress" or "submit draft" for a Category 1 report.

* **Spill response completion date:** 12 : 00 Date Format: MM/DD/YY

28. The user can enter a description of the visual inspection results from the impacted receiving water.

Visual inspection results from impacted receiving water:

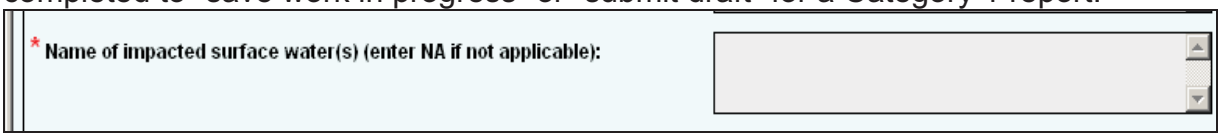
29. **This field will only appear if the spill is a Category 1.** Select whether or not health warnings were posted because of the spill. This field doesn't need to be completed to "save work in progress" or "submit draft" for a Category 1 report.

* **Health warnings posted?**

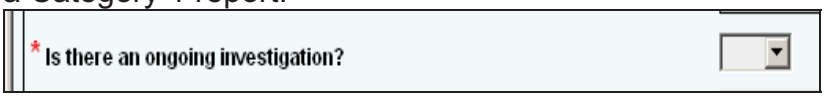
30. **This field will only appear if the spill is a Category 1.** Enter the names of any and all beaches that were impacted by the spill. This field doesn't need to be completed to "save work in progress" or "submit draft" for a Category 1 report

* **Name of impacted beach(es) (enter NA if not applicable):**

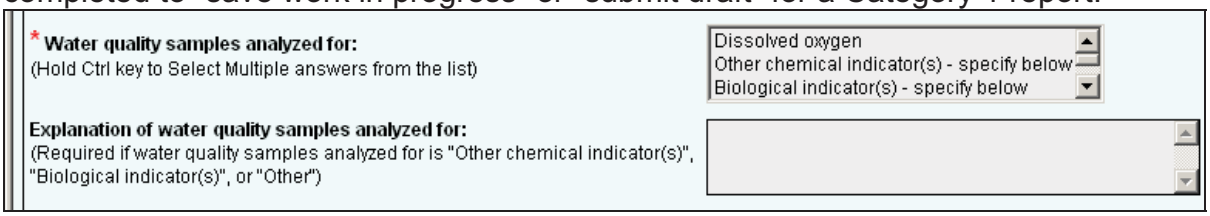
31. **This field will only appear if the spill is a Category 1.** Enter the names of any and all surface waters impacted by the spill. This field doesn't need to be completed to "save work in progress" or "submit draft" for a Category 1 report.



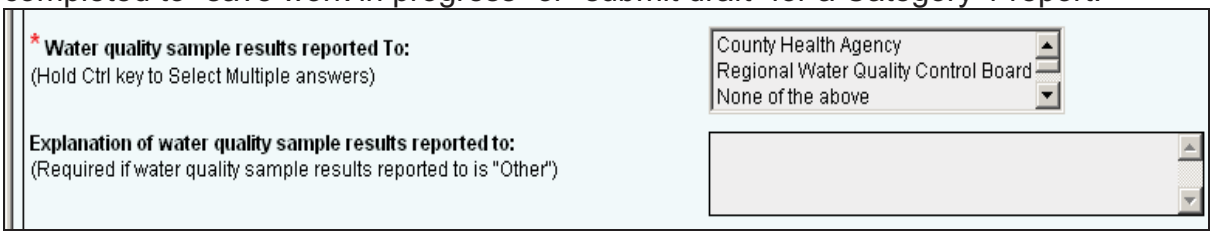
32. **This field will only appear if the spill is a Category 1.** Choose whether or not there is an ongoing investigation concerning the spill event. This field doesn't need to be completed to "save work in progress" or "submit draft" for a Category 1 report.



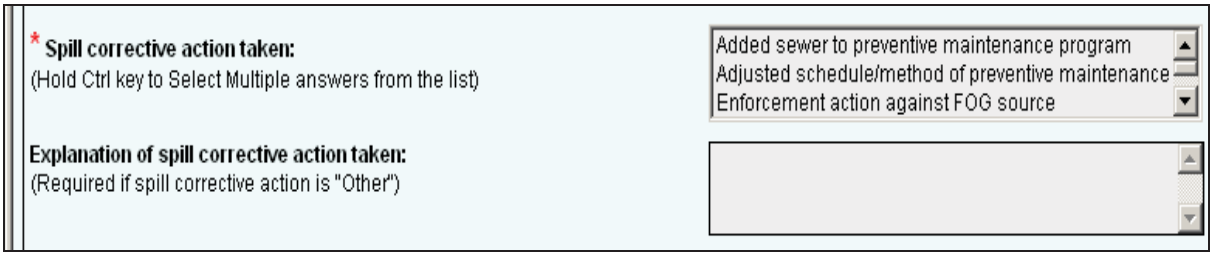
33. **This field will only appear if the spill is a Category 1.** Select what the water quality samples taken from the spill were analyzed for. Hold CTRL to select multiple. Please note that some selections require a description to be entered in the accompanying text field. This field doesn't need to be completed to "save work in progress" or "submit draft" for a Category 1 report.



34. **This field will only appear if the spill is a Category 1.** Select which agencies the results of the water samples were reported to. Hold CTRL to select multiple. Please note that a selection of "other" requires a description to be entered in the accompanying text field. This field doesn't need to be completed to "save work in progress" or "submit draft" for a Category 1 report.

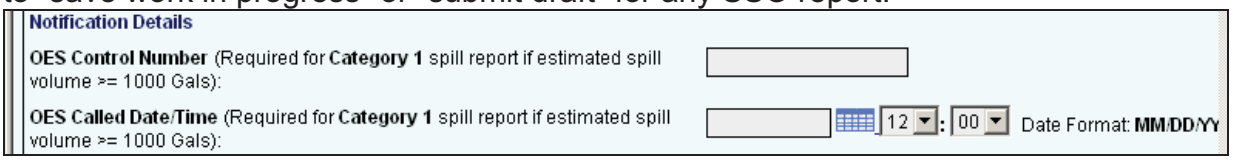


35. **This field will only appear if the spill is a Category 1.** Select which corrective actions were taken by your agency in response to the spill. Hold CTRL to select multiple. Please note that a selection of "other" requires a description to be entered in the accompanying text field. This field doesn't need to be completed to "save work in progress" or "submit draft" for a Category 1 report.

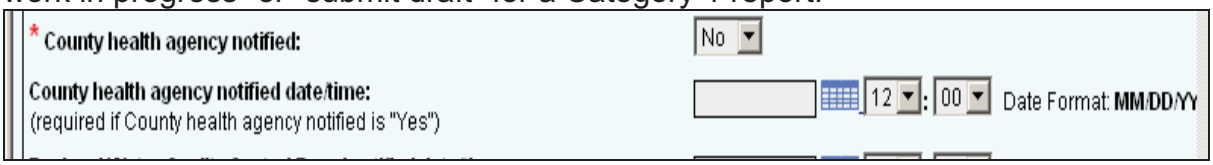


36. Enter an overall description of the spill.

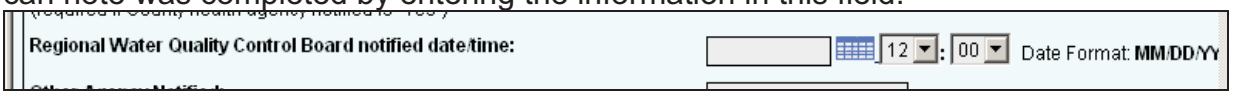
37. Enter the OES Control Number for your agency and the date/time you notified OES of the spill. This field must be completed to “ready to certify” or “certify” a Category 1 report if the estimated spill volume is greater than or equal to 1,000 gal and wastewater reached a drainage channel/surface water or storm drainpipe that was not fully captured. This field doesn’t need to be completed to “save work in progress” or “submit draft” for any SSO report.



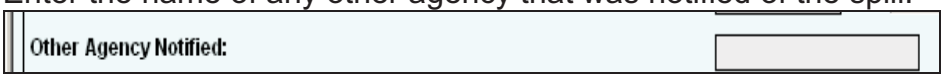
38. **These fields will only appear if the spill is a Category 1.** Select whether or not you notified your county health agency of the spill. If yes enter the date/time they were notified. This field doesn’t need to be completed to “save work in progress” or “submit draft” for a Category 1 report.



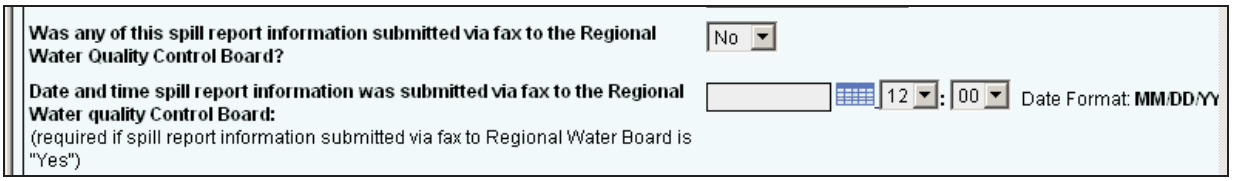
39. Enter the date and time that your Regional Water Quality Control Board was notified of the spill, if applicable. For example, some Regional Water Quality Control Boards require 24-hour notification of certain spills, which an enrollee can note was completed by entering the information in this field.



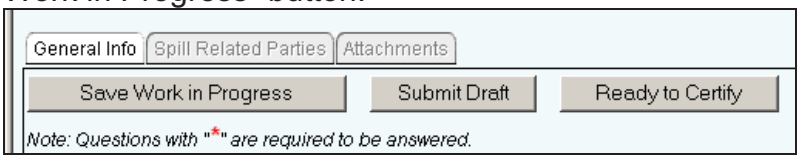
40. Enter the name of any other agency that was notified of the spill.



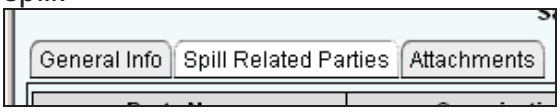
41. Select whether or not any of the information available in the report you just filled out was faxed to your Regional Water Quality Control Board. If some of the information was faxed, enter the date/time the fax was sent in the accompanying field. The Sanitary Sewer Order requires spill report information to be faxed to the responsible Regional Water Quality Control Board if the SSO database is not available for the enrollee to meet the applicable reporting deadline. When the SSO database becomes available, the enrollee must enter all faxed information into the SSO database.



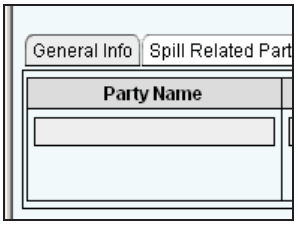
42. The “General Info” tab of your SSO report is now complete. Press the “Save Work in Progress” button.



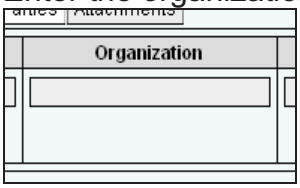
43. Select the “Spills Related Parties” tab. The purpose of this tab is to list any private parties who may have caused, contributed to, or were impacted by the spill.



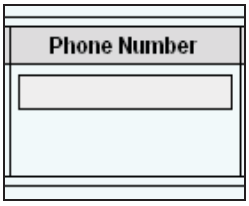
44. Enter the names of any individual or representatives in the “Party Name” field.



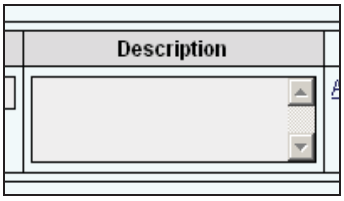
45. Enter the organization name in the “Organization” field.



46. Enter a number at which the part can be reached in the “Phone Number” field.

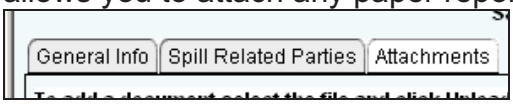


47. Enter a description of how the party is related to the spill in the “Description” field.

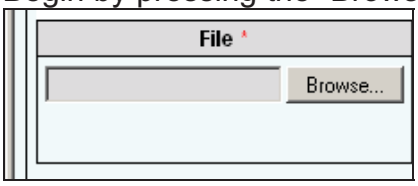


48. Once all of the information is complete for a party press the “Add” hyperlink to the right of the “Description” field. The information will be saved and you will then be allowed to enter another party. If, at any time, you wish to remove a party press the “Delete” hyperlink.

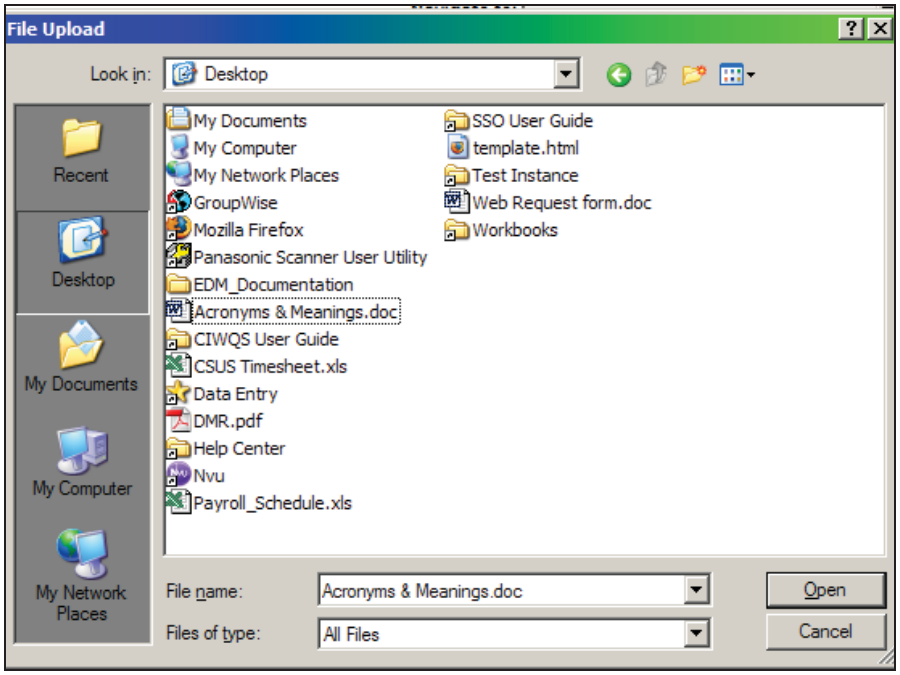
49. When you are finished adding parties select the “Attachments” tab. This tab allows you to attach any paper reports, pictures, diagrams, etc. of the spill.



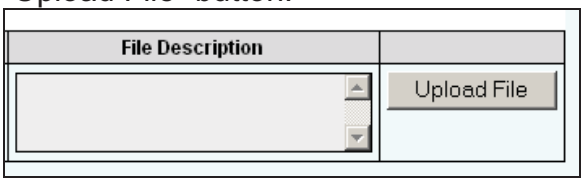
50. Begin by pressing the “Browse” button.



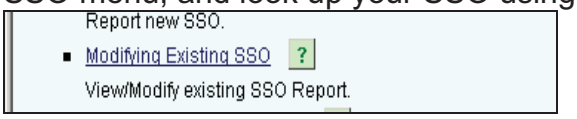
51. A file search window will appear. Locate the file you wish to attach, select it and press the “Open” button.



52. You will be returned to the attachments screen. Enter a brief description of the file you will be uploading into the “File Description” field and press the “Upload File” button.



53. Your SSO Spill report is now complete. If at any time you wish to edit the report before you certify it select the “Modify Existing SSO” hyperlink from the SSO menu, and look up your SSO using one of the available search fields.



54. To learn how to save drafts and certify your report proceed to the next section of this document.

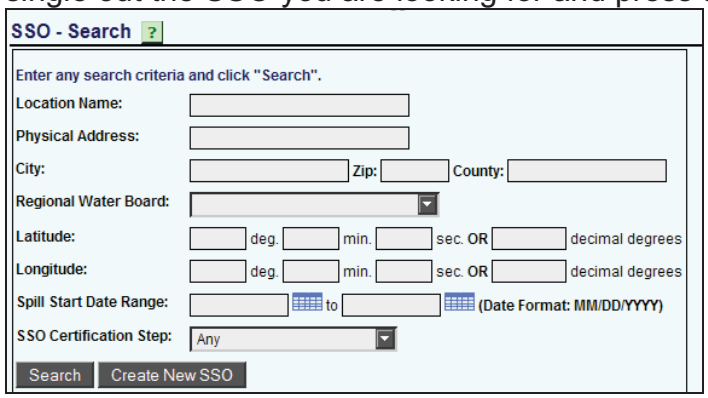
Part 4: Submitting Drafts and Certifying an SSO

When the agency begins submitting drafts the system will start tracking all the changes made to certain fields. When the agency decides that it is ready to certify the SSO the Legally Responsible Official will have to finish the last few screens.

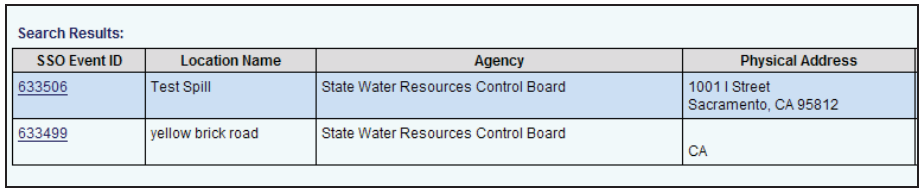
User roles that need to review this section: All, Certification LRO specific.

1. From the SSO main menu select the “Modify Existing SSO” hyperlink.

2. You will be taken to the SSO search screen. Enter any information that will single out the SSO you are looking for and press the “Search” button.



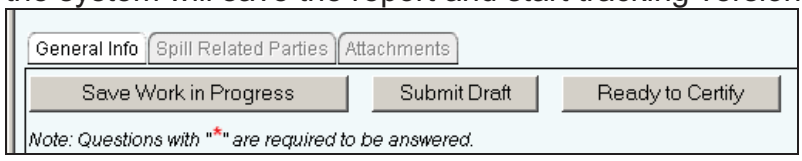
3. You SSO will appear. There will be a hyperlink in the “SSO Event ID” column, select it.



Search Results:

SSO Event ID	Location Name	Agency	Physical Address
633506	Test Spill	State Water Resources Control Board	1001 I Street Sacramento, CA 95812
633499	yellow brick road	State Water Resources Control Board	CA

4. The SSO General Info tab will appear. If you press the “Submit Draft” button the system will save the report and start tracking version numbers.



5. Every time you submit a new draft a new version number will be created and any changes to certain fields will be tracked. Click on any of the “View History” hyperlinks to see a history of the changes for these fields.

Close Window

SSO Event ID	Version	Current Spill Amount	Date Entered	User Info
601730	**8**	**28**	**12/05/2005**	**Nick Arhontes (narhontes)**
601730	7	34	12/05/2005	Nick Arhontes (narhontes)
601730	6	36	12/05/2005	Nick Arhontes (narhontes)
601730	5	36	12/05/2005	Nick Arhontes (narhontes)
601730	4	36	12/05/2005	Nick Arhontes (narhontes)
601730	3	36	11/28/2005	Nick Arhontes (narhontes)
601730	2	36	11/28/2005	Nick Arhontes (narhontes)
601730	1	36	11/28/2005	Nick Arhontes (narhontes)

6. When you decide it is finally time to certify your SSO report press the “Ready to Certify” button. This will perform an error check and make sure that your report has everything that is required.

General Info | Spill Related Parties | Attachments

Save Work in Progress | Submit Draft | Ready to Certify

Note: Questions with "" are required to be answered.*

Note: Only the LRO can complete the rest of this section.

7. If the report passes the error check the “Certify” button will then become available. Press the “Certify” button.

8. You will be taken to the Certification Screen. Start by entering your name in the “Certifier Name:” field.

Certification:

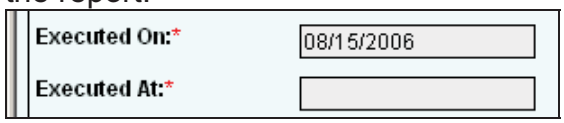
I certify under penalty of law that all data submitted, including attachments, were prepared under my direction in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system,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

Certifier Name:*

9. Enter your title in the “Certifier Title” field.

Certifier Title:*

10. The “Executed On:” field will be pre-populated with the date. Complete the “Executed At:” field, which indicates the location/office of the LRO certifying the report.



11. Once all four field are complete press the “Certify” button.

12. Your SSO report is now completed and submitted to the regional board. If at anytime you realize that some of the information has changed or is incorrect for some other reason you may look up the report and press the “Amend” button to reopen the report for editing. It will then have to be recertified.

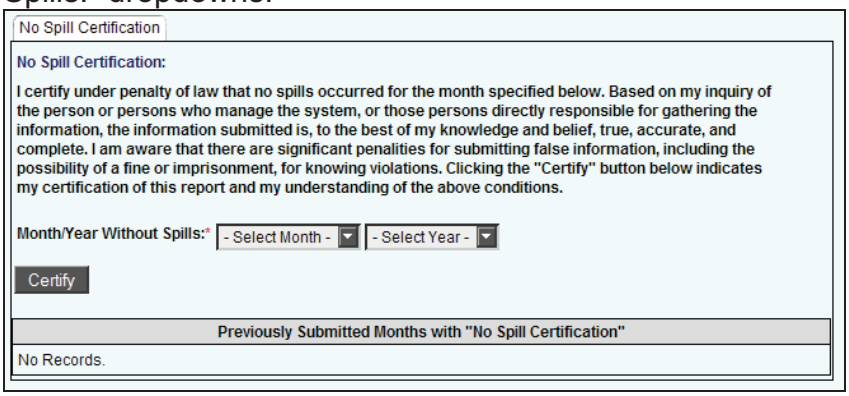
Part 5: No Spill Certification

Perhaps your agency doesn't have any spills to report for your period. That can be taken care of by completing no spill certification.

User roles that need to review this section: LRO

1. From the SSO main menu select the "Generate No Spill Certification" hyperlink.

2. The no spill certification section is only two dropdowns and a certification page. Select the period you didn't have a spill from the "Month/Year Without Spills:" dropdowns.



3. Press the "Certify" button.

4. No spill certification is now complete.

SSLOCSD Board Members

City of Arroyo Grande	Caren Ray Russom, Chair
City of Grover Beach	Karen Bright, Vice Chair
Oceano Community Services District	Linda Austin, Director

SSLOCSD District Staff

Mychal Jones, Plant Superintendent/Chief Plant Operator	Jeremy Ghent, District Administrator
Legally Responsible Official	Legally Responsible Official
Tel: (805) 489-6666	Tel: (805) 489-6666
Fax: (805) 489-2765	Fax: (805) 489-2765
Email: mychal@sslocsd.us	Email: jeremy@sslocsd.us
Mike Arias, Plant Operations Supervisor	Rick Jackman, Senior Plant Operator
Data Submitter	Tel: (805) 489-6666
Tel: (805) 489-6666	Fax: (805) 489-2765
Fax: (805) 489-2765	Email: rick@sslocsd.us
Email: arias@sslocsd.us	
Billy Romhild, Plant Operator II	Mario De Leon, Plant Operator II
Tel: (805) 489-6666	Tel: (805) 489-6666
Fax: (805) 489-2765	Fax: (805) 489-2765
Email: billy@sslocsd.us	Email: mario@sslocsd.us
Chris Rigoni, Plant Operator II	Justin Musick, Plant Operator II
Tel: (805) 489-6666	Tel: (805) 489-6666
Fax: (805) 489-2765	Fax: (805) 489-2765
Email: chris@sslocsd.us	Email: justin@sslocsd.us
Erika Frost, Laboratory Technician/Operator in Training	Amy Simpson, Secretary/Bookkeeper
Data Submitter	Tel: (805) 489-6666
Tel: (805) 489-6666	Fax: (805) 489-2765
Fax: (805) 489-2765	Email: amy@sslocsd.us
Email: erika@sslocsd.us	

24-Hour Emergency Number

South San Luis Obispo County Sanitation District

1600 Aloha Place

Oceano, CA 93445

(805) 489-6670

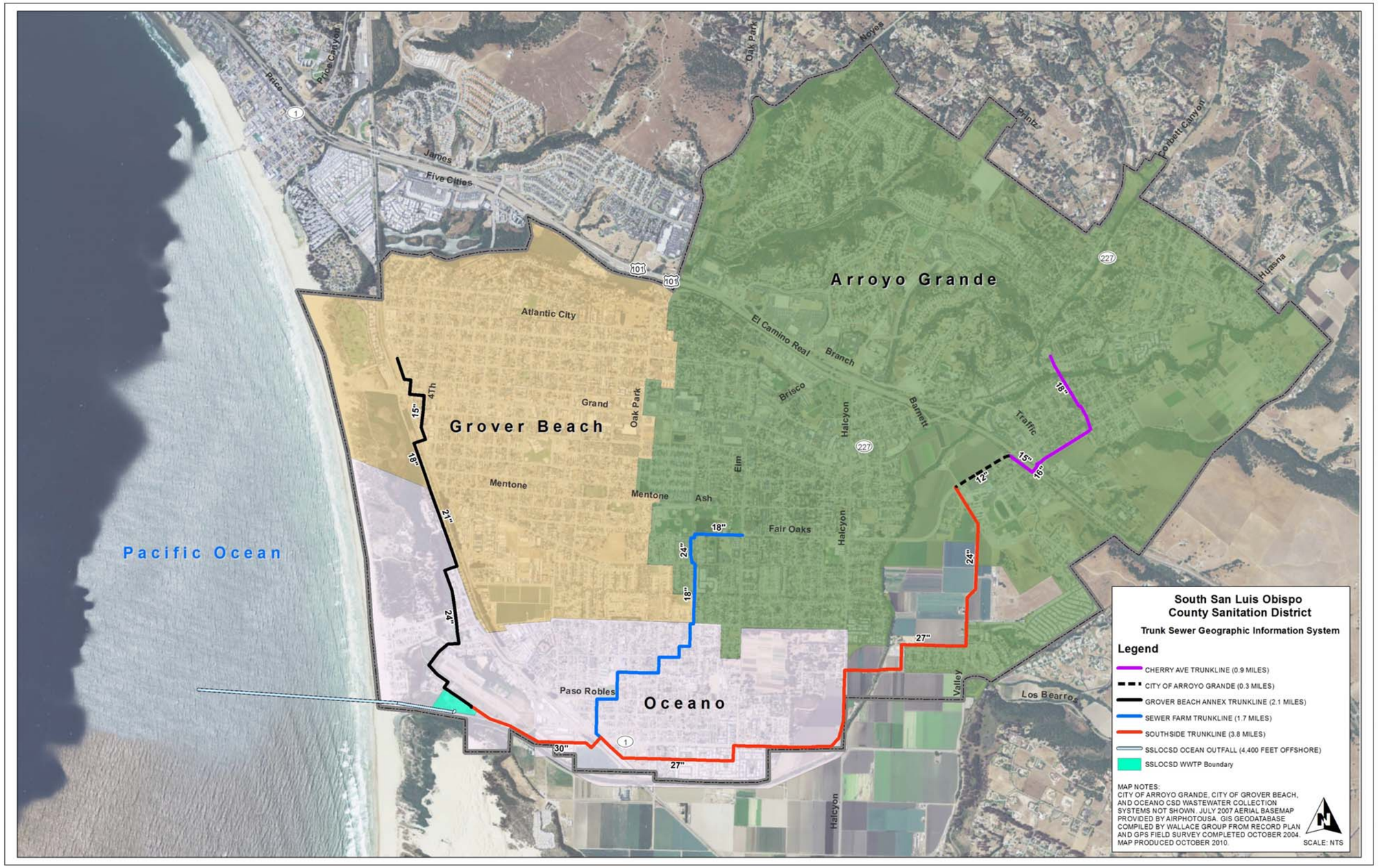
Chain of Communicating Sanitary Sewer Overflows

Organization	Contact Person	Phone Number
Cal OES Warning Center		(800) 852-7550
Central Coast Regional Water Quality Control Board	Dispatch	(805)549-3891
CCRWQB for Discharge to Waters of the United States	Arwen Wyattmair	(805)542-4695
County of San Luis Obispo Public Health Department		(805)542-4695
California OES SLO County Emergency Services Coordinator	Elise Arata	(916)628-0371
California Department of Fish and Wildlife (Central Region)		(559)243-4005

Appendix C

Trunk Sewer Geographic Information System Sample Map

Trunk Sewer Geographic Information System Map



Appendix D

District’s Standard Procedure for Trunk Sewer Connections

Standard Operating Procedure South San Luis Obispo County Sanitation District		Document No: O-SOP-021
Title: Trunk Sewer Connection Request		Page: 1 of 1
		Revision: 1
Issued by: Bob Barlogio	Prepared by: Aaron Yonker	Date Issued: Draft – June 2011

South San Luis Obispo County Sanitation District
Operating Procedures

1.0 Purpose

A. The purpose of this Standard Operating Procedure (SOP) is to establish a uniform process for compliance for checking and approving connections to the District's Trunk Sewer Collection System.

B. The SOP outlined is applicable to the Plant Superintendent, District Administrator, and District Engineer. The District staff or hired engineering contractor conducting this procedure must be familiar with the San Luis Obispo County Public Works Standard Construction Details for sewer system.

2.0 Procedure

A. Applicant contacts the Plant Superintendent and District Bookeeper at the Sanitation District and submits project plans for connection request.

B. Sanitation District forwards project plans to the District Engineer, who is currently at Wallace Group.

C. Wallace Group updates connection tracking spreadsheet and continues to update with each new submittal, response or project closeout.

D. Wallace Group contacts the District's attorney to create resolution for the District Board to approve a new connection request to the District trunk line.

E. The Sanitation District calculates sewer connection fees upon Board review.

F. Developer pays one half of fees as determined by Sanitation District.

G. Sanitation District notifies Wallace Group that Developer has paid one half of fees.

H. Wallace Group reviews project plans and provides Applicant with SSLCOSD Connection Requirement Package tailored to location and connection type (Manhole vs. Pipe, ACP vs. VCP) utilizing version of the SLO County Department of Public Works Standard Improvement Specifications and Drawings. These standards are located at the SLO County website at: **http://www.slocounty.ca.gov/PW/DevServ/PublicImprovementStandards.htm**.

I. Applicant reviews connection requirement package and submits to Wallace Group for review.

J. Wallace Group provides Plan Check Comments if required and reissues to Applicant for correction.

K. If approved, Conditions of Approval are generated by Wallace Group and forwarded to the Applicant with instruction to notify Wallace Group in writing a minimum of 48 hours prior to beginning construction within the Trunk System easement and/or connection.

L. Applicant submits notification to Wallace Group informing of construction/connection date.

M. Wallace Group performs on-site inspection and completes necessary observation checklist, daily construction report and documents connection sequence through photographic record.

N. Applicant notifies the District Bookkeeper at the Sanitation District that the connection is complete.

O. Sanitation District contacts Applicant and Applicant pays remaining fees.

P. Sewer service is activated.

Q. Wallace Group updates connection tracking spreadsheet.

Appendix E

District Overflow Emergency Response Plan

SSO Report Forms – Incident and Telephone Log

SOUTH SAN LUIS OBISPO COUNTY SANITATION DISTRICT

OVERFLOW EMERGENCY RESPONSE PLAN (OERP)

FEBRUARY 25, 2025

PREPARED FOR:

SOUTH SAN LUIS OBISPO COUNTY SANITATION DISTRICT
1600 ALOHA PI
OCEANO, CA 93445

PREPARED BY:

MKN
354 PACIFIC STREET
SAN LUIS OBISPO, CA 93401
805.329.4773

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List of Abbreviations

AG	Arroyo Grande
BMP	Best Management Practices
CIWQS	California Integrated Water Quality System
CCTV	Closed Circuit Television
CDFG	California Department of Fish and Game
CSD	Community Services District
EMA	Emergency Management Agency
ft	Feet
fps	Feet per Second
gal	Gallons
GB	Grover Beach
gpm	Gallons per Minute
GWDR	General Waste Discharge Requirements
MKN	Michael K. Nunley & Associates, Inc.
MRP	Monitoring and Reporting Program
NPDES	National Pollutant Discharge Elimination System
OERP	Overflow Emergency Response Plan
OES	Office of Emergency Services
RWQCB	Regional Water Quality Control Board
SCADA	Supervisory Control and Data Acquisition
SSMP	Sewer System Management Plan
SSLOCSD	South San Luis Obispo County Sanitation District
SSO	Sanitary Sewer Overflow
SWRCB	State Water Resources Control Board
WDR	Waste Discharge Requirement
WWTP	Wastewater Treatment Plant

Quick Reference – Emergency Contacts

Emergency Contacts	
Contacts	**Phone Number**
District Personnel	
SSLOCSD Office	(805) 489-6670
Plant Superintendent Bob Barlogio	(805) 434-1315 home (805) 674-2415 cell
On-Call Operator	(805) 780-4422
District Engineer John Wallace	(805) 544-4011 office (805) 431-9732 cell
Police, Sheriff, and Fire	9-1-1
To reach On-Call personnel in the following areas	
Arroyo Grande Police (during office hours) Arroyo Grande Police (after hours)[1]	(805) 473-5460 (805) 473-5100
Grover Beach Police (during office hours) Grover Beach Police (after hours)[1]	(805) 473-4520 (805) 481-4511
Oceano CSD (24 hours)	(805) 481-6730
Pismo Beach (24 hours)	(805) 773-2208
Reporting Agencies	
Cal EMA	(800) 852-7550
SLO County Health	(805) 781-5544
SLO County OES	(805) 781-5011
RWQCB Office Matt Keeling	(805) 549-3147 (805) 549-3685
CDFG Central Dispatch	(831) 649-2810
Clean-up contractors or rentals	
Rain for Rent	(800) 742-7246
United Rentals	(800) 877-3687
Fluid Resource Management (FRM)	(800) 597-7100
Board Members[2,3]	
Tony Ferrara	(AG)
Lori Angello	(OCSD)
Bill Nicolls	(GB)
Media[3]	
Tribune	(805) 781-7800
New Times	(805) 546-8208
KSBY	(805) 597-8400
KCOY	(805) 929-4748
Testing Lab	
Abalone Coast Bacteriology On-Call	(805) 595-1080 office (805) 235-2330 cell
Notes:	
1) After hours are defined as any time outside the standard operating office hours of 8:00 AM to 5:00 PM 2) Phone numbers located in District Office 3) To be contacted by District Administrator or Plant Superintendent only	

1.0 INTRODUCTION

This section provides background information related to the purpose and organization of this Overflow Emergency Response Plan (OERP) and provides a brief overview of the South San Luis Obispo County Sanitation District's (SSLOCSD or District) sewer service area and trunk system.

1.1 Purpose

The purpose of the OERP is to support an orderly and effective response to sanitary sewer overflows (SSOs). The OERP provides guidelines for the District, as the Enrollee, to follow in responding to, cleaning up, and reporting SSOs that may occur within the District's service area. State Water Resources Control Board (SWRCB) Order No. 2022-0103-DWQ requires wastewater collection agencies to have an OERP, this OERP satisfies the requirement.

1.2 Background

The San Luis Obispo County Board of Directors formed the District in 1963 for the purpose of providing wastewater treatment to the communities of Arroyo Grande, Oceano, Halcyon, and several unincorporated areas in the vicinity. Additionally, the City of Grover Beach serves as a contact agency and is available to provide on-call services. This service area of SSLOCSD encompasses a population of approximately 38,000 residents (2016 Wastewater Financial Plan and Rate Study).

The District constructed their wastewater treatment plant (WWTP) on a 7.6 acre site on Aloha Place in Oceano, between the Oceano Airport and the Arroyo Grande Creek Channel in 1965. Member agencies (the City of Arroyo Grande, City of Grover Beach, and the Oceano Community Services District) of the District provide sewage collection services within their respective service areas and their collection systems terminate at multiple separate points along the District's trunk system. Sewage from the member collection system is conveyed through 9 miles of District owned, operated, and maintained trunk mains which terminate at the WWTP. Currently, the WWTP operates using a fixed film rector for secondary treatment with a permitted average dry weather flow of 5 million gallons per day (mgd) and a 9 mgd peak wet weather flow.

1.3 Goals

The primary goals of this OERP are to protect public health and safety, prevent adverse impacts to the environment, and facilitate compliance with overflow-related regulatory requirements.

1.4 Objectives

This OERP will help the District achieve the following objectives:

- Timely and proper notifications of responders, regulatory agencies, and other potentially affected entities.
- Provision of appropriate customer service
- Protection of the wastewater treatment facility, trunk system, and all appurtenances
- Protection of trunk system personnel
- Protection of private and public property adjacent to the collection and treatment facilities
- Minimizing adverse impacts of SSOs

- Timely implementation of corrective action
- Accurate and consistent identification, investigation, and reporting related to SSOs
- Ensuring appropriate District staff follow the OERP and effectively manage emergency operations and other necessary response activities

1.5 Regulatory Requirements for OERP Element of SSMP

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

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

2. A program to ensure appropriate response to all overflows;

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

4. Procedures to ensure that appropriate staff and on-call contractor personnel are aware of follow the Emergency Response Plan and are appropriately trained;

5. Procedures to address emergency operations, such as traffic and crowd control and other necessary response activities; and

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

2.0 SSO DETECTION AND NOTIFICATION

The processes that are employed to notify the District of the occurrence of an SSO include observation by the public, observation by District staff during the normal course of their work, and receipt of an alarm.

2.1 Public Observation

The Chain of Communication for reporting SSOs begins with the Plant office being contacted by residents, 911 dispatchers, or police and fire departments. The SSLOCSD telephone contact number is (805) 489-6670. This telephone number is answered twenty-four (24) hours per day by either District Staff or a message referring callers to the on-call operator. During regular business hours, (Monday through Friday, 7:30am to 4:00pm) the Superintendent sends one or more operations staff to respond to an SSO notification.

2.2 District Staff Observation

District staff conducts periodic inspections of its sewer system facilities as part of their routine activities. Any problems noted with the sewer system facilities are reported to appropriate District staff that, in turn, responds to emergency situations. Work orders are issued to correct non-emergency conditions. Due to the small size of the District, all Staff are expected to respond to SSOs. Staff are trained upon hire and a refresher training course is completed annually.

2.3 Alarms

In 2018, an AutoSys Inc. and Rockwell Automation SCADA system was brought online. While the District no longer use AutoSync or Rockwell; their system is now managed by Mission Communications. A float system is installed at the lowest point in their network, which is the primary area of concern for SSOs. This system operates based on flow levels and is connected to an auto-dialer that alerts District personnel in the event of an SSO.

2.4 Notification and Response

Appendix A presents a notification and response flowchart that outlines the required chain of communications for various SSO occurrences.

3.0 SSO RESPONSE PROCEDURES

3.1 First Responder Priorities

The first responders are considered the sewer/plumbing crews who have arrived at the scene of an SSO after being notified by the public, plant staff, or receipt of an alarm.

The first responder's priorities are:

- To follow safe working practices
- To respond promptly with the appropriate equipment
- To contain the overflow where feasible
- To restore the flow within the system as soon as practicable
- To minimize public access to and/or contact with the overflowed sewage
- To estimate start time and photograph the incident as required in Section 3.5, when possible
- To promptly notify the District Administrator in event of a major SSO
- To restore the overflow area to its original condition (or as close as possible)

3.2 Safety

Since the District does not own or operate vacuum trucks, a specific safety manual is not in place. However, the first responder must always follow established safety procedures. Proper safety precautions must be observed when performing sewer work, and all District staff are required to adhere to safety protocols. Additionally, staff will receive training upon arrival at the SSO site to ensure compliance with safety guidelines.

3.3 Initial Response

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

The first responder should:

- Document location and any description of the problem as well as the name and contact information of the caller for follow-up information. Use the information to fill out the Telephone Log Form. The Telephone Log Form is included in **Appendix B**
- Note arrival time at the site using SSO Incident Report form. The report form is included in **Appendix C**
- Identify and assess the affected area and extent of the overflow

- Take photos of spill on arrival, during, and after correction actions have been implemented, noting: the location, if the manhole has lifted, weather conditions, if pick holes are clean, flood elevation, presence of debris, and flow of stormwater.
- Verify if overflowed sewage is present and caused by failure/blockage in the public system (note appearance point(s), and
- Initiate containment measures in an attempt to return sewage to the District sewer system
- Notify the Plant Superintendent (working hours and after hours):
    - If the SSO appears to be flowing to a storm drain, is in a sensitive area, or if there is doubt regarding the extent, impact, or how to proceed
    - If additional help is needed

3.4 Initiate SSO Containment Measures

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

- Determine the immediate destination of the overflowing sewage
- Plug storm drains, if applicable, using air plugs, sandbags, and/or plastic mats to prevent sewage from entering the storm drain system. If the SSO has made contact with the storm drainage system, attempt to contain the sewage by plugging downstream storm drainage facilities
- Contain/direct overflow sewage away from storm drain system inlets and bodies of water using dike/dam or sandbags, if applicable
- Contact Arroyo Grande or one of the District's on-call contractors (see list, page 1) to pump around the blockage/pipe failure/pump station, if applicable
- For SSOs at the WWTP a tractor may be used to divert and/or contain the overflow and prevent migration off-site. Use truck and trailer to import dirt if necessary

3.5 Spill Specific Monitoring Requirements

The Enrollee shall visually assess the spill location(s) and spread using photography, global positioning system (GPS), and other best available tools. The Enrollee shall document the critical spill locations, including:

- Photography and GPS coordinates for:
    - The system location where the spill originated. For multiple appearance points of a single spill event, the points closest to the spill origin.
- Photography for:
    - Drainage conveyance system entry locations
    - The location(s) of discharge into surface waters, as applicable

- Extent of spill spread, and
- The location(s) of clean up

To assess the approximate spill magnitude and spread, the District shall estimate the total spill volume using updated volume estimation techniques, calculations, and documentation for electronic reporting, as outlined in Appendix D. The District shall update its notification and reporting of estimated spill volume (which includes spill volume recovered) as further information is gathered during and after a spill event.

3.6 Restore Flow

Using the appropriate cleaning equipment, set up downstream of the blockage and hydro clean upstream from a clear manhole. Attempt to remove the blockage from the system and observe the flows to ensure that the blockage does not recur downstream. Crew should attempt to capture the blocked material and remove in order to evaluate the cause of the blockage.

If the blockage cannot be cleared within a reasonable time (15 minutes), or the sewer requires construction repairs to restore flow, then initiate containment and/or bypassing pumping. If assistance is required, immediately contact the District Superintendent who will contact other employees, contractors, and equipment suppliers.

3.7 Water Quality Sampling and Analysis

For sewage spills in which are an estimated 50,000 gallons or greater are discharged into a surface water, the District shall conduct water sampling no later than 18 hours after knowledge of a potential discharge into water.

The water quality sampling procedures are:

- Collect one water sample, each day of the duration of the spill, at:
    - A point in a drainage conveyance system before the drainage conveyance system flow discharges into a receiving water, if sewage discharges to a surface water via a drainage conveyance system; and/or
    - A point in the receiving water where sewage initially enters the receiving water; and/or
    - A point in the receiving water, upstream of the point of sewage discharge, to capture ambient conditions absent of sewage discharge impacts; and/or
    - A point in the receiving water, downstream of the point of sewage discharge, where the spill material is fully mixed with the receiving water; and/or
    - If the receiving water has no flow during the duration of the spill, the Enrollee must report “No Sampling Due To No Flow” for its receiving water sampling locations.

The District shall analyze the collected receiving water samples for the following constituents:

- Ammonia, and

- Appropriate bacterial indicator(s) per the applicable Basin Plan water quality objectives, including one or more of the following, unless directed otherwise by the Regional Water Board:
    - Total Coliform Bacteria
    - Fecal Coliform Bacteria
    - E-coli
    - Enterococcus

The District shall collect and analyze additional samples as required by the applicable Regional Water Board Executive Officer or designee.

4.0 RECOVERY AND CLEAN-UP

4.1 Estimate the Volume of Overflowed Sewage

- To estimate the volume of overflowed sewage, use the pictures and tables included in **Appendix D** to assess the spill to determine the Category of SSO. Wherever possible, document the estimate using photos of the SSO site before and during the recovery operation.

4.2 Recovery of Overflowed Sewage

Vacuum up and/or pump the overflowed sewage and discharge it back into the sanitary sewer system.

4.3 Clean-Up and Disinfection

Clean-up and disinfection procedures should be implemented to reduce the potential for human health issues and adverse environmental impacts that are associated with an SSO event. Where clean-up is beyond the capabilities of District staff, a clean-up contractor will be used.

The clean-up and disinfection procedures are:

- Small spill clean-ups may be accomplished with absorbents and buckets
- Larger spills may require use of a vacuum truck or other equipment (see page 1 for contractors)
- For spills greater than 500 gallons pump liquid to headworks or primary clarifier at the WWTP
- If the WWTP operator advises against pumping through WWTP, utilize any of the local septic pumpers for off-site disposal
- Once standing water has been removed using above methods, spread lime over area and post warning signs if the potential for of public contact exists
- Once the area has been secured and lime has been in place for a minimum of 1 hour, proceed with final clean-up of dirt, solids, etc.
- Treat each incident separately for disinfection
- Equipment used must be disinfected
- Enlist the assistance of other public agencies or contractors if necessary
- Electronically document all procedures used

4.4 Public Notification

Post signs and place barricades to keep vehicles and pedestrians away from contact with sewage. Do not remove the signs until clean-up is completed. A sample warning sign is included in **Appendix E**.

Lagoons, streams and beaches that have been contaminated as a result of an SSO should be posted at visible access locations until the risk of contamination has subsided to acceptable background levels. The warning signs once posted should be checked every day to ensure that they are still in place.

In the event that an overflow occurs at night, the locations should be inspected first thing the following day. The field crew should look for any signs of sewage solids and sewage-related material that may warrant additional clean-up activities.

Major SSOs may warrant broader public notice. The District Administrator and/or Plant Superintendent will authorize contact with local media when significant areas may have been contaminated by sewage.

4.5 Failure Analysis Investigation

The District will conduct a failure analysis investigation following each SSO. The objective of the failure analysis investigation is to determine the "root cause" of the SSO and to identify corrective action(s) needed that will reduce or eliminate future potential for the SSO to recur. The investigation should include reviewing all relevant data to determine appropriate corrective action(s) for the trunk line segment within which the SSO occurred. The investigation should include:

- The completed SSO Report Form and available photographs
- Incident map
- Pump station records, if applicable
- Review of filed interview notes from response staff
- Review of past applicable maintenance records
- CCTV inspection to determine the condition of the line segment immediately following the SSO and reviewing the video and logs
- Interview of staff that responded to the SSO
- Review and discussion of the Overflow Emergency Response Plan and whether revisions are necessary to provide more efficient and relevant procedures

The product of the failure analysis investigation should be the determination of the root cause of the SSO and the identification of corrective actions. Upon completion of the investigation make any revisions necessary, notify all staff and interested parties of the changes that were made, and provide trainings on the revised plan if necessary.

5.0 SSO NOTIFICATION, MONITORING, REPORTING, AND RECORDKEEPING REQUIREMENTS

5.1 SSO Categories

The California State Water Resources Control Board (SWRCB) has established guidelines for classifying and reporting SSOs. Reporting and documentation requirements vary based on the type of SSO.

Table 5-1 provides the SSO categories as defined by the SWRCB.

Table 5-1: SSO Categories[1]

Category	Category Definitions
Category 1	A spill of any volume of sewage from or caused by a sanitary sewer system regulated under this General Order that results in a discharge to: • A surface water, including a surface water body that contains no flow or volume of water; or • A drainage conveyance system that discharges to surface waters when the sewage is not fully captured and returned to the sanitary sewer system or disposed properly. Any spill volume not recovered from a drainage conveyance system is considered a discharge to surface water, unless the drainage conveyance system discharges to a dedicated stormwater infiltration basin or facility. A spill from an Enrollee-owned and/or operated lateral that discharges to a surface water is a Category 1 spill; the Enrollee shall report all Category 1 spills per section 3.1 of Attachment E1 (Notification, Monitoring, Reporting and Recordkeeping Requirements) of this General Order.
Category 2	A spill of 1,000 gallons or greater, from or caused by a sanitary sewer system regulated under this General Order that does not discharge to a surface water. A spill of 1,000 gallons or greater that spills out of a lateral and is caused by a failure or blockage in the sanitary sewer system, is a Category 2 spill
Category 3	A spill of equal to or greater than 50 gallons and less than 1,000 gallons, from or caused by a sanitary sewer system regulated under this General Order that does not discharge to a surface water. A spill of equal to or greater than 50 gallons and less than 1,000 gallons, that spills out of a lateral and is caused by a failure or blockage in the sanitary sewer system is a Category 3 spill.
Category 4	A spill of less than 50 gallons, from or caused by a sanitary sewer system regulated under this General Order that does not discharge to a surface water. A spill of less than 50 gallons that spills out of a lateral and is caused by a failure or blockage in the sanitary sewer system is a Category 4 spill.

Note:

1. *Per State Water Resources Control Board Order No. 2022-0103-DWQ*

5.2 SSO Notification Procedures

5.2.1 Internal Notification Category 1 & 2 SSOs

The field crew (working hours) or on-call staff (after hours) will immediately notify the Plant Superintendent or designee.

The field crew will fill out the SSO Report Form and submit to the Plant Superintendent or designee. The Plant Superintendent will forward the report to the District Engineer and/or District Administrator.

In the event of a Category 1 & 2 overflows, the Plant Superintendent may notify the District Engineer and/or District Administrator. The Plant Superintendent may notify the Board of Directors.

5.2.2 Internal Notification Category 3 & 4 SSOs

The field crew will fill out the SSO Report form and submit to the Plant Superintendent or designee. The Plant Superintendent will forward the report to the District Engineer and/or District Administrator.

5.2.3 External Notification Requirements

The District shall prepare Notifications per the State Water Resources Control Board Order No. 2022-0103-DWQ as shown below:

- Category 1 Spill: Spills to Surface Waters – Within two (2) hours of the Enrollee's knowledge of a Category 1 spill of 1,000 gallons or greater, discharging or threatening to discharge to surface waters, notify the California Office of Emergency Services and obtain a notification control number.
- Category 2 Spills: Spills of 1,000 gallons or Greater That Do Not Discharge to Surface Waters – Within two (2) hours of the Enrollee's knowledge of a Category 2 spill of 1,000 gallons or greater, discharging or threatening to discharge to surface waters, notify the California Office of Emergency Services and obtain a notification control number.
- Category 3 Spills: Spills of Equal or Greater than 50 Gallons and Less Than 1,000 Gallons That Does Not Discharge to Surface Waters – No notification required.
- Category 4 Spills: Spills Less Than 50 Gallons That Do Not Discharge to Surface Waters – No notification required.
- Enrollee Owned and/or Operated Lateral Spills That Do Not Discharge to Surface Waters – Within two (2) hours of 1,000 gallons or greater, from an enrollee-owned and/or operated lateral, discharging, or threatening to discharge to waters of the State: Notify California of Emergency Services and obtain a notification control number. No notification required for spills of less than 1,000 gallons.

5.3 SSO Monitoring Procedures

The District shall follow Monitoring Procedures per the State Water Resources Control Board Order No. 2022-0103-DWQ as shown below:

- Category 1 Spill: Spills to Surface Waters – Conduct spill specific monitoring as shown in Section 3.5 and conduct water quality analysis of the receiving water within 18 hours of initial knowledge of spill of 50,000 gallons or greater to surface waters, as described in as shown in Section 3.7.
- Category 2 Spills: Spills of 1,000 gallons or Greater That Do Not Discharge to Surface Waters – Conduct spill specific monitoring, as shown in Section 3.5.
- Category 3 Spills: Spills of Equal or Greater than 50 Gallons and Less Than 1,000 Gallons That Does Not Discharge to Surface Waters – Conduct spill specific monitoring, as shown in Section 3.5.
- Category 4 Spills: Spills Less Than 50 Gallons That Do Not Discharge to Surface Waters – Conduct spill specific monitoring, as shown in Section 3.5.
- Enrollee Owned and/or Operated Lateral Spills That Do Not Discharge to Surface Waters – Conduct visual monitoring.

5.4 SSO Reporting Procedures

The District shall follow Reporting Procedures per the State Water Resources Control Board Order No. 2022-0103-DWQ as shown below:

- Category 1 Spill: Spills to Surface Waters –
    - Submit Draft Spill Report within three (3) business days of the Enrollee's knowledge of the spill;
    - Submit Certified Spill Report within 15 calendar days of the spill end date;
    - Submit Technical Report within 45 calendar days after the spill end date for a Category 1 spill in which 50,000 gallons or greater discharged to surface waters; and
    - Submit Amended Spill Report within 90 calendar days after the spill end date.
- Category 2 Spills: Spills of 1,000 gallons or Greater That Do Not Discharge to Surface Waters –
    - Submit Draft Spill Report within three (3) business days of the Enrollee's knowledge of the spill;
    - Submit Certified Spill Report within 15 calendar days of the spill end date;
    - Submit Amended Spill Report within 90 calendar days after the spill end date.

- Category 3 Spills: Spills of Equal or Greater than 50 Gallons and Less Than 1,000 Gallons That Does Not Discharge to Surface Waters –
    - Submit monthly Certified Spill Report to the online CIWQS Sanitary Sewer System Database within 30 calendars days after the end of the month in which the spills occur; and
    - Submit Amended Spill Reports within 90 calendar days after the Certified Spill Report due date.
- Category 4 Spills: Spills Less Than 50 Gallons That Do Not Discharge to Surface Waters –
    - If, during any calendar month, Category 4 spills occur, certify monthly, the estimated total spill volume exiting the sanitary sewer system, and the total number of all Category 4 spills into the online CIWQS Sanitary Sewer System Database, within 30 days after the end of the calendar month in which the spills occurred.
    - Upload and certify a report, in an acceptable digital format, of all Category 4 spills to the online CIWQS Sanitary Sewer System Database, by February 1st after the end of the calendar year in which the spills occur.
- Enrollee Owned and/or Operated Lateral Spills That Do Not Discharge to Surface Waters –
    - Upload and certify a report, in an acceptable digital format, of all lateral spills (that do not discharge to a surface water) to the online CIWQS Sanitary Sewer System Database, by February 1st after the end of the calendar year in which the spills occur.
    - Report a lateral spill of any volume that discharges to a surface water as a Category 1 spill.

A regulatory reporting guide is included in **Appendix A**.

5.5 SSO Record Keeping Requirements

The General Waste Discharge Requirements (GWDR) and MRP require that individual SSO records be maintained by the District for a minimum of five years from the date of the SSO. This period may be extended when requested by a Regional Water Quality Control Board Executive Officer.

All records shall be made available for review upon SWRCB or RWQCB staff's request during on-site inspection or through an information request. Records shall be retained for all SSOs, including but not limited to the following when applicable:

- Service call records and complaint logs of calls received by the District, documenting how the District responded to all notifications of possible or actual SSOs (including complaints that do not result in SSOs), including:
- Date, time, and method of notification
- Date and time the complainant or informant first noticed the SSO

- Narrative description of the complaint, including any information the caller can provide regarding whether or not he/she knows if the SSO has reached surface waters, drainage channels, or storm drains
- Follow-up return contact information for complainant or informant for each complaint received, if not reported anonymously
- Final resolution of the complaint
- Electronic monitoring records relied upon for documenting SSO events and/or estimating SSO volume discharged, including:
- Supervisory Control and Data Acquisition (SCADA) systems records, logs, etc.
- Alarm systems alerts
- Listing of flow monitoring devices or other instruments used to estimate wastewater levels, flow rates, or volumes
- Records documenting steps and/or remedial actions take to control and terminate the SSO and recover as much of the discharged volume as possible
- Records documenting how estimates of volume discharged, and volume recovered were calculated

If water quality samples are required by an environmental or health agency, State Law, or if voluntary monitoring is conducted by the District or its agent(s) as result of any SSO, records of monitoring information shall include:

- The date, exact place, and time of sampling or measurements
- The individual(s) who performed the sampling or measurements
- The date(s) individual analyses were preformed
- The individual(s) who performed the analyses
- The analytical technique or method used
- The results of such analyses

6.0 EQUIPMENT

This section provides a list of specialized equipment that is required to support this Overflow Emergency Response Plan.

- Field Manual
- Event Folder:
    - SSO Reports
    - SSO Log Sheet
    - Telephone Log Sheet
    - Incident Report Form
- GPS, Cell phone, and/or radio
- Flashlight
- Camera
- Tape measure
- Traffic Control Equipment (safety tape, signs, cones, etc.)
- Personal Protective Equipment:
    - Rubber Gloves
    - Rubber Boots
    - Goggles
    - Respiratory mask
- Atlas with manhole rim elevations
- Table of Manholes with latitude/longitude and which are locked, which have liners, and which are equipped with pressure lids
- Technical data sheets for response equipment, pumps, generators, etc.
- Sandbags, lime, absorbents, booms, and other items to contain spill and protect storm drains
- Portable Generators, Portable Pumps, Piping, and Hoses
- Combination Sewer Cleaning Truck
- Backup Combination Vacuum Trucks
- Closed Circuit Television (CCTV) Inspection Unit

7.0 SSO RESPONSE TRAINING

7.1 Initial and Annual Refresher Training

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

7.2 SSO Response Drills

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

7.3 Tailgate Sessions

The Maintenance Service Center holds monthly tailgate meetings that cover a variety of topics applicable to their responsibilities and safety requirements. SSO emergency response is a topic at these tailgate sessions on a routine basis.

7.4 SSO Training Record Keeping

Records should be kept of all training that is provided in support of this plan. The records for all scheduled training courses and for each overflow emergency response training event should include date, time, place, content, name of trainer(s), and names of attendees. The District shall update the training record log within 48 hours of the most recent training session.

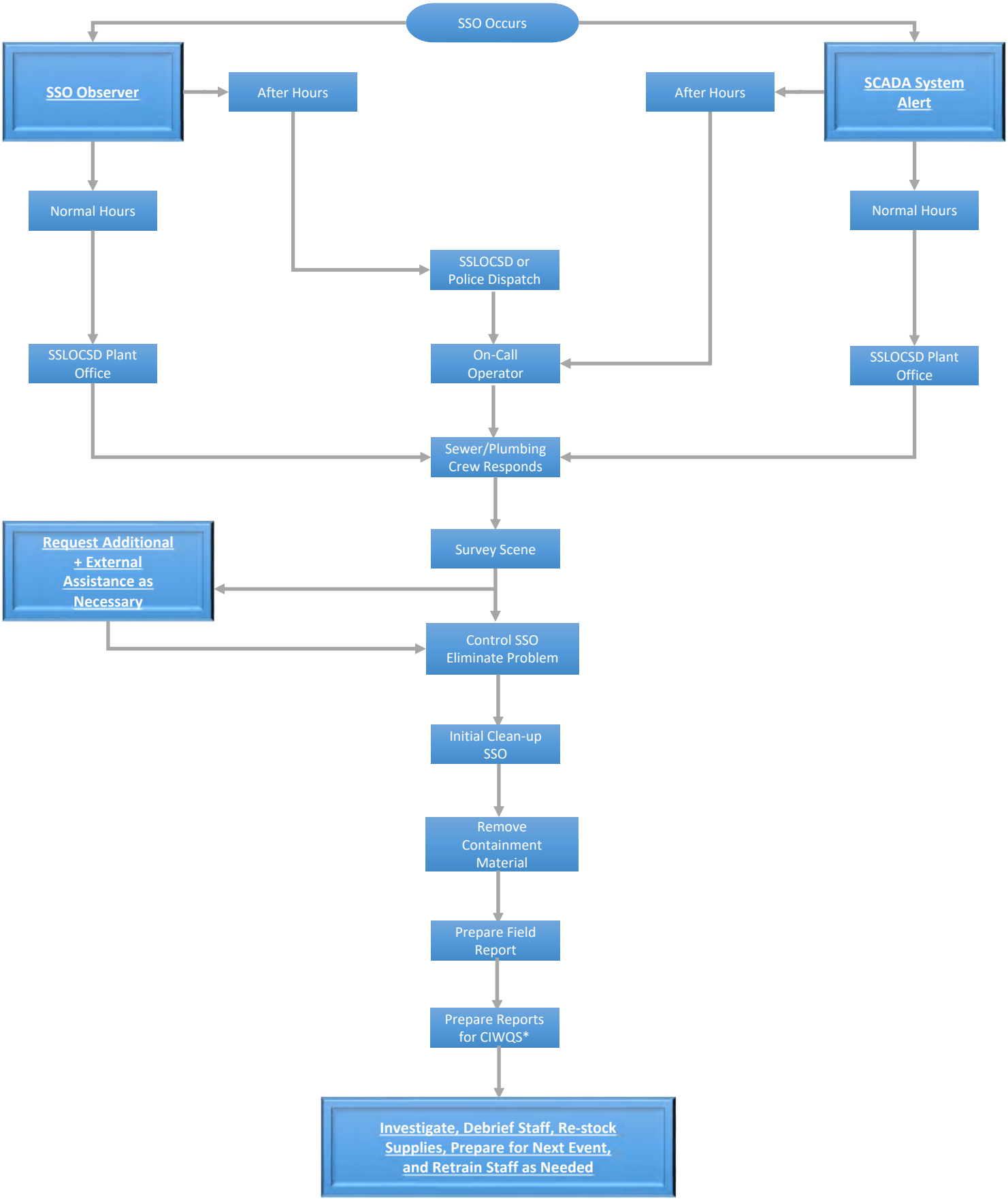
7.5 Contractors Working on District Sewer Facilities

Any contractors that work or otherwise utilize the sewer system are required to comply with all legal requirements associated with SSO responses, be provided a copy of the District's OERP, and have knowledge of the District's response procedures and requirements.

Appendix A

Notification and Response Flow Chart and Regulatory Reporting Guide

Appendix A: Notification and Response Flowchart



* Submit Reports to CIQWS** as per Regulatory Reporting Guide
** If CIWQS website is not available, you must fax all required information to RWQCB and reattempt as soon as possible.

Regulatory Reporting Guide

Deadline	Category 1 Spill[1]	Category 2 Spill[2]	Category 3 Spill[2]	Category 4 Spill[2]
2 hours after awareness of spill	Within two (2) hours of the WCW's knowledge of a Category 1 spill of 1,000 gallons or greater, discharging or threatening to discharge to Waters of the State, notify CalOES and obtain a notification control number.	Within two (2) hours of the WCW's knowledge of a Category 2 spill of 1,000 gallons or greater threatening to discharge to Waters of the State, notify CalOES and obtain a notification control number.	-	-
Within 18 hours of awareness of spill	Conduct water quality sampling of the receiving water within 18 hours of initial knowledge of spill of 50,000 gallons or greater to surface waters.	-	-	-
As soon as possible	Notify the Plant Superintendent, District Engineer, and On-Call Operator.			
3 Business Days after awareness of spill	Submit Draft Spill Report in the CIWQS database.	Submit Draft Spill Report in the CIWQS database.	-	-
15 days after the spill end date	Submit Certified Spill Report within 15 calendar days of the spill end date. (Submit Amended Spill Report, as needed, within 90 calendar days after the spill end date.)	Submit Certified Spill Report within 15 calendar days of the spill end date. (Submit Amended Spill Report, as needed, within 90 calendar days after the spill end date.)	-	-
Within 30 Calendar days after the end of the calendar month which the spill occurs	-	-	Submit monthly Certified Spill Report to the online CIWQS Sanitary Sewer System Database (Submit Amended Spill Report, as needed, within 90 calendar days after the Certified Spill Report due date.)	Certify monthly, the estimated total spill volume exiting the sanitary sewer system, and the total number of all Category 4 spills into the online CIWQS Sanitary Sewer System Database.
45 days after spill end date	Submit Technical Report within 45 calendar days after the spill end date for a Category 1 spill in which 50,000 gallons or greater discharged to surface waters; and	-	-	-
By February 1st after the end of the calendar year in which the spills occur.	-	See + note below.	-	Upload and certify a report, in an acceptable digital format, of all Category 4 spills to the online CIWQS Sanitary Sewer System Database.

Notes:

(1) A spill from an Enrollee-owned and/or operated lateral that discharges to a surface water is a Category 1 spill.

(2) Agency owned lateral spills (Cat 2-4) to be reported by Feb 1 of the following year.

Appendix B

Telephone Log Form

South San Luis Obispo County Sanitation District

Telephone Log

Phone Call From: _____ Title: _____

Company (if applicable): _____

Phone Number Called From: _____ Office / Cell

Date of Call: _____ Time of Call: _____ am / pm

Member Agency: _____

Person Contacted: _____ Title: _____

Phone Number Called: _____ Office / Cell

Conversation Summary: _____

_____

_____

Message Date	Time	With Whom	For Whom	Date & Time Returned	
	am / pm				am / pm
	am / pm				am / pm
	am / pm				am / pm

_____

_____

_____

Follow-up Required: _____

_____

_____

_____

_____

Appendix C

SSO Incident Report Form

SSLOCSD
Sanitary Sewer Spill Report

Spill location name: _____

Address: _____
Number (N, S, E, W) Street Name (Rd, St, Ct, etc.)

Estimated spill volume that reached a separate storm drain that flows to a surface water body?_____

Estimated spill volume recovered from the separate storm drain that flows to a surface water body? _____

Estimated spill volume that directly reached a drainage channel that flows to a surface water body? _____

Estimated spill volume recovered from a drainage channel that flows to a surface water body? _____

Estimated spill volume discharged directly to a surface water body? _____

Estimated spill volume recovered from surface water body? _____

Estimated spill volume discharged to land? (Discharges directly to land, storm drain system, or drainage channel that flows to a storm water infiltration/retention structure, field, or other non-surface water location. Also backups to buildings)_____

Estimated spill volume recovered from the discharge to land? _____

Did the spill discharge to a drainage channel and/or surface water? Yes ☐ No ☐

Did the spill reach a storm drainpipe that is not part of a combined sewer system? Yes ☐ No ☐

If spill reached a separate storm drainpipe, was all of the wastewater fully captured from the separate storm drain and returned to the sanitary sewer system? Yes ☐ No ☐

Spill location description: _____

_____

Number of appearance points: _____ Spill appearance points (Check all that apply):

- ☐ Inside building or structure
- ☐ Force main
- ☐ Gravity mainline
- ☐ Manhole
- ☐ Other sewer system structure
- ☐ Pump station
- ☐ Lateral cleanout (private)
- ☐ Upper or lower lateral (private)
- ☐ Other (specify below)

Spill appearance point explanation (Required if spill appearance point is "Other" and/or multiple appearance points are selected): _____

_____

Final spill destination (Check all that apply):

- ☐ Beach
- ☐ Building or structure
- ☐ Drainage channel
- ☐ Separate storm drain
- ☐ Street/curb and gutter
- ☐ Surface water
- ☐ Paved surface
- ☐ Unpaved surface
- ☐ Other (specify below)

Explanation of final spill destination (Required if spill destination point is "Other"): _____

_____

Estimated spill start date and time: _____

Date and time sanitary sewer system agency was notified of or discovered spill: _____

Estimated Operator arrival date and time: _____ Estimated spill end date and time: _____

Spill cause (Check all that apply):

- ☐ Debris from lateral
- ☐ Debris - rags
- ☐ Debris from construction
- ☐ Vandalism
- ☐ Natural disaster
- ☐ Damage by others
- ☐ Operator error
- ☐ Pipe structural problem/failure
- ☐ Pipe structural problem/installation
- ☐ Pump station controls
- ☐ Pump station mechanics
- ☐ Pump station power failure
- ☐ Root intrusion
- ☐ Grease deposition (FOG)
- ☐ Other (specify below)

Spill cause explanation (Required if spill cause is "Other"): _____

Where did failure occur? (Check all that apply):

- ☐ Force main
- ☐ Gravity mainline
- ☐ Manhole
- ☐ Air relief valve
- ☐ Pump station - controls
- ☐ Pump station - mechanical
- ☐ Pump station - power
- ☐ Siphon
- ☐ Other (specify below)

Explanation of where failure occurred (Required if where failure occurred is "Other"): _____

_____

Was this spill associated with a storm event? Yes ☐ No ☐

Sewer pipe at the point of blockage or failure: _____
Diameter (inches) Material Estimated Age (years)

Spill response activities (Check all that apply):

☐ Cleaned-up
☐ Mitigated effects of spill
☐ Contained all or portion of spill
☐ Restored flow
☐ Returned spill to sewer system
☐ Returned some to sewer system
☐ Property owner notified
☐ Enforcement agency(s) notified
☐ Other (specify below)

Explanation of spill response activities (Required if spill response activities is "Other"): _____

Spill response completion date: _____ Spill corrective action taken (Check all that apply):

☐ Added sewer to preventive maintenance program
☐ Adjusted schedule/method of preventive maintenance
☐ Enforcement action against FOG source
☐ Inspected sewer using CCTV to determine cause
☐ Plan rehabilitation or replacement of sewer
☐ Repaired facilities or replaced defect
☐ Other (specify below)

Explanation of spill corrective action taken (Required if spill corrective action taken is "Other"): _____

Is there an ongoing investigation? Yes ☐ No ☐ Reason for ongoing investigation? _____

Visual inspection results from impacted receiving water: _____

Health warnings posted: Yes ☐ No ☐ Did the spill result in a beach closure? Yes ☐ No ☐

If **YES**, name of impacted beach(s) (enter N/A if None): _____

Name of impacted surface water(s) (enter un-named if un-named): _____

Water quality samples analyzed for (Check all that apply):

☐ No water quality samples taken
☐ Not applicable to this spill
☐ Dissolved oxygen
☐ Other chemical indicators (specify below)
☐ Biological indicators (specify below)
☐ Other (specify below)

Explanation of water quality samples analyzed for (Required if water quality samples analyzed for is "Other chemical indicators," "Biological indicators," or "Other"): _____

Water quality sample results reported to (Check all that apply):

☐ OES
☐ County Health Agency
☐ Regional Water Quality Control Board
☐ No water quality samples taken
☐ Not applicable to this spill
☐ Other (specify below)

Explanation of water quality sample results reported to (Required if water quality sample results reported to is "Other"): _____

Explanation of volume estimation methods used (Describe how you developed spill volume estimates for this spill): _____

OES Notification (Required for Category 1 spill greater or equal to 1,000 gallons): _____
Control No. Date/Time OES called

Contact person _____
Name Title Phone number

Report Completed by: _____ Date: _____

Appendix D

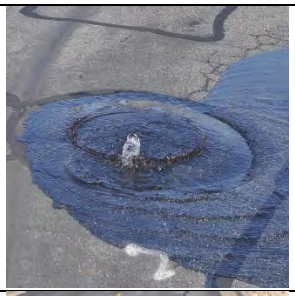
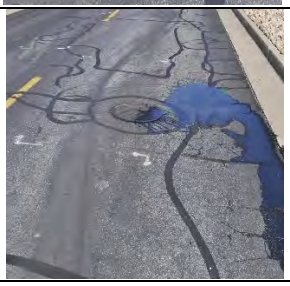
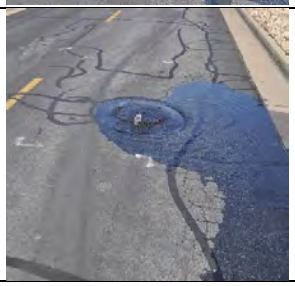
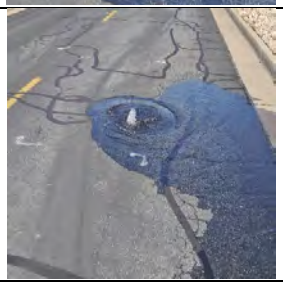
Category of SSO Photo Index and SSO Category Determination

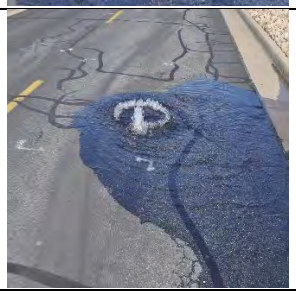
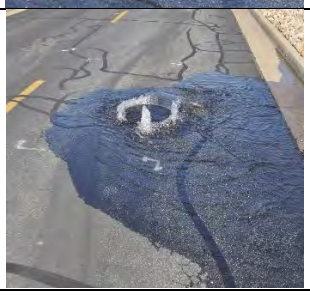
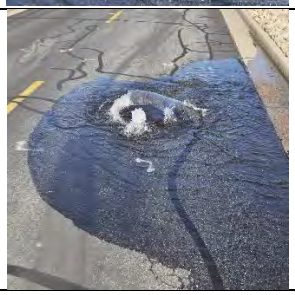
Flow Rate Index

Compare the Spill to the reference images below to estimate the flow rate of the current overflow.

NOTE: If the manhole cover in your picture has vent holes or more than one pry hole, do not use these pictures for comparison.

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

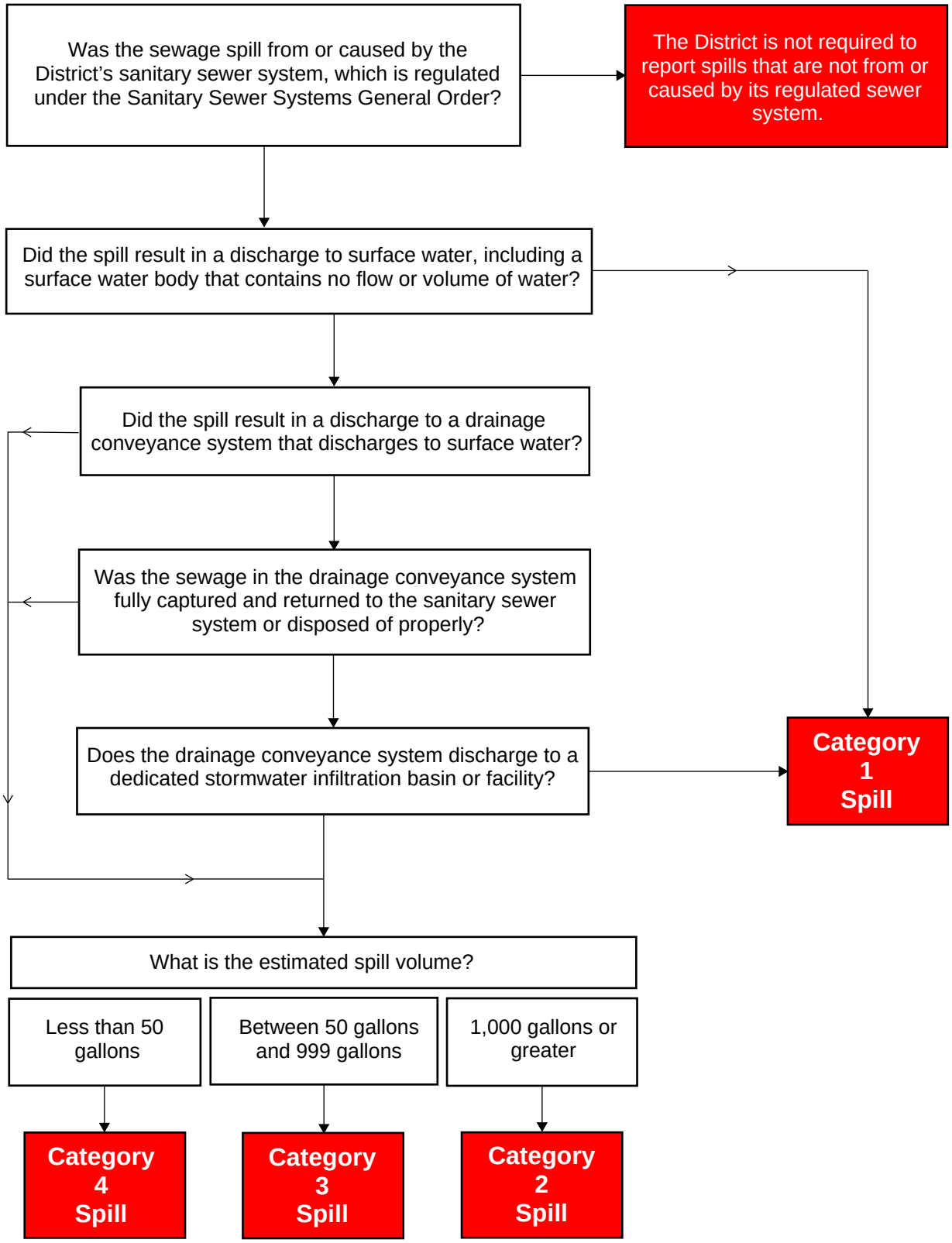
Flowrates	5 GPM	25 GPM	50 PM	100 GPM
Near View				
Far View				

Flowrates	150 GPM	200 GPM	300 PM	400 GPM
Near View				
Far View				

Source: CWEA Southern Section Collection Systems Committee Overflow Simulation

SSO Category Determination

INSTRUCTIONS: Answer each question in order and stop at the red box once you have determined the category.



Attachment D - Sample Templates for SSO Volume Estimation

TABLE 'A'

ESTIMATED SSO FLOW OUT OF M/H WITH COVER IN PLACE

24" COVER

Height of spout above M/H rim H in inches	S S O FLOW Q in gpm	in MGD	Min. Sewer size in which these flows are possible
1/4	1	0.001	
1/2	3	0.004	
3/4	6	0.008	
1	9	0.013	
1 1/4	12	0.018	
1 1/2	16	0.024	
1 3/4	21	0.030	
2	25	0.037	
2 1/4	31	0.045	
2 1/2	38	0.054	
2 3/4	45	0.065	
3	54	0.077	
3 1/4	64	0.092	
3 1/2	75	0.107	
3 3/4	87	0.125	
4	100	0.145	
4 1/4	115	0.166	
4 1/2	131	0.189	
4 3/4	148	0.214	
5	166	0.240	
5 1/4	185	0.266	
5 1/2	204	0.294	
5 3/4	224	0.322	6"
6	244	0.352	
6 1/4	265	0.382	
6 1/2	286	0.412	
6 3/4	308	0.444	
7	331	0.476	
7 1/4	354	0.509	
7 1/2	377	0.543	
7 3/4	401	0.578	8"
8	426	0.613	
8 1/4	451	0.649	
8 1/2	476	0.686	
8 3/4	502	0.723	
9	529	0.761	

36" COVER

Height of spout above M/H rim H in inches	S S O FLOW Q in gpm	in MGD	Min. Sewer size in which these flows are possible
1/4	1	0.002	
1/2	4	0.006	
3/4	8	0.012	
1	13	0.019	
1 1/4	18	0.026	
1 1/2	24	0.035	
1 3/4	31	0.044	
2	37	0.054	
2 1/4	45	0.065	
2 1/2	55	0.079	
2 3/4	66	0.095	
3	78	0.113	
3 1/4	93	0.134	
3 1/2	109	0.157	
3 3/4	127	0.183	
4	147	0.211	
4 1/4	169	0.243	
4 1/2	192	0.276	
4 3/4	217	0.312	6"
5	243	0.350	
5 1/4	270	0.389	
5 1/2	299	0.430	
5 3/4	327	0.471	
6	357	0.514	
6 1/4	387	0.558	8"
6 1/2	419	0.603	
6 3/4	451	0.649	
7	483	0.696	
7 1/4	517	0.744	
7 1/2	551	0.794	
7 3/4	587	0.845	10"
8	622	0.896	
8 1/4	659	0.949	
8 1/2	697	1.003	
8 3/4	734	1.057	
9	773	1.113	

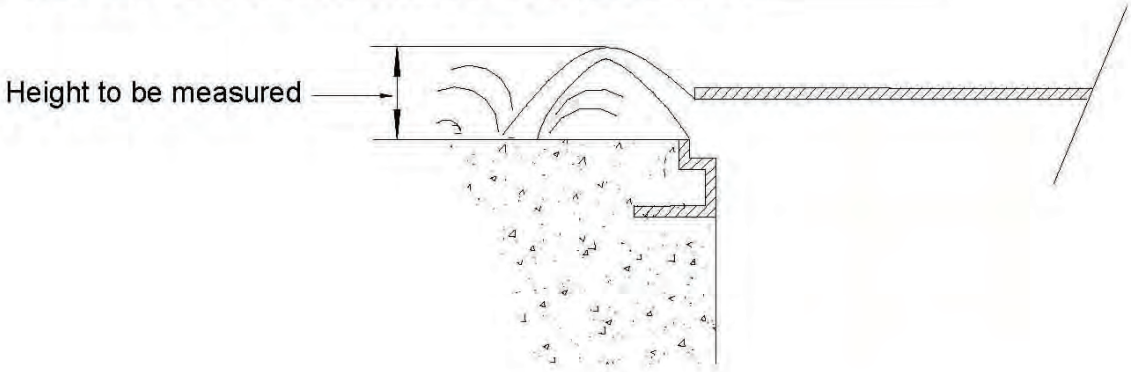
Disclaimer:
This sanitary sewer overflow table was developed by Ed Euyen, Civil Engineer, P.E. No. 33955, California, for County Sanitation District 1. This table is provided as an example. Other Agencies may want to develop their own estimating tables.

The formula used to develop Table A measures the maximum height of the water coming out of the maintenance hole above the rim. The formula was taken from hydraulics and its application by A.H. Gibson (Constable & Co. Limited).

Example Overflow Estimation:

The maintenance hole cover is unseated and slightly elevated on a 24" casting. The maximum height of the discharge above the rim is 5 ¼ inches. According to Table A, these conditions would yield an SSO of 185 gallons per minute.

FLOW OUT OF M/H WITH COVER IN PLACE



This sanitary sewer overflow drawing was developed by Debbie Myers, Principal Engineering Technician, for Ed Euyen, Civil Engineer, P.E. No. 33955, California, of County Sanitation District 1.

TABLE 'B'

ESTIMATED SSO FLOW OUT OF M/H WITH COVER REMOVED

24" FRAME

Water Height above M/H frame H in inches	S S O FLOW Q in gpm	S S O FLOW Q in MGD	Min. Sewer size in which these flows are possible
1/8	28	0.04	
1/4	62	0.09	
3/8	111	0.16	
1/2	160	0.23	
5/8	215	0.31	6"
3/4	354	0.51	8"
7/8	569	0.82	10"
1	799	1.15	12"
1 1/8	1,035	1.49	
1 1/4	1,340	1.93	15"
1 3/8	1,660	2.39	
1 1/2	1,986	2.86	
1 5/8	2,396	3.45	18"
1 3/4	2,799	4.03	
1 7/8	3,132	4.51	
2	3,444	4.96	21"
2 1/8	3,750	5.4	
2 1/4	3,986	5.74	
2 3/8	4,215	6.07	
2 1/2	4,437	6.39	
2 5/8	4,569	6.58	24"
2 3/4	4,687	6.75	
2 7/8	4,799	6.91	
3	4,910	7.07	

36" FRAME

Water Height above M/H frame H in inches	S S O FLOW Q in gpm	S S O FLOW Q in MGD	Min. Sewer size in which these flows are possible
1/8	49	0.07	
1/4	111	0.16	
3/8	187	0.27	6"
1/2	271	0.39	
5/8	361	0.52	8"
3/4	458	0.66	
7/8	556	0.8	10"
1	660	0.95	12"
1 1/8	1,035	1.49	
1 1/4	1,486	2.14	15"
1 3/8	1,951	2.81	
1 1/2	2,424	3.49	18"
1 5/8	2,903	4.18	
1 3/4	3,382	4.87	
1 7/8	3,917	5.64	21"
2	4,458	6.42	
2 1/8	5,000	7.2	24"
2 1/4	5,556	8	
2 3/8	6,118	8.81	
2 1/2	6,764	9.74	
2 5/8	7,403	10.66	
2 3/4	7,972	11.48	30"
2 7/8	8,521	12.27	
3	9,062	13.05	
3 1/8	9,604	13.83	
3 1/4	10,139	14.6	
3 3/8	10,625	15.3	36"
3 1/2	11,097	15.98	
3 5/8	11,569	16.66	
3 3/4	12,035	17.33	
3 7/8	12,486	17.98	
4	12,861	18.52	
4 1/8	13,076	18.83	
4 1/4	13,285	19.13	
4 3/8	13,486	19.42	

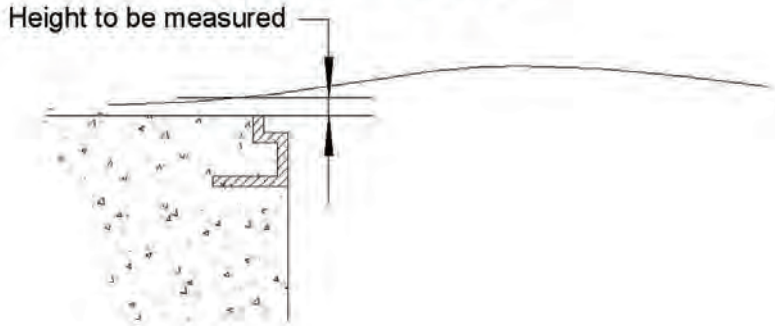
Disclaimer:
This sanitary sewer overflow table was developed by Ed Euyen, Civil Engineer, P.E. No. 33955, California, for County Sanitation District 1. This table is provided as an example. Other Agencies may want to develop their own estimating tables.

The formula used to develop Table B for estimating SSO's out of maintenance holes without covers is based on discharge over curved weir -- bell mouth spillways for 2" to 12" diameter pipes. The formula was taken from hydraulics and its application by A.H. Gibson (Constable & Co. Limited).

Example Overflow Estimation:

The maintenance hole cover is off and the flow coming out of a 36" frame maintenance hole at one inch (1") height will be approximately 660 gallons per minute.

FLOW OUT OF M/H WITH COVER REMOVED (TABLE "B")



This sanitary sewer overflow drawing was developed by Debbie Myers, Principal Engineering Technician, for Ed Euyen, Civil Engineer, P.E. No. 33955, California, of County Sanitation District 1.

TABLE 'C'

ESTIMATED SSO FLOW OUT OF M/H PICK HOLE

Height of spout above M/H cover H in inches	SSO FLOW Q in gpm	Height of spout above M/H cover H in inches	SSO FLOW Q in gpm	
1/8	1.0	5 1/8	6.2	
1/4	1.4	5 1/4	6.3	
3/8	1.7	5 3/8	6.3	
1/2	1.9	5 1/2	6.4	
5/8	2.2	5 5/8	6.5	
3/4	2.4	5 3/4	6.6	
7/8	2.6	5 7/8	6.6	
1	2.7	6	6.7	
1 1/8	2.9	6 1/8	6.8	
1 1/4	3.1	6 1/4	6.8	
1 3/8	3.2	6 3/8	6.9	Unrestrained
1 1/2	3.4	6 1/2	7.0	M/H cover will
1 5/8	3.5	6 5/8	7.0	start to lift
1 3/4	3.6	6 3/4	7.1	
1 7/8	3.7	6 7/8	7.2	
2	3.9	7	7.2	
2 1/8	4.0	7 1/8	7.3	
2 1/4	4.1	7 1/4	7.4	
2 3/8	4.2	7 3/8	7.4	
2 1/2	4.3	7 1/2	7.5	
2 5/8	4.4	7 5/8	7.6	
2 3/4	4.5	7 3/4	7.6	
2 7/8	4.6	7 7/8	7.7	
3	4.7	8	7.7	
3 1/8	4.8	8 1/8	7.8	
3 1/4	4.9	8 1/4	7.9	
3 3/8	5.0	8 3/8	7.9	
3 1/2	5.1	8 1/2	8.0	
3 5/8	5.2	8 5/8	8.0	
3 3/4	5.3	8 3/4	8.1	
3 7/8	5.4	8 7/8	8.1	
4	5.5	9	8.2	
4 1/8	5.6	9 1/8	8.3	
4 1/4	5.6	9 1/4	8.3	
4 3/8	5.7	9 3/8	8.4	
4 1/2	5.8	9 1/2	8.4	
4 5/8	5.9	9 5/8	8.5	
4 3/4	6.0	9 3/4	8.5	
4 7/8	6.0	9 7/8	8.6	
5	6.1	10	8.7	

Note: This chart is based on a 7/8 inch diameter pick hole

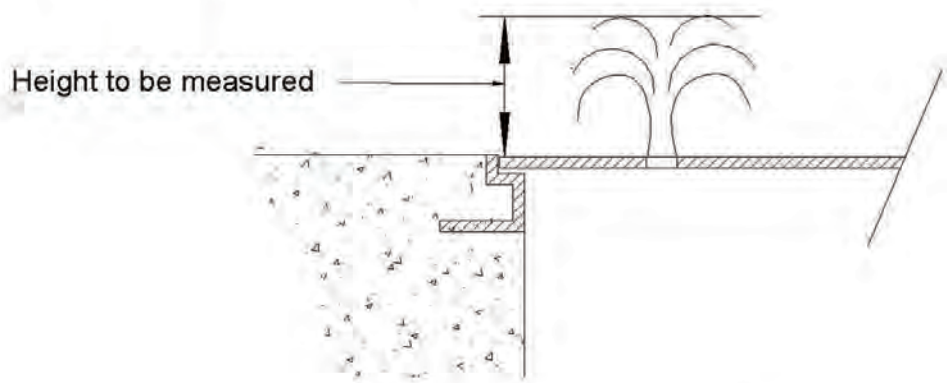
Disclaimer: This sanitary sewer overflow table was developed by Ed Euyen, Civil Engineer, P.E. No. 33955, California, for County Sanitation District 1. This table is provided as an example. Other Agencies may want to develop their own estimating tables.

The formula used to develop Table C is Q=CcVA, where Q is equal to the quantity of the flow in gallons per minute, Cc is equal to the coefficient of contraction (.63), V is equal to the velocity of the overflow, and A is equal to the area of the pick hole.[2] If all units are in feet, the quantity will be calculated in cubic feet per second, which when multiplied by 448.8 will give the answer in gallons per minute. (One cubic foot per second is equal to 448.8 gallons per minute, hence this conversion method).

Example Overflow Estimation:

The maintenance hole cover is in place and the height of water coming out of the pick hole seven-eighths of an inch in diameter (7/8") is 3 inches (3"). This will produce an SSO flow of approximately 4.7 gallons per minute.

FLOW OUT OF VENT OR PICK HOLE (TABLE "C")



This sanitary sewer overflow drawing was developed by Debbie Myers, Principal Engineering Technician, for Ed Euyen, Civil Engineer, P.E. No. 33955, California, of County Sanitation District 1.

[2] Velocity for the purposes of this formula is calculated by using the formula h = v squared / 2G, where h is equal to the height of the overflow, v is equal to velocity, and G is equal to the acceleration of gravity

Appendix E

Sample Warning Sign

DANGER
RAW SEWAGE HAS CONTAMINATED WATER

CONTACT MAY CAUSE ILLNESS

Keep children and pets out of this area.

PELIGRO
AGUA CONTAMINADA CONTACTO CON EL AGUA

PUEDE CAUSAR ENFERMEDADES

Mantenga a niños y mascotas fuera de esta área.

For more information – Para más información

Contact: SSLOCSD Office

(805) 489-6670

mkn

Appendix F

District FOG Ordinance

FOG Best Management Practices Booklet

Commercial Flyer

No Grease Door Hanger

Appendix E

BMP Booklet

Fats, Oil and Grease (FOG) Best Management Practices (BMP) Manual

Train Your People

Train kitchen staff and other employees about how they can help ensure the Best Management Practices (BMPs) are implemented.

People are more willing to support an effort when they understand the basis for it.

Use the Most Appropriate Water Temperature.

Use water temperature of less than 140°F in all sinks, especially the pre-rinse sink before a mechanical dishwasher.

Use a mechanical dishwasher with a minimum temperature of 160°F.

Temperatures in excess of 140°F will dissolve grease, but it can solidify in the sanitary system as the water cools.

Water from mechanical dishwashers should not be discharged through a grease trap or interceptor.

Conspicuously Post No Grease Signs

Post these signs in restrooms, over sinks, near all floor drain, near all dishwashers and anywhere else where water may enter a drain to the sewer.

Signs serve as a constant reminder for staff working with FOG.

Use the 3-Sink System

Use the first sink to wash plates; the second sink to rinse plates and the third sink to sanitize with a 50-100 ppm bleach solution.

Water temperatures in the sinks should be less than 140°F.

The system will save energy and costs as a result.

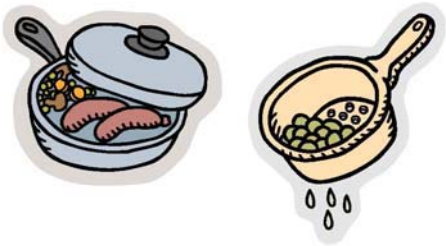
Recycle Waste Cooking Oil

There are many companies who specialize in taking waste cooking oil from fryers and other types of equipment and making animal feed or fuels, such as biodiesel from it.

Recycling reduces the amount of wastes that have to be disposed as a solid waste, and helps to prolong the life of any grease traps and interceptors.

It keeps the FOG out of the sewer system.

Dry Wipe All Pots, Pans and Plates



Wiping the FOG and food that remain in pots, pans and dishware before washing will keep the FOG out of the grease traps and interceptors.

This will result in less frequent cleaning of the grease interceptors and traps, and result in lower maintenance costs.

Properly Dispose of Food Waste

Food should never be poured down a drain or into a toilet.

Recycling of food wastes is the best option for a food service establishment.

Recycling of food wastes will reduce solid waste disposal costs, and the need to more frequently clean grease traps and interceptors.

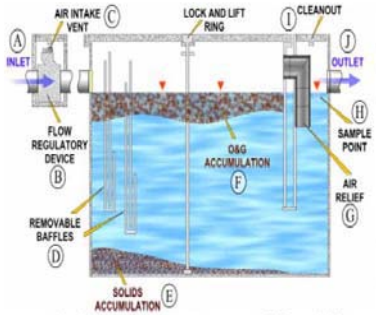
There are non-profits organizations that will take food wastes to feed those who are hungry.

Witness Grease Interceptor Cleaning

The grease hauler should pump out the interceptor or trap completely and clean the sides and any baffles.

You are ultimately responsible for the FOG Control at your place of business. Witnessing the cleaning of your Trap or Interceptor will ensure the complete removal of all grease and solids.

Clean Undersink Grease Traps at Least Weekly

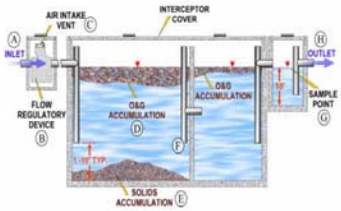


Under sink traps have less volume than grease interceptors.

Weekly cleaning by the establishment's staff will reduce the cost of cleaning any grease interceptors.

Place recovered grease in proper disposal container. It can go in a dumpster, if it is in a closed container. **Do not** pour down any drains or in any toilets.

Clean Grease Interceptors at Least Quarterly



Grease interceptors must be cleaned routinely to ensure that grease accumulation does not interfere with proper operation.

The cleaning frequency is a function of the type of establishment, the size of the interceptor, and the volume of flow discharged to the interceptor.

Routine cleaning will prevent plugging of the sewer line between the food service establishment and the sanitary sewer system. A backup will require someone to unplug the line and could pose a serious health risk to workers and patrons.

Keep a Maintenance Log and All Service Records

The log serves as a record of the frequency and volume of cleaning of the grease interceptor(s).

The record helps to ensure that the food service establishment is in compliance with its permit, and affords any inspector the opportunity to verify compliance. Service records verify the accuracy of the log.

The log can optimize the cleaning frequency in order to reduce costs.

Cover Grease Containers Stored Outdoors

Uncovered FOG containers can collect rainwater. Since FOG floats, the rainwater can overflow the container and flow onto the ground where it can reach the stormwater system.

Any discharge to the stormwater may result in adding biological or chemical demand to local receiving waters.

The discharge might also result in legal penalties being imposed on the food service establishment.

Locate Dumpsters and FOG Containers Away From Storm Drains

A release of FOG can degrade water quality in receiving streams in the area by adding biological and chemical demand to the stream.

Discharging of FOG into storm drains can also result in fines and other legal actions.

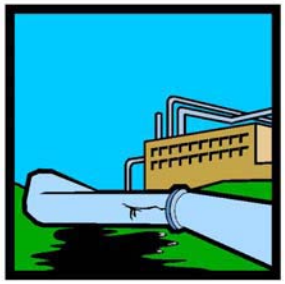
The farther away from a storm drain the FOG is stored, the more time someone has to clean up any spills. **BE AWARE** of FOG dripping out of containers or dumpsters and clean up quickly.

Use Absorbents Around All Storm Drains

Use absorbent pads around all storm drains where dumpsters or containers are nearby.

This can present an effective barrier to prevent FOG from entering the storm drain system.

Use Absorbent Pads For All Spills



Absorbent pads can help to clean up grease and oil that is spilled on the ground near outdoor equipment, containers or dumpsters. They prevent the spills from entering the storm drain system when it rains.

DO NOT use absorbent material such as "kitty litter," or saw dust since they can flow into the storm drains when it rains.

Routinely Clean Exhaust Hoods

If FOG escapes through the kitchen exhaust system, it can accumulate on the roof of the house or restaurant and eventually start a fire or enter the storm drain when it rains.

DO

- Scrape excess grease in a container and dispose of it in the trash or containers specifically designated for grease.
- Place food scraps in waste containers or garbage bags for disposal with solid wastes, or start a compost pile; promote the use of scraping ware prior to washing.
- Place a wastebasket in the bathroom to dispose of wastes.
- Promote the use of the 3 "**R's**" **R**educe. **R**euse and **R**ecycle.

DON'T

- Discharge fats, oil, and grease in concentrations that will cause an obstruction to the flow in a sewer, or pass through or interference at a wastewater treatment facility. FOG from cooking should not be placed in the kitchen or bathroom sinks or in the toilet.
- Discharge of butchering waste of any kind within the sewer system.
- Discharge wastewater with temperatures in excess of 140° F to any grease traps. This includes water from mechanical dishwashers that have a minimum required temperature of 160° F.
- Discharge waste from a food waste disposal unit to any grease traps.
- Discharge caustics, acids, solvents, soaps, enzymes, or other emulsifying agents into sinks that feed grease traps and/or interceptors.
- Discharge fats, wax, grease or oils containing substances that will become viscous between 32° F (0° C) and 150° F (65° C).
- Utilize biological agents, chemicals, or enzymes for grease remediation without permission from the sanitary agency receiving the waste.
- Clean equipment outdoors in an area where water can flow to the gutter, storm drain, or street.
- Use the toilet as a wastebasket

Provided by:
South San Luis Obispo County Sanitation District
FOG Program
c/o Wallace Group
612 Clarion Court
San Luis Obispo, CA 93401
Attn: Heather Billing or Tammie Nichols
805-544-4011 Tel
805-544-4294 Fax
heatherb@wallacegroup.us
tammien@wallacegroup.us

Commercial FOG Flyer

What you need to know about grease traps and interceptors.

To work correctly, grease traps and interceptors must be properly:

1 **DESIGNED**
Grease traps and interceptors must be sized to handle the amount of grease expected.

2 **INSTALLED**
Grease traps and interceptors must be level and vented per Uniform Plumbing Code.

3 **MAINTAINED**
Grease traps and interceptors must be cleaned and serviced frequently, often daily, to reduce or prevent blockages

For More Information or Additional Brochures- Please Contact:

South San Luis Obispo County Sanitation District
C/O Wallace Group
Attn: Heather Billing or Tammie Nichols
612 Clarion Court
San Luis Obispo, California 93401
(805) 544-4011 Tel
(805) 544-4294 Fax

Fat - Free Sewers

Fat, Oil, and Grease… They are bad for your plumbing and your City's sewers.

Fat, Oil, and Grease...

Understanding Your System

Most food service operations have two systems to serve their wastewater disposal needs: A sanitary system for toilets, urinals, and bathroom sinks, and a kitchen system for floor drains, dishwashers, and prep-sinks.

The systems normally use two- to four-inch pipe to carry the flow of wastewater away from the building to the sewer system. Floor drains allow drainage from the floor into the sewer. P-traps provide a liquid seal against sewer gases and odors. Roof vents enable gases and odors in drainage pipes to escape to the outside… and then there are grease traps…

What is a grease trap?

Grease traps or interceptors, which are part of the kitchen system, capture grease from the wastewater flow. Grease is stored in the reservoir tank, which ranges from 10 gallons to 1000 gallons or more. Small inside grease traps are usually located on the floor in the kitchen preparation areas or near dishwashers. This type of grease trap requires frequent maintenance. Larger outside grease interceptors are usually located a few feet from the building in parking, delivery, or drive-thru areas. Outside interceptors are more effective than traps, but they also require periodic maintenance.

How does a grease trap work?

A grease trap slows down the flow of hot greasy water, allowing it to cool. As the hot water cools, the grease separates and floats to the top of the grease trap. The water continues to flow down the pipe to the sewer. The grease is trapped by baffles that cover the inlet and outlet of the tank, preventing it from flowing out of the trap

Why do backups and blockages occur?

Most problems result from poor housekeeping or improper and insufficient grease trap and drain line maintenance. A partial or total blockage can cause floor drains, sinks, and dishwashers to back up and become inoperative. A grease trap or drain line that is not proactively maintained will eventually clog, disrupting service and ultimately shutting down your facility.

If the buildup of grease blocks the public sewer, the South San Luis Obispo County Sanitation District (SSLOCSD) must perform expensive repairs. Grease related blockages have served as the basis for regulations governing the discharge of grease to the sanitary sewer system. SSLOCSD enforces the regulations and inspects grease trap installation for food service operations.

A grease trap or drain line that is not proactively maintained will eventually clog, disrupting service and ultimately shut down your facility.

IT IS UNLAWFUL TO DISPOSE OF GREASE INTO THE SEWER SYSTEM!

What problems are caused by grease?

- Sewage backing up into your business.
- Rancid odors.
- Expensive cleanup, repair, and replacement of damaged property.
- Potential contact with microorganisms that can cause illness.
- Higher operating and maintenance costs.

How can you have fat-free sewers?

Training employees about the problem will mean long-term benefits to your business and our community.

Training should include:

- The nature of grease.
- The effects of grease on the environment.
- The cost of treating grease and its relationship to higher operating costs.
- Recommended disposal practices.
- Recommended housekeeping practices.
- Proper and periodic maintenance schedule.
- The following dos and don'ts:
  - **Post "no grease" signs above sinks and on the front of dishwashers.**
  - **Never pour grease down sink drains or into toilets.**
  - **Scrape grease material and food scraps from all cookware and dishware into a can or the trash for disposal.**
  - **Use a three-sink dishwashing system, which includes sinks for washing, rinsing, and sanitizing in a 50-100 ppm bleach solution.**
  - **Use strainers in sink drains to catch food scraps and other solids, and empty the drain strainers into the trash.**
  - **Wipe cookware and dishes before washing.**
  - **Clean kitchen exhaust system filters routinely.**
  - **Recycle cooking oil and food waste.**
  - **Call SSLOCSD if you have any questions about sewer system operations and maintenance.**

Sewer Bill Inserts for Member Agencies

South San Luis Obispo County Sanitation District

Fats, Oils, and Grease (FOG) Ordinance

October 2008

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South San Luis Obispo County Sanitation District Ordinance No. 2008-01

An Ordinance to the Board of Directors for the South San Luis Obispo County Sanitation District Establishing Fats, Oils, and Grease Regulations for the use of District FSE.

The Governing Board of South San Luis Obispo County Sanitation District ordains as follows:

ARTICLE 1 – GENERAL PROVISIONS

1.1 PURPOSE

A. The purpose of this Ordinance is to establish a FOG Control Program that will facilitate the maximum beneficial public use of the South San Luis Obispo County Sanitation District's (District) sewer services and facilities while preventing blockages of the sewer facilities resulting from discharges of Fats, Oils and Grease (FOG) to sewer trunk lines, and to specify appropriate FOG discharge requirements for FSE (FSE).

B. This Ordinance governs all FSE that discharge into the District or its Member Agencies sewer system.

C. This FOG Ordinance is intended to be consistent with all rules, policies and other applicable governmental actions of the District. This Ordinance is not intended to contradict or repeal any rule, regulation, Ordinance, or other governmental action of the District. This Ordinance supplements the District's existing rules, policies and other governmental actions, and addresses specifically the discharges of FOG into the wastewater system to the District.

D. Any User subject to this FOG Ordinance is hereby advised to review and strictly comply with all other rules, regulations, policies and other governmental actions of the District which may be construed as applicable to FOG discharges into the wastewater system to the District. In particular, any User subject to this FOG Ordinance is still required to meet and satisfy all of the provisions of the District's Pretreatment Ordinance 1994-1, including the general sewer use requirements set forth therein.

E. This Ordinance sets uniform requirements for FOG discharges to the District's sewer system and enables the District to comply with all applicable State and Federal laws, including, but not limited to, the Clean Water Act.

F. This Ordinance provides for the regulation of all FOG discharges into the sewer system. This Ordinance establishes administrative review procedures; monitoring; potential testing and regulation of the amount of the Users' fats, oils, and grease

discharge. The setting of fees for the equitable distribution of costs resulting from the program will be determined separately by each Member Agency.

G. Except as otherwise provided, the District shall administer, implement, and enforce the provisions of this Ordinance. Any powers granted to or duties imposed upon the District may be delegated by the District Administrator to the accepted Member Agency.

1.2 OBJECTIVES

A. To aid in the prevention of sewer blockages and overflows from the contribution and accumulation of fats, oils, and greases into such sewer system from industrial and commercial establishments, particularly food preparation and serving facilities.

B. To prevent the introduction into the District's Sewer System, discharges that will interfere with the operation of the system which includes, but is not limited to, any gravity type sewer system, force main system, or the POTW.

C. To protect both the District's Sewer System, its personnel, and members of the general public who may be affected by the sewer blockages and obstructions.

D. To prevent pass through to receiving water.

E. To improve the opportunity to reclaim and recycle all fats, oils, and grease from the Users grease trap or interceptor.

F. To enable the District to comply with its National Pollutant Discharge Elimination System (NPDES) permit and non-discharge requirement conditions, sludge use and disposal requirements, and any other Federal or State laws to which the District is subject.

1.3 DEFINITIONS

Unless a provision explicitly states otherwise, the following terms and phrases, as used in this Ordinance, shall have the meanings hereinafter designated.

Act or "the Act"	The Federal Water Pollution Control Act, also known as the Clean Water Act, as amended, 33 U.S.C. & 1251 et. seq.
Authorized Representative of the User	The manager or person in charge of day to day operation of the establishment or any other person who performs similar Ordinance or decision-making functions for the establishment.
Best Management Practices (BMP)	Schedules of activities, prohibitions of practices, maintenance procedures and other management practices to prevent or reduce the introduction of FOG to the Sewer facilities as more specifically provided in Sections 4.5 & 4.6 of this Ordinance.
Board	The District Board of the South San Luis Obispo County Sanitation District.
Building Sewer	A sewer lateral conveying Wastewater from the premises of a User to the District's sanitary sewer system.
Bypass	The intentional diversion of waste streams from any portion of an Industrial User's treatment facility. *[40 CFR §403.17(a)]*
District	The South San Luis Obispo County Sanitation District, its Administrator, or his/her designee.
District Administrator	The person designated by the District to supervise the operation of the District's sanitary sewer system or his designee, and who is charged with certain duties and responsibility by this Ordinance.
Domestic Sewage/Wastewater	The liquid waste generated from bathrooms, toilets rooms, kitchens and home laundries, and other similar facilities.
Effective Date	October 15, 2008
Environmental Protection Agency or EPA	The U.S. Environmental Protection Agency or, where appropriate, the Regional Water Quality Control Division Director, or other duly authorized official of said agency.

Fats, Oils, and Greases (FOG)	Organic polar compounds derived from animal and/or plant sources that contain multiple carbon chain triglyceride molecules. These substances are detectable and measurable using analytical test procedures established in 40 CFR 136, as may be amended from time to time. All are sometimes referred to herein as “Grease” or “Greases.”
District FOG Control Program Administrator	The District Engineer or his/her designee of the South San Luis Obispo County Sanitation District.
Food Service Establishments (FSE)	Those establishments primarily engaged in activities of preparing, serving, or otherwise making available for consumption foodstuffs and that use one or more of the following preparation activities: cooking by frying (all methods), baking (all methods), grilling, sautéing, rotisserie cooking, broiling (all methods), boiling, blanching, roasting, toasting, or poaching. Also included are infrared heating, searing, barbecuing, and other food preparation activity that produces a hot, non-drinkable food product in or on a receptacle that requires washing. Examples of some FSE are, but are not limited to, full service restaurants, fast food establishments, delis, cafeterias (including church and school facilities where commercial equipment is installed and the frequency of use indicates more than occasional use), meat distributors, butchering, food processing facilities, grocery stores with food preparation/ service areas, bakeries, caterers, and/or similar types of operations.
Grab Sample	A sample which is taken from a waste stream without regard to the flow in the waste stream and over a period of time not to exceed fifteen (15) minutes.
Grease Control Device	Any grease interceptor, grease trap or other mechanism, device, or process, which attaches to, or is applied to wastewater plumbing fixtures and lines, the purpose of which is to trap or collect or treat FOG prior to it being discharged onto the sewer system. “Grease Control Device” may also include any other proven method to reduce FOG subject to the approval of the District.
Grease Interceptor (Gravity Grease Interceptor)	A device for separating and retaining waterborne fats, oils and grease prior to the wastewater exiting the interceptor and entering the District’s sanitary sewer collection system. These devices also serve to collect settleable solids, generated by and from food preparation activities, prior to the water exiting the trap and entering the District’s sanitary sewer collection

	system. Grease Interceptors are large grease collectors located outside a FSE typically covered by a manhole cover.
Grease Trap (Hydro mechanical Grease Interceptor)	A device for separating and retaining waterborne fats, oils and grease prior to the wastewater exiting the trap and entering the District's sanitary sewer collection system. These devices also serve to collect settleable solids, generated by and from food preparation activities, prior to the water exiting the trap and entering the District's sanitary sewer collection system. Grease Traps are small grease collectors typically located inside a FSE near the dishwashing area.
Interference	A discharge, which alone or in conjunction with other sources, inhibits or disrupts the District's treatment processes, operation, sludge processes, use or disposal; and therefore, is a cause of a violation of the District's NPDES permit. Interference can also be applicable to the prevention of beneficial sewage sludge use or disposal resulting in a violation of any of the following statutory/regulatory provisions or permits issued under, or any more stringent State or local regulations: Section 405 of the Clean Water Act; the Solid Waste Disposal Act, including Title II commonly referred to as the Resource Conservation and Recovery Act (RCRA); and State regulations contained in any State sludge management plan prepared pursuant to Subtitle D of the Solid Waste Disposal Act; the Clean Air Act; the Toxic Substances Control Act; and the Marine Protection, Research, and Sanctuaries Act.
Member Agencies	The City of Arroyo Grande, City of Grover Beach, Oceano Community Services District.
Minimum Design Capability	The design features of a Grease Trap/Interceptor and its ability or volume required to effectively intercept and retain Greases from grease-laden wastewaters discharged to the District's sanitary sewer collection system.
Pass Through	A discharge which exits the District treatment facility into waters of the state in quantities or concentrations which alone or in conjunction with a discharge of discharges from other sources, is a cause of a violation of any requirement and/or limit established in the District's NPDES permit(s), including an increase in the magnitude or duration of a violation.
POTW	Publically Owned Treatment Works

Ordinance	The South San Luis Obispo County Sanitation District: Fats, Oils & Grease (FOG) Ordinance effective October 15, 2008.
Regulatory Agencies	Regulatory Agencies shall mean those agencies having regulatory jurisdiction over the operations of the District, including, but not limited to: • United States Environmental Protection Agency. • California State Water Resources Control Board (SWRCB). • California Regional Water Quality Control Board, Region 3 (RWQCB). • San Luis Obispo County Health Department. • California Department of Fish and Game
Renewal Permit	A renewal permit is granted on an annual basis when the conditions of the FSE have not substantially changed.
Remodel	A physical change or operational change to any type of facility that results in meeting the criteria set forth in the definition of "FSE."
SSLOCSD	South San Luis Obispo County Sanitation District or any duly authorized representative thereof.
Sanitary Sewer Overflow (SSO)	An event where untreated sewage is discharged into the environment.
Sewer System	Sewer System consists of laterals, mains and trunklines transporting wastewater that is treated by the District's treatment plant or facility and is further defined in Member Agency Ordinances.
Significant Non-Compliance/ Notice of Violation (NOV)	A status of a User's non-compliance is defined as follows: 1. Chronic violations of this Ordinance's FOG Discharge requirements for consecutive periods of time. 2. Any other violation or discharge that the District determines has caused, alone or in combination with other discharges, the endangering of health of District personnel or the general public. 3. Any discharge that has caused imminent endangerment to human health, welfare, to the environment, or has resulted in the District's exercise of its emergency authority to halt or prevent such a discharge.

State	The State of California or any duly authorized representative thereof.
User	Any person or company that contributes to; causes or allows the contribution of wastewater into the District's sanitary sewer collection system.
Variance	A Variance may be granted when a FSE has negligible FOG discharge and an insignificant impact to the sewer system.
Exclusion	Exclusion is only granted when FSE is not connected to the Sewer System or all food is prepackaged.
Wastewater	The liquid and water-carried from residential dwellings, commercial buildings, industrial and manufacturing facilities, and institutions, together which contributes to the District's sanitary sewer collection system.

Words used in this Ordinance in the singular may include the plural and the plural in the singular. Use of masculine or feminine may be used interchangeably. Shall is mandatory; May is permissive or discretionary.

ARTICLE 2 – GENERAL LIMITATIONS, PROHIBITIONS, AND REQUIREMENTS ON FATS, OILS, AND GREASE ("FOG") DISCHARGES

2.1 FOG DISCHARGE LIMITATION

No FSE shall discharge or cause to be discharged into the sewer system, FOG that may accumulate and/or cause or contribute to blockages in the sewer system or at the sewer system.

2.2 GENERAL PROHIBITION

A. Introduction of any additives into a FSE sewer system for the purpose of emulsifying FOG is prohibited, unless a specific written authorization from the District is obtained.

B. Disposal of waste cooking oil into the sewer system is prohibited. All waste cooking oils shall be collected and stored properly in receptacles such as barrels or drums for recycling or other acceptable methods of disposal.

C. Discharge of food grinders to any Grease Trap or Grease Interceptor is prohibited.

D. Discharge of wastewater with temperatures in excess of current California Retail Food Code (see Cal 104 CCR Section 113996 et.seq.) to any Grease Control Device, including Grease Traps and Grease Interceptors, is prohibited.

E. The use of biological additives for grease remediation or as a supplement to interceptor maintenance is prohibited unless a specific written authorization from the District is obtained.

F. Discharge waste from toilets, urinals, wash basins, and other fixtures containing fecal materials to Grease Traps is prohibited.

G. Operation of Grease Interceptors or Grease Traps with FOG and solids accumulation exceeding 25% of the total operating depth is prohibited.

2.3 FOG DISCHARGE PROHIBITION

A. No person shall discharge, or cause to discharge any wastewater from FSE directly or indirectly into the sewer system without first obtaining a FOG Wastewater Discharge Permit or Variance.

B. Within 60 days of the effective date of this Ordinance, all FSE in the District or its Member Agency area shall file an application for a FOG Wastewater Permit or Variance with the District. Any person who wishes to open or operate a pre-existing FSE as a new owner following the effective date of this Ordinance shall apply for and obtain a FOG Wastewater Discharge Permit or Variance prior to opening or operating such FSE.

C. Any FSE proposing to change the volume or characteristics of an existing discharge is required to inform the District. A determination regarding whether a new permit or Variance is required shall be made within a reasonable amount of time. If the proposed change requires a revision in a current local permit or requires that a different type of permit be issued, the User shall apply to the District for an appropriate FOG Discharge Permit within forty-five (45) days of receiving notification of such requirement.

2.4 BEST MANAGEMENT PRACTICES REQUIRED

All Food Services Establishments shall implement Best Management Practices in its operation to minimize the discharge of FOG to the sewer system. Detailed requirements for Best Management Practices are specified in Article 4 Section 4.5 & 4.6 of this Ordinance. This may include kitchen practices and employee training essential in minimizing FOG discharge.

2.5 FOG PRETREATMENT REQUIRED

All FSE are required to install, operate and maintain an approved type and adequately sized Grease Interceptor or Grease Trap. The device used shall be adequate to separate and remove FOG contained in the wastewater discharge from the FSE prior to discharge to the sewer system. Any fixtures, equipment and drain lines located in the food preparation and clean up areas of FSE that are sources of FOG discharges shall be plumbed to a Grease Interceptor or Grease Trap.

2.6 NEW CONSTRUCTION OF FSE

All new construction of FSE shall require a permit which shall involve the installation of a Grease Interceptors or Grease Traps prior to commencing discharges of wastewater to the sewer system, unless a Variance is issued.

2.7 EXISTING FOOD SERVICE ESTABLISHMENTS

A. For existing FSE, the requirement to install and to properly operate and maintain a Grease Interceptor may be conditionally stayed, that is, delayed in its implementation, by the District FOG Control Program Administrator for a maximum period of six months from the effective date of this Ordinance (six-month implementation period). The District finds that this time period a reasonable implementation period for existing FSE that are operating without a Grease Interceptor.

B. Existing FSE, which have caused or contributed to grease-related blockage in the sewer system, or which have sewer laterals connected to areas that require continual maintenance, or which have been determined to contribute significant FOG to the sewer system by the District's Member Agencies or FOG Control Program Administrator based on inspection or sampling, shall be deemed to have reasonable potential to adversely impact the sewer system, shall install Grease Interceptors within 60 days upon notification by the District.

C. Existing FSE undergoing remodeling or a change in operations as defined in Article 1 Section 1.3 of this Ordinance shall be required to install a Grease Interceptor.

2.8 VARIANCE OF GREASE INTERCEPTOR

A. A Variance from installation of a Grease Trap/Interceptor may be granted when a FSE is determined to have negligible FOG discharge and insignificant impact to the sewer system.

B. A Variance may also be issued from Grease Trap/Interceptor requirements when an alternative technology that is, at least, equally effective in controlling the FOG discharge. This Variance is granted to FSE demonstrating that it is impossible or impracticable to install, operate or maintain a Grease Trap/ Interceptor. The District FOG Control Program Administrator determination to grant a Variance will be based upon, but not limited to, evaluation of the following conditions:

    1. There is no adequate slope for gravity flow between kitchen plumbing fixtures and the Grease Interceptor and/or between the Grease Trap/Interceptor and the private collection lines or the public sewer; and

    2. The FSE can justify that the alternative pretreatment technology is equivalent or better than a Grease Trap/Interceptor in controlling its FOG discharge. In addition, the FSE must be able to demonstrate, after installation of the proposed alternative pretreatment, its effectiveness to control FOG discharge through downstream monitoring of the sewer system, for at least three months, at its own expense. A Variance may be granted if the results show no visible accumulation of FOG in its lateral and/or tributary downstream sewer lines.

2.9 EXCLUSION FROM INSTALLATION OF GREASE TRAP/INTERCEPTOR

An Exclusion from installation of a Grease Trap/Interceptor shall be granted for FSE when a facility is not connected to the public sewer system.

2.10 APPLICATION FOR VARIANCE OR EXCLUSION REQUIREMENT FOR GREASE TRAP/INTERCEPTOR

A. A FSE may submit an application for Variance or Exclusion from the Grease Trap/Interceptor requirement to the District FOG Control Program Administrator. The FSE bears the burden of demonstrating, to the District Administrator reasonable satisfaction, that the installation of a Grease Trap/Interceptor is not feasible or applicable. Upon determination by the District FOG Control Program Administrator reasons are sufficient to justify a Variance or Exclusion, the permit

will be issued or revised. If an Exclusion is determined to be prudent, the facility will be removed from the Districts FOG Program.

B. A Variance shall contain terms and conditions that serve as basis for its issuance. A Variance may be revoked when any of the terms and conditions for its issuance is not satisfied or if the conditions upon which the Variance was based change, so that justification no longer exists. The Variance shall be valid for one year as long as the FSE remains in compliance with their terms and conditions until the expiration date specified in the Variance.

2.11 GREASE DISPOSAL MITIGATION

A. All FOG Interceptors and or Grease Traps shall be cleaned on a regular basis at the User's expense to ensure efficient operation of the Interceptor. This Ordinance requires that all Interceptors be cleaned no less than once every ninety (90) days and Grease Traps be cleaned a minimum of every seven (7) days. The necessary frequency of cleaning will vary greatly depending on the nature of the establishment.

B. Authorized District personnel shall be allowed access to Grease Interceptors and or Grease Traps within or near the facility for the purpose of inspection and/or to verify compliance with this Ordinance.

C. Maintenance of below ground Grease Interceptors shall be performed only by a licensed Grease Interceptor cleaning service at the FSE expense. Smaller under-the-counter Grease Traps can be cleaned by an approved licensed Grease Trap cleaning service or by in-house staff of the FSE.

D. Notwithstanding the six-month implementation period established in Article 2 Section 2.7, FSE found to have contributed to a Sewer System Overflows (SSO) or any sewer system interference resulting from the discharge of wastewater or waste containing FOG, shall be ordered to install and maintain a Grease Interceptor, Grease Trap or other approved grease control device, and may be subject to a plan to abate the nuisance and prevent any future health hazards created by sewer line failures and blockages, SSO or any other sewer system interferences. SSO may cause threat and injury to public health, safety, and welfare of life and property and are hereby declared public nuisances. Furthermore, sewer lateral failures and SSO caused by FSE alone or collectively, are the responsibility of the private property owner or FSE.

E. If the District or Member Agency must act immediately to contain and clean up a SSO caused by blockage of a private or public sewer lateral or system serving a FSE, or at the request of the property owner or operator of the FSE, or because of the failure of the property owner or FSE to abate the condition causing immediate threat of injury to the health, safety, welfare, or property of the public, the

District‘s and/or Member Agency’s costs for such abatement shall be entirely borne by the property owner and operator of the FSE.

ARTICLE 3 – FOG WASTEWATER DISCHARGE PERMITS FOR FSE

3.1 FOG WASTEWATER DISCHARGE PERMIT REQUIRED

A. FSE currently discharging wastewater containing FOG into the District‘s sewer system shall obtain a FOG Wastewater Discharge Permit or Variance from the District.

B. FOG Wastewater Discharge Permit or Variance shall be expressly subject to all provisions of this Ordinance and all other regulations, charges for use, and fees established by the District. The conditions of FOG Wastewater Discharge Permit or Variance shall be enforced by the District in accordance with this Ordinance and applicable to any State and Federal Regulations.

C. Any FOG discharger proposing to change the volume or characteristics of an existing discharge shall request consideration from the District as to whether or not a new application should be filed and shall provide sufficient information on the proposed change to enable the District to determine whether a new application is needed. If the proposed change requires a revision in a current local permit or requires that a different type of permit be issued, the User shall apply to the District for an appropriate FOG Discharge Permit within forty-five (45) days of receiving notification of such requirement.

D. There shall be three types of FOG Discharge Permits granted to FSE by the District:

    1. Regular Permit: Regular Permits will be issued upon the proper installation and maintenance of a Grease Interceptor/Grease Trap as described in Article 4 Section 4.1- 4.4.

    2. Variance: A Variance permit will be issued upon implementation of Best Management Practices, minimal FOG production and/or alternative pretreatment technology that is, at least, equally effective in controlling the FOG discharge in lieu of a Grease Interceptor/Grease Trap, as described in Article 2 Section 2.8.

    3. Exclusion: Exclusions will only be issued when a facility does not meet the criteria for requiring a FOG Wastewater Discharge Permit as stated in Article 2 Section 2.9.

E. Proper installation and maintenance of a Grease Interceptor or Grease Trap and application for a Regular Permit shall be the standard method of compliance with this Ordinance.

3.2 FOG WASTEWATER DISCHARGE PERMIT APPLICATION

A. Any person required to obtain a FOG Wastewater Discharge Permit shall complete and file with the District prior to commencing or continuing discharges, a FOG Participant Data and Application Form prescribed by the District. The applicable fees shall accompany the application. The applicant shall submit, in units and terms appropriate for evaluation, the following information at a minimum:

    1. Name, physical and mailing address, telephone number, description of the FSE, operation, cuisine and food service activities.

    2. (Which ever is applicable) Name, address of any and all principals/owners/major shareholders of the FSE; Business License.

    3. Practices currently in use to reduce FOG.

    4. Any other information as specified in the Participant Data and Application form.

    5. Applicants may be required to submit facility plans, plumbing plans, and details to show all sewers, FOG control device, Grease Interceptor or other pretreatment equipment and appurtenances by size, and location, for evaluation.

B. Other information related to the applicant's business operations and potential discharge may be requested to properly evaluate the permit application.

C. After evaluation of the furnished data, the District may issue a FOG Wastewater Discharge Permit, subject to terms and conditions set forth in this Ordinance and as otherwise determined by the FOG Control Program Administrator to be appropriate to protect the District‘s sewer system.

3.3 FOG WASTEWATER DISCHARGE PERMIT CONDITIONS

A. The issuance of a FOG Wastewater Discharge Permit may contain any of the following conditions or limits:

   1. Limits on discharge of FOG.

   2. Requirements for proper operation and maintenance of Grease Interceptors and other grease control devices.

   3. Requirements for implementation of Best Management Practices and installation of adequate Grease Interceptor and/or grease control device.

   4. Requirements for maintaining logs and/or records, including wastehauling records and waste manifests on-site.

   5. Requirements for the FSE to construct operate and maintain, at its own expense, FOG control device.

   6. Additional requirements as otherwise determined to be reasonably appropriate by the District FOG Control Program Administrator to protect the District‘s system or as specified by other Regulatory Agencies.

   7. Other terms and conditions, which may be reasonably applicable to ensure compliance with this Ordinance.

3.4 FOG WASTEWATER DISCHARGE PERMIT APPLICATION FEE

A. The FOG Wastewater Discharge Permit application fee shall be paid by the applicant in an amount adopted by resolution of the Member Agencies. Payment of the permit fee must be received at the time of filing the application for the permit. All delinquent fees must be paid prior to issuance of renewal permits.

B. The District and its Member Agencies may adopt reasonable fees for reimbursement of costs, which may include:

   1. Fees for FOG Ordinance Permit Forms including the cost of processing such forms.

   2. Fees for monitoring, inspection, and surveillance procedures including the cost of collection and analyzing a User's Discharge, and reviewing monitoring reports submitted by Users.

3. Fees for reviewing and responding to accidental Discharge procedures and construction.

4. Any other fees the District and its Member Agencies deem necessary to carry out the requirements contained herein.

C. These fees shall relate solely to the matters covered by this Ordinance and are separate from all other fees, fines, and penalties determined to be chargeable by the District or Member Agency.

3.5 FOG WASTEWATER DISCHARGE PERMIT MODIFICATION OF TERM & CONDITIONS

A. The terms and conditions of an issued permit may be subject to modification and change by the sole determination of the District FOG Control Program Administrator during the life of the permit based on:

1. The quantity of FOG a FSE discharges.

2. Changes in the requirements of Federal, State or County Regulatory Agencies which affect the District; or

3. A determination by the District FOG Control Program Administrator that such modification is appropriate to further the objectives of this Ordinance.

B. The User may request a modification to the terms and conditions of an issued permit. The request shall be in writing stating the requested change, and include reasons for the change. The District FOG Control Program Administrator shall review the request, make a determination on the request, and respond in writing.

C. The User shall be informed of any change in the permit limits, conditions, or requirements at least forty-five days (45) prior to the effective date of the change. Any changes shall include a reasonable time schedule for compliance.

3.6 FOG WASTWATER DISCHARGE PERMIT DURATION AND RENEWAL

FOG Wastewater Discharge Permits shall be issued annually. At least 30 days prior to the expiration of the permit, the User shall apply for renewal in accordance with the FSE permit.

3.7 NON-TRANSFERABILITY OF PERMITS

FOG Wastewater Discharge Permits issued under this section of the Ordinance are for a specific FSE, for a specific operation and create no vested rights. No permit holder shall assign, transfer, or sell any FOG Wastewater Discharge Permit issued under this Ordinance nor use any such permit for or on any premises or for facilities or operations or discharges not expressly encompassed within the underlying permit. No permit can be transferred to a new owner or operator or to a new facility.

3.8 FOG WASTEWATER DISCHARGE PERMIT CHARGE OF USE

Each Member Agency will determine the appropriate equitable permit charge.

ARTICLE 4 – FACILITY REQUIREMENTS

4.1 GREASE INTERCEPTOR REQUIREMENTS

A. All FSE shall discharge wastewater acceptable to the District, under the requirements and standards established herein before discharging to any public sewer. Any FSE is required to provide FOG pretreatment, install, operate, and maintain an approved type and adequately sized Grease Interceptor necessary to maintain compliance with the objectives of this Ordinance.

B. Grease Interceptor sizing and installation shall conform to the current edition of the Uniform Plumbing Code (UPC) and manufacturers specifications. Grease Interceptors shall be constructed in accordance with the design approved by the District FOG Control Program Administrator and shall have a minimum of two compartments with fittings designed for grease retention.

C. The Grease Interceptor shall be installed at a location where it shall be at all times easily accessible for inspection, cleaning, and removal of accumulated grease.

D. Access manholes, with a minimum diameter of 24 inches, shall be provided over each Grease Interceptor chamber and sanitary tee. The access manholes shall extend at least to finished grade and be designed and maintained to prevent water inflow or infiltration. The manholes shall also have readily removable covers to facilitate inspection, grease removal, and wastewater sampling activities.

4.2 GREASE INTERCEPTOR MAINTENANCE REQUIREMENTS

A. Grease Interceptors shall be maintained in efficient operating condition by periodic removal of the full content of the Interceptor which includes wastewater accumulated FOG, floating materials, sludge and solids.

B. All existing and newly installed Grease Interceptors shall be maintained in a manner consistent with maintenance frequency approved by the FOG Control Program Administrator pursuant to this section.

C. No FOG that has accumulated in a Grease Interceptor shall be allowed to pass into any sewer lateral, sewer system, storm drain, or public right of way during maintenance activities.

D. FSE with Grease Interceptors shall be required to submit data and information necessary to establish the maintenance frequency of Grease Interceptors.

E. The maintenance frequency for all FSE with a Grease Interceptor shall be determined in one of the following methods:

    1. Grease Interceptors shall be fully pumped out and cleaned at a frequency such that the combined FOG and solids accumulation does not exceed 25% of the total designed hydraulic depth of the Grease Interceptor. This is to ensure that the minimum hydraulic retention time and required available hydraulic volume is maintained to effectively intercept and retain FOG discharged to the sewer system. All FSE with a Grease Interceptor shall maintain their Grease Interceptor no less than every ninety (90) days.

    2. Grease Interceptors shall be fully pumped out and cleaned quarterly when the frequency described in (1) has not been established.

    3. If the Grease Interceptor, at any time, contains FOG and solids accumulation that does not meet the requirements described in E.1 of this Section, the FSE shall be required to have the Grease Interceptor serviced immediately such that all fats, oils, grease, sludge, and other materials are completely removed from the Grease Interceptor. If deemed necessary, the District FOG Control Program Administrator may also increase the maintenance frequency of the Grease Interceptor from the current frequency.

    4. Wastewater, accumulated FOG, floating materials, sludge/solids, and other materials removed from the Grease Interceptor shall be disposed off site properly by wastehaulers in accordance with all applicable federal, state and/or local laws.

4.3 GREASE TRAP REQUIREMENTS

A. Sizing and installation of Grease Traps shall conform to the current edition of the UPC and manufacturers specifications.

B. Grease Traps shall be inspected periodically to check for leaking seams and pipes, and for effective operation of the baffles and flow regulating device. Grease Traps and their baffles shall be maintained free of all FOG and waste. Removable baffles shall be removed and cleaned during the maintenance process.

C. Food waste disposal units shall not be connected to or discharged into any Grease Trap.

D. Grease Traps shall be provided with an approved type of vented Flow Control Device (FCD), in conformance with the current edition of the UPC.

   1. FCD shall be designed and installed so that the total flow through such a device or devices shall at no time be greater than the rated flow of the Grease Trap.

   2. No FCD, having adjustable or removable parts shall be approved by the District.

   3. The vented FCD shall be located such that no system vent shall be between the flow control device and the Grease Trap inlet.

   4. No vent or air inlet of the FCD shall connect with the sanitary drainage vent, as required by the UPC, or shall terminate through the roof of the building, and shall not terminate to the free atmosphere inside the building.

   5. A vent shall be installed downstream of the Grease Trap in accordance with the requirements set forth in the current edition of the UPC.

4.4 GREASE TRAP MAINTENANCE REQUIREMENTS

A. Grease Traps shall be maintained in efficient operating conditions by removing accumulated grease on a weekly basis.

B. Grease Traps shall be maintained free of all food solids and any FOG waste removed during the cleaning and scraping process.

C. Grease Trap cleaning records shall be maintained on-site for a minimum of three years.

4.5 REQUIREMENTS FOR BEST MANAGEMENT PRACTICES

A. All FSE shall implement Best Management Practices in accordance with the requirements and guidelines established by the District and its Member Agencies under its FOG Control Program in an effort to minimize the discharge of FOG to the sewer system.

B. All FSE shall be required, at a minimum, to comply with Best Management Practices (BMP), when applicable.

4.6 BEST MANAGEMENT PRACTICES

A. Employees of the FSE shall be trained by ownership/management periodically in BMP which may include:

   1. How to —dry wipe pots, pans, dishware and work areas before washing to remove grease.

   2. The location and use of absorption products to clean under fryer baskets and other locations where grease may be spilled or dripped.

   3. How to properly dispose of grease or oils from cooking equipment into a grease receptacle such as a barrel or drum without spilling.

   4. Use of proper water temperatures to minimize grease blockages downstream.

B. Best Management Practices and/or No Grease Posters shall be posted conspicuously in the food preparation and dishwashing areas at all times.

C. Record keeping.

ARTICLE 5 – MONITORING, REPORTING, NOTIFICATION, AND INSPECTION REQUIREMENT

5.1 MONITORING AND REPORTING REQUIREMENTS

A. The District FOG Control Program Administrator may require video monitoring at the sole expense of the User to observe the actual conditions of the FSE connection to sewer system and sewer lines downstream.

B. The District FOG Control Program Administrator may require sampling reports for the self-monitoring of FOG wastewater which may be necessary for

determining compliance with any conditions or requirements as specified in the FOG Wastewater Discharge Permit or this Ordinance. Monitoring reports concerning the analysis of FOG wastewater shall be in a manner and form approved by the District FOG Control Program Administrator and shall be submitted upon request of the District FOG Control Program Administrator. Failure by the User to perform any required monitoring, or to maintain monitoring reports required by the District FOG Control Program Administrator constitutes a violation of this Ordinance and be cause for the District to initiate all necessary tasks and analysis to determine wastewater constituents for compliance with any conditions and requirements specified in the FOG Wastewater Discharge Permit or in this Ordinance. The User shall be responsible for any and all expenses of the District in undertaking such monitoring analyses and preparation of reports.

C. Other reports may be required such as compliance schedule progress reports, FOG Control Monitoring Reports, and any other reports deemed reasonably appropriate by the FOG Control Program Administrator to ensure compliance with this Ordinance.

5.2 RECORD KEEPING REQUIREMENTS

A. The User shall keep all manifests (if provided), receipts and invoices of all cleaning, maintenance, grease removal of/from the grease control device, disposal carrier and disposal site location for no less than three years. The User shall, upon request, make the manifests, receipts and invoices available to any District representative, or inspector. These records may include:

   1. A log book of Grease Interceptor, Grease Trap or grease control device cleaning and maintenance practices.

   2. A record of Best Management Practices being implemented including employee training.

   3. Records of sampling data and sludge height monitoring for FOG and solids accumulation in the Grease Interceptors.

   4. Records of any spills and/or cleaning of the lateral or sewer system.

B. The User shall also provide any other information deemed appropriate by the District FOG Control Program Administrator to ensure compliance with this Ordinance.

5.3 FALSIFYING INFORMATION OR TAMPERING WITH PROCESS

It shall be unlawful to make any false statement, representation, record, report, plan or other document that is filed with the District or Member Agency, or to tamper with or knowingly render inoperable any grease control device, monitoring device or method or access point required under this Ordinance.

5.4 RIGHT OF ENTRY: INSPECTION AND SAMPLING

A. The District personnel and/or other authorized representatives of the District shall have the right to enter the premises of any User to determine whether the User is complying with all requirements of this Ordinance or order issued hereunder. Users shall allow the District ready access to all parts of the premises for the purposes of inspection, sampling, records examination, and the performance of any additional duties.

B. Should a User have security measures in force which require proper identification and clearance before entry into its premises, the User shall make necessary arrangements with its security guards so that, upon presentation of suitable identification, the District will be permitted to enter without delay for the purposes of performing specific responsibilities as set forth above.

C. The District shall have the right to set up on the User's property, or require installation of, such devices as are necessary to conduct sampling and/or metering of the User's operations.

D. Any temporary or permanent obstruction preventing safe and easy access to the facility area to be inspected and/or sampled shall be promptly removed by the User at the written or verbal request of the District and shall not be replaced. The costs of clearing such access shall be borne by the User.

E. Unreasonable delays in allowing the District access to the User's premises shall be a violation of this Ordinance.

5.5 RIGHT TO INSPECT

If the District has been refused access to a building, structure, or property, or any part thereof, and is able to demonstrate probable cause to believe that there may be a violation of this Ordinance, or that there is a need to inspect and/or sample as part of a routine inspection and sampling program of the District designed to verify compliance with this Ordinance or any permit or order issued hereunder, or to protect the overall public health, safety and welfare of the community.

5.6 NOTIFICATION OF SPILL

A. If a User is unable to comply with any permit condition due to a breakdown of equipment, accidents, or human error or the User has reasonable opportunity to know that his/her/its discharge will exceed the discharge provisions of the FOG Wastewater Discharge Permit or this Ordinance, the discharger shall immediately notify the appropriate Member Agency by telephone at the number specified in the Permit. If the material discharged to the sewer has the potential to cause or result in sewer blockages or SSO, the discharger shall immediately notify the Member Agency in which the User resides. Confirmation of this notification shall be made in writing to the District FOG Control Program Administrator at the address specified in the Permit no later than five working days from the date of the incident. The written notification shall state the date of the incident, the reasons for the discharge or spill, what steps were taken to immediately correct the problem, and what steps are being taken to prevent the problem from recurring.

B. Such notification shall not relieve the User of any expense, loss, damage or other liability which may be incurred as a result of damage or loss to the District or Member Agency or any other damage or loss to person or property; nor shall such notification relieve the User of any fees or other liability which may be imposed by this Ordinance or other applicable law.

5.7 NOTIFICATION OF REMODEL OR EXPANSION

Users shall notify the District at least 60 days prior to any facility expansion/remodeling, or process modifications that may result in new or substantially increased FOG discharges or a change in the nature of the discharge. Users shall notify the District in writing of the proposed expansion or remodeling and shall submit any information requested by the District for evaluation of the effect the expansion/re-model may have on the Sewer System.

ARTICLE 6 – Enforcement

6.1 GENERAL PROCEDURE

The District, at its discretion, may utilize any one, combination, or all enforcement remedies provided in Article 6 in response to any permit or Ordinance violations.

6.2 DETERMINATION OF NONCOMPLIANCE WITH FOG WASTEWATER DISCHARGE PERMIT CONDITIONS

A. Sampling and inspection of FSE shall be conducted in the time, place, manner, and frequency determined at the sole discretion of the District FOG Control Program Administrator.

B. Noncompliance with permit discharge conditions, or any discharge provisions of this Ordinance may be determined by an inspection of grease control device, Grease Interceptor and associated manifest and documentation; dye testing; and analysis of a grab or composite sample of the effluent of a FSE.

C. Any sample taken from an approved sample point is considered to be representative of the discharge to the public sewer. All costs associated with sampling shall be at the Users expense.

6.3 NOTIFICATION OF NON-COMPLIANCE

When the District finds that a User has violated any provision of this Ordinance or order, the District may serve upon that User a written Notice of Non-Compliance and will have 30 days from the date of written notice to reach compliance.

6.4 NOTIFICATION OF VIOLATION

When the District finds that a User has violated the conditions set forth as part of the Notice of Non-Compliance, and/or continues to violate, any provision of this Ordinance, or order issued hereunder, any other FOG Ordinance Standard or Requirement, the District may serve upon that User a written Notice of Violation. The User will then correct the specified violation within a 14 day corrective timeline provided by the District. A plan for corrective actions may also be submitted by the User to the District. Submission of this plan in no way relieves the User of liability for any violations occurring before or after receipt of the Notice of Violation.

6.5 NONCOMPLIANCE FEE

Any User determined to be in noncompliance with the terms and conditions specified in Article 4 and Article 5 or with any provision of this Ordinance shall pay a noncompliance fee. The purpose of the noncompliance fee is to compensate the District and its Member Agencies for costs of additional inspections and follow-up, sampling, monitoring, laboratory analysis, treatment, disposal, and administrative processing incurred as a result of the continued non-compliance, and shall be in addition to and not in lieu of any

penalties as may be assessed. Non Compliance fees shall be in an amount adopted by resolution by the District or its Member Agencies.

6.6 PERMIT SUSPENSION

A. The District may immediately suspend a FOG Wastewater Discharge Permit after any written notice to the User has been issued, or when such suspension is necessary to stop an actual or threatened Discharge which reasonably appears to present or cause imminent or substantial endangerment to the health or welfare of Persons.

B. The District may also immediately suspend a FOG Wastewater Discharge Permit, after notice and opportunity to respond to such notice, that threatens to interfere with the operation of the Sewer Collection and Treatment System, or which presents, or may present, an endangerment to the environment.

C. Any User notified of a suspension of Discharge shall immediately stop or eliminate its contribution. In the event of a User's failure to immediately comply voluntarily with the suspension order, the applicable Member Agency shall take such steps as deemed necessary, including immediate severance of the sewer connection, to prevent or minimize damage to the sewer collection and treatment system, its receiving waters, or endangerment to any persons. The Member Agency may allow the User to recommence its discharge when the User has demonstrated to the satisfaction of the District that the period of endangerment has passed.

6.7 PERMIT REVOCATION

A. The FOG Control Program Administrator may revoke any permit when it is determined that a User:

    1. Knowingly provides a false statement, representation, record, report, or other document to the District or Member Agency.

    2. Refuses to provide records, reports, plans, or other documents required.

    3. Falsifies, tampers with, or knowingly renders inaccurate any monitoring device or sample collection method.

    4. Fails to comply with the terms and conditions of permit suspension.

    5. Discharges effluent to the District and Member Agencies sewer system while its permit is suspended.

6. Refuses reasonable access to the User's premises for the purpose of inspection and monitoring.

7. Does not make timely payment of all amounts owed to the Member Agency for User charges, permit fees, or any other fees imposed pursuant to this Ordinance.

8. Causes interference, sewer blockages, or SSO to the District or Member Agency.

9. Violates Grease Interceptor or Trap maintenance, which results in unapproved discharge quantity and composition.

6.8 APPROVAL

A. When the FOG Control Program Administrator has reason to believe that grounds exist for the revocation of a permit, he/she shall give written notice to the User.

B. In the event the FOG Control Program Administrator determines to not revoke the permit, he/she may order other enforcement actions, including, but not limited to, a temporary suspension of the permit, under terms and conditions that he/she deems appropriate.

6.9 EFFECT

A. Upon an order of revocation by the FOG Control Program Administrator becoming final, the User shall lose all rights to discharge wastewater containing FOG directly or indirectly into the District's system. The District and its Member Agencies shall additionally have the right to shut off water service to the affected property that is subject to the order of revocation.

B. Lien Rights. The District and/or Member Agency shall have the right to place a lien on the property affected by the order of revocation to cover all costs, administrative and including legal, as a part of that lien.

C. Each owner or responsible management employee of the User shall be bound by the order of revocation.

D. Any future application for a permit at any location within the Member Agencies and District by any person associated with a notice of revocation will be considered after fully reviewing the records of the revoked permit, which records may be the basis for denial of a new permit.

6.10 BYPASS

A. Bypass is prohibited, and the District may take an enforcement action against a User for a Bypass, unless authorized by the District or unless:

    1. Bypass was unavoidable to prevent loss of life, serious personal injury, or Severe Property Damage.

    2. There were no feasible alternatives to the Bypass, such as the use of auxiliary Interceptor facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering to prevent a Bypass which occurred during normal periods of equipment downtime or preventative maintenance.

B. If a User knows in advance of the need for a Bypass, the User shall submit prior notice to the District, at least ten (10) days before the date of the Bypass, if possible.

C. A User shall submit written notice to the District of an unanticipated Bypass that exceeds applicable FOG Ordinance Standards within twenty-four (24) hours. A written submission shall also be provided within five (5) days of the time the User becomes aware of the Bypass. The written submission shall contain a description of the Bypass and its cause; the duration of the Bypass, including exact dates and times, and, if the Bypass has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the Bypass. The District may waive the written report on a case-by-case basis if the oral report has been received within twenty-four (24) hours.

ARTICLE 7 - JUDICIAL ENFORCEMENT REMEDIES

7.1 CRIMINAL PROSECUTION

The Board of Directors of the South San Luis Obispo County Sanitation District, along with the City Council or District Board of each Member Agency, intends to secure compliance with the provisions of this Ordinance. To the extent that such compliance may be achieved by less drastic methods of enforcement, the following alternate, separate and distinct methods may be utilized. Each method set forth is intended to be mutually exclusive and does not prevent concurrent or consecutive methods being use to achieve compliance against continuing violations. Each and every day that such violation exists constitutes a separate offense. Notwithstanding any other provision of this Ordinance, each violation of the provisions of this Ordinance may be enforced as an alternative.

7.2 INFRACTION

Any person violating any of the provisions or failing to comply with any of the mandatory requirements of this Ordinance may be prosecuted for an infraction. Written citations for infractions may be issued by the District FOG Control Program Administrator or his or her designee.

7.3 MISDEMEANOR

Any person violating any of the provisions or failing to comply with any of the mandatory requirements of this Ordinance may be prosecuted for a misdemeanor. Written citations for misdemeanors may be issued by the District's attorney. Each and every misdemeanor violation is punishable by a fine not exceeding one thousand dollars ($1,000.00) or imprisonment for a term not exceeding six (6) months, or both such fine and imprisonment.

7.4 CIVIL ACTION

The District's attorney, or any Member Agency's legal counsel, by and at the request of the City Council, or Community Services District Board, may institute an action in any court of competent jurisdiction to restrain, enjoin, or abate the conditions to be found in violation as provisions of this Ordinance, as provided by law.

7.5 REMEDIES NONEXCLUSIVE

The remedies contained in this Ordinance are not exclusive. The District may take any, all, or a combination of these actions against a Non-compliant User. Enforcement of the FOG Ordinance violations will generally be in accordance with the District's enforcement response plan. However, the District may take other action against any User when the circumstances warrant. Further, the District is empowered to take more than one enforcement action against any Non-compliant User.

ARTICLE 8 – FALSIFYING INFORMATION; DAMAGES TO MONITORING EQUIPMENT

Any Person who knowingly makes any false statements, representation or certification in any application, record, report, plan, or other document filed or required to be maintained pursuant to this Ordinance, or who falsifies, tampers with or knowingly renders inaccurate any monitoring device or method required under this Ordinance, shall, upon conviction, be punished in accordance with District's Pretreatment Ordinance1994-1, Article V, Sections 27 Civil Remedies, 28 Criminal Penalties & 29 Termination of Service.

Appendix G

Capital Improvement Plan and Budget

Manhole Inspection and Pipeline Cleaning Documentation

System Hydraulic Evaluation & Capacity Assurance Study

MH NO.	BASIN AREA (A-E)	DEPTH	MH TYPE (check one)					GRADE (circle one)	CONCRETE COLLAR	ODOR (check one)				OVERALL SCORE (1-5)	DATE (mm/dd/yy)	INSPECTED BY (initials)	NOTES
			Concrete Precast	Concrete CIP	Brick & Mortar	Lined	Other	Above / At / Below	Yes / No	None	Mild	Medium	Strong				
B28		11'9"	✓					At	Yes		✓			3	3/5/21	MP	
GB34		10'1"	✓					At	Yes		✓			3	3/5/21	MP	
GB33		9'	✓					At	Yes		✓			3	3/5/21	MP	
GB32		4'	✓					At	Yes		✓			2	3/5/21	MP	Needs new Ring & Cover
GB31		8'8"	✓					At	Yes		✓			3	3/5/21	MP	Collar Cracked
GB30		5'2"	✓					At	Yes		✓			3	3/5/21	MP	
B12A		21'8"	✓					At	Yes		✓			3	3/5/21	MP	
B12		21'6"	✓					At	Yes		✓			3	3/8/21	MP	Collar Cracked
11A		14'5"	✓					At	Yes		✓			4	3/8/21	MP	
311		14'	✓					At	Yes		✓			3	3/8/21	MP	

RATING SYSTEM:	
5	Excellent; Minor or no defects
4	Good; Defects that have not begun to deteriorate
3	Fair; Moderate defects that will continue to deteriorate
2	Poor; Severe defects that will become Grade 1 defects within the foreseeable future
1	Attention required; Defects requiring a high priority for repair or attention

NOTE: Do not enter Manhole without permission and proper equipment. Follow all safety procedures.

Sample Common Notes	
Drop Manhole	In Creek
Pressure lid	Backyard
Roots / Dirt	Tight Access
Submerged	Cracks
Water Infiltration	Piping
Rocks	Missing Liner

MH NO.	BASIN AREA (A-E)	DEPTH	MH TYPE (check one)	GRADE (circle one)	CONCRETE COLLAR	ODOR (check one)	OVERALL SCORE (1-5)	DATE (mm/dd/yy)	INSPECTED BY (initials)	NOTES
B10		13'4"	Concrete Precast ✓ / Concrete CIP / Brick & Mortar / Lined / Other	Above / At / Below	Yes / No	None / Mild ✓ / Medium / Strong	2	3/8/21	MP	
B9		8'5"	Concrete Precast ✓ / Concrete CIP / Brick & Mortar / Lined / Other	Above / At / Below	Yes / No	None / Mild ✓ / Medium / Strong	2	3/8/21	MP	
B8		11'	Concrete Precast ✓ / Concrete CIP / Brick & Mortar / Lined / Other	Above / At / Below	Yes / No	None / Mild ✓ / Medium / Strong	2	3/9/21	MP	
B7A		10'8"	Concrete Precast ✓ / Concrete CIP / Brick & Mortar / Lined / Other	Above / At / Below	Yes / No	None / Mild ✓ / Medium / Strong	3	3/11/21	MP	
B7		6'4"	Concrete Precast ✓ / Concrete CIP / Brick & Mortar / Lined / Other	Above / At / Below	Yes / No	None / Mild ✓ / Medium / Strong	3	3/9/21	MP	
B6		5'7"	Concrete Precast ✓ / Concrete CIP / Brick & Mortar / Lined / Other	Above / At / Below	Yes / No	None / Mild ✓ / Medium / Strong	3	3/9/21	MP	
B5		6'10"	Concrete Precast ✓ / Concrete CIP / Brick & Mortar / Lined / Other	Above / At / Below	Yes / No	None / Mild / Medium / Strong	2	3/11/21	MP	Cracked Collar
B4A		8'11"	Concrete Precast ✓ / Concrete CIP / Brick & Mortar / Lined / Other	Above / At / Below	Yes / No	None / Mild ✓ / Medium / Strong	2	3/11/21	MP	
B4		5'7"	Concrete Precast ✓ / Concrete CIP / Brick & Mortar / Lined / Other	Above / At / Below	Yes / No	None / Mild ✓ / Medium / Strong	3	3/11/21	MP	
B3		8'7"	Concrete Precast ✓ / Concrete CIP / Brick & Mortar / Lined / Other	Above / At / Below	Yes / No	None / Mild ✓ / Medium / Strong	2	3/11/21	MP	

RATING SYSTEM:	
5	Excellent; Minor or no defects
4	Good; Defects that have not begun to deteriorate
3	Fair; Moderate defects that will continue to deteriorate
2	Poor; Severe defects that will become Grade 1 defects within the foreseeable future
1	Attention required; Defects requiring a high priority for repair or attention

NOTE: Do not enter Manhole without permission and proper equipment. Follow all safety procedures.

Sample Common Notes	
Drop Manhole	In Creek
Pressure fld	Backyard
Rocks / Dirt	Tight Access
Submerged	Cracks
Water Infiltration	Pitting
Roots	Missing Liner

MH NO.	BASIN AREA (A-E)	DEPTH	MH TYPE (check one)					GRADE (circle one)	CONCRETE COLLAR	ODOR (check one)				OVERALL SCORE (1-5)	DATE (mm/dd/yy)	INSPECTED BY (initials)	NOTES
			Concrete Precast	Concrete CIP	Brick & Mortar	Lined	Other			None	Mild	Medium	Strong				
B1A		6'8"	✓					Above / At / Below	Yes / No		✓			2	3/11/21	ZMP	
B1B		7'6"	✓					Above / At / Below	Yes / No		✓			3	3/11/21	ZMP	
B2		8'2"	✓					Above / At / Below	Yes / No		✓			2	3/11/21	ZMP	
B2A		6'	✓					Above / At / Below	Yes / No		✓			2	3/11/21	ZMP	
~~B3~~								Above / At / Below	Yes / No								
~~B4~~								Above / At / Below	Yes / No								
B5A		7'6"	✓					Above / At / Below	Yes / No		✓			3	3/11/21	ZMP	
~~B5~~								Above / At / Below	Yes / No								
								Above / At / Below	Yes / No								
								Above / At / Below	Yes / No								

RATING SYSTEM:	
5	Excellent; Minor or no defects
4	Good; Defects that have not begun to deteriorate
3	Fair; Moderate defects that will continue to deteriorate
2	Poor; Severe defects that will become Grade 1 defects within the foreseeable future
1	Attention required; Defects requiring a high priority for repair or attention

NOTE: Do not enter Manhole without permission and proper equipment. Follow all safety procedures.

Sample Common Notes	
Drop Manhole	In Crack
Pressure fld	Backyard
Roots / Dirt	Tight Access
Submerged	Cracks
Water Infiltration	Pitting
Rocks	Missing Liner

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MH NO.	BASIN AREA (A-E)	DEPTH	MH TYPE (check one)					GRADE (circle one)	CONCRETE COLLAR	ODOR (check one)				OVERALL SCORE (1-5)	DATE (mm/dd/yy)	INSPECTED BY (initials)	NOTES
			Concrete Precast	Concrete CIP	Brick & Mortar	Lined	Other			None	Mild	Medium	Strong				
GB 15		4'-8"	✓					Above / At / Below	Yes / No		X			2	3-16-21	AV	
GB 14		6"7	✓					Above / At / Below	Yes / No		X			2	3/16/21	JE	
GB 13		7"10	X					Above / At / Below	Yes / No		Mild			2	3/16/21	JE	
GB 12		10"5	X					Above / At / Below	Yes / No		Mild			3	3/16/21	JE	
GB 11		9"6	X					Above / At / Below	Yes / No		X			2	3/16/21	JE	
GB 10		7"7	X					Above / At / Below	Yes / No		X			2	3/16/21	JE	
GB 9		5"5	X					Above / At / Below	Yes / No		X			2	3/16/21	JE	
GB 8		5"10	X					Above / At / Below	Yes / No		X			2	3/16/21	JE	
GB 7								Above / At / Below	Yes / No								Unable to Locate Manhole
GB-6		5"7	X					Above / At / Below	Yes / No		X			2	3/16/21	JE	

RATING SYSTEM:	
5	Excellent; Minor or no defects
4	Good; Defects that have not begun to deteriorate
3	Fair; Moderate defects that will continue to deteriorate
2	Poor; Severe defects that will become Grade 1 defects within the foreseeable future
1	Attention required; Defects requiring a high priority for repair or attention

NOTE: Do not enter Manhole without permission and proper equipment. Follow all safety procedures.

Sample Common Notes	
Drop Manhole	In Creek
Pressure lid	Backyard
Roots / Dirt	Tight Access
Submerged	Cracks
Water Infiltration	Piping
Rocks	Missing Liner

MH NO.	BASIN AREA (A-E)	DEPTH	MH TYPE (check one)	GRADE (circle one)	CONCRETE COLLAR	ODOR (check one)	OVERALL SCORE (1-5)	DATE (mm/dd/yy)	INSPECTED BY (initials)	NOTES
B1		6'11"	Concrete Precast ✓ / Concrete CIP / Brick & Mortar / Lined / Other	Above / At / Below	Yes / No	None / Mild ✓ / Medium / Strong	2	3/18/21	MP	
A9		7'7"	Concrete Precast ✓ / Concrete CIP / Brick & Mortar / Lined / Other	Above / At / Below	Yes / No	None / Mild ✓ / Medium / Strong	3	3/18/21	MP	
A8			Concrete Precast / Concrete CIP / Brick & Mortar / Lined / Other	Above / At / Below	Yes / No	None / Mild / Medium / Strong				
A7		7'7"	Concrete Precast ✓ / Concrete CIP / Brick & Mortar / Lined / Other	Above / At / Below	Yes / No	None / Mild ✓ / Medium / Strong	2	3/19/21	MP	
A6			Concrete Precast / Concrete CIP / Brick & Mortar / Lined / Other	Above / At / Below	Yes / No	None / Mild / Medium / Strong				
A5		9'3"	Concrete Precast ✓ / Concrete CIP / Brick & Mortar / Lined / Other	Above / At / Below	Yes / No	None / Mild ✓ / Medium / Strong	~~5~~ 4	3/24/21	MP	Bottom Ring Gasket Leaking Visible Outside Water Leaking In
			Concrete Precast / Concrete CIP / Brick & Mortar / Lined / Other	Above / At / Below	Yes / No	None / Mild / Medium / Strong				
			Concrete Precast / Concrete CIP / Brick & Mortar / Lined / Other	Above / At / Below	Yes / No	None / Mild / Medium / Strong				
			Concrete Precast / Concrete CIP / Brick & Mortar / Lined / Other	Above / At / Below	Yes / No	None / Mild / Medium / Strong				
			Concrete Precast / Concrete CIP / Brick & Mortar / Lined / Other	Above / At / Below	Yes / No	None / Mild / Medium / Strong				

RATING SYSTEM:	
5	Excellent: Minor or no defects
4	Good: Defects that have not begun to deteriorate
3	Fair: Moderate defects that will continue to deteriorate
2	Poor: Severe defects that will become Grade 1 defects within the foreseeable future
1	Attention required: Defects requiring a high priority for repair or attention

NOTE: Do not enter Manhole without permission and proper equipment. Follow all safety procedures.

Sample Common Notes	
Drop Manhole	In Creek
Pressure lid	Backyard
Roots / Dirt	Tight Access
Submerged	Cracks
Water Infiltration	Pitting
Rocks	Missing Liner

MH NO.	BASIN AREA (A-E)	DEPTH	MH TYPE (check one)					GRADE (circle one)	CONCRETE COLLAR	ODOR (check one)				OVERALL SCORE (1-5)	DATE (mm/dd/yy)	INSPECTED BY (initials)	NOTES
			Concrete Precast	Concrete CIP	Brick & Mortar	Lined	Other			None	Mild	Medium	Strong				
B-22		3'6"	X					Above / At / Below	Yes / No	X				2	9-2	F.V	
B-21		4'3"						Above / At / Below	Yes / No					1	9-2	F.V	In Dog park.
B-20		10'7"	X					Above / At / Below	Yes / No	X				1	9-2	F.V	
B-19								Above / At / Below	Yes / No	X							Lids had bad key locks on.
B-17 E		4'10"	X					Above / At / Below	Yes / No	X				3	9-2	F.V	
~~B-18~~								Above / At / Below	Yes / No								
C-20		10'8"	X					Above / At / Below	Yes / No	X				3	9-2	F.V	
C-18		10'8"	X					Above / At / Below	Yes / No	X				3	9-2	F.V	
								Above / At / Below	Yes / No								
								Above / At / Below	Yes / No								

RATING SYSTEM:	
5	Excellent; Minor or no defects
4	Good; Defects that have not begun to deteriorate
3	Fair; Moderate defects that will continue to deteriorate
2	Poor; Severe defects that will become Grade 1 defects within the foreseeable future
1	Attention required; Defects requiring a high priority for repair or attention

NOTE: Do not enter Manhole without permission and proper equipment. Follow all safety procedures.

Sample Common Notes	
Drop Manhole	In Creek
Pressure fd	Backyard
Roots / Dirt	Tight Access
Submerged	Cracks
Water Infiltration	Piping
Rocks	Missing Liner

MH NO.	BASIN AREA (A-E)	DEPTH	MH TYPE (check one)					GRADE (circle one)	CONCRETE COLLAR	ODOR (check one)				OVERALL SCORE (1-5)	DATE (mm/dd/yy)	INSPECTED BY (initials)	NOTES
			Concrete Precast	Concrete CIP	Brick & Mortar	Lined	Other			None	Mild	Medium	Strong				
B17-A		5'10"	X					Above / At / Below	Yes / No	X				3	9-1	F.V	
B-17		6'3"	X					Above / At / Below	Yes / No	X				3	9-1	F.V	
B16		6'10"	X					Above / At / Below	Yes / No	X				3	9-1	F.V	
B15A		7'3"	X					Above / At / Below	Yes / No	X				3	9-1	F.V	
B15								Above / At / Below	Yes / No								Back-yard
B14		15'10"	X					Above / At / Below	Yes / No	X				3	9-1	F.V	
B13		18'	X					Above / At / Below	Yes / No	X				3	9-1	F.V	
B12-B								Above / At / Below	Yes / No								
B12-A								Above / At / Below	Yes / No								
								Above / At / Below	Yes / No								

RATING SYSTEM:	
5	Excellent; Minor or no defects
4	Good; Defects that have not begun to deteriorate
3	Fair; Moderate defects that will continue to deteriorate
2	Poor; Severe defects that will become Grade 1 defects within the foreseeable future
1	Attention required; Defects requiring a high priority for repair or attention

NOTE: Do not enter Manhole without permission and proper equipment. Follow all safety procedures.

Sample Common Notes	
Drop Manhole	In Creek
Pressure lid	Backyard
Roots / Dirt	Tight Access
Submerged	Cracks
Water Infiltration	Pitting
Rocks	Missing Liner

MH NO.	BASIN AREA (A-E)	DEPTH	MH TYPE (check one)					GRADE (circle one)	CONCRETE COLLAR	ODOR (check one)				OVERALL SCORE (1-5)	DATE (mm/dd/yy)	INSPECTED BY (initials)	NOTES
			Concrete Precast	Concrete CIP	Brick & Mortar	Lined	Other			None	Mild	Medium	Strong				
C-27A								Above / At / Below	Yes / No								
~~C-27~~								Above / At / Below	Yes / No								
C-24		7'2"	X					Above / (At) / Below	(Yes) / No	X				3	8-24	F.V	
C-23		6'3"	X					Above / (At) / Below	(Yes) / No		X			3	8-24	F.V	
C-22		8'4"	X					(Above) / At / Below	(Yes) / No	X				3	8-24	F.V	
C-21		7'3"	X					(Above) / At / Below	(Yes) / No	X				3	8-25	F.V	
C-29A								Above / At / Below	Yes / No								
B17-D		3'5"	X					Above / (At) / Below	(Yes) / No	X				4	9-1	F.V	
B17-C		5'5"	X					Above / (At) / Below	(Yes) / No	X				3	9-1	F.V	
B17-B		6'5"	X					Above / (At) / Below	(Yes) / No	X				4	9-1	F.V	

RATING SYSTEM:	
5	Excellent; Minor or no defects
4	Good; Defects that have not begun to deteriorate
3	Fair; Moderate defects that will continue to deteriorate
2	Poor; Severe defects that will become Grade 1 defects within the foreseeable future
1	Attention required; Defects requiring a high priority for repair or attention

NOTE: Do not enter Manhole without permission and proper equipment. Follow all safety procedures.

Sample Common Notes	
Drop Manhole	In Crack
Pressure fd	Backyard
Roots / Dirt	Tight Access
Submerged	Cracks
Water Infiltration	Piping
Rocks	Missing Liner

MH NO.	BASIN AREA (A-E)	DEPTH	MH TYPE (check one)					GRADE (circle one)	CONCRETE COLLAR	ODOR (check one)				OVERALL SCORE (1-5)	DATE (mm/dd/yy)	INSPECTED BY (initials)	NOTES
			Concrete Precast	Concrete CIP	Brick & Mortar	Lined	Other			None	Mild	Medium	Strong				
C-52		7'3"	X					Above / At / Below	Yes / No	X				3	8-5	F.V	
? C-51		7'2"	X		X			Above / At / Below	Yes / No	X				3	8-4	F.V	Backyard? Found by sidewalk
C-50a		8'2"	X					Above / At / Below	Yes / No	X				3	8-4	F.V	
C-39a A		8'2"	X					Above / At / Below	Yes / No	X				3	8-4	F.V	
C-38a A		7'5"	X					Above / At / Below	Yes / No	X				3	8-4	F.V	
C-37a A		7'5"	X					Above / At / Below	Yes / No	X				4	8-4	F.V	
C-35D		7'6"	X					Above / At / Below	Yes / No	X				3	8-4	F.V	
C-35C		7'5"	X					Above / At / Below	Yes / No	X				4	8-4	F.V	
C-35B		8'	X					Above / At / Below	Yes / No	X				4	8-4	F.V	
C-34		8'3"	X					Above / At / Below	Yes / No	X				3	8-25	F.V	

RATING SYSTEM:	
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4	Good; Defects that have not begun to deteriorate
3	Fair; Moderate defects that will continue to deteriorate
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1	Attention required; Defects requiring a high priority for repair or attention

NOTE: Do not enter Manhole without permission and proper equipment. Follow all safety procedures.

Sample Common Notes	
Drop Manhole	In Crack
Pressure lid	Backyard
Roots / Dirt	Tight Access
Submerged	Cracks
Water Infiltration	Pitting
Rocks	Missing Liner

MH NO.	BASIN AREA (A - E)	DEPTH	MH TYPE (check one)					GRADE (circle one)	CONCRETE COLLAR	ODOR (check one)				OVERALL SCORE (1 - 5)	DATE (mm/dd/yy)	INSPECTED BY (initials)	NOTES
			Concrete Precast	Concrete CIP	Brick & Mortar	Lined	Other	Above / At / Below	Yes / No	None	Mild	Medium	Strong				
~~C-33~~																	
C-27		7'3"	X					Above / (At) / Below	(Yes) / No	X				3	8-5	F.V	
C-26		8'7"	X					Above / (At) / Below	(Yes) / No	X				3	8-5	F.V	
C-25		8'10"	X					Above / (At) / Below	(Yes) / No	X				3	8-5	F.V	
C-33		8'10"	X					Above / (At) / Below	(Yes) / No	X				3	8-13	F.V	
C-32		8'10"	X					Above / (At) / Below	(Yes) / No	X				3	8-13	F.V	
C-31		8'7"	X					Above / (At) / Below	(Yes) / No	X				3	8-13	F.V	
C-30		8'2"	X					Above / (At) / Below	(Yes) / No	X				3	8-13	F.V	
C-29		7'5"	X					Above / (At) / Below	(Yes) / No	X				2	8-13	F.V	Fiberglass was peeling while washing
C-28		8'7"	X					Above / (At) / Below	(Yes) / No	X				3	8-13	F.V	

RATING SYSTEM:	
5	Excellent; Minor or no defects
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3	Fair; Moderate defects that will continue to deteriorate
2	Poor; Severe defects that will become Grade 1 defects within the foreseeable future
1	Attention required; Defects requiring a high priority for repair or attention

NOTE: Do not enter Manhole without permission and proper equipment. Follow all safety procedures.

Sample Common Notes	
Drop Manhole	In Creek
Pressure lid	Backyard
Roots / Dirt	Tight Access
Submerged	Cracks
Water Infiltration	Pitting
Rocks	Missing Liner

added crosses manhole bridge

C-68a 5'3" X AT Yes X 3 7-31 F.V

MH NO.	BASIN AREA (A-E)	DEPTH	MH TYPE (check one)					GRADE (circle one)	CONCRETE COLLAR	ODOR (check one)				OVERALL SCORE (1-5)	DATE (mm/dd/yy)	INSPECTED BY (Initials)	NOTES
			Concrete Precast	Concrete CIP	Brick & Mortar	Lined	Other			None	Mild	Medium	Strong				
C-71		3'-2"	X					Above / At / Below	Yes / No	X				3	7-31	F.V	
C-70		7'-3"	X					Above / At / Below	Yes / No	X				4	7-31	F.V	
C-69			X					Above / At / Below	Yes / No	X				4	7-31	F.V	
C-68		4'3"	X					Above / At / Below	Yes / No	X				3	7-31	F.V	
C-67		8'0"	X					Above / At / Below	Yes / No	X				3	7-31	F.V	
Avocado Field → C-66								Above / At / Below	Yes / No	X				~~4~~ 3	7-31	F.V	Avocado field 6" above.
C-65		10'1"	X					Above / At / Below	Yes / No	X				4	7-31	F.V	
C-64		11'2"	X					Above / At / Below	Yes / No	X				3	7-31	F.V	
C-64a		11'2"	X					Above / At / Below	Yes / No	X				3	7-31	F.V	
C-63		11'2"	X					Above / At / Below	Yes / No	X				3	7-31	F.V	

RATING SYSTEM:	
5	Excellent; Minor or no defects
4	Good; Defects that have not begun to deteriorate
3	Fair; Moderate defects that will continue to deteriorate
2	Poor; Severe defects that will become Grade 1 defects within the foreseeable future
1	Attention required; Defects requiring a high priority for repair or attention

NOTE: Do not enter Manhole without permission and proper equipment. Follow all safety procedures.

Sample Common Notes	
Drop Manhole	In Creek
Pressure lid	Backyard
Roots / Dirt	Tight Access
Submerged	Cracks
Water Infiltration	Pitting
Rocks	Missing Liner

C-59a x AT yes x 4 8-3 F.V

MH NO.	BASIN AREA (A-E)	DEPTH	MH TYPE (check one)					GRADE (circle one)	CONCRETE COLLAR	ODOR (check one)				OVERALL SCORE (1-5)	DATE (mm/dd/yy)	INSPECTED BY (initials)	NOTES
			Concrete Precast	Concrete CIP	Brick & Mortar	Lined	Other			None	Mild	Medium	Strong				
C-62		11'2"	X					Above / (At) / Below	(Yes) / No	X				3	7-31	F.V.	
C-61		10'2"	X					Above / (At) / Below	(Yes) / No	X				3	7-31	F.V	
C-60		9'7"	X					Above / (At) / Below	(Yes) / No	X				3	8-3	F.V	
C-59		9'5"	X					Above / (At) / Below	(Yes) / No	X				5	8-3	F.V	
C-58			X					Above / (At) / Below	(Yes) / No	X				3	8-3	F.V	
C-57		11'0"	X					Above / (At) / Below	(Yes) / No	X				4	8-3	F.V	
C-56		8'2"	X					Above / (At) / Below	(Yes) / No	X				3	8-3	F.V	
C-55		7'8"	X					Above / (At) / Below	(Yes) / No	X				3	8-3	F.V	
C-54		7'8"	X					Above / (At) / Below	(Yes) / No	X				3	8-3	F.V	
C-53								Above / (At) / Below	Yes / No					3	8-3	F.V	Buried lid

RATING SYSTEM:	
5	Excellent; Minor or no defects
4	Good; Defects that have not begun to deteriorate
3	Fair; Moderate defects that will continue to deteriorate
2	Poor; Severe defects that will become Grade 1 defects within the foreseeable future
1	Attention required; Defects requiring a high priority for repair or attention

NOTE: Do not enter Manhole without permission and proper equipment. Follow all safety procedures.

Sample Common Notes	
Drop Manhole	In Creek
Pressure lid	Backyard
Roots / Dirt	Tight Access
Submerged	Cracks
Water Infiltration	Piling
Rocks	Missing Liner

Daily Sewer Line Cleaning Report

Date	Start Time	End Time	From MH	To MH/CO	Footage	Notes	Cleaned	CCTV
7/29	9 AM		C-70	C-71	250	70 IN SIDEWALK PARKING LOT HOLE RUNS TO TOWN	X	
			C-69	C-70	195	301' 70 IN SIDEWALK NEW CONCRETE		
			C-68	C-67	442			
		RETURN	C-66	C-65	410	OLD LADY WAIT FOR SON		
			C-68	C-69	~~250~~	175' BRIDGE		
			C-65	C-64	257			
			C-64	C-64A	14			
			C-64A	C-63	361			
			C-63	C-62	104			
			C-62	C-61	360			
			C-61	C-60	456			
			C-60	C-59	462			
			C-59	C-58	38			
			C-58	C-57	53	3509		
			C-57	C-56	157			
			C-56	C-55	33			3914
			C-66	C-67	410			

Daily Sewer Line Cleaning Report

Date	Start Time	End Time	From MH	To MH/CO	Footage	Notes NO CHARGE	Cleaned	CCTV
7/30	8 AM		C-67	C-68	442	RE PEAT / RE-RUN	X	
			C-54	C-55	210			
			C-53	C-54	298			
			C-52	C-53	225			
			C-51	C-52	169			
			C-50A	C-51	140			
			C-39A	C-50A	200			
			C-38A	C-39A	265			
			C-37A	C-38A	424			
			C-35D	C-37A	425			
			C-35C	C-35D	136			
			C-35B	C-35C	11			
			C-34	C-35B	540			
			C-33	C-34	544			
			C-32	C-33	443	TC C-33 - C27		
			C-26	C-27	528	5502		
			C-25	C-26	502			5502
			C-24	C-25	~~477~~	FENCE LOCKED		
			C-23	C-24	~~124~~			

M/H ADDED C-68A DOWNSTREAM SIDE GREEN BRIDGE

Daily Sewer Line Cleaning Report

Date	Start Time	End Time	From MH	To MH/CO	Footage	Notes	Cleaned	CCTV
7/31	8:30		C-71	C-70	143.5			X
			C-70	C-69	97.9	VCP NOT AC		
			C-69	C-68	196.2	69 IN STREET AC		
			C-68A	C-67	439.5			
			C-67	C-66	405.3			
			C-68	C-68A	142.1	LINER GREEN BRIDGE		1428.7
			C-65	C-66	44.9			
			C-65	C-64	253.1			
			C-64	C-64A	9.3			
			C-64A	C-63	358.2			2092.2
			C-63	C-62	99			
			C-62	C-61	356.2			
			~~C-61~~	~~C-60~~				2545.2
			~~C-60~~	C-59				

Daily Sewer Line Cleaning Report

Date	Start Time	End Time	From MH	To MH/CO	Footage	Notes	Cleaned	CCTV
8/3/20	8 AM		C-61	C-60	450			X
			C-60	C-59	69.3			
			C-59 C-59A	C-59A C-58	386 39.2			
			C-58	C-57	54.3			
			C-57	C-56	152.2	CAM UNDER WATER (SAG?)		
			C-56	C-55		RE-CLEAN		
			C-55	C-54				
			C-54	C-53	255.2			
			C-53	C-52				
			C-52	C-51				
						1406.2		1406.2

Daily Sewer Line Cleaning Report

Date	Start Time	End Time	From MH	To MH/CO	Footage	Notes	Cleaned	CCTV
8/4	10:00		C-50A	C39A	197.3			X
			C-39A	C-38A	260.4			
			C-38A	C-37A	414.8			
			C-37A	C-35D	446.2			
			C-35D	C-35C	130.2			
			C-35C	C-35B	7.6			
			C-35B	C-34				
			C-34	C-33				
						1456.9		1456.9

Daily Sewer Line Cleaning Report

Date	Start Time	End Time	From MH	To MH/CO	Footage	Notes	Cleaned	CCTV
8/5	10 AM		C-56	C-55	29.5			X
			C-55	C-54	~~69.5~~	FREEWAY INC. ROCK UTP RC	SWITCH TO HOURLY	
			C-54	C-53	254.6			
			C-53	C-52	228.1			
			C-52	C-51	199.6			
			C-51	C-50A		TC		
			C-27	C-26	448.5/80	528 LINER ?		
			C-26	C-25	374.2/128	502		
						1811.3		1811.3

Daily Sewer Line Cleaning Report

Date	Start Time	End Time	From MH	To MH/CO	Footage	Notes	Cleaned	CCTV
8/24	8:30		C-55	C-54	175	INC (UNKNOWN) 5X CLEAN 3X TV		X
			C-35B	C-34	42	INC (NIGHT ?) ↑		
			C-34	C-33		NIGHT ↓		
			C-25	C-24	467.4			
			C-24	C-23	122.5	365.5		
			C-23	C-22	~~118.1~~	INC: (BIG CAM)		
			C-22	C-21	118.1			
			C-21	C-20				
						1290.9		1290.9

Daily Sewer Line Cleaning Report

Date	Start Time	End Time	From MH	To MH/CO	Footage	Notes	Cleaned	CCTV
8/25	8:30		C-34	C-35B	495'	INC.		X
			C-34	C-33	536.2			
			C-22	C-23				
			C-20	C-18				
			C-18	C-17				
						1021.2		1021.2

TRAFFIC CONTROL $1,800

Daily Sewer Line Cleaning Report

Date	Start Time	End Time	From MH	To MH/CO	Footage	Notes	Cleaned	CCTV
8/13	8 AM		C-33	C-32	377.3 INC	184' BAD SEGMENT	443 X	X
			C-32	C-31	416.4 INC		600	
			C-31	C-30	555.7	INC	600	
			C-30	C-29	285.7	PIECES TORN FROM WALLS	290	
			C-29	C-28	362.6	INC	0	
			C-28	C-27A	156.8		0	
			C-27A	C-27	278.2	INC	0	
			C-18	C-17		CLEAN ONLY	397	
							2330	2452.7

Daily Sewer Line Cleaning Report

Date	Start Time	End Time	From MH	To MH/CO	Footage	Notes	Cleaned	CCTV
8/11	8:30		C/23	C-24	124		X	
			C-24	C-25	477			
			C-23	C-22	200			
			C-22	C-23	426	GATE LOCK		
			C-21	C-22	302			
			C-20A	C-21	100			
			C-20	C-20A	133			
			C-18	C-20	399			
			C-17	C-18	397			
						2558		
							2558	

Daily Sewer Line Cleaning Report

Date	Start Time	End Time	From MH	To MH/CO	Footage	Notes	Cleaned	CCTV
8/12	8:00		B-21	B-22	207		X	
			B-20	B-21	495			
			B-19	B-20	500			
			B-17E	B-19				
			B-17D	B-17E				
			B-17C	B-17D	417			
			B-17B	B-17C	133	DEBRIS		
			B-17A	B-17B	76			
			B-16	B-17A				
			B-17	B-16				
			B-15	B-17	367			
			C-54	C-55	*	FREEWAY 5X 3HRS @ 375		1,125
						2195	2195	

Daily Sewer Line Cleaning Report

Date	Start Time	End Time	From MH	To MH/CO	Footage	Notes	Cleaned	CCTV
8/19	10:30		B-17A	B-17B	80		X	
			B-16	B-17A	60			
			B-17	B-16	60			
						200		

Daily Sewer Line Cleaning Report

Date	Start Time	End Time	From MH	To MH/CO	Footage	$375 Notes	Cleaned	CCTV
8/20	8 AM		B-21	B-22	~~2070~~	1 HR TO FIND & OPEN M/H	X	
			B-20	B-21	495	COULDNT OPEN LID.		
			B-19	B-20		NO ACCESS TO M/H		
			B-14	B-15/B-16	~~600~~ 600'	~~600'~~ NEED ROAD CUT THRU ICE PLANT		
			B-13	B-14/~~B-15~~	366			
			B-12A	B-12B				
			B-12B	B-12	375			
			B-20	B-21		GATE LOCKED		
						1836	1836	

Daily Sewer Line Cleaning Report

Date	Start Time	End Time	From MH	To MH/CO	Footage	Notes	Cleaned	CCTV
9/1	8:30		B17-D	B-17-C	412.7			X
			B17-C	B-17-B	129.2			
			B17-B	B17-A	77.3			
			B17-A	B-17	55.5			
			B-17	B-17	38.9			
			B-16	B-15A	17.1			
			B-15A	B-15	65.4	INC OFFSET UTP		
			B-14	B-13	~~223.6~~ 276.3	CU INC (NIGHT)	1072.4	
			B-13	B-12B	112.8	CU		
			B-12B	B-12A				
						1185.2		1185.2

Daily Sewer Line Cleaning Report

Date	Start Time	End Time	From MH	To MH/CO	Footage	Notes	Cleaned	CCTV
9/2	8:30		B-22	B-21	203.4			X
			B-21	B-20	220	UTP INC		
			B-20	B-19	19	LINER FAILED		
			B-19	B-17E	~~91.4~~ 38.7	CANT UNLOCK 19/CU		
			B-17E	B-17D	91.4			
			~~[illegible]~~					
			C-21	C-20A	2.4	UTP COULD NOT ENTER LINE		
			C-20	C-18	21.6	UTP JOINT		
			C-18	C-17	345.7	UTP		
						942.2		942.2

[redacted] Daily Sewer Line Cleaning Report

Date	Start Time	End Time	From MH	To MH/CO	Footage	Notes	Cleaned	CCTV
3/5	8:45		GB-27	GB-28	424	15" VCP	X	
3/5	10:38	10:45	B-12	B-12A	70		X	
3/5	10:48	11:00	B-11A	B-12A	417	18" VCP / 460?	X	
3/5	11:15	11:25	B-11	B-11A	150		X	
3/5	12:02	12:12	B-10	B-11	253	18" VCP / 260?	X	
3/5	12:25		B-9	B-10	273	18" ACP / 280?	X	
						1587 ✓		

[redacted] Daily Sewer Line Cleaning Report

Date	Start Time	End Time	From MH	To MH/CO	Footage	Notes	Cleaned	CCTV
3/8	8:40		B-8	B-9	508	18" ACP / 5207	X	
3/8	9:00		B-7A	B-8	253	18" ACP	X	
3/8	9:31		B-7	B-7A	145	18" ACP	X	
3/8	10:00		B-6	B-7	514		X	
3/8	10:25		B-5	B-6	540	18" ACP	X	
3/8	10:50		B-4A	B-5	244	18" ACP	X	
3/8	11:13		B-4	B-4A	438	18" ACP	X	
3/8	12:10		B-3	B-4	498	18" ACP	X	
3/8	12:30		B-2	B-3	420	18" ACP	X	
3/8	1:00		B-1B	B-2	291	18" ACP	X	
3/8	1:20		B-1A	B-1B	131	18" ACP	X	
						3982		

[redacted] Daily Sewer Line Cleaning Report

Date	Start Time	End Time	From MH	To MH/CO	Footage	Notes	Cleaned	CCTV
3/11	9:30		GB-26	GB-27	315	15" VCP	X	
3/11	10:30		GB-14	GB-15	540	24" VCP	X	
3/11	10:51		GB-13	GB-14	300		X	
3/11	11:06		GB-12	GB-13	269	24" VCP	X	
3/11	11:18		GB-11	GB-12	265	24" VCP	X	
3/11	11:37		GB-10	GB-11	266	24" VCP	X	
3/11	12:00		GB-9	GB-10	284	24" VCP	X	
3/11	12:30		GB-8	GB-9	279	24" VCP	X	
						2518		

[redacted] Daily Sewer Line Cleaning Report

Date	Start Time	End Time	From MH	To MH/CO	Footage	Notes	Cleaned	CCTV
3/12	9:32		B-1	B-1A	131	18" ACP	X	
3/12	10:42		GB-6	GB-7	419	24" ACP	X	
3/12	10:52		GB-5	GB-6	317	24" ~~ACP~~ VCP	X	
3/12			GB-4	GB-5	334	24" VCP	X	
3/12			GB-3	GB-4	172	24" VCP	X	
						1373		

Daily Sewer Line Cleaning Report

Date	Start Time	End Time	From MH	To MH/CO	Footage	Notes	Cleaned	CCTV
3/18	9:00		A-9	B-7	200		X	
3/18			A-8	A-9	351	30" ACP	X	
3/18			A-7	A-8	173	30" ACP	X	
						724		
						24,573 ft total		

[redacted] Daily Sewer Line Cleaning Report

Date	Start Time	End Time	From MH	To MH/CO	Footage	Notes	Cleaned	CCTV
3/8			B-12	11-A	411.7 111.7 INC	TAMERA'S PIKE (SAG 44 TO 16)		X
			B-11-A	B-11	52.6	INC I&I BAD JOINT		
			B-11	B-10	298.3	JOINTS BAD FIBERGLASS		
			B-10	D-9	266.6	BUSTERING		
			B-9	B-8	511.2	1490.4 ✓		
3/9			B-8	B-7A	250.1			
			B-7A	B-7	143.1			
			B-7	B-6	506.4			
			B-6	B-5A	246.3	1410.2 ✓		
			B-5A	B-5	264.3			

Total = 2900.6

6

[redacted] Daily Sewer Line Cleaning Report

Date	Start Time	End Time	From MH	To MH/CO	Footage	Notes	Cleaned	CCTV
3/11			B-5	B-4A	237.3			X
			B-4A	B-4	432.7			
			B-4	B-3	489.5			
			B-3	B-2A	176.2	–		
			B-2A	B-2	181			
			B-2	B-1B	~~301.8~~	291		
			B-1B	B-1A	56.9			
			B-1A	B-1	102.3			
3/16			GB-15	GB-14	528.3			
			GB-14	GB-13	253.9	–		
			GB-13	GB-12	265.9			
			GB-12	GB-11	262.9			
			GB-11	GB-10	255.6	–		
			GB-10	GB-9	279.			
			GB-9	GB-8	268.4	–		
			GB-8	GB-7	307.8			
			GB-7	GB-6	247.4	INC 149.2 98.2 SIPHON?		

1966.9 ft.?

5500.4 ?

2669.2?

2668.8

[redacted] Daily Sewer Line Cleaning Report

Date	Start Time	End Time	From MH	To MH/CO	Footage	Notes	Cleaned	CCTV
3/3			GB-33	GB-32	266			
			GB-34	GB-33	276.9	705.1		
			GB-32	GB-31	162.2			
3/5			GB-28	GB-27	418.2	CU		
			GB-27	GB-26		GB-26 LID LOCKED		
			GB-31	GB-30	352			
			GB-30	GB-29	362	2215.4		
			GB-28	GB-29	378.1			
			B-12A	B12				

1,510.3?

Total = 2215.4

[redacted] Daily Sewer Line Cleaning Report

Date	Start Time	End Time	From MH	To MH/CO	Footage	Notes	Cleaned	CCTV
3/3	10:46		GB-33	GB-34	284		X	
3/3	11:03	11:13	GB-32	GB-33	271		X	
3/3	11:13	11:20	GB-34	GB-32	175			
3/3	11:30		GB-30	GB-31	400			
3/3	12:14		GB-29	GB-30	371/425	15" VCP		
3/3	12:29		GB-28	GB-29	425			

[redacted] Daily Sewer Line Cleaning Report

Date	Start Time	End Time	From MH	To MH/CO	Footage	Notes	Cleaned	CCTV
3/17			GB-6	GB-5	307.1			X
			GB-5	GB-4	329.8	798.2		
			GB-4	GB-3	161.3			
			GB-3	GB-2		PLANT		
			GB-2	GB-1		" "		
3/18			A-9	A-8	342.5 ~~15.6~~	18" NOT 30" CU	1,488.3	
			A-8	A-7	30.4 INC	INCLINE TOO STEEP		
			A-7	A-6	606.5			
			B-1	A-9	153.2	~~NA~~	2286.5	
			A-6	A-5	355.7	355.7 INC 238		
3/24			A-5	A-6	10.3	INC. FLOW UTP		
			A-5	A-4	414.3			
			A-4	A-3		LID LOCKED		
			A-3	A-2			424.6	
			A-2	A-1				
							12,486.8	Total Footage

Daily Sewer Line Cleaning Report

Date	Start Time	End Time	From MH	To MH/CO	Footage	Notes	Cleaned	CCTV
3/19			A-6	A-7	~~623~~ 600	30" ACP	X	
3/19			A-5	A-6	593	30" ACP	X	
						1193 ✓		

RESOLUTION NO. 2023-448

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE SOUTH SAN LUIS OBISPO COUNTY SANITATION DISTRICT ADOPTING THE 2023-24 FISCAL YEAR BUDGET

WHEREAS, The District is required, pursuant to State codes, to designate a financial budget for its expenditures and revenues; and

WHEREAS, such budgeting requires that proper methods be used for the acquisition and disbursements of District monies; and

WHEREAS, the District desires to make known its planned activities and associated costs for the 2023-24 Fiscal Year.

NOW, THEREFORE, BE IT RESOLVED, DETERMINED, AND ORDERED by the Board of Directors, South San Luis Obispo County Sanitation District, San Luis Obispo County, California, as follows:

That the proposed budget titled, "South San Luis Obispo County Sanitation District, Fiscal Year Budget 2023-24 be adopted.

That the final budget be administered as established by past policies and practices.

PASSED AND ADOPTED at a Public Hearing held during the regular meeting of the South San Luis Obispo County Sanitation District on June 21, 2023.

Upon motion of Director Austin and seconded by Director Bright and on the following roll call vote to wit:

AYES: Austin, Bright, Ray Russom
NOES:
ABSENT:
CONFLICTS:

Resolution 2023-448

CERTIFICATION:

I do hereby certify that the foregoing is a full, true, and correct copy of a resolution duly and regularly adopted at a meeting of the South San Luis Obispo County Sanitation District held June 21, 2023.

CHAIR OF THE BOARD OF DIRECTORS
SOUTH SAN LUIS OBISPO COUNTY SANITATION DISTRICT

ATTEST:

DISTRICT SECRETARY

APPROVED AS TO FORM:

BY:_____
DISTRICT COUNSEL

APPROVED AS TO CONTENT:

BY:_____
JEREMY GHENT,
DISTRICT ADMINISTRATOR

South San Luis Obispo County Sanitation District

BUDGET

2023-24 Fiscal Year

MEMBERS OF THE
BOARD OF DIRECTORS:

Caren Ray Russom – Chair
Karen Bright – Vice Chair
Linda Austin – Director

South San Luis Obispo County Sanitation District
PO Box 339
1600 Aloha Place
Oceano, CA 93445-9735

(805) 489-6666 Operations
(805) 481-6903 Business Office
(805)489-2765 Fax

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RESOLUTION NO. 2023-448

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE SOUTH SAN LUIS OBISPO COUNTY SANITATION DISTRICT ADOPTING THE 2023-24 FISCAL YEAR BUDGET

WHEREAS, The District is required, pursuant to State codes, to designate a financial budget for its expenditures and revenues; and

WHEREAS, such budgeting requires that proper methods be used for the acquisition and disbursements of District monies; and

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NOW, THEREFORE, BE IT RESOLVED, DETERMINED, AND ORDERED by the Board of Directors, South San Luis Obispo County Sanitation District, San Luis Obispo County, California, as follows:

That the proposed budget titled, "South San Luis Obispo County Sanitation District, Fiscal Year Budget 2023-24 be adopted.

That the final budget be administered as established by past policies and practices.

PASSED AND ADOPTED at a Public Hearing held during the regular meeting of the South San Luis Obispo County Sanitation District on June 21, 2023.

Upon motion of Director _____ and seconded by Director _____ and on the following roll call vote to wit:

AYES:
NOES:
ABSENT:
CONFLICTS:

Resolution 2023-448

CERTIFICATION:

I do hereby certify that the foregoing is a full, true, and correct copy of a resolution duly and regularly adopted at a meeting of the South San Luis Obispo County Sanitation District held June 21, 2023.

_____
CHAIR OF THE BOARD OF DIRECTORS
SOUTH SAN LUIS OBISPO COUNTY SANITATION DISTRICT

ATTEST:

_____
DISTRICT SECRETARY

APPROVED AS TO FORM:

BY:_____
DISTRICT COUNSEL

APPROVED AS TO CONTENT:

BY:_____
JEREMY GHENT,
DISTRICT ADMINISTRATOR

NOTICE OF PUBLIC HEARING
SOUTH SAN LUIS OBISPO COUNTY
SANITATION DISTRICT
ADOPTION OF FISCAL YEAR 2023-2024 BUDGET

DATE: June 21, 2023
TIME: 6:00 p.m.
PLACE: Arroyo Grande Council Chambers
215 E. Branch Street,
Arroyo Grande CA

PLEASE TAKE NOTICE:

1. The District Administrator has prepared a proposed Final Budget, which is available for inspection, during regular business hours, 7:30 a.m. to 4:00 p.m., Monday through Friday, at the District Office located at 1600 Aloha Place, Oceano, California.

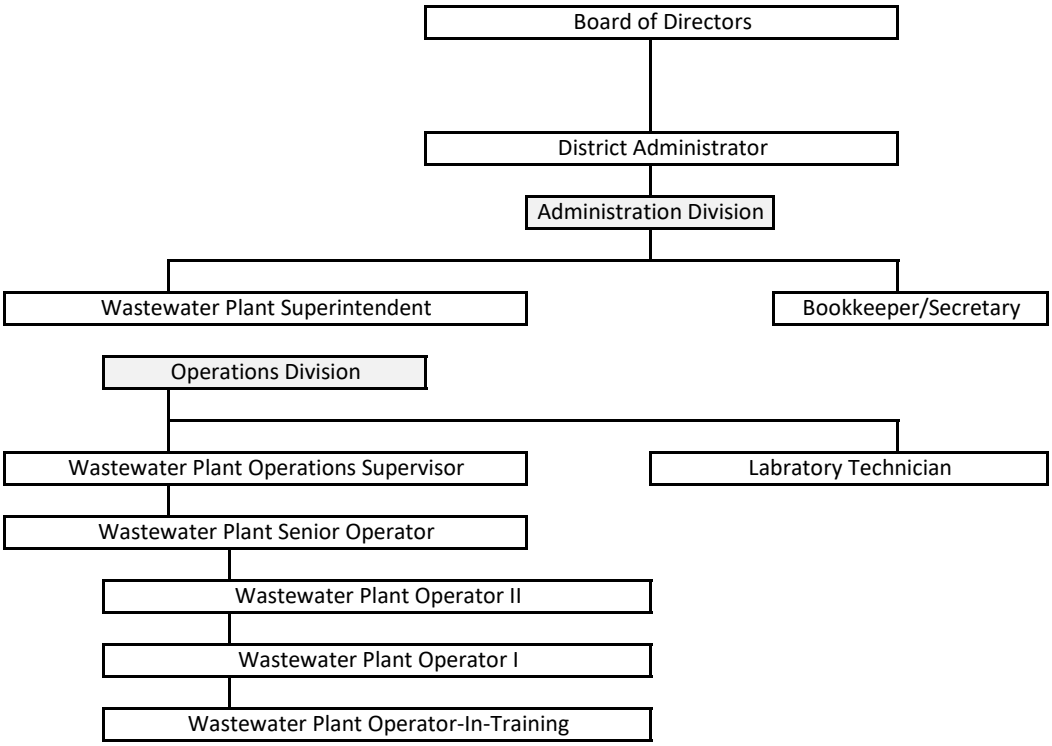
   At 6:00 p.m., on June 21, 2023, South San Luis Obispo County Sanitation District Board of Directors will meet to consider and to adopt the final Fiscal Year 2023-2024 Budget.

2. At the time and place specified in this Notice, any person may appear to be heard regarding any item in the Budget or regarding the addition of any other items.

3. The hearing on the Budget may be continued if necessary.

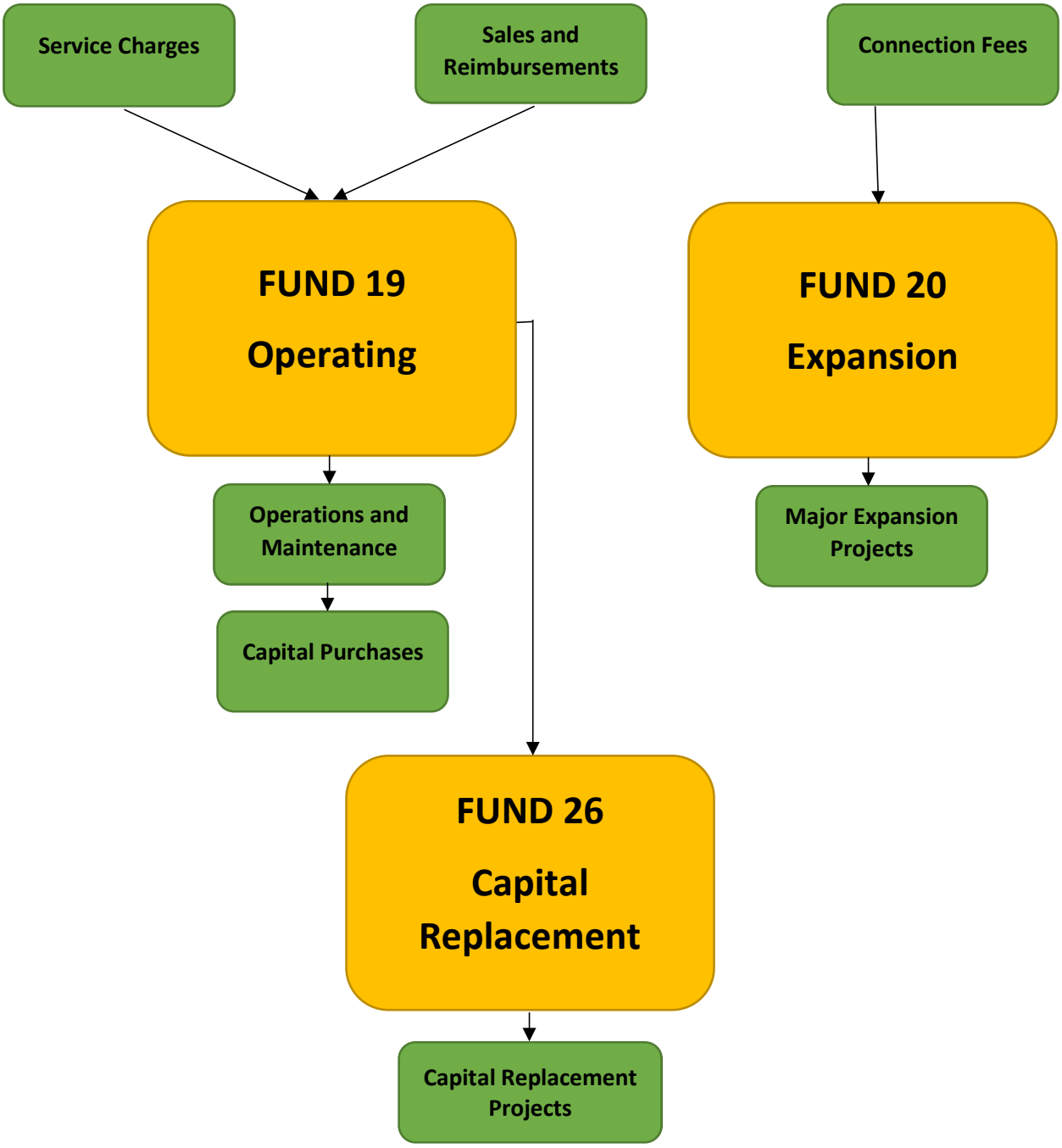
If you should have questions related to the Budget, please contact Amy Simpson, District Bookkeeper/Secretary, at (805) 481-6903.

SOUTH SAN LUIS OBISPO COUNTY SANITATION DISTRICT



South San Luis Obispo County Sanitation District

Accounting Funds



CONSOLIDATED BUDGET FY 2023-24

		Fund 19 Operating Fund	Fund 20 Expansion Fund	Fund 26 Replacement Fund	Proposed Budget FY 2023/24
Revenues					
Service Charges and Fees		5,725,000			5,725,000
Connection Fees			95,000		95,000
Interest		140,000	68,000		208,000
Use of Redundancy Funding			4,174,000		4,174,000
Brine Revenue		115,000			115,000
Total Revenues		**5,980,000**	**4,337,000**	**-**	**10,317,000**
Expenditures & Other Uses					
Operating Expenditures					
Salaries and Wages		1,031,800			1,031,800
Employee Benefits and Other Personnel Costs		642,000			642,000
Permits, Fees and Licenses		64,500			64,500
Communications		20,500			20,500
Administrative Costs		286,500			286,500
Legal Costs		60,000			60,000
Engineering		100,000			100,000
Coastal Hazards & Monitoring		75,000			75,000
LAFCO Budget Share		18,000			18,000
Zone 1/1A Agreement		35,000			35,000
Agency Billing		65,000			65,000
Disposal Services		83,000			83,000
Utilities		466,000			466,000
Maintenance, Tools & Replacements		257,500			257,500
Materials, Services and Supplies		914,700			914,700
Training, Education & Memberships		48,500			48,500
Total Operating Expenditures		**4,168,000**	**-**	**-**	**4,168,000**
Total Other Charges					
Debt Service		1,036,000			1,036,000
Total Other Charges		**1,036,000**	**-**	**-**	**1,036,000**
Capital Outlay					
Capital Replacement/Maintenance (Fund 26)				741,000	741,000
Capital Equipment		35,000	4,337,000		4,372,000
Total Capital Outlay		**35,000**	**4,337,000**	**741,000**	**5,113,000**
Other Financing Sources & Uses					
Transfers Out/In Fund 26		741,000		(741,000)	-
Transfers Out/In Fund 20					-
Total Other Financing Sources & Uses		**741,000**	**-**	**(741,000)**	**-**
Total Funding Source		5,980,000	4,337,000	-	10,317,000
Total Expense		5,980,000	4,337,000	-	10,317,000
Net Change (Deficit)		**-**	**-**	**-**	**-**

Balanced Budget

CASH AND RESERVE SUMMARY

	19-Operating		20-Capital Expansion		26-Capital Replacement		Total
Available Cash Reserves	$ 2,746,829		$ 12,554,545		$ 709,560		$ 16,010,934
Reserve % of Operating	56.2%		N/A		N/A		N/A
$ Above Reserve Policy	$ 2,258,213		N/A		N/A		N/A

Operating Fund 19

Provides for routine daily operations, as well as funding transfers for major maintenance and capital purchases. Primarily funded by user service fees.

CONSOLIDATED BUDGET FY 2023-24

		Fund 19 Operating Fund	Fund 20 Expansion Fund	Fund 26 Replacement Fund	Proposed Budget FY 2023/24
Revenues					
Service Charges and Fees		5,725,000			5,725,000
Connection Fees			95,000		95,000
Interest		140,000	68,000		208,000
Use of Redundancy Funding			4,174,000		4,174,000
Brine Revenue		115,000			115,000
Total Revenues		**5,980,000**	**4,337,000**	**-**	**10,317,000**
Expenditures & Other Uses					
Operating Expenditures					
Salaries and Wages		1,031,800			1,031,800
Employee Benefits and Other Personnel Costs		642,000			642,000
Permits, Fees and Licenses		64,500			64,500
Communications		20,500			20,500
Administrative Costs		286,500			286,500
Legal Costs		60,000			60,000
Engineering		100,000			100,000
Coastal Hazards & Monitoring		75,000			75,000
LAFCO Budget Share		18,000			18,000
Zone 1/1A Agreement		35,000			35,000
Agency Billing		65,000			65,000
Disposal Services		83,000			83,000
Utilities		466,000			466,000
Maintenance, Tools & Replacements		257,500			257,500
Materials, Services and Supplies		914,700			914,700
Training, Education & Memberships		48,500			48,500
Total Operating Expenditures		**4,168,000**	**-**	**-**	**4,168,000**
Total Other Charges					
Debt Service		1,036,000			1,036,000
Total Other Charges		**1,036,000**	**-**	**-**	**1,036,000**
Capital Outlay					
Capital Replacement/Maintenance (Fund 26)				741,000	741,000
Capital Equipment		35,000	4,337,000		4,372,000
Total Capital Outlay		**35,000**	**4,337,000**	**741,000**	**5,113,000**
Other Financing Sources & Uses					
Transfers Out/In Fund 26		741,000		(741,000)	-
Transfers Out/In Fund 20					-
Total Other Financing Sources & Uses		**741,000**	**-**	**(741,000)**	**-**
Total Funding Source		5,980,000	4,337,000	-	10,317,000
Total Expense		5,980,000	4,337,000	-	10,317,000
Net Change (Deficit)		**-**	**-**	**-**	**-**

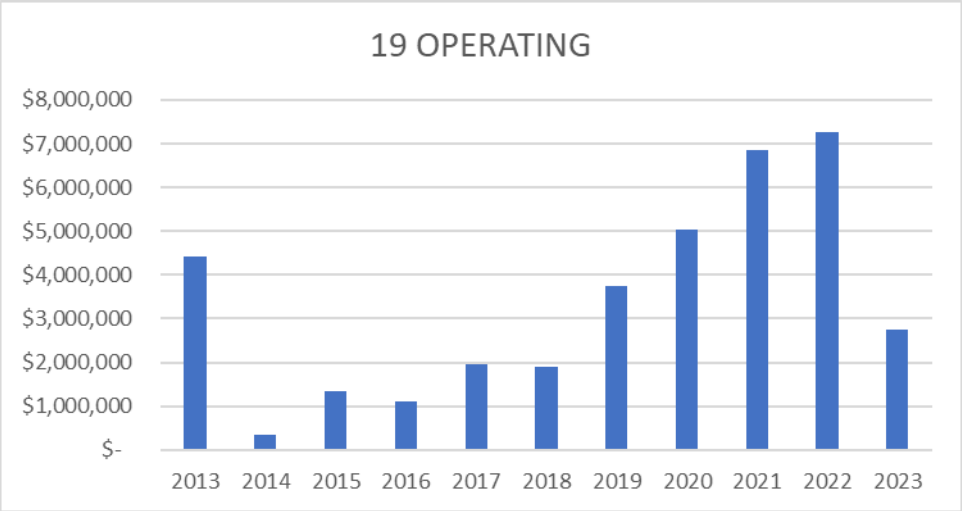
OPERATING FUND BUDGET ALLOCATIONS

		Adopted Budget FY 2022-23	Proposed Budget FY 2023-24
REVENUE			
19-4015 Arroyo Grande Services	$	2,663,000	$ 2,710,000
19-4022 Grover Beach Services	$	1,960,000	$ 1,961,000
19-4035 Oceano Services	$	995,700	$ 1,000,000
19-4040 Other Service Income	$	8,000	$ 9,000
19-4045 School Services	$	40,000	$ 45,000
19-4050 Brine Disposal Service	$	97,000	$ 115,000
19-5015 Interest	$	100,000	$ 140,000
REVENUE TOTALS	$	5,863,700	$ 5,980,000
PERSONNEL EXPENSES			
19-6030 Plant Operators	$	728,000	$ 776,800
19-6040 Secretary/Bookkeeper	$	75,000	$ 75,000
19-6045 District Administrator	$	178,000	$ 180,000
19-6010 Medical Insurance	$	229,000	$ 274,400
19-6025 Dental Insurance	$	10,000	$ 13,700
19-6030 Life Insurance	$	1,000	$ 1,500
19-6050 S.S. & Medicare	$	75,100	$ 75,000
19-6055 State Disability Insure	$	5,400	$ 5,400
19-6060 State Retirement	$	117,800	$ 117,000
19-6065 Unfunded Liability	$	121,200	$ 122,000
19-6075 Medical Reimbursement	$	6,500	$ 7,000
19-6080 Workers Compensation	$	23,000	$ 23,000
19-6095 Unemployment Reimburse	$	3,000	$ 3,000
19-6090 Payroll Process Fee	$	4,000	$ 4,500
PERSONNEL TOTALS	$	1,577,000	$ 1,678,300
OPERATING EXPENSES			
19-7068 Permits/Fees/License	$	60,000	$ 60,000
19-7011 Communications	$	3,500	$ 4,500
19-7013 Communications-Telephone	$	9,000	$ 12,000
19-7014 Communications-Cell	$	4,500	$ 4,000
19-7082 Prof. Serv.-Comp. Support	$	25,000	$ 24,000
19-7005 Advert/Legal&Recruit	$	8,000	$ 8,000
19-7020 Coastal Hazard Monitoring	$	60,000	$ 75,000
19-7043 Ins, Liability/Auto	$	62,000	$ 70,000
19-7062 Prof Serv.-Electrician	$	6,000	$ 6,000
19-7065 Public Outreach	$	2,500	$ 2,000
19-7069 LAFCO Budget Share	$	18,000	$ 18,000
19-7070 Prof Serv -Out.Counsel	$	20,000	$ 20,000
19-7071 Prof Serv-Attorney Fee	$	40,000	$ 40,000
19-7072 Prof Serv - Auditing	$	18,000	$ 18,000
19-7073 Prof Serv - AG Billing	$	28,000	$ 28,000
19-7074 Prof Serv - Oceano Com	$	12,000	$ 12,000
19-7075 Prof Serv - Brd Member	$	4,500	$ 4,500
19-7076 Prof Serv- H R Service	$	10,000	$ 15,000
19-7077 Prof Serv-Engineering	$	150,000	$ 100,000
19-7078 Prof Serv-Chem Analysis	$	100,000	$ 100,000
19-7079 Prof Serv-Records Mngmt	$	4,000	$ 4,000
19-7095 Zone 1/1A Agreement	$	34,000	$ 35,000
19-7080 Prof Serv - AGP Video	$	11,000	$ 10,000
19-7081 Prof Serv-GB Bill	$	24,000	$ 25,000
19-7083 Prof Serv-Fiscal Serv.	$	15,000	$ 15,000
19-7088 Prof Serv-Strat Planning	$	5,000	$ 5,000
19-7085 Solids Handling	$	60,000	$ 80,000
19-7086 Brine Disposal Sampling	$	3,000	$ 3,000
19-7091 Util-Elec	$	300,000	$ 380,000
19-7092 Util-Gas	$	45,000	$ 60,000
19-7093 Util-Rubbish	$	22,000	$ 22,000
19-7094 Util-Water	$	5,000	$ 4,000
19-8079 Transfer to Replacement	$	1,020,000	$ 741,000
Interest Expense Debt Service	$	1,040,500	$ 1,036,000
OPERATING TOTALS	$	3,229,500	$ 3,041,000

OPERATING FUND BUDGET ALLOCATIONS

		Adopted Budget FY 2022-23		Proposed Budget FY 2023-24
MATERIALS AND SUPPLIES EXPENSES				
19-8030 Equipment Maint-Reg	$	175,000	$	175,000
19-8032 Automotive Maint	$	2,500	$	2,500
19-8060 Structure Maint-Reg	$	20,000	$	20,000
19-8015 Trunk Sewer Maintenance	$	150,000	$	60,000
19-7060 Ocean Outfall Maintenance	$	40,000	$	5,000
19-8056 Safety Supplies	$	12,000	$	15,000
19-6035 Student Interns	$	-		
19-6085 Temp Labor Service	$	5,000	$	185,200
19-7025 Employee Uniforms	$	20,000	$	32,000
19-7032 Equip Rental Other	$	5,000	$	10,000
19-8020 Gas & Oil	$	5,000	$	10,000
19-8035 Admin Building Expense	$	4,000	$	4,000
19-8040 Lab Supplies	$	35,000	$	45,000
19-8045 Office Supplies&Exp	$	6,500	$	6,500
19-8050 Plant Chemicals	$	325,000	$	600,000
19-7015 Off. Equip/Computer/GIS	$	7,500	$	7,000
19-7050 Memberships	$	16,000	$	16,000
19-7055 Prof. Certs/Licenses	$	2,500	$	2,500
19-7067 Training/Conferences	$	30,000	$	30,000
MATERIALS AND SUPPLIES TOTALS	$	861,000	$	1,225,700
CAPITAL EQUIPMENT				
19-8010 Capital Equipment	$	13,000	$	35,000
Redundancy Designation	$	183,200		
CAPITAL EQUIPMENT TOTALS	$	196,200	$	35,000
TOTAL OPERATING REVENUES	$	5,863,700	$	5,980,000
TOTAL OPERATING EXPENSES	$	5,863,700	$	5,980,000
	$	-	$	-
FUND 19 CASH BALANCE @ 05/31/2023	$	2,746,829		
Estimated Remaining Expenses	$	478,490		
Estimated Remaining Revenue	$	809,117		
Estimated Cash Balance @ 7/1/23	$	3,077,456		

FUND 19 CASH BALANCE HISTORY



Service Charges

ORDINANCE NO. 2016 – 01

AN ORDINANCE OF THE BOARD OF DIRECTORS OF SOUTH SAN LUIS OBISPO COUNTY SANITATION DISTRICT INCREASING CHARGES FOR WASTEWATER TREATMENT SERVICES AND FACILITIES

THE BOARD OF DIRECTORS OF SOUTH SAN LUIS OBISPO COUNTY SANITATION DISTRICT ORDAINS AS FOLLOWS:

WHEREAS, Health & Safety Code §§5471 provides that, by an ordinance approved by a two-thirds vote of its membership, the Board of Directors of a sanitation district may prescribe, revise and collect charges for services and facilities it furnishes; and

WHEREAS, California Constitution Article XIII D, §6, entitled "property related fees and charges," specifies procedures the District must use when increasing charges for wastewater treatment services and facilities, and imposes substantive requirements for those charges; and

WHEREAS, Government Code §53755 contains additional procedures and clarifications for use by agencies that wish to impose an increase to their property-related fees and charges, including charges for wastewater treatment services and facilities; and

WHEREAS, the District needs to increase its charges for wastewater treatment services and facilities because, besides operating and maintaining its regional treatment plant (which includes repair and replacement of aging plant facilities and increased costs for staffing, electricity, chemicals, insurance and other operating expenses), the District must build major new facility upgrades to comply with state and federal laws and regulations; and

WHEREAS, in compliance with the authorities set out above and subsequent case law, the District has commissioned a Wastewater Financial Plan & Rate Study, revised 2/9/16, from Bartle Wells Associates, which demonstrates all of the following with regard to the District's proposed increased charges:

- Revenues derived from the charges do not exceed the funds required to provide the property related service.
- Revenues derived from the charges will not be used for any purpose other than that for which the fee or charge was imposed.
- The amount of the charge imposed upon any parcel or person as an incident of property ownership does not exceed the proportional cost of the service attributable to the parcel.
- The charges will not be imposed for a service unless that service is actually used by, or immediately available to, the owner of the property in question.
- The charges are not imposed for general governmental services, but only for wastewater treatment services and facilities; and

WHEREAS, also in compliance with the authorities set out above and subsequent case law, the District has identified the parcels upon which the increased charge is to be imposed as all parcels that are currently customers receiving wastewater treatment services from the District; and

WHEREAS, also in compliance with the authorities set out above and subsequent case law, the District has calculated the amount of the charge proposed to be imposed on each parcel; and

WHEREAS, also in compliance with the authorities set out above and subsequent case law, the District on December 30, 2015 caused notice of a public hearing on the proposed increases (a copy of which is set out in the Wastewater Financial Plan & Rate Study) to be sent by first-class mail to the address contained in the County Assessor's office for the record owner of each identified parcel ***and*** to the address of record for each customer signed up for wastewater treatment service at each identified parcel; and

WHEREAS, District staff has received proof of this mailing in electronic format, which is maintained at District offices; and

WHEREAS, on February 17, 2016, the District conducted a public hearing upon the proposed increases, which date is more than 45 days after mailing of the notice; and

WHEREAS, at the public hearing, the District considered all written protests previously filed concerning the proposed increases, and all protests concerning the proposed increases offered at the public hearing—and has determined that no majority protest has been presented; and

WHEREAS, the approval of this ordinance is exempt from the California Environmental Quality Act pursuant to Public Resources Code §21080(b)(8).

NOW, THEREFORE, THE DISTRICT finds that the above recitals are true, and ordains:

Section 1. Wastewater treatment rates shall be increased as shown in the following chart:

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Wastewater Treatment Rates

		Monthly Service Charges Effective on or After			
		July 1 2016	July 1 2017	July 1 2018	July 1 2019
a.	Residences & Apartments	$19.60	$21.56	$23.52	$25.48
b.	Hotel Units with Kitchens	17.14	18.85	20.56	22.27
c.	Hotel Units without Kitchens	11.02	12.12	13.22	14.32
d.	Hotel Room	11.02	12.12	13.22	14.32
e.	Commercial Establishments	8.81	9.69	10.57	11.45
	Each additional employee above 5	1.77	1.95	2.13	2.31
f.	Beauty Shops	17.63	19.39	21.15	22.91
	Each additional operator above 5	2.66	2.93	3.20	3.47
g.	Eating Establishments w/o Grinders	27.43	30.17	32.91	35.65
	Each additional 5 seats above 30	4.12	4.53	4.94	5.35
h.	Restaurants (w/Grinders) <30 seats	44.09	48.50	52.91	57.32
	Restaurants (w/Grinders) over 30 seats	61.72	67.89	74.06	80.23
i.	Laundromats - per washing maching	12.63	13.89	15.15	16.41
	Minimum Charge	37.91	41.70	45.49	49.28
j.	Service Stations - no wash/rack	51.92	57.11	62.30	67.49
	Service Stations - with wash/rack	74.47	81.92	89.37	96.82
k.	Factories	29.39	32.33	35.27	38.21
	Each additional employee above 20	1.47	1.62	1.77	1.92
l.	Churches	16.26	17.89	19.52	21.15
	Per ADA with elementary school	0.49	0.54	0.59	0.64
	Per ADA with other school	0.72	0.79	0.86	0.93
m.	Bottling Plants	35.28	38.81	42.34	45.87
n.	Schools (Non-boarding)	9.76	10.74	11.72	12.70
	Per ADA with elementary school	0.49	0.54	0.59	0.64
	Per ADA with other school	0.72	0.79	0.86	0.93
o.	Schools (Boarding)	9.80	10.78	11.76	12.74
	Per ADA with elementary school	0.98	1.08	1.18	1.28
	Per ADA with other school	1.38	1.52	1.66	1.80
p.	Trailer/Mobile Home Space	11.77	12.95	14.13	15.31
q.	RV Dump Stations - Less than 50 services	91.12	100.23	109.34	118.45

Section 2. Severability. Should any provision, section, paragraph, sentence or word of this Ordinance be declared invalid by any court of competent jurisdiction or by reason of any preemptive legislation, the remaining provisions, sections paragraphs, sentences or words of this Ordinance shall remain in full force and effect and, to that end, the provisions of this Ordinance are severable.

Section 3. Effective date. This ordinance shall become effective 30 days from the date of final passage.

Section 4. Publication. Within 15 days of its final passage, this ordinance shall be published once, with the names of the Board members voting for and against the ordinance, in a newspaper of general circulation published in the County of San Luis Obispo.

Alternatively, a summary of the proposed ordinance may be prepared by District Counsel and published by the District Bookkeeper. A certified copy of the full text of the proposed ordinance shall be made available to the public upon request at least five days prior to the District Board meeting at which the proposed ordinance is to be adopted. The District Bookkeeper shall also post a copy of the full text of the ordinance on the District's Internet website five days prior to the District Board meeting at which the proposed ordinance is to be adopted. Within 15 days after adoption of the ordinance, the District Bookkeeper shall publish a summary of the ordinance with the names of those directors voting for and against the matter and shall make available to the public, upon request, a certified copy of the full text of the ordinance. The District Bookkeeper shall also post a copy of the full text of the ordinance with the names of those directors voting for and against the ordinance on the District's Internet website.

Introduced at a regular meeting of the South San Luis Obispo County Sanitation District held February 17, 2016, and **passed and adopted** at a regular meeting of the South San Luis Obispo County Sanitation District held March 2, 2016, by the following roll-call vote:

AYES: John Shoals, Matthew Guerrero, Jim Hill

NOES: 0

ABSENT: 0

ABSTENTIONS: 0

John Shoals, Chairman

ATTEST:

Secretary

APPROVED AS TO FORM:

District Counsel

Expansion Fund 20

To Provide for major expenses in order to increase capacity or new equipment as required. Primarily funded by new user connection fees.

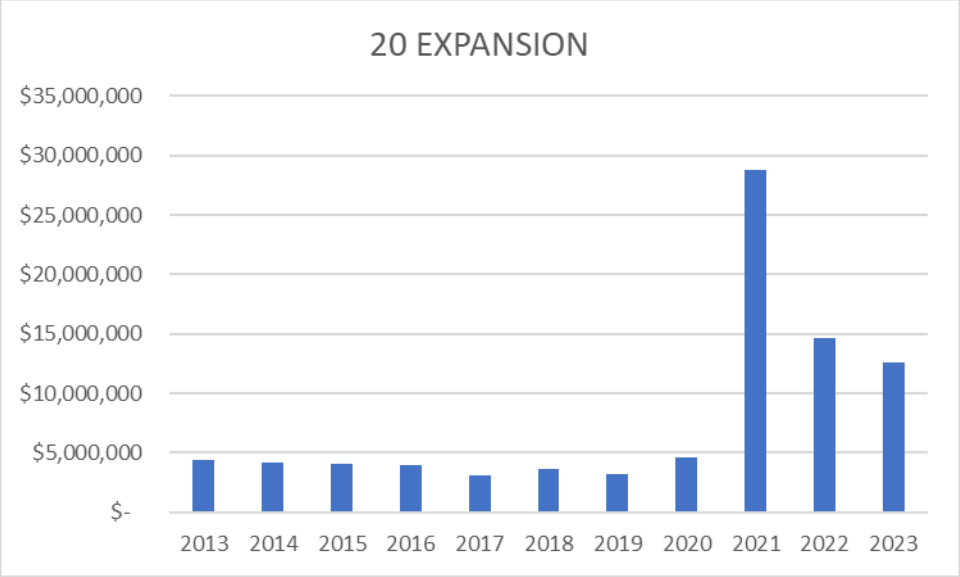
CONSOLIDATED BUDGET FY 2023-24

		Fund 19 Operating Fund	Fund 20 Expansion Fund	Fund 26 Replacement Fund	Proposed Budget FY 2023/24
Revenues					
Service Charges and Fees		5,725,000			5,725,000
Connection Fees			95,000		95,000
Interest		140,000	68,000		208,000
Use of Redundancy Funding			4,174,000		4,174,000
Brine Revenue		115,000			115,000
Total Revenues		**5,980,000**	**4,337,000**	**-**	**10,317,000**
Expenditures & Other Uses					
Operating Expenditures					
Salaries and Wages		1,031,800			1,031,800
Employee Benefits and Other Personnel Costs		642,000			642,000
Permits, Fees and Licenses		64,500			64,500
Communications		20,500			20,500
Administrative Costs		286,500			286,500
Legal Costs		60,000			60,000
Engineering		100,000			100,000
Coastal Hazards & Monitoring		75,000			75,000
LAFCO Budget Share		18,000			18,000
Zone 1/1A Agreement		35,000			35,000
Agency Billing		65,000			65,000
Disposal Services		83,000			83,000
Utilities		466,000			466,000
Maintenance, Tools & Replacements		257,500			257,500
Materials, Services and Supplies		914,700			914,700
Training, Education & Memberships		48,500			48,500
Total Operating Expenditures		**4,168,000**	**-**	**-**	**4,168,000**
Total Other Charges					
Debt Service		1,036,000			1,036,000
Total Other Charges		**1,036,000**	**-**	**-**	**1,036,000**
Capital Outlay					
Capital Replacement/Maintenance (Fund 26)				741,000	741,000
Capital Equipment		35,000	4,337,000		4,372,000
Total Capital Outlay		**35,000**	**4,337,000**	**741,000**	**5,113,000**
Other Financing Sources & Uses					
Transfers Out/In Fund 26		741,000		(741,000)	-
Transfers Out/In Fund 20					-
Total Other Financing Sources & Uses		**741,000**	**-**	**(741,000)**	**-**
Total Funding Source		5,980,000	4,337,000	-	10,317,000
Total Expense		5,980,000	4,337,000	-	10,317,000
Net Change (Deficit)		**-**	**-**	**-**	**-**

EXPANSION FUND BUDGET ALLOCATIONS

		Adopted Budget FY 2022-23		Proposed Budget FY 2023-24
REVENUE				
20-4010 AG Connections	$	40,000.00	$	40,000.00
20-4020 GB Connections	$	30,000.00	$	45,000.00
20-4030 OCSD Connections	$	6,000.00	$	10,000.00
20-5015 Interest Income	$	6,000.00	$	68,000.00
REVENUE TOTALS	$	82,000.00	$	163,000.00
EXPENSES				
20-7060 SCADA	$	82,000.00	$	50,000.00
20-7080 Redundancy Project	$	15,783,200.00	$	4,287,000.00
EXPENSES TOTAL	$	15,865,200.00	$	4,337,000.00
Fund 20 Cash Balance @ 05/31/2023	$	12,554,545.00		
Estimated Remaining Expenses	$	1,200,000.00		
Estimated Remaining Revenue				
Estimated Cash Balance @ 7/1/23	**$**	**11,354,545.00**		

FUND 20 CASH BALANCE HISTORY



M E M O R A N D U M

TO: **SOUTH SAN LUIS OBISPO COUNTY SANITATION DISTRICT**

FROM: **DISTRICT CO-COUNSEL STOCKTON**

RE: **USE OF FUND 20**

DATE: **May 17, 2016**

QUESTION:
For what purposes may money held in Fund 20 properly be used?

SHORT ANSWER:
Money held in Fund 20 is to be used:

- for emergency treatment plant maintenance and repair (to be borrowed at no interest);
- to equalize "the cost of sewage installation beyond the trunk system" (applies to specific charges for specified property);
- for a sinking fund for plant expansion and sewer line enlargement.

BACKGROUND AND DISCUSSION:
A. Background. In 1966 the District created a separate bank account to hold sewer connection fees. Since then the District has enacted several ordinances establishing and adjusting the cost of connecting to the system of pipes leading to the Oceano treatment plant.

In 1981 the District specified how connection fees may be spent. Ordinance 1981-3 required that connection fees be used for "maintaining a sinking fund for treatment plant expansion and sewer line enlargement." The ordinance also provided:

- a surcharge of $15/foot would apply to specified connections, and this surcharge would be "for the purpose of equalizing the cost of sewage installation beyond the trunk system;"
- "Funds may be borrowed at no interest by the District for the purpose of emergency maintenance and repair to the District facilities."

B. Discussion. When connection fees pay for existing or new public facilities which proportionally benefit property, they are called "capacity charges." The law requires that capacity charges *not* exceed the reasonable cost to provide the service for which they are collected. Also, capacity charges:

- Must not exceed the reasonable cost of providing the service for which they are charged unless approved by 2/3 of the voters;
- Must be deposited into a separate capital facilities fund;
- Must be accounted for in a manner to avoid any commingling with other moneys of the local agency, except for investments;

- And any interest they earn, must be spent solely for the purposes for which they are collected. [Government Code §66013(c)];
- Must be identified in a report available to the public within 180 days after the last day of each fiscal year. [Government Code §66013(d).]

The law does not require any particular process to be used to spend connection fees collected. Authority to spend could be provided through the budget process, purchasing guidelines, an interpreting resolution or ordinance, or Board action on individual projects. Public agencies commonly create a list of short- and long-term projects for partial funding by connection fees.

Please advise if you have questions concerning this memo.

Replacement Fund 26

To Provide for the replacement of Plant treatment and processing equipment. Also provides for future solids handling requirements. Primarily funded by user service fees provided for through transfers from the Operating Fund as budgeted annually.

CONSOLIDATED BUDGET FY 2023-24

		Fund 19 Operating Fund	Fund 20 Expansion Fund	Fund 26 Replacement Fund	Proposed Budget FY 2023/24
Revenues					
Service Charges and Fees		5,725,000			5,725,000
Connection Fees			95,000		95,000
Interest		140,000	68,000		208,000
Use of Redundancy Funding			4,174,000		4,174,000
Brine Revenue		115,000			115,000
Total Revenues		**5,980,000**	**4,337,000**	**-**	**10,317,000**
Expenditures & Other Uses					
Operating Expenditures					
Salaries and Wages		1,031,800			1,031,800
Employee Benefits and Other Personnel Costs		642,000			642,000
Permits, Fees and Licenses		64,500			64,500
Communications		20,500			20,500
Administrative Costs		286,500			286,500
Legal Costs		60,000			60,000
Engineering		100,000			100,000
Coastal Hazards & Monitoring		75,000			75,000
LAFCO Budget Share		18,000			18,000
Zone 1/1A Agreement		35,000			35,000
Agency Billing		65,000			65,000
Disposal Services		83,000			83,000
Utilities		466,000			466,000
Maintenance, Tools & Replacements		257,500			257,500
Materials, Services and Supplies		914,700			914,700
Training, Education & Memberships		48,500			48,500
Total Operating Expenditures		**4,168,000**	**-**	**-**	**4,168,000**
Total Other Charges					
Debt Service		1,036,000			1,036,000
Total Other Charges		**1,036,000**	**-**	**-**	**1,036,000**
Capital Outlay					
Capital Replacement/Maintenance (Fund 26)				741,000	741,000
Capital Equipment		35,000	4,337,000		4,372,000
Total Capital Outlay		**35,000**	**4,337,000**	**741,000**	**5,113,000**
Other Financing Sources & Uses					
Transfers Out/In Fund 26		741,000		(741,000)	-
Transfers Out/In Fund 20					-
Total Other Financing Sources & Uses		**741,000**	**-**	**(741,000)**	**-**
Total Funding Source		5,980,000	4,337,000	-	10,317,000
Total Expense		5,980,000	4,337,000	-	10,317,000
Net Change (Deficit)		**-**	**-**	**-**	**-**

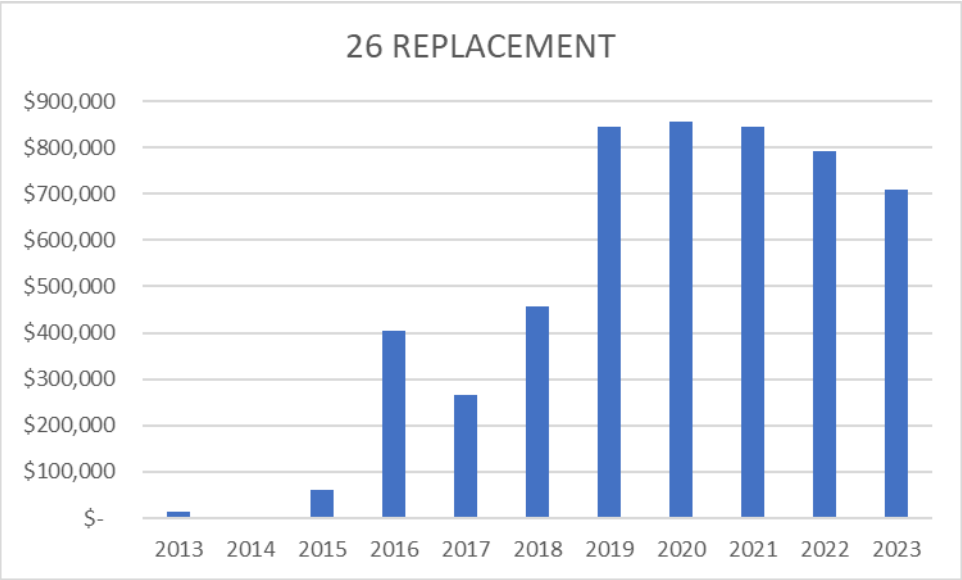
REPLACEMENT FUND BUDGET ALLOCATIONS

	Adopted Budget FY 2022-23	Proposed Budget FY 2023-24
26-8065 Struct/Grounds Replace	$ 995,000	$ 711,000
26-8070 Emergency Equip Repair	$ 25,000	$ 30,000
EXPENSES TOTAL	$ 1,020,000	$ 741,000
Fund 26 Cash Balance @ 05/31/2023	$ 709,560	
Estimated Remaining Expenses	$ 500,000	
Estimated Remaining Revenue	$ -	
Estimated Balance @ 7/1/23	**$ 209,560**	

CAPITAL REPLACEMENT/MAINTENANCE FY 2023-24

Cogeneration Unit	250,000.00
Influent Slide Gate Install	75,000.00
Chemical Storage Station	60,000.00
Demolition of Sludge Thickener	20,000.00
Chemical Tank Replacement	115,000.00
Andritz Centrifuge Project	35,000.00
Plant Light Post Replacement	30,000.00
Building Lighting	10,000.00
Sludge Bed Valve Replace	20,000.00
Upgrade City Water Project	26,000.00
Asphalt	70,000.00
	711,000.00

FUND 26 CASH BALANCE HISTORY



Reserve Policy

Reserve Policy to provide for a reserve fund of 20% of annual charges or 10% of the annual costs of District maintenance and operation, whichever is less.

RESOLUTION 2016-352

A RESOLUTION OF THE BOARD OF SOUTH SAN LUIS OBISPO COUNTY SANITATION DISTRICT, APPROVING A RESERVE POLICY AND AUTHORIZING AND DIRECTING THE DISTRICT ADMINISTRATOR TO IMPLEMENT THE POLICY

WHEREAS, on August 18, 1976 the South San Luis Obispo County Sanitation District (District) adopted Resolution 53, providing for a reserve fund in the amount of 20% of annual charges or 10% of the annual costs of District maintenance and operation, whichever is less; and

WHEREAS, in addition to its standard operations, the District is now proceeding with significant capital and updating projects including a redundancy project, and wishes to implement a prudent reserve to assure success of these efforts; and

WHEREAS, the District wishes to limit use of the reserve to one-time cases of emergency, natural disaster or unexpected event; and

NOW, THEREFORE, IT IS HEREBY RESOLVED, that the Board of South San Luis Obispo County Sanitation District:

1. Hereby approves a reserve within Fund 19, as follows:
   - To be made in the amount of 10% of the annual costs of District maintenance and operation;
   - To be made to the reserve fund by July 31 of each year;
   - May be used only in one-time cases of emergency, natural disaster, or unexpected event;
   - A majority vote of the Board is required to access the reserve;
   - The reserve will be reviewed annually with the budget.

2. Authorizes and directs the District Administrator, or his/her designee, to take all steps necessary to implement this resolution.

PASSED AND ADOPTED at a regular meeting of the South San Luis County Sanitation District Board of Directors held this 15th day of June, 2016.

On the motion of Shoals seconded by Hill, and after the following roll call vote:

AYES:
NOES:
ABSENT:
CONFLICTS:

John Shoals,
Chairman
Board of Directors
South San Luis Obispo County Sanitation District

ATTEST:

DISTRICT SECRETARY

APPROVED AS TO FORM:

BY: _____, Esq
DISTRICT COUNSEL

CONTENTS:

BY: _____
DISTRICT ADMINISTRATOR

Investment Policy

Investment Policy to establish the guidelines for the prudent Investment of South San Luis Obispo County Sanitation District Funds. The objectives of this policy are safety, liquidity, yield, and compliance with state and federal laws and policies.

SOUTH SAN LUIS OBISPO COUNTY SANITATION DISTRICT
RESOLUTION NO. 2009-256

A RESOLUTION OF THE
BOARD OF DIRECTORS OF THE
SOUTH SAN LUIS OBISPO COUNTY SANITATION DISTRICT
ADOPTING THE YEAR 2009 DISTRICT INVESTMENT POLICY

WHEREAS, the Board of Directors of the South San Luis Obispo County Sanitation District ("District") believes that public funds should, so far as is reasonably possible, be invested in financial institutions to produce revenue for the District rather than to remain idle; and

WHEREAS, from time to time there are District funds which for varying periods of time will not be required for immediate use by the District, and which will, therefore, be available for the purpose of investing in financial institutions with the objectives of safety, liquidity, yield and compliance with state and federal laws and policies.

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of the South San Luis Obispo County Sanitation District as follows:

1. The District hereby adopted the Investment Policy attached hereto as Exhibit "A" as the District's Investment Policy;
2. The District Administrator shall act as Treasurer/Finance Officer of the District and is authorized to invest and re-invest funds in accordance with the Investment Policy for the succeeding twelve (12) month period or until such time as the delegation of authority is revoked.

PASSED AND ADOPTED by the Board of Directors of the South San Luis Obispo County Sanitation District this 18th day of February, 2009, on the following roll call vote:

AYES: Jim Hill, Bill Nicolls
NOES: None
ABSENT: Tony Ferrara
ABSTAIN: None

Bill Nicolls, Chairperson,
South San Luis Obispo County
Sanitation District

ATTEST:

John Wallace
Secretary to the Board

APPROVED AS TO FORM:

Michael W. Seitz,
District Legal Counsel

RESOLUTION 2009-
EXHIBIT A

YEAR 2009 INVESTMENT POLICY
SOUTH SAN LUIS OBISPO COUNTY SANITATION DISTRICT

1. INTRODUCTION

The purpose of this written *Investment Policy* is to establish the guidelines for the prudent investment of South San Luis Obispo County Sanitation District funds (herein referred to as District funds). The objectives of this policy are safety, liquidity, yield and compliance with state and federal laws and policies.

District funds are to be managed with a high degree of care and prudence. Though all investments contain a degree of risk, the proper concern for prudence, maintenance of high level of ethical standards and proper delegation of authority reduces the potential for any realized loss.

This policy establishes the standards under which the District's Finance Officer will conduct business with financial institutions with regard to the investment process.

2. FINANCE OFFICER

The Board of Directors appoints the District Administrator as the District Finance Officer and Treasurer.

3. SCOPE

The District investment portfolio shall consist of money held in a sinking fund of, or surplus money in, the District's treasury not required for the immediate necessities of the District. The District's investment portfolio shall be invested in accordance with this policy.

4. OBJECTIVES

The primary objectives are safety, liquidity, yield, and compliance.

A. SAFETY

The investment portfolio shall be managed in a manner that ensures the preservation of capital. The objective is to minimize credit risk and interest rate risk.

B. LIQUIDITY

The investment portfolio shall remain sufficiently liquid to meet all operating requirements. This shall be accomplished by structuring the investment portfolio so that investments mature concurrent with cash needs.

C. YIELD

Yield shall be a consideration only after the requirements of safety and liquidity have been met.

D. COMPLIANCE

This Investment Policy is written to be in compliance with California and Federal law.

RESOLUTION 2009-
EXHIBIT A

YEAR 2009 INVESTMENT POLICY
SOUTH SAN LUIS OBISPO COUNTY SANITATION DISTRICT

5. STANDARDS OF CARE

A. PRUDENCE

The Finance Officer will manage the portfolio pursuant to the "Prudent Investor Standard." When investing, reinvesting, purchasing, acquiring, exchanging, selling and managing public funds in the District's investment portfolio, the Finance Officer shall act with care, skill, prudence, and diligence under the circumstances then prevailing, that a prudent person acting in a like capacity and familiarity with those matters would use in the conduct of funds of a like character and with like aims, to safeguard the principal and maintain the liquidity needs of the District.

B. DISCLOSURES

Finance Officer shall disclose any material interest in financial institutions with which he/she conducts the District business.

6. INVESTMENTS AUTHORITY

A. PERMITTED INVESTMENTS

The District Finance Officer is authorized to invest in the following institutions:

1. County pooled funds (California Government Code § 61730)
2. The Local Agency Investment Fund created by the California State Treasury (California Government Code § 16429.1)
3. One or more FDIC insured Banks and/or Savings and Loan Associations that are designated as District depositories by resolution of the Board of Directors (California Government Code § 61053).
4. Such other financial institutions or securities that may be designated by the Board of Directors from time to time in compliance with California and Federal law.

B. PROHIBITED INVESTMENTS

The District's Finance Officer shall not invest in:

1. Inverse floaters, range notes or interest only strips that are derived from a pool of mortgages.
2. Any security that could result in a zero interest accrual if held to maturity.
3. A state or federal credit union, if a member of the District's Board of Directors or an administrative officer also serves on the Board of Directors, or any committee appointed by the Board of Directors, or the credit committee or supervisory committee, of the state or federal credit union.

C. DIVERSIFIED INVESTMENTS

Investments, other than investments referenced in paragraphs **A** (1) and (2) above, will be diversified to avoid losses that may be associated with any one investment.

RESOLUTION 2009-
EXHIBIT A

YEAR 2009 INVESTMENT POLICY
SOUTH SAN LUIS OBISPO COUNTY SANITATION DISTRICT

7. REPORTS

A. MONTHLY REPORT

Finance Officer/Treasurer shall make monthly reports to the Board of investments made or retired during the preceding month.

B. QUARTERLY REPORT

Finance Officer shall file a quarterly report that identifies the District's investments and their compliance with the District's Investment Policy. The quarterly report must be filed with the District's auditor and considered by the District's Board of Directors within thirty (30) days after the end of each quarter (i.e., by May 1, August 1, November 1, and February 1) (California Government Code § 53646). Required elements of the quarterly report are as follows:

1. Type of Investment.
2. Institution.
3. Date of Maturity (if applicable).
4. Amount of deposit or cost of the security.
5. Current market value of securities with maturity in excess of twelve months (if applicable).
6. Rate of Interest.
7. Statement relating the report to the Statement of Investment Policy.
8. Statement of the District's ability to meet cash flow requirements for the next six months.
9. Accrued Interest (if applicable).

C. ANNUAL REPORT

Prior to June 30th of each year, the Finance Officer shall file and submit an annual report to the District's auditor and Board of Directors which will contain the same information required in the quarterly report.

The annual report will include a recommendation to the Board of Directors to either:

1. Readopt the District's then current annual Investment Policy; or
2. Amend the District's then current Investment Policy.

D. LIMITED QUARTERLY REPORT

If the District has placed all of its investments in the Local Agency Investment Fund (LAIF), created by California Government Code § 16429.1, or in Federal Deposit Insurance Corporation, insured accounts in a bank or savings and loan association, in a County investment pool, or any combination of these, the Finance Officer may submit to the Board of Directors, and the auditor of the District the most recent statement or statements received by the District from these institutions in lieu of the information required in paragraph 7.B above. This special reporting policy does not relieve the Finance Officer of the obligation to prepare an annual investment report as identified in paragraph 7.C, above.

Purchasing Policy

Policy and Procedures for the expenditure of District Funds for supplies, equipment, construction, and services.

RESOLUTION NO. 2019-410

A RESOLUTION OF THE BOARD OF SOUTH SAN LUIS OBISPO COUNTY SANITATION DISTRICT AMENDING THE ADOPTED POLICIES AND PROCEDURES FOR THE EXPENDITURE OF DISTRICT FUNDS FOR SUPPLIES, EQUIPMENT, CONSTRUCTION, AND SERVICES AS SET FORTH IN RESOLUTION NO. 2010-274 AND AMENDED IN RESOLUTION NO. 2014-314 AND NO. 2016-353

ARTICLE I
Adoption of Purchasing and Construction Policies

1.1 **Statutory Authority:** These policies and procedures are adopted pursuant to the Government Code Section 54201 (l), et seq., and the Public Contract Code Section 22000 et seq. ("Uniform Public Construction Cost Accounting Act") in order to establish an efficient procedure for the purchase of supplies, equipment and contracting for work and services.

1.2 **Board Findings and Declaration:** The Board finds and declares that placing all of these policies in one procedural set of guidelines will make these procedures clearer and easier to find. Furthermore, it is the intent of the Board in enacting these procedures to achieve the following objectives:

A. To establish an efficient procedure for the purchase of supplies, equipment, and services at the lowest possible cost;

B. To assure that all supplies, equipment, construction and services at the plant are of sufficient quality to assure the efficient running of the plant;

C. To exercise positive financial control over purchases;

D. To clearly define authority for the purchase of supplies and equipment and for contracting for outside services and construction;

E. To assure as full and open competition as possible on all purposes;

F. Fitness and quality being equal, a preference may be granted to local vendors for the purchase of materials, supplies and services with a bid price less than $45,000. The District may provide a preference to each qualified local vendor if the bid of a local qualified vendor does not exceed the lowest bid or price quoted by other vendors by more than five percent. To quality as a local vendor, a business must have all current applicable city licenses and permits, must maintain its primary office and/or place of business within district boundaries. This preference is not applicable to any materials, supplies or services for which formal bids are required pursuant to statutory or California common law.

ARTICLE II
Purchase of Supplies and Equipment
District Manager Duties

2.0 The Board of Directors of the District shall approve all contracts for services and/or supplies and equipment in excess of $30,000.00.

2.1 The District Administrator or Plant Superintendent, as the case may be, shall be the purchasing authority whose functions shall include the following powers and duties:

A. To purchase or contract for supplies and equipment required by the District in accordance with the purchasing procedures outlined herein.

B. To negotiate and recommend execution of contracts for the purchase of supplies and equipment.

C. To ensure as full and open competition as possible on all purchases.

D. To inspect supplies and equipment delivered, as well as contractual services performed, to determine their conformance with the specifications set forth in the purchase orders and contracts.

E. To sell surplus supplies and equipment to interested private and/or public agencies or vendors.

F. To keep informed of current developments in the field of purchasing, prices, market conditions and new products.

G. To maintain a bidders' list, vendors' catalog file and records.

H. To develop and prescribe administrative policies, forms, and files as may be reasonably necessary for the internal management and operation of these purchasing procedures.

2.2 Exemptions From Policies

A. Emergencies: The purchasing procedures described above may be dispensed with at the discretion and judgment of the purchasing authority in the best interest of the District when the Board of Directors adopts a resolution by two-thirds vote declaring that it is in the public interest and necessity to demand an immediate expenditure of public funds to safeguard life, health, or property.

B. Single Source: When the Board of Directors adopts a finding that there is only a single source of procurement and that the purchase is for the sole purpose of duplicating or replacing supplies, equipment, or material which is in use.

C. Deliveries Under Annual or Biannual Contracts: When the Board of Directors has contracted for services or supplies on an annual or other regular basis, the payment for delivery of such services or supplies upon delivery is exempt from the need for additional authority for payment. This exemption does not apply to the actual

negotiation or contracting for services or delivery of supplies.

2.3 Supplies and Equipment - District purchases under $2,500.00

A. The Plant Superintendent shall act as purchasing agent for the District in connection in obtaining materials, supplies, and equipment with a cost of **$2,500.00** or less.

B. Open Accounts:

1. The Plant Superintendent shall maintain a list of all open accounts with suppliers on which employees of the District have the ability to sign for purchases. The list of open accounts shall be approved by the District Administrator.

2. The Plant Superintendent shall maintain a list of all employees with the ability to sign on open accounts and such list shall be approved by the District Administrator.

3. No employee shall sign on an open account without prior approval of the District Administrator.

C. In regards to the purchases of supplies or equipment with a cost of **$300.00** or more, a "purchase order" shall be used.

1. District employees shall submit a requisition for any required supplies, equipment, or services with an anticipated cost in excess of **$300.00** on a form approved by the District Administrator.

2. If the requisition is approved by the Plant Superintendent, the Plant Superintendent shall seek the most favorable terms and price for the approved requisition either through comparative pricing or competitive bidding, whichever method the Plant Superintendent deems most appropriate under the circumstances. To the extent possible, the Plant Superintendent will review at feast two quotations to ensure that the products or supplies purchased are of a quality suitable for the District's purposes and to obtain the lowest price available.

3. Once the Plant Superintendent has determined the most advantageous price or bid, as the case may be, for the requisition, he/she shall issue a purchase order which will constitute a formal offer by the District to purchase the supplies, equipment, or to procure the service for the price and terms indicated therein.

D. Except in cases of emergency or in cases where specific authority has been first obtained from the District Administrator, the Plant Superintendent shall not purchase supplies or equipment unless there exists an unencumbered appropriation in the fund account against which the purchase is to be charged.

2.4 Supplies and Equipment - District purchases under $15,000.00

The District Administrator shall act as purchasing agent for the District in connection with the obtaining of supplies, equipment, or services with costs in excess of **$2,500.00** but not

more than **$15,000.00.**

A. The purchase of supplies and equipment with a value of **$2,500.00** to **$15,000.00.** may be made by the District Administrator in the open market pursuant to the procedure hereinafter proscribed:

1. The District Administrator or his/her designee shall solicit quotations for the purchase of all such goods and supplies. Said quotations may be solicited by telephone or in writing.

2. Open market purchases shall, whenever possible, be based on at least three written quotations approved by the District Administrator and shall be awarded to the supplier submitting the lowest responsive quote.

   a. Single Source Items: If the District Administrator determines that there is a single source of procurement and that the purchase of the supplies or equipment is for the sole purpose of duplicating or replacing supplies, equipment, or material which is in use, the requirement of obtaining competitive quotations shall not be required.

2.5 Supplies and Equipment - District Purchases over $15,000.00 and less than $60,000.00

A. For the purposes of this section, the District Administrator shall be the purchasing agent for the District in connection with supplies, equipment, and services with a cost in excess of **$15,000.00,** but not more than **$60,000.00**.

B. The District Administrator and/or his/her designee shall solicit quotations for all goods and supplies with a cost of more than **$15,000.00** and less than **$60,000.00.** Said quotations may be solicited by telephone or in writing.

1. Open market purchases shall, whenever possible, be based upon at least three written quotations approved by the District and shall be awarded to the entity submitting the lowest responsive quote. The Board of Directors of the District shall approve all purchases in excess of **$15,000.00** and less than **$60,000.00.**

   a. Exception: When the District Administrator determines that it is reasonably necessary to purchase equipment and supplies on an expedited basis, the District Administrator may do so, but only on approval by the Chairman of the Board of Directors obtained prior to the actual purchase.

2.6 Supplies and Equipment -District Purchases over $60,000.00 and less than $200,000.00 – Informal Bidding Process

A. For the purposes of this section, the District Administrator shall be the purchasing agent for the District in connection with supplies, equipment, and services with costs in excess of **$60,000.00,** but not more than **$200,000**.00.

B. Public projects, as defined by the Uniform Public Construction Cost Accounting Act (Act) and in accordance with the limits listed in Section 22032 of the Public Contract Code, may be let to contract by informal procedures as set forth in Section 22032, et

seq., of the Code.

C. A list of contractors shall be developed and maintained in accordance with the provisions of Section 22034 of the Public Contract Code and criteria promulgated from time to time by the California Uniform Construction Cost Accounting Commission.

D. **Notice Inviting Informal Bids**:

Where a public project is to be performed, which is subject to the provisions of the Act, a notice inviting informal bids may be mailed to all contractors for the category of work to be bid and shall be mailed to all construction trade journals as specified by the California Uniform Construction Cost Accounting Commission in accordance with Section 22036 of the Public Contract Code. Additional contractors and/or construction trade journals may be notified at the discretion of the District Administrator and/ or his/her designee, provided however:

1. If there is no list of qualified contractors maintained by the District for the particular category of work to be performed, the notice inviting bids shall be sent only to the construction trade journals specified by the Commission.

2. If the product or service is proprietary in nature such that it can be obtained only from a certain contractor or contractors, the notice inviting informal bids may be sent exclusively to such a contractor or contractors.

E. The District Administrator is authorized to award informal contracts pursuant to this section.

2.7 Supplies and Equipment - District Purchases over $200,000.00 - Formal Competitive Bidding/Notice

Except as otherwise provided in these procedures, purchases and contracts for supplies and equipment subject to the two-hundred thousand-dollar contract limitations of the Uniform Public Construction Cost Accounting Act (or an amount specified in a subsequent statute), shall be by written contract with the lowest responsible bidder pursuant to the procedures prescribed herein.

A. Notice of Inviting Bids:

1. Notices inviting bids shall include, but not be limited to, the following:

   a. The notice shall distinctly state the supplies and equipment to be purchases;

   b. The location and deadline for submission of bids;

   c. The location where bid blanks and specifications may be secured;

   d. The date, time, and place assigned for the opening of sealed bids;

   e. The type and character of bidder's security required, if any;

   f. Notice that the District reserves the right to waive minor irregularities in the bid.

g. Notice that no bidder can withdraw his/her bid for a period of 60 days after the date set for the award of the contract.

h. Notice that a successful bidder can substitute securities for performance retention pursuant to Public Contract Code Section 22300.

2. Notices inviting bids shall be published at least twice, not less than 5 days apart, in a newspaper of general circulation, printed and published in the District, or if there is none, the notice shall be posted in at least three public places in the District that have been designated by the District Board of Directors as places for posting such notice.

3. The first publication or posting of the notice shall be at least ten days before the date of opening bids.

B. Supplies and Equipment Bids - Security Requirements:

Bidder's security may be required when deemed necessary. Bidders shall be entitled to the return of any bid security within 60 days from the time the award is made. A successful bidder shall forfeit his/her bid security, however, upon refusal or failure to execute a contract within 15 days after notice of award of the contract unless the district is responsible for the delay. The contract may be awarded to the next lowest responsible bidder upon the refusal or failure of the successful bidder to execute the contract within the time herein prescribed.

C. Bids Opening:

Sealed bids shall be opened in public at a time and place stated in the notice of inviting bids. A tabulation of all bids received shall be made available for public inspection until the award of the contract.

D. Bid Rejection:

The District may reject:

1. Any bid that fails to meet the bidding requirements in any respect; or

2. All bids, for any reason whatsoever, and may readvertise for new bids;

3. All bids, and adopt by two-thirds vote, a resolution declaring that the materials or supplies can be furnished at a lower price in the open market and the District may purchase the materials or supplies as stated in the resolution in order to take advantage of the lower cost.

E. Contract Award:

Contracts shall be awarded at the next regularly scheduled meeting after the date set for opening bids to the lowest responsible bidder except as follows:

1. If two or more bids are the same and the lowest, the District Board may accept the one it chooses.

2. If no bids are received, the District Board may order the supplies and equipment purchased without further bid.

F. Determination of Lowest Responsible Bidder:

In addition to the bid or quotation price, criteria for determining the lowest responsible bid or quotation, shall include, but not be limited to, the following:

1. The character, integrity, reputation, judgment, experience and efficiency of the bidder (this may include an analysis of previous dealings with the District or other public agencies);

2. The ability of the bidder to provide the supplies, equipment or services required, within the time specified, without delay or interference;

3. The ability of the bidder to provide future maintenance, repair parts and replacement of purchased equipment or supplies; and

4. Compliance by the bidder with Federal Acts, Executive Orders, and State Statutes.

Upon motion of Director Austin, seconded by Director Ray Russom, and on the following roll call vote, to wit:

AYES: Austin, Ray Russom, Lee

NOES:

ABSENT:

ABSTAINING:

The forgoing Resolution is hereby adopted this 6th day of Nov 2016.

Chairman

ATTEST:

District Administrator

APPROVED AS TO FORM:

District Legal Counsel

South San Luis Obispo County Sanitation District

Trunk Sewer System Capacity Study

Final Draft Report

May 12, 2006

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Appendix A-3: District Trunk Sewer and Manhole Map- Arroyo Grande West - Sewer Farm Trunk Lines

Appendix A-4: District Trunk Sewer and Manhole Map - Grover Beach

Appendix A-5: District Trunk Sewer and Manhole Map - Grover Beach/Oceano

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1. INTRODUCTION

1.1 PURPOSE

The South San Luis Obispo County Sanitation District's (District or SSLOCSD) existing wastewater collection system was designed and built in 1966. Raw wastewater is collected through 6.5 miles of District trunk lines that extend through Oceano and Arroyo Grande with pipes varying in size from 18 to 30-inches. Trunk lines (pipes varying from 15 to 24-inches) in Grover Beach which convey sewage to the treatment plant were also included in this study although, presently, these trunk lines are not owned by the District. Capacity in District trunk lines is not specifically divided among the parent agencies. As outlined in Ordinance No. 2000-3, impact fees are collected for new developments from each agency which are used for expansion related improvements. As a result, those agencies which sustain the most new development contribute a greater share to facility expansion. This Trunk Sewer Capacity Study presents the analysis of existing and future flows within the District trunk sewer lines and identifies existing and future capacity concerns that will enable staff to make project recommendations throughout the District's service area.

1.2 Scope of Study

The Trunk Sewer Capacity Study was conducted to evaluate the existing wastewater trunk sewers under current and build out conditions, and to re-evaluate how to correct those deficiencies in the SSLOCSD service area. The scope of this study included the following:

Research and Review of Documents - Data for this study included planning information from each agency as well as available records for sewer utility locations throughout the service area.

Existing Wastewater Flows - Wastewater flow data at the District treatment plant was analyzed, and flow information was based on population information data within the District service area. The plant influent data was analyzed to estimate the peak diurnal flow to the plant, and this in turn was used to estimate a peaking factor for each service area. Historical average daily flows incorporating rainfall data and general trends of inflow/infiltration to the plant was reviewed and analyzed, to assess the capacity of trunk lines. This did not include inflow and infiltration (I/I) monitoring in the trunk sewer but is recommended in future studies.

Future Wastewater Flows - Future wastewater flows and flow characteristics were based on growth projections provided by each participating agency served by the District.

Trunk Sewer Modeling - A hydraulic model of the entire gravity trunk sewer was based on information collected from as-built or record drawings. This gravity flow model was created on an Excel spreadsheet developed by Wallace Group. All sewer inverts were provided on District as-built drawings. Design criteria was generated for each trunk sewer relative to design capacities and flow parameters. The flow analysis utilized Manning's open channel flow equation for flow in circular channels. All sewers 12" diameter and larger which directly impacted the District's trunk sewer system were included in the model. The City of Arroyo Grande's 12" trunk sewer ,which is part of the District's overall trunk sewer system, was recently modeled in their wastewater master plan. This data was also included into this spreadsheet. Wastewater demands were distributed throughout the trunk sewer system based on available zoning/land use maps. Analysis of these zoning/land use maps included discussions with corresponding agency staff relative to developed and undeveloped areas through their respective service areas. Model runs were conducted for existing flows (at diurnal peak flow conditions during the maximum month), and at future projected wastewater flows (also at diurnal peak flow conditions during the maximum month).

1.3 Acknowledgments

The District appreciates the assistance provided by the following individuals and thanks them for their contributions to this report:

Jeff Appleton – Plant Superintendent, SSLOCSD

Phil Davis – Utility Manager, Oceano Community Services District

Chuck Ellison – General Manager, Fluid Resource Management; former Superintendent SSLOCSD

Mike Ford – Utility Manager, City of Grover Beach

Scott Mascolo – Shift Supervisor, SSLOCSD

Shane Taylor – City of Arroyo Grande, Public Works Superintendent

Murray Wilson – Staff Assistant, City of Grover Beach Planning Department

2. SSLOCSD SERVICE AREA

2.1 Service Area Boundaries

The District encompasses a geographic area of 165 square miles. It is located within an area known as the Five Cities area in the southwestern portion of San Luis Obispo County, 15 miles south of the City of San Luis Obispo. Refer to Figure 2-1 for the project vicinity map, and Figure 2-2 for the SSLOCSD Service Area Boundaries. Refer to Appendices A and B for maps of the District's trunk sewers. The following is a brief description of each of the communities served by the District trunk sewer system.

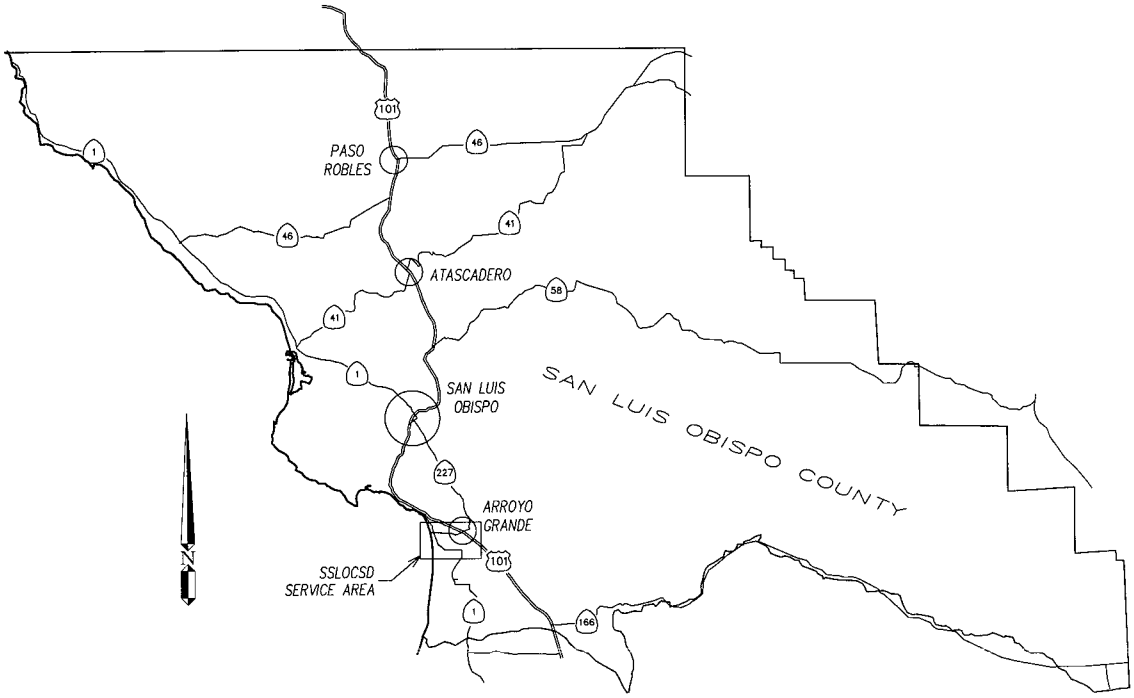


Figure 2-1 Vicinity Map

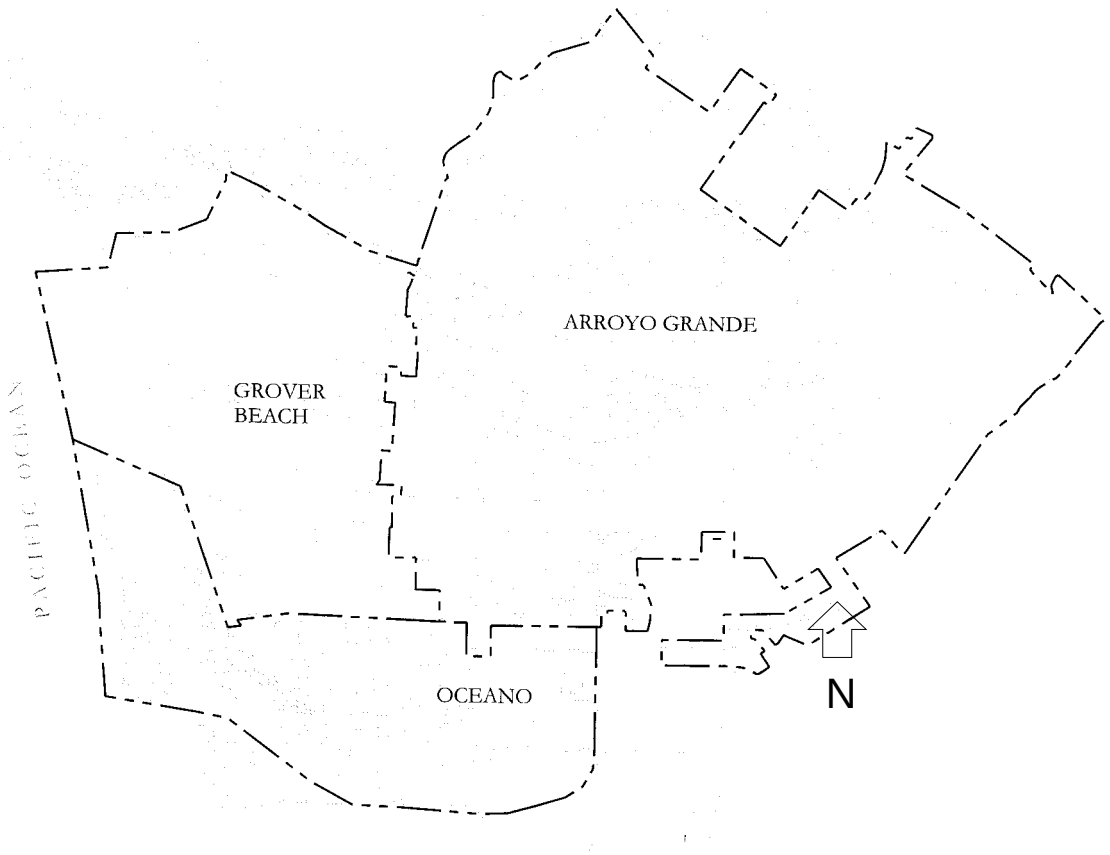


Figure 2-2 SSLOCSD Service Area Boundaries

2.1.a. City of Arroyo Grande

The City of Arroyo Grande is a community encompassing 5.45 square miles of diverse landscape ranging from gentle rolling suburbs to scenic canyon lands.

The City extends on both sides of Highway 101, which bisects Arroyo Grande into an eastern and western section. Both “sections” of the City contain commercial and residential areas. The eastern section contains what many consider the “Old Village” with accompanying residences rising up into canyon land extending to the north and east. A limited amount of agriculture occurs in this City, and Lopez Lake lies due east of Arroyo Grande.

The western section of town includes predominantly suburban homes and service businesses and is served by Grand Avenue, a major commercial corridor which passes through Arroyo Grande and extends into Grover Beach.

2.1.b. City of Grover Beach

Grover Beach is an incorporated ocean -front City encompassing approximately 2.25 square miles.

The topography includes gently rolling hills, urban and suburban neighborhoods. The weather is moderate during the winter and slightly cool during the summer months. The City receives an average of 20 inches of annual rainfall. Grand Avenue is a major commercial corridor connecting to California Hwy 101 in the City of Arroyo Grande.

The economic base is primarily commercial service and tourism, and there are no heavy industries located in the service area. The City has been served by the District since its inception, first as a contract agency, then as a member agency since 1997.

2.1.c. Oceano Community Services District

Oceano is an unincorporated area of San Luis Obispo County governed by the Oceano Community Services District. It reportedly began in the late 1800's as a fishing village and evolved into an agricultural community. At one point, in 1972, the community considered incorporation but the tax base was not adequate to sustain city status.

In 1981, the Oceano Community Services District (OCSD) was formed, and provides water, sewer, street lighting, recreation and fire protection services. The OCSD boundaries encompass an area of approximately 1.7 square miles and includes both the town of Oceano and community of Halcyon.

2.2 Descriptions

The SSLOCSD is governed by a three-member board of directors consisting of a representative from each of its member agencies. Member agencies include the City of Arroyo Grande, the City of Grover Beach, and the Oceano Community Services District. Wastewater collection (trunk sewers only), treatment, and disposal services are provided by the District to each member agency as described in the following sections:

2.2.a. Trunk Sewer System

The District owns and maintains a system of gravity trunk sewers to serve its member agencies. The District trunk sewers vary between 18" and 30" in diameter. The majority of the system was constructed in 1966. The trunk capacity available for each member agency is not established by contract and no capacity allocation exists for each agency. However, the District collects impact fees from new development projects within each member agency, and the funds are used for major replacements and expansion-related improvements. As a result, those agencies which incur the most new development contribute a greater share of the cost to expand the District system expansion.

2.2.b. Wastewater Treatment Plant (WWTP)

The District owns and operates a wastewater treatment and ocean disposal facility with a design average annual flow capacity of 5.0 million gallons per day. The system consists of a secondary treatment facility including the following process elements:

- Headworks - flow meter and raw wastewater pump station
- Primary clarification
- Secondary treatment utilizing a biological fixed film reactor
- Secondary clarification
- Disinfection and dechlorination
- Gravity ocean outfall (shared with the City of Pismo Beach)

The treatment system is operating at approximately 58% of capacity[1] (2.88 mgd) As with trunk capacity, wastewater treatment and disposal capacity was not established by contract and was therefore not apportioned amongst the member agencies.

[1] District flow records, 2000 Annual Report

3. EXISTING AND FUTURE LAND USE AND POPULATION

The land area served by the District includes residences, tourism, and commercial districts composed primarily of service businesses and light industry. Scattered agricultural uses within the District's service area are limited and not currently expanding in scale.

Arroyo Grande, Grover Beach, and Oceano Community Services District each have land use plans as part of applicable general plans guiding development within their respective areas**.** In the case of OCSD, the County's land use plan governs.

3.1 City of Arroyo Grande

Arroyo Grande's General Plan emphasizes the community's desire to maintain a rural, small town character. It recommends that large scale commercial development remain focused along the Hwy 101 corridor and small scale commercial development continue to occupy the "village area" and the Grand Avenue corridor.

Agricultural uses lie primarily on the southeast side of Arroyo Grande and are split by Hwy 101. Expansion of agricultural uses is unlikely, but Arroyo Grande's general plan considers preservation of existing agricultural land use as a priority goal.

The majority of Arroyo Grande is residential in use and character. Approximately 82% of the land area is occupied by housing. Southwest of Hwy 101 the land is relatively flat and suburban in character. It has a mix of both single family and multiple family residences with single family predominating. The residential area on the Northeast side of Hwy 101 is a mixture of flatter development and hillside residences.

Arroyo Grande has recently experienced a considerable increase in commercial/retail development along the Hwy 101 corridor. There are approximately 18 acres of city land devoted to light industrial and a business park to be developed.

The current population of Arroyo Grande is reported to be 16,115[2] with a build out population projected to be 20,000 (see Table 3-1) in the year 2012.

[2] City of Arroyo Grande General Plan

Table 3-1 Existing and Future Populations		
City or District	**Existing Population**	**Future Population (Build Out)**
Arroyo Grande	16,115	20,000
Grover Beach	13,067	16,268
Oceano Community Services District	7,260	9,601
Total	**36,442**	**45,869**
Populations based on 2000 Census data and assessment of additional dwellings in 2001.		

3.2 City of Grover Beach

Grover Beach's general plan seeks to "... preserve and promote an economically diverse town influenced by the natural benefits of its location on the hills and valleys, reaching out to the coastal dunes, the beach, and the Pacific Ocean."

Most of the City appears commercial, suburban and recreational in character. There is little light industry and no heavy industry. Commercial/Retail uses are located primarily on the Grand Avenue corridor.

The Land Use Element of the General Plan divides Grover Beach into 13 separate neighborhoods for which housing and population statistics have been compiled. The current population of the City of Grover Beach is 13,067 with a projected future build out population of 16,268 (Table 3-1) anticipated to be reached around 2011. Any one of these neighborhoods may have a mix of uses but as in the case of Arroyo Grande, they are primarily residential in character. Two exceptions to this, however, include the Central Business District Neighborhood and the Beach Neighborhood. In these neighborhoods residential uses give way to commercial and retail uses.

Two major transportation corridors serve Grover Beach. Grand Avenue serves the Central Business District, connecting to Hwy 101 on the East and the beach on the West. Highway One and the railroad line separates the majority of Grover Beach from the beach area. The rail runs north and south and carries both passenger and freight traffic on the main line that connects Los Angeles and San Francisco.

Grover Beach considers itself an "affordable" community while continuing to attract and serve tourists to its natural resources. There is a small area of agricultural land remaining in Grover Beach (approximately 150 acres).

3.3 Oceano Community Services District

The County's San Luis Bay Area Plan governs land use and development in Oceano. There are both coastal and inland versions of this plan. Particular reference is made in this plan to the area within the Oceano Urban Reserve Line.

The current population of the Oceano community is 7,260. Population projected by the San Luis Obispo County Oceano Specific Plan and Environmental Impact Report (August 2001) indicates a population of 9,601 at buildout. Although a specific year is not stated for the build out population to be reached, the life of this Specific Plan was stated as 20 years.

The community of Oceano is primarily residential with 42% of its 896 acres encumbered by this use. There are large open space areas within the District in the form of beach land, the Oceano Airport, and several agricultural fields totaling about 126 acres. Of the residential areas, approximately 34% are single family homes, 6% of the areas are mobile home parks, and about 2% are multi-family dwellings.

Commercial areas are located along the railroad/Highway One corridor which divides the community in a north and south direction. There are also commercial uses along Pier Avenue, which is the access point to the beach. These areas account for about 20% of the total land area.

A limited amount of light industrial uses are also located along the railroad corridor. These uses occupy about 20 acres of land. The Oceano airport consisting of approximately 65 acres is located very near the beach area and the District's wastewater treatment plant.

Most of the housing units in Oceano are modest single family homes with vacation homes located along the beach. About 75 percent of the housing was built before 1984, with about a third of that constructed before 1960.

4. WASTEWATER FLOWS

4.1 Existing Wastewater Flows

Existing wastewater flows were assessed utilizing the following sources of data:

- The Arroyo Grande Wastewater Master Plan.
- The District wastewater treatment plant influent flow records and annual reports.
- Population data from each agency.

Since no additional flow data was available from Grover Beach or Oceano, the existing wastewater flows were derived from the sources of data listed above. The approximate percentage of the total flow that the City of Arroyo Grande contributes to the District treatment facility was determined. The District flow data, which includes continuous flow records and daily totals, was then used to confirm seasonal peaking factor characteristics. As of mid-2001, the District served a total population of 36,802 persons including the following entities:

- City of Arroyo Grande (16,115 persons)
- City of Grover Beach (13,067 persons)
- Oceano Community Services District (7,260 persons)

There is a small population that is serviced by the District that is not incorporated within the above mentioned entities. This population consist of less than 50 residences, and the associated demands were included in this study.

Flow meters were installed (2001) at the two District trunk mains that convey wastewater from Arroyo Grande. An analysis of data from the Arroyo Grande Wastewater Master Plan shows that during dry weather periods, Arroyo Grande contributes approximately 44% of the total raw wastewater flow to the District. This result was consistent with the current Arroyo Grande population, which also represents approximately 44% of the total District population. It was a reasonable assumption then, that Grover Beach and the Oceano Community Services District would also contribute proportionate flows based on their population ratios. Table 4-1 shows the determination of existing flows.

Table 4-1 Existing Average Annual (Daily) Flows by Land Use[1]

City or District	Existing Population	Percentage to District Population	Total Average Annual Flow (Million gallons/day)
Arroyo Grande	16,115	44%	1.26
Grover Beach	13,067	36%	1.03
Oceano Community Services District	7,260	20%	0.59
SSLOCSD TOTAL	**36,802[3]**	**N/A**	**2.88[2]**

Notes:
1. These values were based on the values used in the Arroyo Grande Wastewater Master Plan adopted on November 2001.
2. The Annual Average Flow (year 2000) for The District during the same period was 2.88 MGD
3. Population not incorporated within Arroyo Grande, Grover Beach, and the OCSD, but were still serviced by the District will not alter the percentages significantly.

Although existing flow data used for this study was based on the year 2000, the District Treatment Plant average daily flows for 2001, 2002 were 2.72 mgd, 2.73 mgd respectively. It was a reasonable assumption that the present day flow analysis will vary minimally from the data used in the year 2000. The population as of 2003 has increased by about 3%[1] from 2001.

4.2 Peaking Factor Analysis

In order to appropriately design wastewater collection facilities, peak flow conditions are quantified, and summarized below:

Average Annual Flow (AAF) was obtained by dividing the total flow conveyed in one year by 365 days. Peak conditions were derived by multiplying the AAF by a peaking factor (PF). Table 4-1 summarizes the average annual flows to the SSLOCSD WWTP.

Peak Day Dry Weather Flow (PDF) is the maximum flow during one day of the dry season. This flow condition is often used for the biological design of treatment processes. PDF was based on data provided by the District.

Peak Hour Wet Weather Flow (PHWWF) is the single hour maximum flow rate during wet weather. This condition will govern the design of sewers and represents the maximum flow rate that the system must convey. This flow condition was used in determining the peaking factor used for this study.

Average Day Maximum Month Dry Weather Flow reflects the maximum flow rate during the peak month of summer. This condition reflects the seasonal variation in dry weather flow. This flow condition was only used as a reference (Table 4-2).

Table 4-2 Summary of Peaking Factor Analysis

Peak Flow Condition	Historical Peaking Factor (SSLOCSD)	Arroyo Grande Peaking Factor
Average Annual (Daily) Flow (AAF)	--	--
Peak Day Dry Weather Flow (PDF)[1]	1.17	1.3
Peak Hour Wet Weather Flow (PHWWF)[2]	2.79	3.0
Average Day Maximum Month Dry Weather Flow	1.02	1.1

Notes:
1.PDF was based on the District Peak Day in September, 2000
2.From the Arroyo Grande Wastewater Master Plan, PHWWF was confirmed by checking two conditions. Firstly, peak hour wet weather flow at The District was examined. Secondly, the known daily flow fluctuation in AG was applied to the AG portion of the maximum day wet weather flow at The District (March 5, 2001). The latter condition was assumed representative of the trunk lines within Arroyo Grande and Oceano.

[1]According to the 2003 Economic Report for the City of San Luis Obispo by the Research Department of the SLO Chamber of Commerce - Grover Beach 13,433; Arroyo Grande 16,523; OCSD 7,574

Table 4-2 summarizes the peaking factors used for this study. These peaking factors reflect peak flows due to gravity (lift stations were assumed inflow equals outflow) in reference to AAF. Since the Oceano trunk system also conveys Arroyo Grande flows, the Arroyo Grande peaking factor (3.0) was used for the trunk system within Arroyo Grande and Oceano. The various Arroyo Grande lift stations cause plug flows which adversely affect the peak gravity flow analysis (Table 4-2). Flow data from Arroyo Grande factors in the impact of its upstream lift stations. These plug flows will reflect higher peak flows to some extent downstream in the District trunk sewers (Appendix E - locations of these lift stations).

The trends of inflow/infiltration flows were factored into the peaking factors chosen for this study.

4.3 Future Wastewater Flows

Table 4-3 summarizes the future wastewater flows for each City/District at build-out using each member agency's planning and population information. The existing peaking factors from Table 4-2 were applied to these future wastewater flows for the build-out trunk sewer capacity analysis.

Table 4-3 Future Wastewater Flows (Average Daily Flows)

City or District	Build-out Population	Build-out Flows (mgd)
Arroyo Grande	20,000	1.65
Grover Beach	16,268	1.34
Oceano Community Services District	9,601	0.79
Total	**45,869**	**3.83**

4.4 Arroyo Grande Tract Map Development Update

An updated tract map of Arroyo Grande enabled more conclusive flow projections (see Table 4-5, and Figure 4-4). The relevant issues are as follows:

- Although all but one(see #24 on Fig 4-4) of these developments are consistent with the Land Use Map of the Arroyo Grande General Plan, some of these developments are not projected by the Arroyo Grande Wastewater Master Plan.
- Flow additions by developments upstream of LS1, West AG, and East AG showed minor variances in the flow allocations projected by the AGWWMP.
- Present design upgrade plans to LS1 pumps will not exceed the existing pump outflow.
- LS1 and West Arroyo Grande wastewater flows are conveyed by the SSLOCSD Sewer Farm Trunk System, which has identified concerns (see section 5).
- East Arroyo Grande wastewater flows are conveyed by the SSLOCSD Cherry Avenue and Southside Trunk System.

Table 4-4 summarizes wastewater flow additions that will be contributed by developments shown by the updated tract map (see Table 4-5 for the full description). The Projected Average Flows account for current developments constructed or soon to be constructed. Although this data would indicate an excess of flows, it must be considered that the projections made by the AGWWMP are going to vary from the actual planned developments. Flow contributions from the updated tract map also shows that the Future Total Average Daily Flow projected by the AGWWMP has not been exceeded. For the purpose of this study, it will be assumed that these flows will add to the Future Total Average Daily Flow projected by the AGWWMP. With this assumption, flows from East Arroyo Grande will not impact the Southside Trunk System, but flows from West Arroyo Grande will impact the 18" Bakeman Lane Trunk Sewer (see Section 5) within the Sewer Farm Trunk System.

Table 4-4 – Arroyo Grande Updated Flow Additions

Upstream Area	**Projected Average Flows (gpd)** (unaccounted by AGWWMP projections)
Lift Station 1	35,729
West Arroyo Grande	7,338
East Arroyo Grande	6,900
Unaccounted Total Average Flows (gpd)	**49,967**
Existing Total Average Daily Flow (gpd) (stated in AGWWMP)	**1,260,000**
Future Total Average Daily Flow (gpd) (projected by AGWWMP)	**1,650,000**
Future Total Average Daily Flow (gpd) (adjusted per the updated flow additions)	**1,700,000**

5. WASTEWATER TRUNK SEWER SYSTEM ANALYSIS

5.1 Trunk Sewer System Model

An Excel based spreadsheet program developed by Wallace Group was used to evaluate existing and future flows to the trunk sewer system. This spreadsheet program utilized Manning's Equation for Circular channel flow in conjunction with information from the Circular Channel Ratios[1] graph for d/D vs. Q/Qfull. This graph relates the ratio of depth of flow to the diameter of pipe (d/D) and the ratio of the actual flow rate to the full capacity flow rate (Q/Q_{full}).

Appendix C displays the existing and future flows to the system.
Appendix F, Table 1 - displays the existing flow data spreadsheet for the represented agencies.
Appendix F, Table 3 - displays the future flow data spreadsheet for the represented agencies.

5.2 Analysis and Deficiencies

Design criteria for the gravity sewer analysis recommends a maximum allowable flow depth ratio (d/D - ratio of depth of flow over diameter of pipe) of 0.90 for peak hour wet weather flow. This design criteria is acceptable for large diameter trunk lines (over 12"); however design judgement is required for each particular case. This design criteria is also consistent with that derived in the Arroyo Grande Wastewater Master Plan.

5.2.a Flow Impacts and Analysis

Analysis of the trunk sewer system was viewed under existing and future flow conditions.

- Existing Conditions:
  - Oceano - analysis shows no flow/capacity issues.
  - Arroyo Grande -
    - analysis shows flow conditions exceeding 0.90 d/D at Fair Oaks Ave near Hwy101 (Appendix F, Table 1, line 48 -52) at PHWWF.
    - 18" Bakeman Lane trunk sewer (Appendix F, Table 1 line 78 - 83) analysis does not show the d/D over 0.90. However, there are potential capacity issues with the trunk line in this reach. District staff[2] has reported a sag on this line. This sag has been substantiated by recent video of this reach of sewer. Recommendations for this Bakeman Lane trunk line are discussed in section 6.
  - Grover Beach - analysis shows the 18" trunk line (beginning at the intersection of Manhattan Street and Pacific Blvd to the corner of Coolidge Drive and Norswing Street) with a d/D over 0.80 (See Appendix F, Table 1, line 110 - 115) at PHWWF. All the flows from Grover Beach converge at manhole #340 (See Appendix F, Table 1, line 115).

[1] From Civil Engineering Reference Manual 7th Edition Appendix 19.C

[2] Jeff Appleton, the Superintendent of the District WWTP

- Future Conditions:
  - Analysis of future conditions was conducted by determining the location of future growth and development from land use and zoning information. Locations of future flow additions were then introduced into the trunk sewer system accordingly. Such flows are shown on Figure 5-1 and are discussed as follows:

    - Oceano
      - future flow additions are observed to enter the Southside Trunk Sewer near Halcyon Road and Highway One. These flows would be conveyed by the 27" and 30" trunk lines along Nipomo Street and Highway One to the Treatment plant.
      - The District Trunk Sewer lines within Oceano have adequate capacity for buildout flows.

    - Arroyo Grande
      - 18" Bakeman Lane trunk line(Appendix F,Table 3 line 79- 83) d/D is over 0.90 at this stretch.
      - Other future flows are observed to enter the 27" trunk line (Southside Trunk Lines) at Halcyon Road at East Oceano.
      - The Southside Trunk lines show adequate design flow capacity.

    - Grover Beach
      - Future flows enter the 18" trunk line at Manhattan Street and Pacific Blvd (Appendix F, Table 3, line 110 - 115).
      - Further analysis of this stretch of trunk line shows surcharging in MH# 340 where all the flows converge.
      - Computer modeling shows surcharging at a height of about 2.5' from the invert of the manhole; this will raise the water level about 12" above the pipe crown during peak hour wet weather flow conditions.

5.2.b Gravity Flow Conditions

Since the impact of the lift station pumps are intermittent in nature, the system was appropriately analyzed with the lift station pumps cycling on and off. The analysis of the trunk sewer system was based on Peak Hour Wet Weather Conditions along with plug flows by various lift stations within the system (refer to Appendix E for lift station locations). A special analysis was considered with flow conditions that do not include the plug flows of these various lift station pumps. This analysis is displayed in Appendix F, Table 2 for Existing Conditions and Appendix F, Table 4 for Future Conditions. Although these conditions do not occur often, this analysis must be considered since it shows a picture of what conditions look like without the short cycles of increased flows that the lift stations discharge. Gravity flow conditions may be simulated if variable frequency drives (VFD) were installed in the upstream Arroyo Grande Lift stations. VFDs control the lift station motor so that the pumps continuously run to match flow output to flow input.

5.3 Conclusions / Recommendations

Overall results show that the capacities of District trunk lines for existing and future flows are adequate, except for three potential problem areas (see Appendix D for the map that identifies these areas) as follows:

- 18" trunk line beginning at the corner of Manhattan Street and Pacific Blvd in Grover Beach
  - This trunk line shows existing flows which approach the limits of design flow capacity during peak hour wet weather flow. Future analysis shows the potential for surcharging at manhole #340. Solutions such as decreasing the I/I in the trunk sewer system, should be investigated to abate this future problem. Also, flow monitoring is recommended to confirm the hydraulic peaking factors used in this study. Once the flow monitoring confirms the accuracy of the hydraulic model, further recommendations will need to be made at that time.

- 18" trunk line (Sewer Farm Trunk Line) at Bakeman Lane near the Oceano/West Arroyo Grande border
  - This trunk line is deep, around 25' at one point, and is located in an easement surrounded by a dense residential development and improvements in the easement. Along with these challenges, the trunk line is also reported to be sagging, and there is debris in the line restricting flow. This study recommends immediate solutions to mitigate this problem. *See the full discussion of this recommendation in chapter 6.*

- 12" trunk line at Fair Oaks lane near Hwy 101 in Arroyo Grande.
  - This trunk line is owned by the City of Arroyo Grande. A capital improvement plan for this stretch of trunk line is outlined in the Arroyo Grande Wastewater Master Plan, adopted November 13, 2001.

Recommendations:

- 2300-ft of 12" VCP Trunk Line along Fair Oaks Ave near Hwy 101 at Arroyo Grande needs to be upgraded by the City of Arroyo Grande, as recommended in the Arroyo Grande Wastewater Master Plan.

- 18" trunk sewer line near Bakeman Lane
  - Debris removal and pipe cleaning.
  - Flow monitoring upstream and downstream of the vicinity of the sag should be performed to observe the hydraulic conditions during peak flows.
  - Possible construction of a by-pass relief sewer should be considered if these maintenance measures do not mitigate the problems. *See the full discussion of this recommendation in chapter 6.*
  - The City of Arroyo Grande has a disposal station that is located upstream of the 18" trunk sewer line near Bakeman Lane. A new location to receive these flows through the Southside trunk system should be considered; a possible location is at Valley Road near Fair Oaks Ave.

- Video of District trunk system – Video of the trunk system was filmed during February 2004, but was only partially completed because of manhole inaccessibility within certain areas of the system – approximately 30 manholes are inaccessible. Appendix H shows a map of current sewer video information.

- Flow monitoring – conduct flow monitoring at various locations to verify modeled flows and assumptions. For example, Grover Beach MH#340 should be monitored where all the flows from Grover Beach converge in the 18" trunk line. Grover Beach has grown considerably in the last 3 years and updated wastewater flow data is needed.

- Work with each respective entity (Oceano Community Services District, City of Arroyo Grande, City of Grover Beach) to implement a comprehensive infiltration/inflow (I/I) program to reduce wet weather flows by 25% or more. The City of Arroyo Grande's Wastewater System Master Plan calls for inflow studies upstream of Lift Station #3 in its Capital Improvement Plan. Such programs are required by the Regional Water Quality Control Board in the Districts existing waste discharge requirements.

- Variable Frequency Drives (VFD) be installed in lift stations that are upstream of the 18" trunk sewer line near Bakeman Lane. *See more detailed discussion of this recommendation in section 6.6.*

It is intended that the findings in this report will enable staff to proceed with recommendations that will ensure continued capacity within the District Trunk Sewer System.

Chapter 6 presents a more in depth discussion of the recommendations to the 18" trunk sewer located near and parallel to Bakeman Lane in the form of a feasibility study.

6. BAKEMAN LANE BY- PASS RELIEF TRUNK SEWER FEASIBILITY STUDY

Within the SSLOCSD trunk sewer system, there are observed flow capacity problems within the stretch of trunk lines within the Sewer Farm Trunk system near Bakeman lane that extends on through The Pike. Results from the Arroyo Grande Wastewater Master plan (AGWWMP) , this Trunk Sewer Capacity analysis , and observations and analysis from SSLOCSD staff, indicate the need to restore trunk sewer capacity in this area. The 18” Bakeman trunk line conveys all of the sewage flows from West Arroyo Grande. A solution for continued flow capacity is needed to preserve existing capacity, and accommodate future developments that will be serviced by this stretch of trunk sewer. Staff was authorized by the Board to conduct a feasibility study for improving the 18” Bakeman Lane trunk sewer line.

6.1 Alternatives

The following alternatives assume that the 18" Bakeman Lane Trunk sewer will either need to be replaced or that a by-pass relief sewer be constructed.

A common approach to solving sewage capacity flow problems within trunk mains is to construct a relief sewer main parallel to the problem trunk main. This conventional alternative is not feasible in this case because the vicinity of the Bakeman Lane trunk sewer is virtually inaccessible due to location and depth. A large portion of the trunk sewer is located within a mobile home park and the depths of this stretch of sewer approaches 30-feet. The first construction alternative considered is known as pipe bursting. The second alternative is construction of a relief trunk sewer that would by-pass the problem Bakeman Lane trunk sewer line with another trunk sewer along South Elm Street and the Pike. These alternatives are discussed below.

- Alternative 1 - Pipe Bursting

  Pipe bursting would make it possible to upgrade the existing sewer from 18" to a 21" diameter HDPE gravity sewer pipe and still meet the slope requirements. This method breaks the existing pipe and pulls the replacement pipe in place of the old. This alternative, although possible, does not appear to be feasible in this case. The drawbacks are summarized in the following:
    - The geotechnical report shows highly compacted sand that would make pipe bursting unfavorable.
    - The pipe bursting method, when employed in densely pack material, may adversely affect the residences nearby due to possible cracking of siding and drywall from vibrations.
    - Inaccessibility of the manholes are a major drawback since construction will require that these manholes be accessed.
    - This construction method will not repair the sag problem.

- Alternative 2 - By-pass relief sewer

The most feasible alternative is to construct a by-pass relief sewer in an alternative alignment. Since this is a proposed by-pass relief sewer trunk line, it is intended that the existing 18" trunk line remain in service.

The remainder of this chapter summarizes the feasibility analysis of Alternative 2. The proposed alignment of the Bakeman Lane by-pass relief gravity sewer begins at the corner of Fair Oaks and South Elm Street, proceeding south along South Elm Street, then at the intersection of South Elm and The Pike, proceed west along The Pike until it ties in to the sewer manhole near Tamara Street (the proposed end of connection). Please refer to the attached Figure 6-1. There does not appear to be any other feasible alignments. Other alignments would traverse residential areas, and/or would extend length and thus reduce flow capacity and velocities in the trunk sewer.

6.2 General Site Observations

These observations were made on April 2, 2004, Friday between 9:30am and 10:30am:

- At Fair Oaks Ave and South Elm Street, there is a park to the west. The existing trunk line proceeds west from this intersection. South Elm Street is a 4 lane commercial street; ac pavement is in good condition; in fact, the City of Arroyo Grande overlaid this road within the last two years. Mainly condominiums and apartments are on both sides of the street. The street slopes gently in the southerly direction.

- Southbound South Elm Street slopes upward as it crosses Farroll Ave then downward as it crosses Pacific Pointe Way until the intersection at The Pike.

- At The Pike and South Elm Street, the proposed alignment continues westbound along The Pike. The Pike is a 2 lane street with bike lanes on both sides; ac pavement is in good condition (this road has also been overlaid within the last two years) lined on both sides with residential housing.

- The existing trunk sewer MH where the proposed by-pass relief alignment would connect is located at The Pike near Tamara St, in front of North Oceano Elementary School.

- Tamara Street and 23rd Street are both narrow 2 lane residential streets; ac pavement is in good condition. Alignments down these streets were considered undesirable.

- South Elm Street and The Pike are the recommended alignments for the proposed by-pass relief sewer; other streets were investigated but access was limited.

- Utility maps show the width of the South Elm Street right-of-way as 80' and the width of the Pike right-of-way varies from 50' to 70'.

6.3 Utility Issues

The following summarizes utility information within the proposed sewer alignment.

Water utilities:

- The 8" ACP Lopez Water Line runs southbound along the western side of South Elm Street and at the intersection of The Pike proceeds westbound along the northern side of The Pike.
- On South Elm Street, a 10" Arroyo Grande Water Main runs parallel to the 8" Lopez line and proceeds east at the South Elm/The Pike intersection.
- The 6" Oceano water main connects to the 8" Lopez line at South Elm and Lancaster Dr. and both the Oceano 6" main and the 8" Lopez line continues southbound then proceeds westbound at the South Elm/ The Pike intersection. The 6" main runs along the northern side and the 8" Lopez line along the southern side of The Pike.

Sewer Utilities:

- A 10" VCP and 8" VCP gravity sewer run along most of South Elm Street.
- A 8" VCP gravity sewer runs along The Pike.

Gas Utilities:

- Gas lines run along the entire lengths of interest for both South Elm Street and The Pike.

PG&E Utilities:

- There are underground power lines along South Elm Street. The number and location of these lines must be verified before construction.
- There are no underground power utilities along The Pike.

These utility locations are schematically depicted on the utility drawings collected from each utility agency. The exact locations would need to be verified during detailed design.
Although there are a moderate amount of utilities within this proposed alignment, there is adequate space for design and placement of a new trunk sewer alignment within the road rights-of-way.

6.4 General Analysis

Table 6-1 presents the Tract Map update for Arroyo Grande which shows the developments that are either under construction or are making progress towards construction. Except where noted, these developments follow the Land Use and Zoning map of the Arroyo Grande General Plan 2001, which was the data referenced by the Arroyo Grande Wastewater Master Plan to estimate future sewer flows. In the area of interest, the updated AG tract map varies little with the 2001 AG General Plan; therefore, the hydraulic sewer analysis from the AG Wastewater Master Plan and the SSLOCSD Trunk Sewer Study can be applied to this study.

Table 6-1 – Developments at West Arroyo Grande[1]

Development	Location	Status
Long's Drugs, Starbucks, Panda Express	Courtland St and Grand Ave, SE corner	Under Construction
Santa Lucia Bank	Courtland St and Grand Ave, NW corner	Under Construction
Tract 2338 – 26 SFR homes	Stonecrest Dr and El Camino Real	Under Construction
Commercial Building	El Camino Real, north of Brisco Rd	Under Construction
Tract 2236 – 20 SFR homes	Rodeo Dr. north of West Branch St.	Plan Check
Tract 1998 – 40 SFR homes [2]	La Canada and James Way	EIR Review[2]
20 Condos	James Way, east of Oak Park Blvd	Plan Check
40 Senior Apartments	Camino Mercado north of West Branch	Approved
5 Professional office bldgs	Camino Mercado near West Branch St.	Plan Check
Tract 2240 – 9 units	South Elm St. near Fair Oaks Ave.	Completed
Tract 2471 – 9 SFR homes	Grand Ave between Oak Park Rd and Courtland St.	Plan Check
108 Senior Apartments	Courtland St between Brighton and Grand Ave	Plan Check
Tract 2532 – 8 units	Ash St, east of South Elm St	Plan Check
Tract 2505 – 47 units	Ash St near Courtland St	Plan Check

Notes:
1. These flows will have influence on the Bakeman Lane Trunk Sewer.
2. The Arroyo Grande Wastewater Master Plan, adopted in November 2001, designates this as open space. Assuming that this subdivision will be approved, Appendix G shows an additional 7000 gallons per day added to the Future flow analysis. These flows enter the SSLOCSD trunk system at Fair Oaks and South Elm Street; which means that these flows would flow into the proposed by-pass relief trunk line or existing Bakeman Lane trunk.

Table 6-2 summarizes the existing and proposed flows through the trunk system.

Flows enter the 18" Bakeman trunk line from two main areas (see Figure 6-1):

1. At the Fair Oaks/South Elm Street connection
2. At the connection where the 18" trunk line changes direction from west to south which is at the northeast corner of Tract 2310.

Table 6-2 – Trunk Sewer Conditions with Future Peak Flows[1]

Trunk Sewer and Conditions	Peak Flow (gpm)
Future flows to Bakeman Ln 18" Trunk Sewer	2000[1,5]
18" Bakeman Ln Trunk sewer with S. Elm St/The Pike By-pass Relief Trunk in operation[1]	900[2]
Proposed South Elm St/The Pike By-pass Relief Trunk Sewer[3]	1100[4]

Notes:
1. These peak flows are future flows projected by the Arroyo Grande Wastewater Master Plan, adopted November 2001.
2. These are projected future flows that would continue to flow through this existing trunk line; since these flows connect downstream from where the proposed by-pass relief sewer alignment would connect.
3. See Appendix G for hydraulic analysis for each proposed trunk sewer diameter options.
4. These are the future flows projected by the Arroyo Grande Wastewater Master Plan that flows to the connection point of the proposed by-pass relief trunk line.
5. These are what the future flows would be to this existing 18" trunk line if no by-pass relief sewer were constructed.

Table 6-3 - General Information for Proposed By-Pass Relief Sewer Alignment

	Location	Approximate Top of Grade Elevation (ft)	Approximate Invert Elevation (ft)
Beginning of by-pass	South Elm / Fair Oaks Ave	78.0	73.5
End of by-pass	The Pike (near Tamara St)	83.5	60.2

The information in Table 6-3 was obtained from SSLOCSD Trunk Sewer Plan and Profile record drawings.

1. The total estimated length of the proposed by-pass trunk line is 3700 linear feet.
2. The elevation drop of the manhole inverts at the beginning and end of the proposed alignment is estimated at 13 ft. This would give an average slope of about 0.35%.

Appendix G at the end of this report presents a hydraulic analysis for trunk sewer options of various diameters for both existing and future conditions. It is recommended that a trunk sewer diameter of 21" be used; this allows more capacity, but also provides full build-out capacity should the Bakeman trunk sewer fail in the future. The SSLOCSD trunk system diameter reverts to 18" at the connection point at The Pike/Tamara Street. Even though the proposed by-pass relief sewer is a larger diameter, the hydraulic analysis as shown in the SSLOCSD Trunk Sewer Capacity Study shows that there is adequate flow capacity within the existing trunk sewers from this point of connection to the Wastewater Treatment Plant. The larger diameter proposed by-pass relief sewer will allow for future flows as shown on Table 6-1.

The criteria for capacity is the ratio of depth of flow (d) to diameter of pipe (D) for peak flow. A d/D ratio of 0.90 is a recommended design criteria for peak flows within large diameter(18" and over) trunk sewers. Once the proposed by-pass relief trunk sewer is in place, the existing trunk sewer will convey peak flows at less than 50% of its current capacity. The reduced flow within the existing 18-inch trunk sewer will be well within its calculated design capacity; but, this condition will need to be monitored because the sagging problem will cause this stretch of sewer to behave differently from calculated hydraulic analysis. This sagging trunk line can be a maintenance issue because of solids deposition. Additional future developments that are out of scope of the current land use and zoning analysis from the Arroyo Grande Wastewater Master Plan are recommended to tie in

to the proposed by-pass sewer.

6.5 Cost Estimates

This sub-section presents the cost estimate for the by-pass relief sewer alignment.
Budget cost estimates were prepared for this project with the following assumptions:

- The Arroyo Grande Wastewater Master Plan, adopted November 2001, is referenced for estimating the gravity sewer construction costs.
- The costs are estimated in Year 2004 dollars with an Engineering News Record (ENR) construction cost index of 7311 (November 2004).

A. By-pass relief sewer alignment cost estimate

It is assumed that half of the South Elm Street right-of-way will need to be resurfaced at 1.5" thick overlay.

Table 6-5– Construction Cost Summary – By-Pass Relief Sewer Alignment

Pipe Diameter	Estimated Depth	Estimated Cost
21'	less than 10 feet	$160 /LF
21'	10 to 15 feet	$170 /LF
21'	over 15 feet	$200 /LF
Cost for 3,700-LF of Sewer Pipe		$740,000
Asphalt Re-Surfacing[1] @ $2.50 / SF		$370,000
Pavement Striping[2] @ $1.10 / LF		$4,070
Subtotal		$1,114,070
Contingency at construction 25%		$275,520
Design, Construction Management, Administration @ 40%		$445,630
TOTAL ESTIMATED CONSTRUCTION COST		$1,835,220

Note:
1. Based on County of SLO approved unit costs, adjusted for June 2004. Assumes AC grinding and 1.5" asphalt overlay of 40' wide (which is approximately half of the road) over the 3,700 length of road.
2. Based on County of SLO approved unit costs, adjusted for June 2004.

6.6 Conclusion

Future flow (Appendix F, Table 4) conditions for the existing 18" Bakeman Lane Trunk Line shows an acceptable 85% d/D at PHWWF when gravity flow conditions apply (i.e. upstream lift stations are off or the upstream lift station pump flow output equals flow input). As upstream lift station pumps cycle on and off at the flow rate of each particular lift station, a plug flow is generated which increases the anticipated PHWWF. Gravity flow conditions can be maintained if the lift station motors are controlled by variable frequency drives (VFD). In the case of the Bakeman Lane Trunk Sewer, upstream Lift Station 1 in Arroyo Grande contributes the most flows. At the time of this report, it is confirmed[1] that upstream Lift Station #7 will be abandoned and its flows converted to gravity flow. Design plans to upgrade Lift Station 1 are in progress and a VFD will be included in the design.

The City of Arroyo Grande has a disposal station that is located upstream of the 18" Bakeman trunk sewer. Relocation of this disposal site should be considered. A location that would convey these flows through the east trunk system is preferable. Such a location is at Valley Road near Fair Oaks Ave.

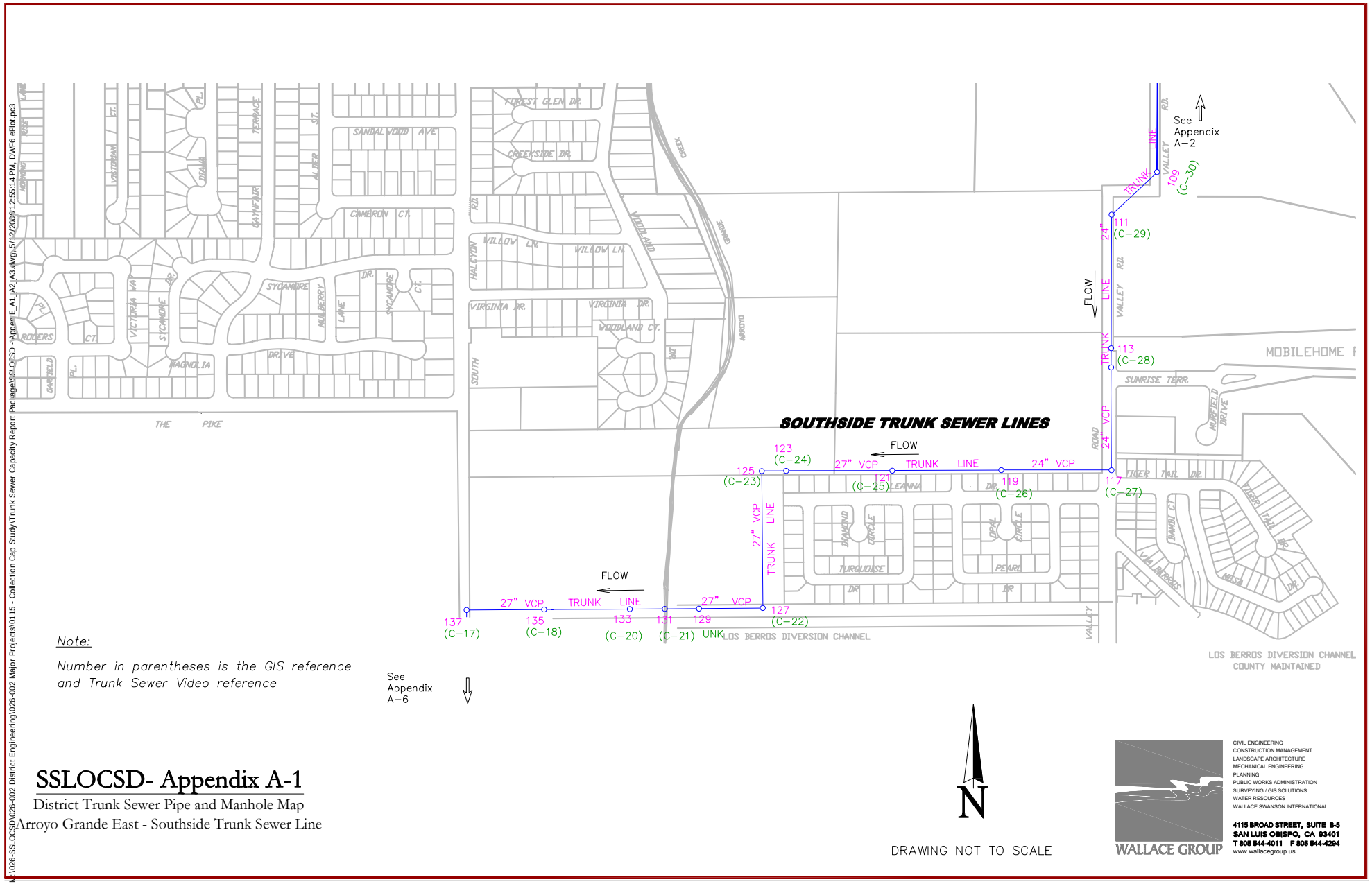
The Bakeman Lane trunk sewer slope is very flat (0.0184%) and it also contains a sag. Sewer video information show that debris is causing up to 50% blockage at some sections. Inaccessibility issues make it difficult to service these areas. Such conditions also make it difficult to predict the hydraulic conditions within this trunk sewer. If these conditions can be mitigated, new construction may be avoided. It is highly recommended that efforts to remove this debris be pursued as soon as possible.

This chapter concludes that construction of a by-pass sewer alignment (along South Elm Street and The Pike) is feasible – although costly. Utility coordination and traffic control are issues that can be addressed in more detail during design phase. The estimated total costs (see Table 6-5) for this gravity by-pass sewer line by conventional trench construction is about $1,835,220.

Flow capacity to the 18" Bakeman Lane trunk line needs to be improved, but the urgency of this improvement is driven by additional wastewater flows from new developments within the West Arroyo Grande area. The 18" trunk line can function marginally if no new additional flows impact this line.

[1] Confirmed by Shane Taylor, City of Arroyo Grande Public Works Superintendent, June 29,2004

Appendices



Note:

Number in parentheses is the GIS reference and Trunk Sewer Video reference

SSLOCSD- Appendix A-1

District Trunk Sewer Pipe and Manhole Map

Arroyo Grande East - Southside Trunk Sewer Line

N

DRAWING NOT TO SCALE

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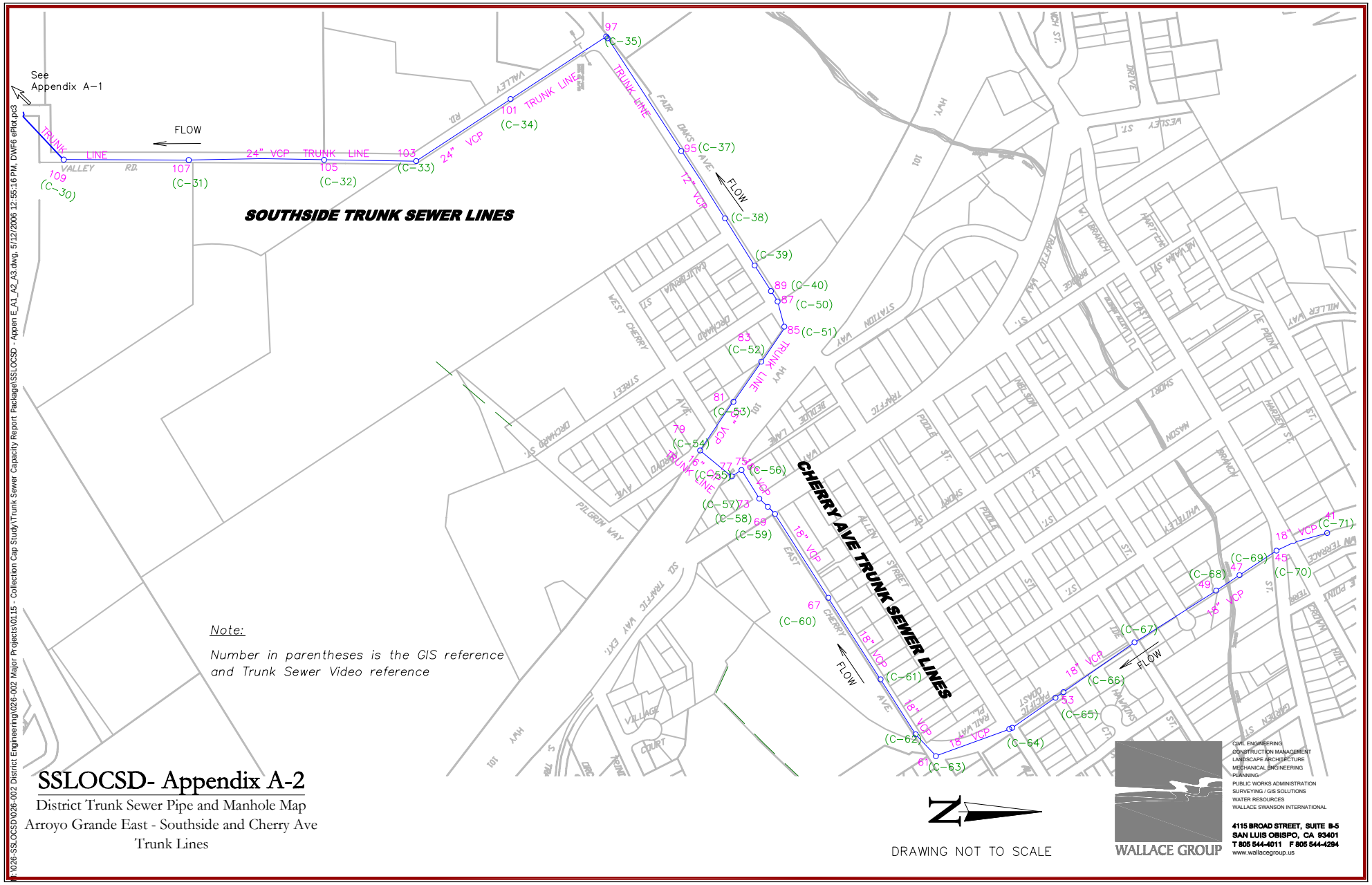

SSLOCSD- Appendix A-2

District Trunk Sewer Pipe and Manhole Map

Arroyo Grande East - Southside and Cherry Ave Trunk Lines

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Note:

Number in parentheses is the GIS reference and Trunk Sewer Video reference

SSLOCSD- Appendix A-3

District Trunk Sewer Pipe and Manhole Map

Arroyo Grande West - Sewer Farm Trunk Line

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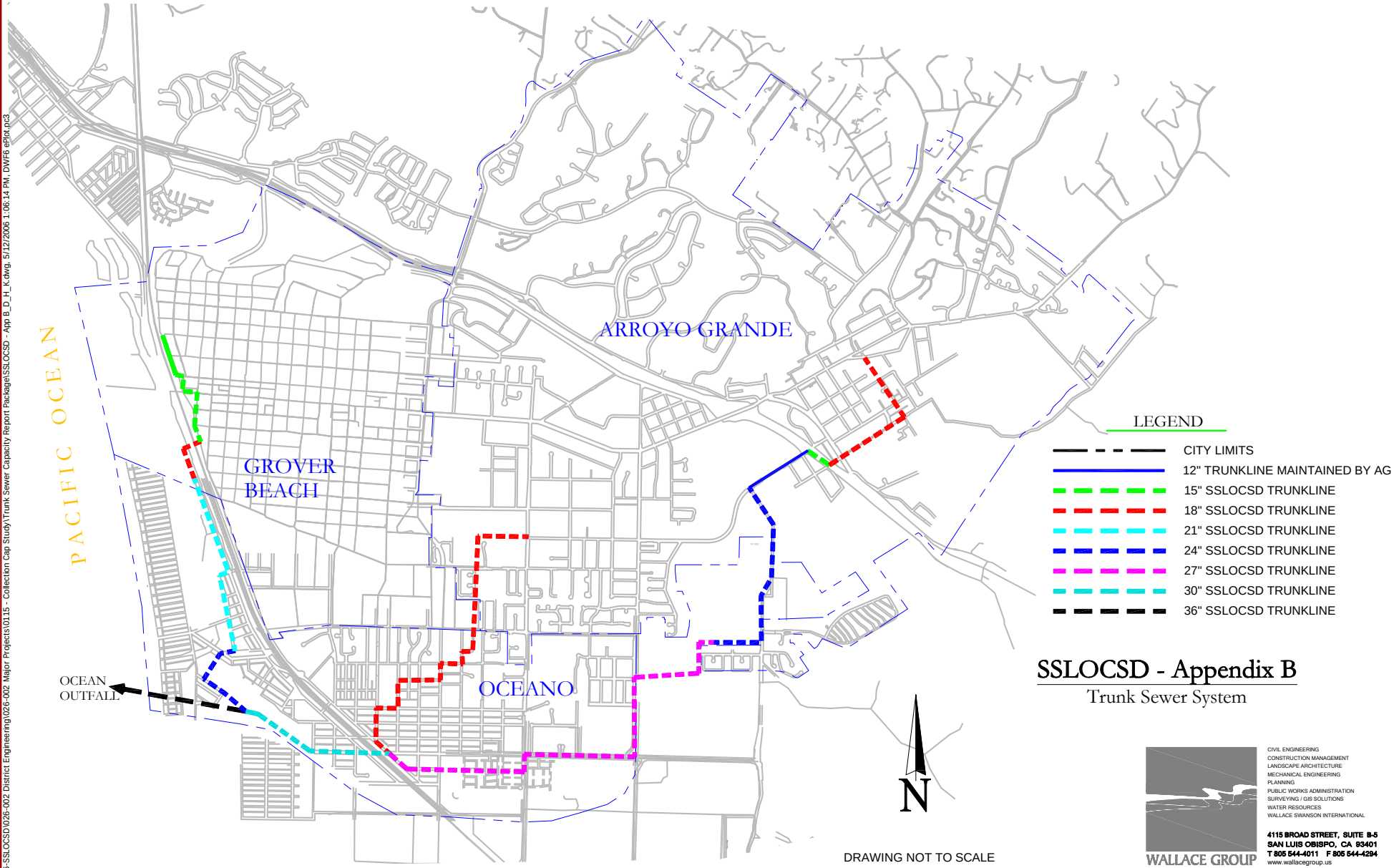

SSLOCSD - Appendix B

Trunk Sewer System

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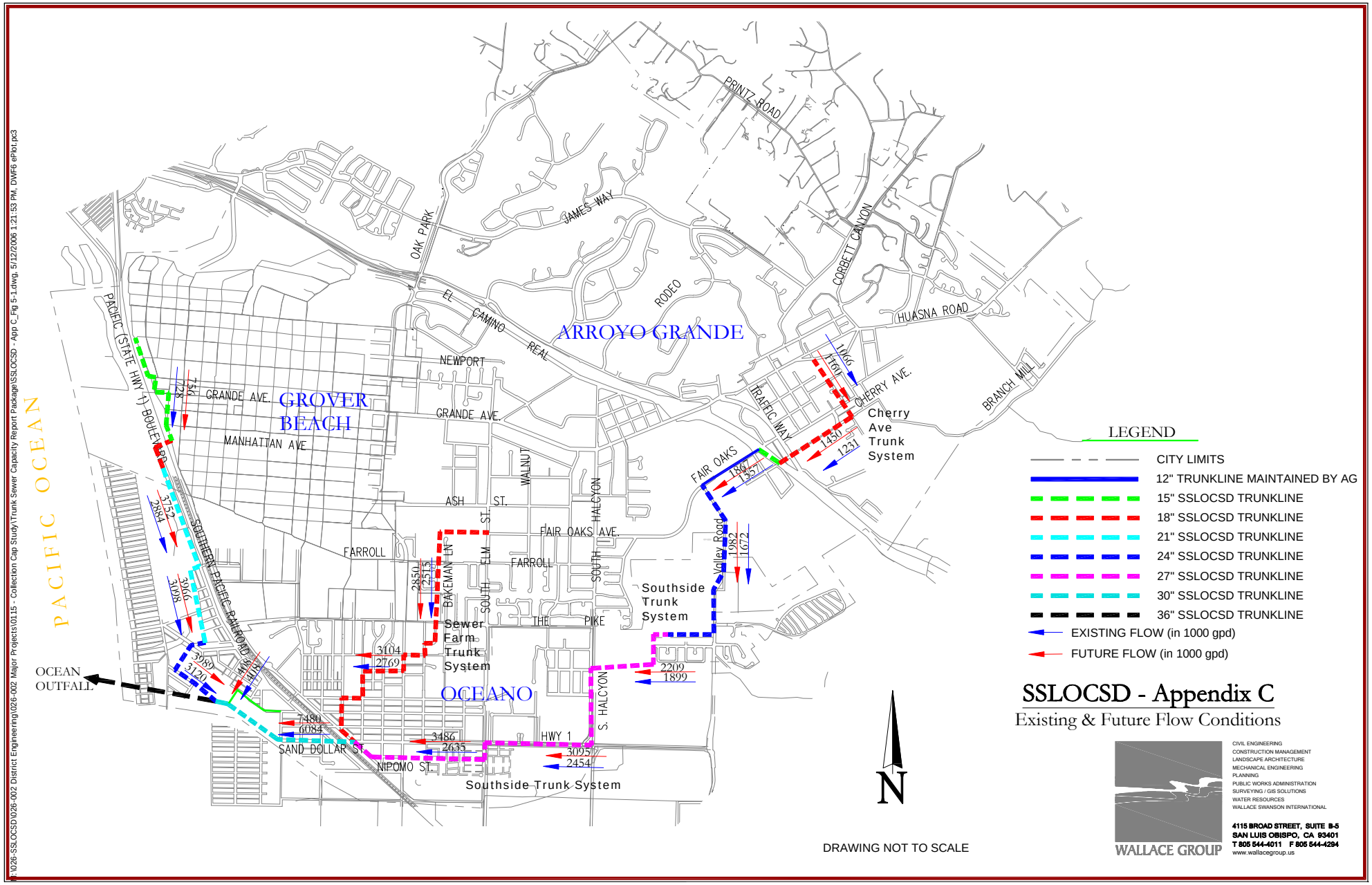

SSLOCSD - Appendix C

Existing & Future Flow Conditions

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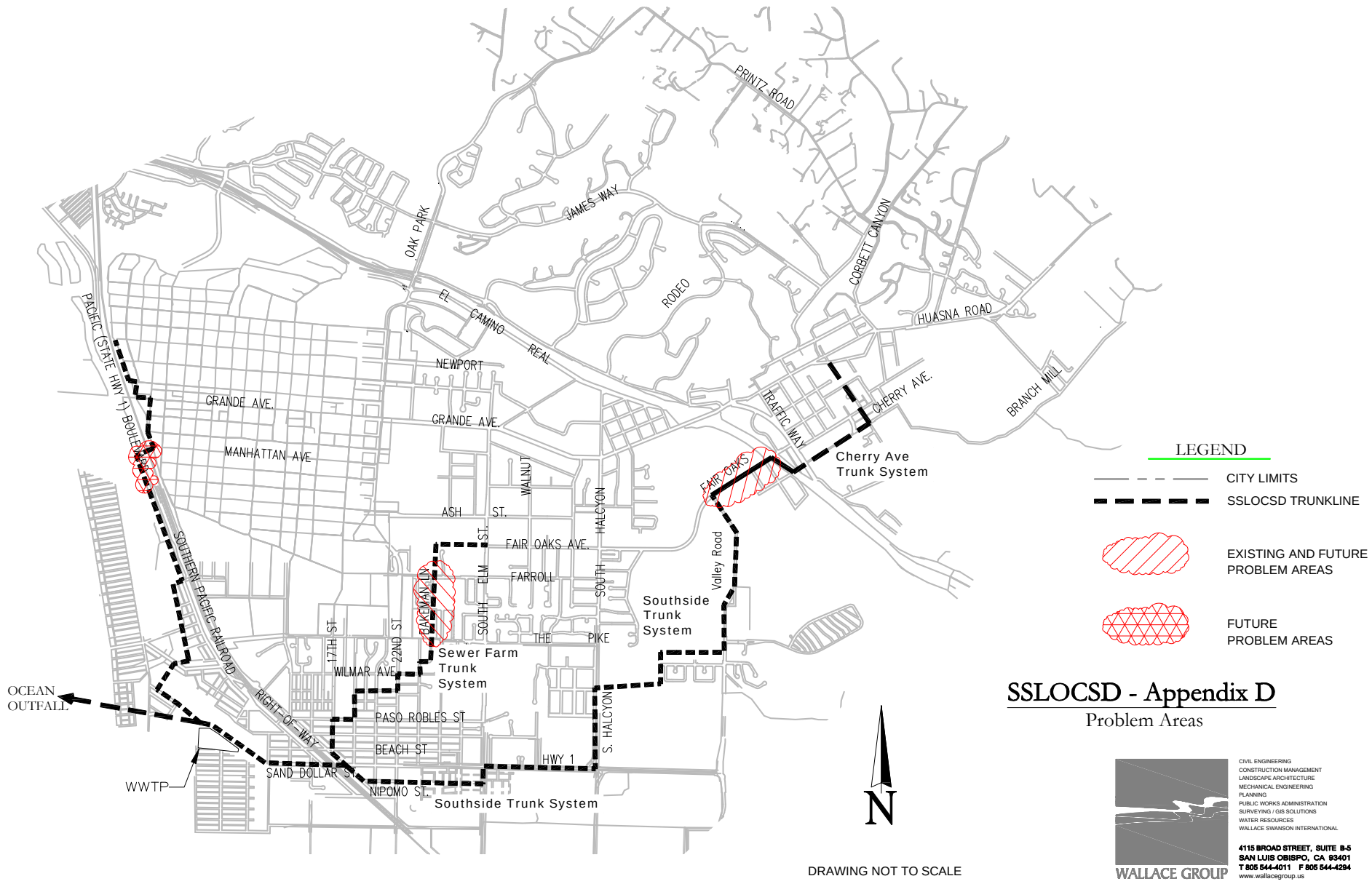

SSLOCSD - Appendix D

Problem Areas

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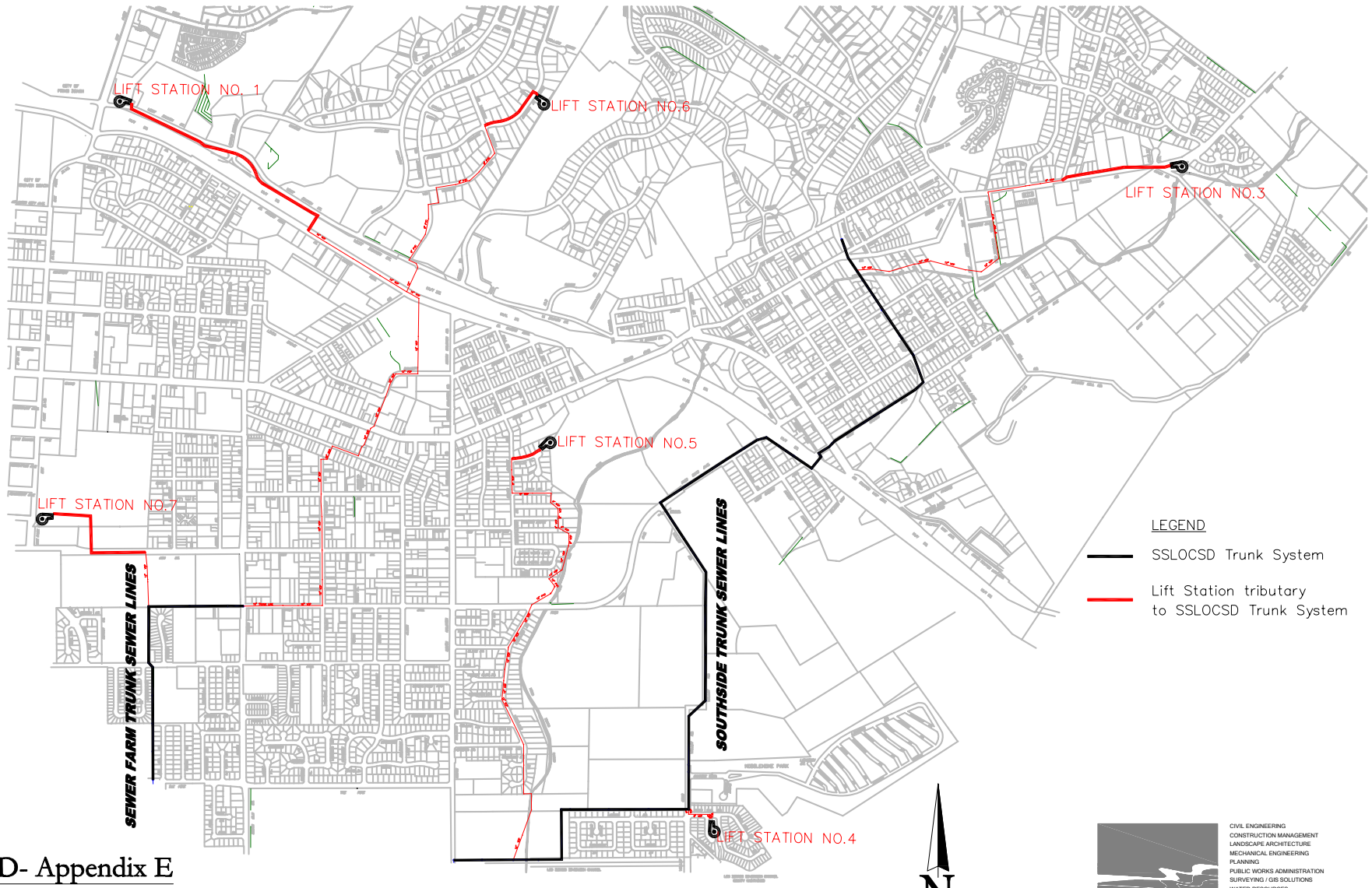

SSLOCSD- Appendix E

Location of Lift Stations
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			From		To		A	B	C	D	E		F	G		H		I	J	K	L	M	N	O	P	Q	R
Line #	Location	Description	Road	Manhole	Road	Manhole	Distance (ft)	Diameter (ft)	Area (ft^2)	Slope (ft/ft)	Avg. Flow (gpd)	Added Ave Flows (gpd)	Avg. Flow (cfs)	Peak Flow (gpd)	Peak Flow (gpm)	Peak Flow (cfs)	Max Capacity (50%)	Qfull	Velocity(ft/s)	Q_{avg}/ Q_{full}	Q_{peak}/ Q_{full}	d/D_{avg} flow	d avg flow (in)	d/D_{peak} flow	d peak flow (in)	Velocity Avg Flow (ft/s)	Velocity Peak Flow (ft/s)
1	WWTP		Honolulu	A1-A		A	509.16	2.50	4.9086	0.0025	3278336		4.918	9,835,008	6,830	14.753	8.911	17.821	3.631	0.276	0.828	0.356	10.680	0.689	20.670	3.050	4.037
2	Oceano			A		B	530.10	2.50	4.9086	0.0025	2027836		3.042	6,083,508	4,225	9.125	8.911	17.821	3.631	0.171	0.512	0.270	8.100	0.504	15.120	2.658	3.631
3	Oceano			B		C	809.32	2.50	4.9086	0.0025	2027836		3.042	6,083,508	4,225	9.125	8.911	17.821	3.631	0.171	0.512	0.270	8.100	0.504	15.120	2.658	3.631
4	Oceano			C		TR1-B	593.03	2.50	4.9086	0.0025	2027836		3.042	6,083,508	4,225	9.125	8.911	17.821	3.631	0.171	0.512	0.270	8.100	0.504	15.120	2.658	3.631
5	Oceano		Sand Dollar	TR1-B	Railroad	1	622.00	2.50	4.9086	0.0025	2027836	9000	3.042	6,083,508	4,225	9.125	8.911	17.821	3.631	0.171	0.512	0.270	8.100	0.504	15.120	2.658	3.631
6	Oceano		Railroad	1		2	173.53	2.50	4.9086	0.0025	2018836		3.028	6,056,508	4,206	9.085	8.911	17.821	3.631	0.170	0.510	0.260	7.800	0.500	15.000	2.600	3.631
7	Oceano			2	Hwy 1	3	350.29	2.50	4.9086	0.0025	2018836		3.028	6,056,508	4,206	9.085	8.911	17.821	3.631	0.170	0.510	0.260	7.800	0.500	15.000	2.600	3.631
8	Oceano	Southside Trunk Lines	Hwy 1	3		TR7-C	752.60	2.25	3.9760	0.0049	902370	24200	1.354	2,707,110	1,880	4.061	9.410	18.819	4.733	0.072	0.216	0.176	4.752	0.308	8.316	2.622	3.692
9	Oceano	Southside Trunk Lines	Nipomo St	TR7-C		4	632.90	2.25	3.9760	0.0058	878170		1.317	2,634,510	1,830	3.952	10.248	20.496	5.155	0.064	0.193	0.163	4.401	0.290	7.830	2.742	3.938
10	Oceano	Southside Trunk Lines		4		5	602.42	2.25	3.9760	0.0058	878170		1.317	2,634,510	1,830	3.952	10.248	20.496	5.155	0.064	0.193	0.163	4.401	0.290	7.830	2.742	3.938
11	Oceano	Southside Trunk Lines		5		TR8-A	636.61	2.25	3.9760	0.0042	878170		1.317	2,634,510	1,830	3.952	8.741	17.483	4.397	0.075	0.226	0.176	4.752	0.316	8.532	2.436	3.483
12	Oceano	Southside Trunk Lines		TR8-A		TR8-B	495.00	2.25	3.9760	0.0076	878170		1.317	2,634,510	1,830	3.952	11.762	23.523	5.916	0.056	0.168	0.150	4.050	0.260	7.020	3.017	4.236
13	Oceano	Southside Trunk Lines		TR8-B		TR8-C	424.55	2.25	3.9760	0.0076	878170	8000	1.317	2,634,510	1,830	3.952	11.731	23.462	5.901	0.056	0.168	0.150	4.050	0.260	7.020	3.009	4.225
14	Oceano	Southside Trunk Lines		TR8-C	Elm St	Q'1-A	391.00	2.25	3.9760	0.0076	870170		1.305	2,610,510	1,813	3.916	11.731	23.462	5.901	0.056	0.167	0.150	4.050	0.260	7.020	3.009	4.225
15	Oceano	Southside Trunk Lines	Hwy 1	Q'1-A		Q'1-Aa	89.45	2.25	3.9760	0.0069	870170		1.305	2,610,510	1,813	3.916	11.178	22.355	5.623	0.058	0.175	0.150	4.050	0.270	7.290	2.868	4.116
16	Oceano	Southside Trunk Lines		Q'1-Aa		Q1-A	200.15	2.25	3.9760	0.0020	870170	8000	1.305	2,610,510	1,813	3.916	6.018	12.036	3.027	0.108	0.325	0.215	5.805	0.392	10.584	1.925	2.688
17	Oceano	Southside Trunk Lines		Q1-A		TR9-A	476.62	2.25	3.9760	0.0020	862170	8000	1.293	2,586,510	1,796	3.880	6.018	12.036	3.027	0.107	0.322	0.215	5.805	0.392	10.584	1.925	2.688
18	Oceano	Southside Trunk Lines		TR9-A		TR10-A	532.31	2.25	3.9760	0.0020	854170	36250	1.281	2,562,510	1,780	3.844	6.018	12.036	3.027	0.106	0.319	0.215	5.805	0.386	10.422	1.925	2.652
19	Oceano	Southside Trunk Lines		TR10-A		6	412.57	2.25	3.9760	0.0020	817920		1.227	2,453,760	1,704	3.681	6.018	12.036	3.027	0.102	0.306	0.215	5.805	0.380	10.260	1.925	2.652
20	Oceano	Southside Trunk Lines		6		7	380.55	2.25	3.9760	0.0020	817920		1.227	2,453,760	1,704	3.681	6.018	12.036	3.027	0.102	0.306	0.215	5.805	0.380	10.260	1.925	2.652
21	Oceano	Southside Trunk Lines		7		8	375.65	2.25	3.9760	0.0020	817920		1.227	2,453,760	1,704	3.681	6.018	12.036	3.027	0.102	0.306	0.215	5.805	0.380	10.260	1.925	2.652
22	Oceano	Southside Trunk Lines		8		9	287.95	2.25	3.9760	0.0020	817920		1.227	2,453,760	1,704	3.681	6.018	12.036	3.027	0.102	0.306	0.215	5.805	0.380	10.260	1.925	2.652
23	Oceano	Southside Trunk Lines		9		9a	134.20	2.25	3.9760	0.0020	817920		1.227	2,453,760	1,704	3.681	6.018	12.036	3.027	0.102	0.306	0.215	5.805	0.380	10.260	1.925	2.652
24	Oceano	Southside Trunk Lines		9a		10	318.30	2.25	3.9760	0.0042	817920		1.227	2,453,760	1,704	3.681	8.762	17.524	4.408	0.070	0.210	0.176	4.752	0.308	8.316	2.442	3.438
25	Oceano	Southside Trunk Lines		10		11	426.80	2.25	3.9760	0.0042	817920		1.227	2,453,760	1,704	3.681	8.721	17.441	4.387	0.070	0.211	0.176	4.752	0.308	8.316	2.430	3.422
26	Oceano(AG flows in)	Southside Trunk Lines	Halcyon	11		137	853.10	2.25	3.9760	0.0042	817920		1.227	2,453,760	1,704	3.681	8.721	17.441	4.387	0.070	0.211	0.176	4.752	0.308	8.316	2.430	3.422
27	AG	Southside Trunk Lines		137		135	397.03	2.25	3.9760	0.0022	817920		1.227	2,453,760	1,704	3.681	6.354	12.709	3.196	0.097	0.290	0.202	5.454	0.364	9.828	1.982	2.723
28	AG	Southside Trunk Lines		135		133	399.23	2.25	3.9760	0.0022	817920		1.227	2,453,760	1,704	3.681	6.354	12.709	3.196	0.097	0.290	0.202	5.454	0.364	9.828	1.982	2.723
29	AG	Southside Trunk Lines	AG Creek	133	(inverse siphon)	131	163.15	1.50	1.7671	0.0025	632880		0.949	1,898,640	1,319	2.848	2.282	4.564	2.583	0.208	0.624	0.300	5.400	0.570	10.260	2.015	2.717
30	AG	Southside Trunk Lines		131		129	158.77	2.25	3.9760	0.0021	632880		0.949	1,898,640	1,319	2.848	6.181	12.362	3.109	0.077	0.230	0.176	4.752	0.324	8.748	1.723	2.500
31	AG	Southside Trunk Lines		129		127	301.76	2.25	3.9760	0.0021	632880		0.949	1,898,640	1,319	2.848	6.166	12.333	3.102	0.077	0.231	0.176	4.752	0.324	8.748	1.718	2.494
32	AG	Southside Trunk Lines		127		125	626.37	2.25	3.9760	0.0021	632880		0.949	1,898,640	1,319	2.848	6.166	12.333	3.102	0.077	0.231	0.176	4.752	0.324	8.748	1.718	2.494
33	AG	Southside Trunk Lines		125		123	123.68	2.00	3.1415	0.0025	632880		0.949	1,898,640	1,319	2.848	4.915	9.829	3.129	0.097	0.290	0.202	4.848	0.364	8.736	1.940	2.666
34	AG	Southside Trunk Lines		123		123a	131.82	2.00	3.1415	0.0025	632880		0.949	1,898,640	1,319	2.848	4.885	9.770	3.110	0.097	0.292	0.202	4.848	0.372	8.928	1.928	2.687
35	AG	Southside Trunk Lines		123a		121	344.85	2.00	3.1415	0.0059	632880		0.949	1,898,640	1,319	2.848	7.518	15.036	4.786	0.063	0.189	0.163	3.912	0.280	6.720	2.546	3.503
36	AG	Southside Trunk Lines		121		119	501.62	2.00	3.1415	0.0060	557280		0.836	1,671,840	1,161	2.508	7.601	15.202	4.839	0.055	0.165	0.150	3.600	0.260	6.240	2.468	3.465
37	AG	Southside Trunk Lines	Valley Road	119		117	527.49	2.00	3.1415	0.0048	557280		0.836	1,671,840	1,161	2.508	6.781	13.563	4.317	0.062	0.185	0.163	3.912	0.280	6.720	2.297	3.160
38	AG	Southside Trunk Lines		117		117a	326.84	2.00	3.1415	0.0047	557280		0.836	1,671,840	1,161	2.508	6.760	13.520	4.304	0.062	0.185	0.163	3.912	0.280	6.720	2.290	3.150
39	AG	Southside Trunk Lines		117a		113	278.00	2.00	3.1415	0.0064	557280		0.836	1,671,840	1,161	2.508	7.888	15.776	5.022	0.053	0.159	0.150	3.600	0.250	6.000	2.561	3.515
40	AG	Southside Trunk Lines		113		111	622.17	2.00	3.1415	0.0065	557280		0.836	1,671,840	1,161	2.508	7.925	15.849	5.045	0.053	0.158	0.150	3.600	0.250	6.000	2.573	3.532
41	AG	Southside Trunk Lines		111		111a	99.83	2.00	3.1415	0.0065	557280		0.836	1,671,840	1,161	2.508	7.931	15.861	5.049	0.053	0.158	0.150	3.600	0.250	6.000	2.575	3.534
42	AG	Southside Trunk Lines		111a		109	190.45	2.00	3.1415	0.0079	557280		0.836	1,671,840	1,161	2.508	8.736	17.473	5.562	0.048	0.144	0.130	3.120	0.243	5.832	2.592	3.804
43	AG	Southside Trunk Lines		109		107	622.84	2.00	3.1415	0.0079	557280		0.836	1,671,840	1,161	2.508	8.720	17.439	5.551	0.048	0.144	0.130	3.120	0.243	5.832	2.587	3.797
44	AG	Southside Trunk Lines		107		105	575.74	2.00	3.1415	0.0040	557280		0.836	1,671,840	1,161	2.508	6.178	12.355	3.933	0.068	0.203	0.163	3.912	0.300	7.200	2.092	3.068
45	AG	Southside Trunk Lines		105		103	442.64	2.00	3.1415	0.0040	557280		0.836	1,671,840	1,161	2.508	6.178	12.355	3.933	0.068	0.203	0.163	3.912	0.300	7.200	2.092	3.068
46	AG	Southside Trunk Lines		103		101	543.72	2.00	3.1415	0.0025	557280		0.836	1,671,840	1,161	2.508	4.915	9.829	3.129	0.085	0.255	0.189	4.536	0.340	8.160	1.802	2.591
47	AG	Southside Trunk Lines		101		97	555.54	2.00	3.1415	0.0025	557280		0.836	1,671,840	1,161	2.508	4.915	9.829	3.129	0.085	0.255	0.189	4.536	0.340	8.160	1.802	2.591
48	AG	Southside Trunk Lines	Fair Oaks	97		95	624.62	1.00	0.7854	0.0020	518880		0.778	1,556,640	1,081	2.335	0.692	1.385	1.763	0.562	1.686	0.528	6.336	1.000	12.000	1.791	1.763
49	AG	Southside Trunk Lines		95		89	783.35	1.00	0.7854	0.0074	518880		0.778	1,556,640	1,081	2.335	1.332	2.663	3.391	0.292	0.877	0.372	4.464	0.726	8.712	2.930	3.812
50	AG	Southside Trunk Lines		89		87	58.09	1.00	0.7854	0.0585	518880		0.778	1,556,640	1,081	2.335	3.744	7.488	9.535	0.104	0.312	0.215	2.580	0.386	4.632	6.064	8.352
51	AG	Southside Trunk Lines		87		85	122.12	1.00	0.7854	0.0025	518880		0.778	1,556,640	1,081	2.335	0.774	1.548	1.971	0.503	1.508	0.500	6.000	1.000	12.000	1.971	1.971
52	AG	Southside Trunk Lines		85		83	197.1	1.00	0.7854	0.0024	506976		0.760	1,520,928	1,056	2.281	0.758	1.517	1.931	0.501	1.504	0.500	6.000	1.000	12.000	1.931	1.931

Mannings coefficient: n=.015 is value for VCP see Appendix 19-A from CERM 7th Edition

Appendix F - Table 1
Existing Conditions

			From		To		A	B	C	D	E		F	G		H		I	J	K	L	M	N	O	P	Q	R
Line #	Location	Description	Road	Manhole	Road	Manhole	Distance (ft)	Diameter (ft)	Area (ft^2)	Slope (ft/ft)	Avg. Flow (gpd)	Added Ave Flows (gpd)	Avg. Flow (cfs)	Peak Flow (gpd)	Peak Flow (gpm)	Peak Flow (cfs)	Max Capacity (50%)	Qfull	Velocity(ft/s)	Q_{avg}/ Q_{full}	Q_{peak}/ Q_{full}	$d/D_{avg\ flow}$	$d_{avg\ flow}$ (in)	$d/D_{peak\ flow}$	$d_{peak\ flow}$ (in)	Velocity Avg Flow (ft/s)	Velocity Peak Flow (ft/s)
53	AG	Southside Trunk Lines		83		81	230.44	1.20	1.1309	0.0024	506976		0.760	1,520,928	1,056	2.281	1.233	2.466	2.181	0.308	0.925	0.380	5.472	0.762	10.973	1.910	2.469
54	AG	Southside Trunk Lines		81		79	277.4	1.25	1.2271	0.0021	506976		0.760	1,520,928	1,056	2.281	1.286	2.572	2.096	0.296	0.887	0.372	5.580	0.734	11.010	1.811	2.360
55	AG	Cherry Ave Trunk Lines		79		77	192.46	1.33	1.3892	0.0026	506976		0.760	1,520,928	1,056	2.281	1.689	3.377	2.431	0.225	0.676	0.316	5.043	0.599	9.560	1.925	2.587
56	AG	Cherry Ave Trunk Lines		77		75	54.75	1.33	1.3892	0.0032	506976		0.760	1,520,928	1,056	2.281	1.873	3.747	2.697	0.203	0.609	0.300	4.788	0.560	8.938	2.104	2.821
57	AG	Cherry Ave Trunk Lines		75		73	158.69	1.50	1.7671	0.0044	410208		0.615	1,230,624	855	1.846	3.027	6.055	3.426	0.102	0.305	0.215	3.870	0.380	6.840	2.179	3.002
58	AG	Cherry Ave Trunk Lines		73		69	103.01	1.50	1.7671	0.0050	410208		0.615	1,230,624	855	1.846	3.227	6.454	3.653	0.095	0.286	0.202	3.636	0.364	6.552	2.265	3.112
59	AG	Cherry Ave Trunk Lines		69		67	467.81	1.50	1.7671	0.0071	410208		0.615	1,230,624	855	1.846	3.846	7.691	4.353	0.080	0.240	0.189	3.402	0.332	5.976	2.507	3.552
60	AG	Cherry Ave Trunk Lines		67		61	902.65	1.50	1.7671	0.0039	410208		0.615	1,230,624	855	1.846	2.850	5.700	3.226	0.108	0.324	0.215	3.870	0.392	7.056	2.052	2.865
61	AG	Cherry Ave Trunk Lines		61		2189	199.48	1.50	1.7671	0.0025	355392		0.533	1,066,176	740	1.599	2.282	4.564	2.583	0.117	0.350	0.222	3.996	0.410	7.380	1.684	2.350
62	AG	Cherry Ave Trunk Lines		2189		53	439.03	1.50	1.7671	0.0020	355392		0.533	1,066,176	740	1.599	2.041	4.082	2.310	0.131	0.392	0.236	4.248	0.434	7.812	1.543	2.148
63	AG	Cherry Ave Trunk Lines		53		49	908.34	1.50	1.7671	0.0020	355392		0.533	1,066,176	740	1.599	2.041	4.082	2.310	0.131	0.392	0.236	4.248	0.434	7.812	1.543	2.148
64	AG	Cherry Ave Trunk Lines		49		47	132.01	1.50	1.7671	0.0030	355392		0.533	1,066,176	740	1.599	2.500	5.000	2.829	0.107	0.320	0.215	3.870	0.386	6.948	1.799	2.478
65	AG	Cherry Ave Trunk Lines		47		45	208.69	1.50	1.7671	0.0069	355392		0.533	1,066,176	740	1.599	3.791	7.582	4.291	0.070	0.211	0.176	3.168	0.308	5.544	2.377	3.347
66	AG	Cherry Ave Trunk Lines		45		41	252.36	1.50	1.7671	0.0024	355392		0.533	1,066,176	740	1.599	2.236	4.472	2.531	0.119	0.358	0.222	3.996	0.410	7.380	1.650	2.303
67	Oceano	Sewer Farm Trunk Lines	Front St.	3		TR2-B	157.70	1.50	1.7671	0.0040	1116466		1.675	3,349,398	2,326	5.024	2.897	5.795	3.279	0.289	0.867	0.364	6.552	0.718	12.924	2.794	3.679
68	Oceano	Sewer Farm Trunk Lines	17th	TR2-B		D1-A	497.30	1.50	1.7671	0.0168	1116466	132900	1.675	3,349,398	2,326	5.024	5.916	11.831	6.695	0.142	0.425	0.243	4.374	0.452	8.136	4.580	6.361
69	Oceano	Sewer Farm Trunk Lines		D1-A		D	374.66	1.50	1.7671	0.0174	983566		1.475	2,950,698	2,049	4.426	6.020	12.041	6.814	0.123	0.368	0.229	4.122	0.416	7.488	4.443	6.201
70	Oceano	Sewer Farm Trunk Lines	Paso Robles	D		F1-A	498.27	1.50	1.7671	0.0160	983566	36250	1.475	2,950,698	2,049	4.426	5.773	11.546	6.534	0.128	0.383	0.229	4.122	0.428	7.704	4.260	6.011
71	Oceano	Sewer Farm Trunk Lines	19th Street	F1-A		TR4-A	438.64	1.50	1.7671	0.0178	947316	12100	1.421	2,841,948	1,974	4.263	6.089	12.178	6.892	0.117	0.350	0.222	3.996	0.410	7.380	4.493	6.271
72	Oceano	Sewer Farm Trunk Lines		TR4-A		TR4-B	244.25	1.50	1.7671	0.0178	935216	12100	1.403	2,805,648	1,948	4.208	6.089	12.178	6.892	0.115	0.346	0.222	3.996	0.404	7.272	4.493	6.203
73	Oceano	Sewer Farm Trunk Lines	Vista	TR4-B		J1-A	518.05	1.50	1.7671	0.0060	923116	12100	1.385	2,769,348	1,923	4.154	3.535	7.071	4.001	0.196	0.588	0.290	5.220	0.544	9.792	3.057	4.129
74	Oceano	Sewer Farm Trunk Lines		J1-A		L1-E	513.33	1.50	1.7671	0.0060	911016	9700	1.367	2,733,048	1,898	4.100	3.535	7.071	4.001	0.193	0.580	0.290	5.220	0.536	9.648	3.057	4.097
75	Oceano	Sewer Farm Trunk Lines	22nd St.	L1-E		L1-A	398.63	1.50	1.7671	0.0057	901316	9700	1.352	2,703,948	1,878	4.056	3.446	6.891	3.900	0.196	0.589	0.290	5.220	0.544	9.792	2.980	4.025
76	Oceano	Sewer Farm Trunk Lines	Wilmar	L1-A		N1-A	508.23	1.50	1.7671	0.0027	891616	43500	1.337	2,674,848	1,858	4.012	2.372	4.743	2.684	0.282	0.846	0.364	6.552	0.703	12.654	2.287	3.006
77	Oceano	Sewer Farm Trunk Lines	23rd St.	N1-A		M2	273.12	1.50	1.7671	0.0027	848116	9700	1.272	2,544,348	1,767	3.817	2.376	4.752	2.689	0.268	0.803	0.348	6.264	0.675	12.150	2.227	2.979
78	Oceano	Sewer Farm Trunk Lines	Tamara Dr.	M2		M3	331.11	1.50	1.7671	0.0027	838416		1.258	2,515,248	1,747	3.773	2.372	4.743	2.684	0.265	0.795	0.348	6.264	0.669	12.042	2.222	2.963
79	Oceano (AG flows in)	Sewer Farm Trunk Lines		M3		291	593.91	1.50	1.7671	0.0018	838416		1.258	2,515,248	1,747	3.773	1.958	3.915	2.216	0.321	0.964	0.392	7.056	0.788	14.184	1.968	2.517
80	AG	Sewer Farm Trunk Lines		291		289	375.06	1.50	1.7671	0.0018	838416		1.258	2,515,248	1,747	3.773	1.936	3.873	2.192	0.325	0.974	0.392	7.056	0.796	14.328	1.946	2.494
81	AG	Sewer Farm Trunk Lines		289		287	366.22	1.50	1.7671	0.0018	838416		1.258	2,515,248	1,747	3.773	1.936	3.873	2.192	0.325	0.974	0.392	7.056	0.796	14.328	1.946	2.494
82	AG	Sewer Farm Trunk Lines		287		285	358.45	1.50	1.7671	0.0018	834624		1.252	2,503,872	1,739	3.756	1.936	3.873	2.192	0.323	0.970	0.392	7.056	0.788	14.184	1.946	2.490
83	AG	Sewer Farm Trunk Lines		285		283	366.97	1.50	1.7671	0.0018	834624		1.252	2,503,872	1,739	3.756	1.936	3.873	2.192	0.323	0.970	0.392	7.056	0.788	14.184	1.946	2.490
84	AG	Sewer Farm Trunk Lines		283		281	59.17	1.50	1.7671	0.0018	834624		1.252	2,503,872	1,739	3.756	1.936	3.873	2.192	0.323	0.970	0.392	7.056	0.788	14.184	1.946	2.490
85	AG	Sewer Farm Trunk Lines		281		279	363.04	1.50	1.7671	0.0026	706752		1.060	2,120,256	1,472	3.180	2.327	4.654	2.634	0.228	0.683	0.316	5.688	0.606	10.908	2.086	2.818
86	AG	Sewer Farm Trunk Lines		279		277	365.80	1.50	1.7671	0.0026	706752		1.060	2,120,256	1,472	3.180	2.327	4.654	2.634	0.228	0.683	0.316	5.688	0.606	10.908	2.086	2.818
87	AG	Sewer Farm Trunk Lines		277		275	500.37	1.50	1.7671	0.0080	463872		0.696	1,391,616	966	2.087	4.082	8.164	4.620	0.085	0.256	0.189	3.402	0.340	6.120	2.661	3.826
88	AG	Sewer Farm Trunk Lines		275		273	494.83	1.50	1.7671	0.0060	463872		0.696	1,391,616	966	2.087	3.535	7.071	4.001	0.098	0.295	0.202	3.636	0.372	6.696	2.481	3.457
89	AG	Sewer Farm Trunk Lines		273		271	207.20	1.50	1.7671	0.0060	463872		0.696	1,391,616	966	2.087	3.535	7.071	4.001	0.098	0.295	0.202	3.636	0.372	6.696	2.481	3.457
90	Oceano		Ocean Ave	A6-A		A1-C	N/A	1.00	0.7854	0.0025	109000	109000	0.164	327,000	227	0.491	0.774	1.548	1.971	0.106	0.317	0.215	2.580	0.386	4.632	1.254	1.727
91	Oceano		Fountain	A1-C		A1-A	N/A	1.00	0.7854	0.0025	136000	27000	0.204	408,000	283	0.612	0.774	1.548	1.971	0.132	0.395	0.236	2.832	0.434	5.208	1.317	1.833
92	Oceano		At WWTP	A1-A		110	432.76	2.00	3.1415	0.0010	1114500		1.672	3,343,500	2,322	5.015	3.108	6.216	1.979	0.269	0.807	0.348	8.352	0.675	16.200	1.638	2.193
93	Oceano			110		S1-A	397.31	2.00	3.1415	0.0010	1114500	8000	1.672	3,343,500	2,322	5.015	3.108	6.216	1.979	0.269	0.807	0.348	8.352	0.675	16.200	1.638	2.193
94	Oceano			S1-A		130	175.87	2.00	3.1415	0.0010	1106500		1.660	3,319,500	2,305	4.979	3.108	6.216	1.979	0.267	0.801	0.348	8.352	0.675	16.200	1.638	2.193
95	Oceano		San Luis Pl.	130		140	326.82	2.00	3.1415	0.0010	1106500		1.660	3,319,500	2,305	4.979	3.108	6.216	1.979	0.267	0.801	0.348	8.352	0.675	16.200	1.638	2.193
96	Oceano			140		150	317.68	2.00	3.1415	0.0010	1106500		1.660	3,319,500	2,305	4.979	3.108	6.216	1.979	0.267	0.801	0.348	8.352	0.675	16.200	1.638	2.193
97	Oceano			150		160	482.32	2.00	3.1415	0.0010	1106500		1.660	3,319,500	2,305	4.979	3.108	6.216	1.979	0.267	0.801	0.348	8.352	0.675	16.200	1.638	2.193
98	Oceano			160	Pier & Mendel	T1-A	313.69	2.00	3.1415	0.0010	1106500		1.660	3,319,500	2,305	4.979	3.108	6.216	1.979	0.267	0.801	0.348	8.352	0.675	16.200	1.638	2.193
99	Oceano		Mendel Dr.	T1-A		U1-A	280.18	2.00	3.1415	0.0010	1106500	41500	1.660	3,319,500	2,305	4.979	3.108	6.216	1.979	0.267	0.801	0.348	8.352	0.675	16.200	1.638	2.193
100	Oceano		Norswing	U1-A		V1-A	282.84	2.00	3.1415	0.0010	1065000		1.598	3,195,000	2,219	4.793	3.108	6.216	1.979	0.257	0.771	0.340	8.160	0.657	15.768	1.638	2.177
101	Oceano			V1-A		W1-A	266.50	2.00	3.1415	0.0010	1065000	6250	1.598	3,195,000	2,219	4.793	3.108	6.216	1.979	0.257	0.771	0.340	8.160	0.657	15.768	1.638	2.177

Mannings coefficient: n=.015 is value for VCP see Appendix 19-A from CERM 7th Edition

Appendix F - Table 1
Existing Conditions

			From		To		A	B	C	D	E		F	G		H		I	J	K	L	M	N	O	P	Q	R
Line #	Location	Description	Road	Manhole	Road	Manhole	Distance (ft)	Diameter (ft)	Area (ft^2)	Slope (ft/ft)	Avg. Flow (gpd)	Added Ave Flows (gpd)	Avg. Flow (cfs)	Peak Flow (gpd)	Peak Flow (gpm)	Peak Flow (cfs)	Max Capacity (50%)	Qfull	Velocity(ft/s)	Q_{avg}/ Q_{full}	Q_{peak}/ Q_{full}	$d/D_{avg\ flow}$	$d_{avg\ flow}$ (in)	$d/D_{peak\ flow}$	$d_{peak\ flow}$ (in)	Velocity Avg Flow (ft/s)	Velocity Peak Flow (ft/s)
102	Oceano			W1-A		X1-A	266.50	2.00	3.1415	0.0010	1058750	6250	1.588	3,176,250	2,206	4.764	3.108	6.216	1.979	0.255	0.766	0.340	8.160	0.651	15.624	1.638	2.177
103	Oceano			X1-A		Y1-A	266.50	2.00	3.1415	0.0010	1052500	6250	1.579	3,157,500	2,193	4.736	3.108	6.216	1.979	0.254	0.762	0.340	8.160	0.651	15.624	1.638	2.177
104	Oceano			Y1-A		TR13-A	265.14	2.00	3.1415	0.0010	1046250	6250	1.569	3,138,750	2,180	4.708	3.108	6.216	1.979	0.252	0.757	0.340	8.160	0.645	15.480	1.638	2.165
105	Oceano		Coolidge Dr.	TR13-A		240	540.05	2.00	3.1415	0.0010	1040000	10000	1.560	3,120,000	2,167	4.680	3.108	6.216	1.979	0.251	0.753	0.340	8.160	0.645	15.480	1.638	2.165
106	Grover Beach			240		250	326.18	1.75	2.4052	0.0010	1030000		1.545	3,090,000	2,146	4.635	2.177	4.354	1.810	0.355	1.065	0.410	8.610	0.860	18.060	1.647	2.056
107	Grover Beach		Hwy 1	250		260	500.00	1.75	2.4052	0.0018	1030000		1.545	3,090,000	2,146	4.635	2.921	5.842	2.429	0.264	0.793	0.348	7.308	0.669	14.049	2.011	2.681
108	Grover Beach			260		270	500.00	1.75	2.4052	0.0018	1030000		1.545	3,090,000	2,146	4.635	2.921	5.842	2.429	0.264	0.793	0.348	7.308	0.669	14.049	2.011	2.681
109	Grover Beach			270		280	72.77	1.75	2.4052	0.0018	1030000		1.545	3,090,000	2,146	4.635	2.921	5.842	2.429	0.264	0.793	0.348	7.308	0.669	14.049	2.011	2.681
110	Grover Beach			280		290	467.23	1.75	2.4052	0.0010	1030000		1.545	3,090,000	2,146	4.635	2.177	4.354	1.810	0.355	1.065	0.410	8.610	0.860	18.060	1.647	2.056
111	Grover Beach			290		300	500.00	1.75	2.4052	0.0010	1030000		1.545	3,090,000	2,146	4.635	2.177	4.354	1.810	0.355	1.065	0.410	8.610	0.860	18.060	1.647	2.056
112	Grover Beach			300		310	470.00	1.75	2.4052	0.0010	1030000		1.545	3,090,000	2,146	4.635	2.177	4.354	1.810	0.355	1.065	0.410	8.610	0.860	18.060	1.647	2.056
113	Grover Beach			310		320	500.00	1.50	1.7671	0.0022	1030000		1.545	3,090,000	2,146	4.635	2.141	4.281	2.423	0.361	1.083	0.416	7.488	0.890	16.020	2.205	2.723
114	Grover Beach			320		330	264.95	1.50	1.7671	0.0022	1030000		1.545	3,090,000	2,146	4.635	2.141	4.281	2.423	0.361	1.083	0.416	7.488	0.890	16.020	2.205	2.723
115	Grover Beach		Cross Railroad	330		340	307.00	1.50	1.7671	0.0022	1030000	770000	1.545	3,090,000	2,146	4.635	2.141	4.281	2.423	0.361	1.083	0.416	7.488	0.890	16.020	2.205	2.723
116	Grover Beach		Railroad	340		350	319.78	1.25	1.2271	0.0014	260000		0.390	780,000	542	1.170	1.050	2.100	1.712	0.186	0.557	0.280	4.200	0.520	7.800	1.253	1.739
117	Grover Beach			400		410	531.31	1.25	1.2271	0.0018	260000		0.390	780,000	542	1.170	1.191	2.382	1.941	0.164	0.491	0.260	3.900	0.494	7.410	1.390	1.921
118	Grover Beach			410		420	566.19	1.00	0.7854	0.0020	260000	260000	0.390	780,000	542	1.170	0.692	1.385	1.763	0.282	0.845	0.364	4.368	0.703	8.436	1.502	1.974

Mannings coefficient: n=.015 is value for VCP see Appendix 19-A from CERM 7th Edition

Appendix F - Table 1
Existing Conditions

Location	Description	From Road	From Manhole	To Road	To Manhole	A Distance (ft)	B Diameter (ft)	C Area (ft^2)	D Slope (ft/ft)	E Avg. Flow (gpd)	Avg Flow (gpm)	F Avg. Flow (cfs)	G Peak Flow (gpd)	H Peak Flow (cfs)	I Qfull	J Velocity (ft/s)	K Q_{avg}/Q_{full}	L Q_{peak}/Q_{full}	M $d/D_{avg\ flow}$	N $d_{avg\ flow}$ (in)	O $d/D_{peak\ flow}$	P $d_{peak\ flow}$ (in)	Q Velocity Avg Flow (ft/s)	R Velocity Peak Flow (ft/s)
WWTP		Honolulu	A1-A		A	509.16	2.50	4.9086	0.00250	2882000	2001.4	4.323	8,646,000	12.969	17.821	3.631	0.243	0.728	0.332	9.960	0.630	18.900	2.963	3.950
Oceano			A		B	530.10	2.50	4.9086	0.00250	1631500	1133.0	2.447	4,894,500	7.342	17.821	3.631	0.137	0.412	0.236	7.080	0.446	13.380	2.425	3.413
Oceano			B		C	809.32	2.50	4.9086	0.00250	1631500	1133.0	2.447	4,894,500	7.342	17.821	3.631	0.137	0.412	0.236	7.080	0.446	13.380	2.425	3.413
Oceano			C		TR1-B	593.03	2.50	4.9086	0.00250	1631500	1133.0	2.447	4,894,500	7.342	17.821	3.631	0.137	0.412	0.236	7.080	0.446	13.380	2.425	3.413
Oceano		Sand Dollar	TR1-B	Railroad	1	622.00	2.50	4.9086	0.00250	1631500	1133.0	2.447	4,894,500	7.342	17.821	3.631	0.137	0.412	0.236	7.080	0.446	13.380	2.425	3.413
Oceano		Railroad	1		2	173.53	2.50	4.9086	0.00250	1622500	1126.7	2.434	4,867,500	7.301	17.821	3.631	0.137	0.410	0.236	7.080	0.440	13.200	2.425	3.413
Oceano			2	Hwy 1	3	350.29	2.50	4.9086	0.00250	1622500	1126.7	2.434	4,867,500	7.301	17.821	3.631	0.137	0.410	0.236	7.080	0.440	13.200	2.425	3.413
Oceano	Southside Trunk Lines	Hwy 1	3		TR7-C	752.60	2.25	3.9760	0.00489	660504	458.7	0.991	1,981,512	2.972	18.819	4.733	0.053	0.158	0.150	4.050	0.250	6.750	2.414	3.313
Oceano	Southside Trunk Lines	Nipomo St	TR7-C		4	632.90	2.25	3.9760	0.00580	636304	441.9	0.954	1,908,912	2.863	20.496	5.155	0.047	0.140	0.130	3.510	0.236	6.372	2.402	3.444
Oceano	Southside Trunk Lines		4		5	602.42	2.25	3.9760	0.00580	636304	441.9	0.954	1,908,912	2.863	20.496	5.155	0.047	0.140	0.130	3.510	0.236	6.372	2.402	3.444
Oceano	Southside Trunk Lines		5		TR8-A	636.61	2.25	3.9760	0.00422	636304	441.9	0.954	1,908,912	2.863	17.483	4.397	0.055	0.164	0.150	4.050	0.260	7.020	2.243	3.148
Oceano	Southside Trunk Lines		TR8-A		TR8-B	495.00	2.25	3.9760	0.00764	636304	441.9	0.954	1,908,912	2.863	23.523	5.916	0.041	0.122	0.130	3.510	0.229	6.183	2.757	3.857
Oceano	Southside Trunk Lines		TR8-B		TR8-C	424.55	2.25	3.9760	0.00760	636304	441.9	0.954	1,908,912	2.863	23.462	5.901	0.041	0.122	0.130	3.510	0.229	6.183	2.750	3.847
Oceano	Southside Trunk Lines		TR8-C	Elm St	Q'1-A	391.00	2.25	3.9760	0.00760	628304	436.3	0.942	1,884,912	2.827	23.462	5.901	0.040	0.121	0.130	3.510	0.229	6.183	2.750	3.847
Oceano	Southside Trunk Lines	Hwy 1	Q'1-A		Q'1-Aa	89.45	2.25	3.9760	0.00690	628304	436.3	0.942	1,884,912	2.827	22.355	5.623	0.042	0.126	0.130	3.510	0.229	6.183	2.620	3.666
Oceano	Southside Trunk Lines		Q'1-Aa		Q1-A	200.15	2.25	3.9760	0.00200	628304	436.3	0.942	1,884,912	2.827	12.036	3.027	0.078	0.235	0.176	4.752	0.324	8.748	1.677	2.434
Oceano	Southside Trunk Lines		Q1-A		TR9-A	476.62	2.25	3.9760	0.00200	620304	430.8	0.930	1,860,912	2.791	12.036	3.027	0.077	0.232	0.176	4.752	0.324	8.748	1.677	2.434
Oceano	Southside Trunk Lines		TR9-A		TR10-A	532.31	2.25	3.9760	0.00200	612304	425.2	0.918	1,836,912	2.755	12.036	3.027	0.076	0.229	0.176	4.752	0.316	8.532	1.677	2.397
Oceano	Southside Trunk Lines		TR10-A		6	412.57	2.25	3.9760	0.00200	576054	400.0	0.864	1,728,162	2.592	12.036	3.027	0.072	0.215	0.176	4.752	0.308	8.316	1.677	2.361
Oceano	Southside Trunk Lines		6		7	380.55	2.25	3.9760	0.00200	576054	400.0	0.864	1,728,162	2.592	12.036	3.027	0.072	0.215	0.176	4.752	0.308	8.316	1.677	2.361
Oceano	Southside Trunk Lines		7		8	375.65	2.25	3.9760	0.00200	576054	400.0	0.864	1,728,162	2.592	12.036	3.027	0.072	0.215	0.176	4.752	0.308	8.316	1.677	2.361
Oceano	Southside Trunk Lines		8		9	287.95	2.25	3.9760	0.00200	576054	400.0	0.864	1,728,162	2.592	12.036	3.027	0.072	0.215	0.176	4.752	0.308	8.316	1.677	2.361
Oceano	Southside Trunk Lines		9		9a	134.20	2.25	3.9760	0.00200	576054	400.0	0.864	1,728,162	2.592	12.036	3.027	0.072	0.215	0.176	4.752	0.308	8.316	1.677	2.361
Oceano	Southside Trunk Lines		9a		10	318.30	2.25	3.9760	0.00424	576054	400.0	0.864	1,728,162	2.592	17.524	4.408	0.049	0.148	0.130	3.510	0.243	6.561	2.054	3.015
Oceano	Southside Trunk Lines		10		11	426.80	2.25	3.9760	0.00420	576054	400.0	0.864	1,728,162	2.592	17.441	4.387	0.050	0.149	0.130	3.510	0.243	6.561	2.044	3.000
Oceano	Southside Trunk Lines	Halcyon	11		137	853.10	2.25	3.9760	0.00420	576054	400.0	0.864	1,728,162	2.592	17.441	4.387	0.050	0.149	0.130	3.510	0.243	6.561	2.044	3.000
Oceano	Southside Trunk Lines		137		135	397.03	2.25	3.9760	0.00223	576054	400.0	0.864	1,728,162	2.592	12.709	3.196	0.068	0.204	0.163	4.401	0.300	8.100	1.700	2.493
Oceano(AG flows in)	Southside Trunk Lines		135		133	399.23	2.25	3.9760	0.00223	576054	400.0	0.864	1,728,162	2.592	12.709	3.196	0.068	0.204	0.163	4.401	0.300	8.100	1.700	2.493
Oceano	Southside Trunk Lines	AG Creek	133	(inverse siphon)	131	163.15	1.50	1.7671	0.00250	557280	387.0	0.836	1,671,840	2.508	4.564	2.583	0.183	0.549	0.280	5.040	0.516	9.288	1.891	2.603
Oceano	Southside Trunk Lines		131		129	158.77	2.25	3.9760	0.00211	557280	387.0	0.836	1,671,840	2.508	12.362	3.109	0.068	0.203	0.163	4.401	0.300	8.100	1.654	2.425
Oceano	Southside Trunk Lines		129		127	301.76	2.25	3.9760	0.00210	557280	387.0	0.836	1,671,840	2.508	12.333	3.102	0.068	0.203	0.163	4.401	0.300	8.100	1.650	2.419
Oceano	Southside Trunk Lines		127		125	626.37	2.25	3.9760	0.00210	557280	387.0	0.836	1,671,840	2.508	12.333	3.102	0.068	0.203	0.163	4.401	0.300	8.100	1.650	2.419
Oceano	Southside Trunk Lines		125		123	123.68	2.00	3.1415	0.00250	557280	387.0	0.836	1,671,840	2.508	9.829	3.129	0.085	0.255	0.189	4.536	0.340	8.160	1.802	2.591
Oceano	Southside Trunk Lines		123		123a	131.82	2.00	3.1415	0.00247	557280	387.0	0.836	1,671,840	2.508	9.770	3.110	0.086	0.257	0.189	4.536	0.340	8.160	1.791	2.575
Oceano	Southside Trunk Lines		123a		121	344.85	2.00	3.1415	0.00585	557280	387.0	0.836	1,671,840	2.508	15.036	4.786	0.056	0.167	0.150	3.600	0.260	6.240	2.441	3.427
Oceano	Southside Trunk Lines		121		119	501.62	2.00	3.1415	0.00598	557280	387.0	0.836	1,671,840	2.508	15.202	4.839	0.055	0.165	0.150	3.600	0.260	6.240	2.468	3.465
Oceano	Southside Trunk Lines	Valley Road	119		117	527.49	2.00	3.1415	0.00476	557280	387.0	0.836	1,671,840	2.508	13.563	4.317	0.062	0.185	0.163	3.912	0.280	6.720	2.297	3.160
Oceano	Southside Trunk Lines		117		117a	326.84	2.00	3.1415	0.00473	557280	387.0	0.836	1,671,840	2.508	13.520	4.304	0.062	0.185	0.163	3.912	0.280	6.720	2.290	3.150
Oceano	Southside Trunk Lines		117a		113	278.00	2.00	3.1415	0.00644	557280	387.0	0.836	1,671,840	2.508	15.776	5.022	0.053	0.159	0.150	3.600	0.250	6.000	2.561	3.515
Oceano	Southside Trunk Lines		113		111	622.17	2.00	3.1415	0.00650	557280	387.0	0.836	1,671,840	2.508	15.849	5.045	0.053	0.158	0.150	3.600	0.250	6.000	2.573	3.532
Oceano	Southside Trunk Lines		111		111a	99.83	2.00	3.1415	0.00651	557280	387.0	0.836	1,671,840	2.508	15.861	5.049	0.053	0.158	0.150	3.600	0.250	6.000	2.575	3.534
Oceano	Southside Trunk Lines		111a		109	190.45	2.00	3.1415	0.00790	557280	387.0	0.836	1,671,840	2.508	17.473	5.562	0.048	0.144	0.130	3.120	0.243	5.832	2.592	3.804
Oceano	Southside Trunk Lines		109		107	622.84	2.00	3.1415	0.00787	557280	387.0	0.836	1,671,840	2.508	17.439	5.551	0.048	0.144	0.130	3.120	0.243	5.832	2.587	3.797
Oceano	Southside Trunk Lines		107		105	575.74	2.00	3.1415	0.00395	557280	387.0	0.836	1,671,840	2.508	12.355	3.933	0.068	0.203	0.163	3.912	0.300	7.200	2.092	3.068

Appendix F - Table 2
Existing Conditions
(Gravity only)

Mannings coefficient: n=.015 is value for VCP see Appendix 19-A from CERM 7th Edition

Location	Description	From Road	From Manhole	To Road	To Manhole	A Distance (ft)	B Diameter (ft)	C Area (ft^2)	D Slope (ft/ft)	E Avg. Flow (gpd)	Avg Flow (gpm)	F Avg. Flow (cfs)	G Peak Flow (gpd)	H Peak Flow (cfs)	I Qfull	J Velocity (ft/s)	K Q_{avg}/Q_{full}	L Q_{peak}/Q_{full}	M $d/D_{avg\ flow}$	N $d_{avg\ flow}$ (in)	O $d/D_{peak\ flow}$	P $d_{peak\ flow}$ (in)	Q Velocity Avg Flow (ft/s)	R Velocity Peak Flow (ft/s)
Oceano	Southside Trunk Lines		105		103	442.64	2.00	3.1415	0.00395	557280	387.0	0.836	1,671,840	2.508	12.355	3.933	0.068	0.203	0.163	3.912	0.300	7.200	2.092	3.068
Oceano	Southside Trunk Lines		103		101	543.72	2.00	3.1415	0.00250	557280	387.0	0.836	1,671,840	2.508	9.829	3.129	0.085	0.255	0.189	4.536	0.340	8.160	1.802	2.591
Oceano	Southside Trunk Lines		101		97	555.54	2.00	3.1415	0.00250	557280	387.0	0.836	1,671,840	2.508	9.829	3.129	0.085	0.255	0.189	4.536	0.340	8.160	1.802	2.591
AG	Southside Trunk Lines	Fair Oaks	97		95	624.62	1.00	0.7854	0.00200	518880	360.3	0.778	1,556,640	2.335	1.385	1.763	0.562	1.686	0.528	6.336	1.000	12.000	1.791	1.763
AG	Southside Trunk Lines		95		89	783.35	1.00	0.7854	0.00740	518880	360.3	0.778	1,556,640	2.335	2.663	3.391	0.292	0.877	0.372	4.464	0.726	8.712	2.930	3.812
AG	Southside Trunk Lines		89		87	58.09	1.00	0.7854	0.05850	518880	360.3	0.778	1,556,640	2.335	7.488	9.535	0.104	0.312	0.215	2.580	0.386	4.632	6.064	8.352
AG	Southside Trunk Lines		87		85	122.12	1.00	0.7854	0.00250	518880	360.3	0.778	1,556,640	2.335	1.548	1.971	0.503	1.508	0.500	6.000	1.000	12.000	1.971	1.971
AG	Southside Trunk Lines		85		83	197.1	1.00	0.7854	0.00240	506976	352.1	0.760	1,520,928	2.281	1.517	1.931	0.501	1.504	0.500	6.000	1.000	12.000	1.931	1.931
AG	Southside Trunk Lines		83		81	230.44	1.20	1.1309	0.00240	506976	352.1	0.760	1,520,928	2.281	2.466	2.181	0.308	0.925	0.380	5.472	0.762	10.973	1.910	2.469
AG	Southside Trunk Lines		81		79	277.4	1.25	1.2271	0.00210	506976	352.1	0.760	1,520,928	2.281	2.572	2.096	0.296	0.887	0.372	5.580	0.734	11.010	1.811	2.360
AG	Cherry Ave Trunk Lines		79		77	192.46	1.33	1.3892	0.00260	506976	352.1	0.760	1,520,928	2.281	3.377	2.431	0.225	0.676	0.316	5.043	0.599	9.560	1.925	2.587
AG	Cherry Ave Trunk Lines		77		75	54.75	1.33	1.3892	0.00320	506976	352.1	0.760	1,520,928	2.281	3.747	2.697	0.203	0.609	0.300	4.788	0.560	8.938	2.104	2.821
AG	Cherry Ave Trunk Lines		75		73	158.69	1.50	1.7671	0.00440	410208	284.9	0.615	1,230,624	1.846	6.055	3.426	0.102	0.305	0.215	3.870	0.380	6.840	2.179	3.002
AG	Cherry Ave Trunk Lines		73		69	103.01	1.50	1.7671	0.00500	410208	284.9	0.615	1,230,624	1.846	6.454	3.653	0.095	0.286	0.202	3.636	0.364	6.552	2.265	3.112
AG	Cherry Ave Trunk Lines		69		67	467.81	1.50	1.7671	0.00710	410208	284.9	0.615	1,230,624	1.846	7.691	4.353	0.080	0.240	0.189	3.402	0.332	5.976	2.507	3.552
AG	Cherry Ave Trunk Lines		67		61	902.65	1.50	1.7671	0.00390	410208	284.9	0.615	1,230,624	1.846	5.700	3.226	0.108	0.324	0.215	3.870	0.392	7.056	2.052	2.865
AG	Cherry Ave Trunk Lines		61		2189	199.48	1.50	1.7671	0.00250	355392	246.8	0.533	1,066,176	1.599	4.564	2.583	0.117	0.350	0.222	3.996	0.410	7.380	1.684	2.350
AG	Cherry Ave Trunk Lines		2189		53	439.03	1.50	1.7671	0.00200	355392	246.8	0.533	1,066,176	1.599	4.082	2.310	0.131	0.392	0.236	4.248	0.434	7.812	1.543	2.148
AG	Cherry Ave Trunk Lines		53		49	908.34	1.50	1.7671	0.00200	355392	246.8	0.533	1,066,176	1.599	4.082	2.310	0.131	0.392	0.236	4.248	0.434	7.812	1.543	2.148
AG	Cherry Ave Trunk Lines		49		47	132.01	1.50	1.7671	0.00300	355392	246.8	0.533	1,066,176	1.599	5.000	2.829	0.107	0.320	0.215	3.870	0.386	6.948	1.799	2.478
AG	Cherry Ave Trunk Lines		47		45	208.69	1.50	1.7671	0.00690	355392	246.8	0.533	1,066,176	1.599	7.582	4.291	0.070	0.211	0.176	3.168	0.308	5.544	2.377	3.347
AG	Cherry Ave Trunk Lines		45		41	252.36	1.50	1.7671	0.00240	355392	246.8	0.533	1,066,176	1.599	4.472	2.531	0.119	0.358	0.222	3.996	0.410	7.380	1.650	2.303
Oceano	Sewer Farm Trunk Lines	Front St.	3		TR2-B	157.70	1.50	1.7671	0.00403	961996	668.1	1.443	2,885,988	4.329	5.795	3.279	0.249	0.747	0.332	5.976	0.640	11.520	2.676	3.587
Oceano	Sewer Farm Trunk Lines	17th	TR2-B		D1-A	497.30	1.50	1.7671	0.01680	961996	668.1	1.443	2,885,988	4.329	11.831	6.695	0.122	0.366	0.229	4.122	0.416	7.488	4.365	6.093
Oceano	Sewer Farm Trunk Lines		D1-A		D	374.66	1.50	1.7671	0.01740	829096	575.8	1.244	2,487,288	3.731	12.041	6.814	0.103	0.310	0.215	3.870	0.380	6.840	4.334	5.969
Oceano	Sewer Farm Trunk Lines	Paso Robles	D		F1-A	498.27	1.50	1.7671	0.01600	829096	575.8	1.244	2,487,288	3.731	11.546	6.534	0.108	0.323	0.215	3.870	0.392	7.056	4.156	5.802
Oceano	Sewer Farm Trunk Lines	19th Street	F1-A		TR4-A	438.64	1.50	1.7671	0.01780	792846	550.6	1.189	2,378,538	3.568	12.178	6.892	0.098	0.293	0.202	3.636	0.372	6.696	4.273	5.954
Oceano	Sewer Farm Trunk Lines		TR4-A		TR4-B	244.25	1.50	1.7671	0.01780	780746	542.2	1.171	2,342,238	3.513	12.178	6.892	0.096	0.288	0.202	3.636	0.364	6.552	4.273	5.872
Oceano	Sewer Farm Trunk Lines	Vista	TR4-B		J1-A	518.05	1.50	1.7671	0.00600	768646	533.8	1.153	2,305,938	3.459	7.071	4.001	0.163	0.489	0.260	4.680	0.488	8.784	2.865	3.921
Oceano	Sewer Farm Trunk Lines		J1-A		L1-E	513.33	1.50	1.7671	0.00600	756546	525.4	1.135	2,269,638	3.404	7.071	4.001	0.161	0.482	0.260	4.680	0.488	8.784	2.865	3.921
Oceano	Sewer Farm Trunk Lines	22nd St.	L1-E		L1-A	398.63	1.50	1.7671	0.00570	746846	518.6	1.120	2,240,538	3.361	6.891	3.900	0.163	0.488	0.260	4.680	0.488	8.784	2.792	3.822
Oceano	Sewer Farm Trunk Lines	Wilmar	L1-A		N1-A	508.23	1.50	1.7671	0.00270	737146	511.9	1.106	2,211,438	3.317	4.743	2.684	0.233	0.699	0.324	5.832	0.613	11.034	2.158	2.888
Oceano	Sewer Farm Trunk Lines	23rd St.	N1-A		M2	273.12	1.50	1.7671	0.00271	693646	481.7	1.040	2,080,938	3.121	4.752	2.689	0.219	0.657	0.308	5.544	0.585	10.530	2.097	2.845
Oceano	Sewer Farm Trunk Lines	Tamara Dr.	M2		M3	331.11	1.50	1.7671	0.00270	683946	475.0	1.026	2,051,838	3.078	4.743	2.684	0.216	0.649	0.308	5.544	0.580	10.440	2.094	2.840
Oceano (AG flows in)	Sewer Farm Trunk Lines		M3		291	593.91	1.50	1.7671	0.00184	683946	475.0	1.026	2,051,838	3.078	3.915	2.216	0.262	0.786	0.348	6.264	0.663	11.934	1.835	2.446
AG	Sewer Farm Trunk Lines		291		289	375.06	1.50	1.7671	0.00184	683946	475.0	1.026	2,051,838	3.078	3.915	2.216	0.262	0.786	0.348	6.264	0.663	11.934	1.835	2.446
AG	Sewer Farm Trunk Lines		289		287	366.22	1.50	1.7671	0.00184	683946	475.0	1.026	2,051,838	3.078	3.915	2.216	0.262	0.786	0.348	6.264	0.663	11.934	1.835	2.446
AG	Sewer Farm Trunk Lines		287		285	358.45	1.50	1.7671	0.00184	683946	475.0	1.026	2,051,838	3.078	3.915	2.216	0.262	0.786	0.348	6.264	0.663	11.934	1.835	2.446
AG	Sewer Farm Trunk Lines		285		283	366.97	1.50	1.7671	0.00184	683946	475.0	1.026	2,051,838	3.078	3.915	2.216	0.262	0.786	0.348	6.264	0.663	11.934	1.835	2.446
AG	Sewer Farm Trunk Lines		283		281	59.17	1.50	1.7671	0.00184	683946	475.0	1.026	2,051,838	3.078	3.915	2.216	0.262	0.786	0.348	6.264	0.663	11.934	1.835	2.446
AG	Sewer Farm Trunk Lines		281		279	363.04	1.50	1.7671	0.00260	683946	475.0	1.026	2,051,838	3.078	4.654	2.634	0.220	0.661	0.316	5.688	0.592	10.656	2.086	2.802
AG	Sewer Farm Trunk Lines		279		277	365.80	1.50	1.7671	0.00260	683846	474.9	1.026	2,051,538	3.077	4.654	2.634	0.220	0.661	0.316	5.688	0.592	10.656	2.086	2.802
AG	Sewer Farm Trunk Lines		277		275	500.37	1.50	1.7671	0.00800	463872	322.1	0.696	1,391,616	2.087	8.164	4.620	0.085	0.256	0.189	3.402	0.340	6.120	2.661	3.826

Appendix F - Table 2
Existing Conditions
(Gravity only)

Mannings coefficient: n=.015 is value for VCP see Appendix 19-A from CERM 7th Edition

Location	Description	From Road	From Manhole	To Road	To Manhole	A Distance (ft)	B Diameter (ft)	C Area (ft^2)	D Slope (ft/ft)	E Avg. Flow (gpd)	Avg Flow (gpm)	F Avg. Flow (cfs)	G Peak Flow (gpd)	H Peak Flow (cfs)	I Qfull	J Velocity (ft/s)	K Q_{avg}/Q_{full}	L Q_{peak}/Q_{full}	M $d/D_{avg\ flow}$	N $d_{avg\ flow}$ (in)	O $d/D_{peak\ flow}$	P $d_{peak\ flow}$ (in)	Q Velocity Avg Flow (ft/s)	R Velocity Peak Flow (ft/s)
AG	Sewer Farm Trunk Lines		275		273	494.83	1.50	1.7671	0.00600	463872	322.1	0.696	1,391,616	2.087	7.071	4.001	0.098	0.295	0.202	3.636	0.372	6.696	2.481	3.457
AG	Sewer Farm Trunk Lines		273		271	207.20	1.50	1.7671	0.00600	463872	322.1	0.696	1,391,616	2.087	7.071	4.001	0.098	0.295	0.202	3.636	0.372	6.696	2.481	3.457
Oceano		Ocean Ave	A6-A		A1-C	N/A	1.00	0.7854	0.00250	109000	75.7	0.164	327,000	0.491	1.548	1.971	0.106	0.317	0.215	2.580	0.386	4.632	1.254	1.727
Oceano		Fountain	A1-C		A1-A	N/A	1.00	0.7854	0.00250	136000	94.4	0.204	408,000	0.612	1.548	1.971	0.132	0.395	0.236	2.832	0.434	5.208	1.317	1.833
Oceano		At WWTP	A1-A		110	432.76	2.00	3.1415	0.00100	1114500	774.0	1.672	3,120,600	4.681	6.216	1.979	0.269	0.753	0.348	8.352	0.645	15.480	1.638	2.165
Oceano			110		S1-A	397.31	2.00	3.1415	0.00100	1114500	774.0	1.672	3,120,600	4.681	6.216	1.979	0.269	0.753	0.348	8.352	0.645	15.480	1.638	2.165
Oceano			S1-A		130	175.87	2.00	3.1415	0.00100	1106500	768.4	1.660	3,098,200	4.647	6.216	1.979	0.267	0.748	0.348	8.352	0.640	15.360	1.638	2.165
Oceano		San Luis Pl.	130		140	326.82	2.00	3.1415	0.00100	1106500	768.4	1.660	3,098,200	4.647	6.216	1.979	0.267	0.748	0.348	8.352	0.640	15.360	1.638	2.165
Oceano			140		150	317.68	2.00	3.1415	0.00100	1106500	768.4	1.660	3,098,200	4.647	6.216	1.979	0.267	0.748	0.348	8.352	0.640	15.360	1.638	2.165
Oceano			150		160	482.32	2.00	3.1415	0.00100	1106500	768.4	1.660	3,098,200	4.647	6.216	1.979	0.267	0.748	0.348	8.352	0.640	15.360	1.638	2.165
Oceano			160	Pier & Mendel	T1-A	313.69	2.00	3.1415	0.00100	1106500	768.4	1.660	3,098,200	4.647	6.216	1.979	0.267	0.748	0.348	8.352	0.640	15.360	1.638	2.165
Oceano		Mendel Dr.	T1-A		U1-A	280.18	2.00	3.1415	0.00100	1106500	768.4	1.660	3,098,200	4.647	6.216	1.979	0.267	0.748	0.348	8.352	0.640	15.360	1.638	2.165
Oceano		Norswing	U1-A		V1-A	282.84	2.00	3.1415	0.00100	1065000	739.6	1.598	2,982,000	4.473	6.216	1.979	0.257	0.720	0.340	8.160	0.625	15.000	1.638	2.141
Oceano			V1-A		W1-A	266.50	2.00	3.1415	0.00100	1065000	739.6	1.598	2,982,000	4.473	6.216	1.979	0.257	0.720	0.340	8.160	0.625	15.000	1.638	2.141
Oceano			W1-A		X1-A	266.50	2.00	3.1415	0.00100	1058750	735.2	1.588	2,964,500	4.447	6.216	1.979	0.255	0.715	0.340	8.160	0.625	15.000	1.638	2.141
Oceano			X1-A		Y1-A	266.50	2.00	3.1415	0.00100	1052500	730.9	1.579	2,947,000	4.421	6.216	1.979	0.254	0.711	0.340	8.160	0.625	15.000	1.638	2.141
Oceano			Y1-A		TR13-A	265.14	2.00	3.1415	0.00100	1046250	726.6	1.569	2,929,500	4.394	6.216	1.979	0.252	0.707	0.340	8.160	0.620	14.880	1.638	2.141
Oceano		Coolidge Dr.	TR13-A		240	540.05	2.00	3.1415	0.00100	1040000	722.2	1.560	2,912,000	4.368	6.216	1.979	0.251	0.703	0.340	8.160	0.620	14.880	1.638	2.141
Grover Beach			240		250	326.18	1.75	2.4052	0.00100	1030000	715.3	1.545	2,884,000	4.326	4.354	1.810	0.355	0.994	0.410	8.610	0.812	17.052	1.647	2.064
Grover Beach		Hwy 1	250		260	500.00	1.75	2.4052	0.00180	1030000	715.3	1.545	2,884,000	4.326	5.842	2.429	0.264	0.741	0.348	7.308	0.640	13.440	2.011	2.657
Grover Beach			260		270	500.00	1.75	2.4052	0.00180	1030000	715.3	1.545	2,884,000	4.326	5.842	2.429	0.264	0.741	0.348	7.308	0.640	13.440	2.011	2.657
Grover Beach			270		280	72.77	1.75	2.4052	0.00180	1030000	715.3	1.545	2,884,000	4.326	5.842	2.429	0.264	0.741	0.348	7.308	0.640	13.440	2.011	2.657
Grover Beach			280		290	467.23	1.75	2.4052	0.00100	1030000	715.3	1.545	2,884,000	4.326	4.354	1.810	0.355	0.994	0.410	8.610	0.812	17.052	1.647	2.064
Grover Beach			290		300	500.00	1.75	2.4052	0.00100	1030000	715.3	1.545	2,884,000	4.326	4.354	1.810	0.355	0.994	0.410	8.610	0.812	17.052	1.647	2.064
Grover Beach			300		310	470.00	1.75	2.4052	0.00100	1030000	715.3	1.545	2,884,000	4.326	4.354	1.810	0.355	0.994	0.410	8.610	0.812	17.052	1.647	2.064
Grover Beach			310		320	500.00	1.50	1.7671	0.00220	1030000	715.3	1.545	2,884,000	4.326	4.281	2.423	0.361	1.010	0.416	7.488	0.820	14.760	2.205	2.762
Grover Beach			320		330	264.95	1.50	1.7671	0.00220	1030000	715.3	1.545	2,884,000	4.326	4.281	2.423	0.361	1.010	0.416	7.488	0.820	14.760	2.205	2.762
Grover Beach		Cross Railroad	330		340	307.00	1.50	1.7671	0.00220	1030000	715.3	1.545	2,884,000	4.326	4.281	2.423	0.361	1.010	0.416	7.488	0.820	14.760	2.205	2.762
Grover Beach		Railroad	340		350	319.78	1.25	1.2271	0.00140	260000	180.6	0.390	728,000	1.092	2.100	1.712	0.186	0.520	0.280	4.200	0.504	7.560	1.253	1.712
Grover Beach			400		410	531.31	1.25	1.2271	0.00180	260000	180.6	0.390	728,000	1.092	2.382	1.941	0.164	0.459	0.260	3.900	0.470	7.050	1.390	1.883
Grover Beach			410		420	566.19	1.00	0.7854	0.00200	260000	180.6	0.390	728,000	1.092	1.385	1.763	0.282	0.789	0.364	4.368	0.663	7.956	1.502	1.946
																							n =	0.015

Appendix F - Table 2
Existing Conditions
(Gravity only)

Mannings coefficient: n=.015 is value for VCP see Appendix 19-A from CERM 7th Edition

			From		To		A	B	D	E					F	G		H		I	J	K	L	M	N	O	P	Q	R
Line #	Location	Description	Road	Manhole	Road	Manhole	Distance (ft)	Diameter (ft)	Slope (ft/ft)	Avg. Flow (gpd)	Added Ave Flows (gpd)	Future Additions Ave Flows (gpd)	Future Additions Ave Flows (outside of AGWWMP Projections) (gpd)	Avg. Flow (gpm)	Avg. Flow (cfs)	Peak Flow (gpd)	Peak Flow (gpm)	Peak Flow (cfs)	Max Capacity (50%)	Qfull	Velocity (ft/s)	Q_{avg}/Q_{full}	Q_{peak}/Q_{full}	d/D avg flow	$d_{avg\ flow}$ (in)	d/D peak flow	$d_{peak\ flow}$ (in)	Velocity Avg Flow (ft/s)	Velocity Peak Flow (ft/s)
1	WWTP		Honolulu	A1-A		A	509.16	2.50	0.0025	4101043				2847.95	6.152	12,303,129	8,544	18.455	9.031	18.062	3.680	0.341	1.022	0.404	12.120	0.830	24.900	3.312	4.195
2	Oceano			A		B	530.10	2.50	0.0025	2540543				1764.27	3.811	7,621,629	5,293	11.432	9.031	18.062	3.680	0.211	0.633	0.308	9.240	0.575	17.250	2.870	3.871
3	Oceano			B		C	809.32	2.50	0.0025	2540543				1764.27	3.811	7,621,629	5,293	11.432	9.031	18.062	3.680	0.211	0.633	0.308	9.240	0.575	17.250	2.870	3.871
4	Oceano			C		TR1-B	593.03	2.50	0.0025	2540543				1764.27	3.811	7,621,629	5,293	11.432	9.031	18.062	3.680	0.211	0.633	0.308	9.240	0.575	17.250	2.870	3.871
5	Oceano		Sand Dollar	TR1-B	Railroad	1	622.00	2.50	0.0025	2540543	9000	65000		1764.27	3.811	7,621,629	5,293	11.432	9.031	18.062	3.680	0.211	0.633	0.308	9.240	0.575	17.250	2.870	3.871
6	Oceano		Railroad	1		2	173.53	2.50	0.0025	2466543				1712.88	3.700	7,399,629	5,139	11.099	9.031	18.062	3.680	0.205	0.615	0.300	9.000	0.565	16.950	2.870	3.849
7	Oceano			2	Hwy 1	3	350.29	2.50	0.0025	2466543				1712.88	3.700	7,399,629	5,139	11.099	9.031	18.062	3.680	0.205	0.615	0.300	9.000	0.565	16.950	2.870	3.849
8	Oceano	Southside Trunk Lines	Hwy 1	3		TR7-C	752.60	2.25	0.0049	1189122	24200			825.78	1.784	3,567,366	2,477	5.351	9.537	19.074	4.797	0.094	0.281	0.202	5.454	0.364	9.828	2.974	4.087
9	Oceano	Southside Trunk Lines	Nipomo St	TR7-C		4	632.90	2.25	0.0058	1164922				808.97	1.747	3,494,766	2,427	5.242	10.386	20.773	5.225	0.084	0.252	0.189	5.103	0.340	9.180	3.009	4.326
10	Oceano	Southside Trunk Lines		4		5	602.42	2.25	0.0058	1164922				808.97	1.747	3,494,766	2,427	5.242	10.386	20.773	5.225	0.084	0.252	0.189	5.103	0.340	9.180	3.009	4.326
11	Oceano	Southside Trunk Lines		5		TR8-A	636.61	2.25	0.0042	1164922				808.97	1.747	3,494,766	2,427	5.242	8.859	17.719	4.457	0.099	0.296	0.202	5.454	0.372	10.044	2.763	3.850
12	Oceano	Southside Trunk Lines		TR8-A		TR8-B	495.00	2.25	0.0076	1164922				808.97	1.747	3,494,766	2,427	5.242	11.921	23.841	5.996	0.073	0.220	0.176	4.752	0.308	8.316	3.322	4.677
13	Oceano	Southside Trunk Lines		TR8-B		TR8-C	424.55	2.25	0.0076	1164922	8000			808.97	1.747	3,494,766	2,427	5.242	11.889	23.779	5.981	0.073	0.220	0.176	4.752	0.316	8.532	3.313	4.737
14	Oceano	Southside Trunk Lines		TR8-C	Elm St	Q'1-A	391.00	2.25	0.0076	1156922				803.42	1.735	3,470,766	2,410	5.206	11.889	23.779	5.981	0.073	0.219	0.176	4.752	0.308	8.316	3.313	4.665
15	Oceano	Southside Trunk Lines	Hwy 1	Q'1-A		Q'1-Aa	89.45	2.25	0.0069	1156922		65000		803.42	1.735	3,470,766	2,410	5.206	11.329	22.657	5.699	0.077	0.230	0.176	4.752	0.316	8.532	3.157	4.513
16	Oceano	Southside Trunk Lines		Q'1-Aa		Q1-A	200.15	2.25	0.0020	1091922	8000			758.28	1.638	3,275,766	2,275	4.914	6.099	12.198	3.068	0.134	0.403	0.236	6.372	0.440	11.880	2.049	2.884
17	Oceano	Southside Trunk Lines		Q1-A		TR9-A	476.62	2.25	0.0020	1083922	8000			752.72	1.626	3,251,766	2,258	4.878	6.099	12.198	3.068	0.133	0.400	0.236	6.372	0.434	11.718	2.049	2.853
18	Oceano	Southside Trunk Lines		TR9-A		TR10-A	532.31	2.25	0.0020	1075922	36250			747.17	1.614	3,227,766	2,242	4.842	6.099	12.198	3.068	0.132	0.397	0.236	6.372	0.434	11.718	2.049	2.853
19	Oceano	Southside Trunk Lines		TR10-A		6	412.57	2.25	0.0020	1039672				721.99	1.560	3,119,016	2,166	4.679	6.099	12.198	3.068	0.128	0.384	0.229	6.183	0.428	11.556	2.000	2.823
20	Oceano	Southside Trunk Lines		6		7	380.55	2.25	0.0020	1039672				721.99	1.560	3,119,016	2,166	4.679	6.099	12.198	3.068	0.128	0.384	0.229	6.183	0.428	11.556	2.000	2.823
21	Oceano	Southside Trunk Lines		7		8	275.65	2.25	0.0020	1039672				721.99	1.560	3,119,016	2,166	4.679	6.099	12.198	3.068	0.128	0.384	0.229	6.183	0.428	11.556	2.000	2.823
22	Oceano	Southside Trunk Lines		8		9a	287.95	2.25	0.0020	1039672				721.99	1.560	3,119,016	2,166	4.679	6.099	12.198	3.068	0.128	0.384	0.229	6.183	0.428	11.556	2.000	2.823
23	Oceano	Southside Trunk Lines		9a		9	134.20	2.25	0.0020	1039672				721.99	1.560	3,119,016	2,166	4.679	6.099	12.198	3.068	0.128	0.384	0.229	6.183	0.428	11.556	2.000	2.823
24	Oceano	Southside Trunk Lines		9		10	318.30	2.25	0.0042	1039672				721.99	1.560	3,119,016	2,166	4.679	8.880	17.761	4.467	0.088	0.263	0.189	5.103	0.348	9.396	2.573	3.699
25	Oceano	Southside Trunk Lines		10		11	426.80	2.25	0.0042	1039672				721.99	1.560	3,119,016	2,166	4.679	8.838	17.677	4.446	0.088	0.265	0.189	5.103	0.348	9.396	2.561	3.681
26	Oceano	Southside Trunk Lines	Halcyon	11		137	853.10	2.25	0.0042	1039672				721.99	1.560	3,119,016	2,166	4.679	8.838	17.677	4.446	0.088	0.265	0.189	5.103	0.348	9.396	2.561	3.681
27	Oceano	Southside Trunk Lines		137		135	397.03	2.25	0.0022	1039672		70000		721.99	1.560	3,119,016	2,166	4.679	6.440	12.881	3.240	0.121	0.363	0.229	6.183	0.416	11.232	2.112	2.948
28	Oceano(AG flows in)	Southside Trunk Lines		135		133	399.23	2.25	0.0022	969672		143712	6900	673.38	1.455	2,909,016	2,020	4.364	6.440	12.881	3.240	0.113	0.339	0.222	5.994	0.398	10.746	2.112	2.877
29	Oceano	Southside Trunk Lines	AG Creek	133	(inverse siphon)	131	163.15	1.50	0.0025	738808				513.06	1.108	2,216,424	1,539	3.325	2.313	4.626	2.618	0.240	0.719	0.324	5.832	0.625	11.250	2.105	2.832
30	Oceano	Southside Trunk Lines		131		129	158.77	2.25	0.0021	738808				513.06	1.108	2,216,424	1,539	3.325	6.265	12.529	3.151	0.088	0.265	0.189	5.103	0.348	9.396	1.815	2.609
31	Oceano	Southside Trunk Lines		129		127	301.76	2.25	0.0021	738808				513.06	1.108	2,216,424	1,539	3.325	6.250	12.499	3.144	0.089	0.266	0.189	5.103	0.348	9.396	1.811	2.603
32	Oceano	Southside Trunk Lines		127		125	626.37	2.25	0.0021	738808				513.06	1.108	2,216,424	1,539	3.325	6.250	12.499	3.144	0.089	0.266	0.189	5.103	0.348	9.396	1.811	2.603
33	Oceano	Southside Trunk Lines		125		123	123.68	2.00	0.0025	738808				513.06	1.108	2,216,424	1,539	3.325	4.981	9.962	3.171	0.111	0.334	0.222	5.328	0.398	9.552	2.068	2.816
34	Oceano	Southside Trunk Lines		123		123a	131.82	2.00	0.0025	738808				513.06	1.108	2,216,424	1,539	3.325	4.981	9.962	3.171	0.111	0.334	0.222	5.328	0.398	9.552	2.068	2.816
35	Oceano	Southside Trunk Lines		123a		121	344.85	2.00	0.0059	738808				513.06	1.108	2,216,424	1,539	3.325	7.619	15.239	4.851	0.073	0.218	0.176	4.224	0.308	7.392	2.687	3.784
36	Oceano	Southside Trunk Lines		121		119	501.62	2.00	0.0060	738808				513.06	1.108	2,216,424	1,539	3.325	7.704	15.407	4.904	0.072	0.216	0.176	4.224	0.308	7.392	2.717	3.825
37	Oceano	Southside Trunk Lines	Valley Road	119		117a	527.49	2.00	0.0048	738808				513.06	1.108	2,216,424	1,539	3.325	6.873	13.746	4.376	0.081	0.242	0.189	4.536	0.332	7.968	2.520	3.571
38	Oceano	Southside Trunk Lines		117a		117	326.84	2.00	0.0047	738808				513.06	1.108	2,216,424	1,539	3.325	6.830	13.659	4.348	0.081	0.243	0.189	4.536	0.332	7.968	2.504	3.548
39	Oceano	Southside Trunk Lines		117		113	278	2.00	0.0064	738808			1400	513.06	1.108	2,216,424	1,539	3.325	7.994	15.989	5.090	0.069	0.208	0.163	3.912	0.300	7.200	2.708	3.970
40	Oceano	Southside Trunk Lines		113		111	622.17	2.00	0.0065	661856				459.62	0.993	1,985,568	1,379	2.978	8.032	16.063	5.113	0.062	0.185	0.163	3.912	0.280	6.720	2.720	3.743
41	Oceano	Southside Trunk Lines		111		111a	99.83	2.00	0.0065	661856				459.62	0.993	1,985,568	1,379	2.978	8.032	16.063	5.113	0.062	0.185	0.163	3.912	0.280	6.720	2.720	3.743
42	Oceano	Southside Trunk Lines		111a		109	190.45	2.00	0.0079	661856				459.62	0.993	1,985,568	1,379	2.978		17.709	5.637	0.056	0.168	0.150	3.600	0.260	6.240	2.875	4.036
43	Oceano	Southside Trunk Lines		109		107	622.84	2.00	0.0079	661856				459.62	0.993	1,985,568	1,379	2.978	8.838	17.675	5.626	0.056	0.169	0.150	3.600	0.260	6.240	2.869	4.028
44	Oceano	Southside Trunk Lines		107		105	575.74	2.00	0.0040	661856				459.62	0.993	1,985,568	1,379	2.978	6.261	12.522	3.986	0.079	0.238	0.176	4.224	0.324	7.776	2.208	3.205
45	Oceano	Southside Trunk Lines		105		103	442.64	2.00	0.0040	661856				459.62	0.993	1,985,568	1,379	2.978	6.261	12.522	3.986	0.079	0.238	0.176	4.224	0.324	7.776	2.208	3.205
46	Oceano	Southside Trunk Lines		103		101	543.72	2.00	0.0025	661856				459.62	0.993	1,985,568	1,379	2.978	4.981	9.962	3.171	0.100	0.299	0.202	4.848	0.372	8.928	1.966	2.740
47	Oceano	Southside Trunk Lines		101		97	555.54	2.00	0.0025	661856				459.62	0.993	1,985,568	1,379	2.978	4.981	9.962	3.171	0.100	0.299	0.202	4.848	0.372	8.928	1.966	2.740
48	AG	Southside Trunk Lines	Fair Oaks	97		95	624.62	1.00	0.0020	623456				432.96	0.935	1,870,368	1,299	2.806	0.702	1.403	1.787	0.666	1.999	0.592	7.104	1.000	12.000	1.901	1.787
49	AG	Southside Trunk Lines		95		89	783.35	1.00	0.0074	623456				432.96	0.935	1,870,368	1,299	2.806	1.350	2.699	3.437	0.346	1.039	0.404	4.848	0.840	10.080	3.093	3.918
50	AG	Southside Trunk Lines		89		87	58.09	1.00	0.0585	623456				432.96	0.935	1,870,368	1,299	2.806	3.795	7.589	9.663	0.123	0.370	0.229	2.748	0.416	4.992	6.301	8.794
51	AG	Southside Trunk Lines		87		85	122.12	1.00	0.0025	611552				424.69	0.917	1,834,656	1,274	2.752	0.784	1.569	1.998	0.585	1.754	0.544	6.528	1.000	12.000	2.062	1.998
52	AG	Southside Trunk Lines		85		83	197.1	1.00	0.0024	611552				424.69	0.917	1,834,656	1,274	2.752	0.769	1.537	1.957	0.597	1.790	0.552	6.624	1.000	12.000	2.036	1.957
53	AG	Southside Trunk Lines		83		81	230.44	1.25	0.0024	611552				424.69	0.917	1,834,656	1,274	2.752	1.394	2.787	2.271	0.329	0.987	0.392	5.880	0.804	12.060	2.017	2.589
54	AG	Southside Trunk Lines		81		79	277.4	1.25	0.0021	611552				424.69	0.917	1,834,656	1,274	2.752	1.304	2.607	2.125	0.352	1.056	0.410	6.150	0.860	12.900	1.933	2.413

Appendix F -Table 3
Future Conditions

Mannings coefficient: n=.015 is value for VCP see Appendix 19-A from CERM 7th Edition

			From		To		A	B	D	E					F	G		H		I	J	K	L	M	N	O	P	Q	R
Line #	Location	Description	Road	Manhole	Road	Manhole	Distance (ft)	Diameter (ft)	Slope (ft/ft)	Avg. Flow (gpd)	Added Ave Flows (gpd)	Future Additions Ave Flows (gpd)	Future Additions Ave Flows (outside of AGWWMP Projections) (gpd)	Avg. Flow (gpm)	Avg. Flow (cfs)	Peak Flow (gpd)	Peak Flow (gpm)	Peak Flow (cfs)	Max Capacity (50%)	Qfull	Velocity (ft/s)	Q_{avg}/Q_{full}	Q_{peak}/Q_{full}	d/D avg flow	$d_{avg\ flow}$ (in)	d/D peak flow	$d_{peak\ flow}$ (in)	Velocity Avg Flow (ft/s)	Velocity Peak Flow (ft/s)
55	AG	Cherry Ave Trunk Lines		79		77	192.46	1.33	0.0026	611552				424.69	0.917	1,834,656	1,274	2.752	1.711	3.423	2.464	0.268	0.804	0.348	5.554	0.675	10.773	2.040	2.730
56	AG	Cherry Ave Trunk Lines		77		75	54.75	1.33	0.0032	611552			1040	424.69	0.917	1,834,656	1,274	2.752	1.899	3.797	2.733	0.242	0.725	0.332	5.299	0.630	10.055	2.230	2.974
57	AG	Cherry Ave Trunk Lines		75		73	158.69	1.50	0.0044	483216				335.57	0.725	1,449,648	1,007	2.174	3.068	6.137	3.473	0.118	0.354	0.222	3.996	0.410	7.380	2.264	3.160
58	AG	Cherry Ave Trunk Lines		73		69	103.01	1.50	0.0050	483216				335.57	0.725	1,449,648	1,007	2.174	3.271	6.542	3.702	0.111	0.332	0.222	3.996	0.398	7.164	2.414	3.287
59	AG	Cherry Ave Trunk Lines		69		67	467.81	1.50	0.0071	483216				335.57	0.725	1,449,648	1,007	2.174	3.898	7.795	4.411	0.093	0.279	0.202	3.636	0.356	6.408	2.735	3.706
60	AG	Cherry Ave Trunk Lines		67		61	902.65	1.50	0.0039	483216				335.57	0.725	1,449,648	1,007	2.174	2.889	5.777	3.269	0.125	0.376	0.229	4.122	0.422	7.596	2.132	3.008
61	AG	Cherry Ave Trunk Lines		61		2189	199.48	1.50	0.0025	386784				268.60	0.580	1,160,352	806	1.741	2.313	4.626	2.618	0.125	0.376	0.229	4.122	0.422	7.596	1.707	2.408
62	AG	Cherry Ave Trunk Lines		2189		53	439.03	1.50	0.0020	386784				268.60	0.580	1,160,352	806	1.741	2.069	4.137	2.341	0.140	0.421	0.243	4.374	0.452	8.136	1.601	2.224
63	AG	Cherry Ave Trunk Lines		53		49	908.34	1.50	0.0020	386784				268.60	0.580	1,160,352	806	1.741	2.069	4.137	2.341	0.140	0.421	0.243	4.374	0.452	8.136	1.601	2.224
64	AG	Cherry Ave Trunk Lines		49		47	132.01	1.50	0.0030	386784				268.60	0.580	1,160,352	806	1.741	2.534	5.067	2.868	0.114	0.343	0.222	3.996	0.404	7.272	1.870	2.581
65	AG	Cherry Ave Trunk Lines		47		45	208.69	1.50	0.0069	386784				268.60	0.580	1,160,352	806	1.741	3.842	7.685	4.349	0.075	0.226	0.176	3.168	0.316	5.688	2.409	3.444
66	AG	Cherry Ave Trunk Lines		45		41	252.36	1.50	0.0024	386784				268.60	0.580	1,160,352	806	1.741	2.266	4.532	2.565	0.128	0.384	0.229	4.122	0.428	7.704	1.672	2.360
67	Oceano	Sewer Farm Trunk Lines	Front St.	3		TR2-B	157.70	1.50	0.0040	1277421				887.10	1.916	3,832,263	2,661	5.748	2.936	5.873	3.324	0.326	0.979	0.392	7.056	0.796	14.328	2.951	3.782
68	Oceano	Sewer Farm Trunk Lines	17th	TR2-B		D1-A	497.30	1.50	0.0168	1277421	132900			887.10	1.916	3,832,263	2,661	5.748	5.996	11.991	6.786	0.160	0.479	0.250	4.500	0.482	8.676	4.750	6.650
69	Oceano	Sewer Farm Trunk Lines		D1-A		D	374.66	1.50	0.0174	1144521				794.81	1.717	3,433,563	2,384	5.150	6.102	12.203	6.906	0.141	0.422	0.243	4.374	0.452	8.136	4.724	6.561
70	Oceano	Sewer Farm Trunk Lines	Paso Robles	D		F1-A	498.27	1.50	0.0160	1144521	36250			794.81	1.717	3,433,563	2,384	5.150	5.851	11.702	6.622	0.147	0.440	0.243	4.374	0.464	8.352	4.530	6.357
71	Oceano	Sewer Farm Trunk Lines	19th Street	F1-A		TR4-A	438.64	1.50	0.0178	1108271	12100			769.63	1.662	3,324,813	2,309	4.987	6.171	12.343	6.985	0.135	0.404	0.236	4.248	0.440	7.920	4.666	6.566
72	Oceano	Sewer Farm Trunk Lines		TR4-A		TR4-B	244.25	1.50	0.0178	1096171	12100			761.23	1.644	3,288,513	2,284	4.933	6.171	12.343	6.985	0.133	0.400	0.236	4.248	0.434	7.812	4.666	6.496
73	Oceano	Sewer Farm Trunk Lines	Vista	TR4-B		J1-A	518.05	1.50	0.0060	1084071	12100			752.83	1.626	3,252,213	2,258	4.878	3.583	7.166	4.055	0.227	0.681	0.316	5.688	0.606	10.908	3.212	4.339
74	Oceano	Sewer Farm Trunk Lines		J1-A		L1-E	513.33	1.50	0.0060	1071971	9700			744.42	1.608	3,215,913	2,233	4.824	3.583	7.166	4.055	0.224	0.673	0.316	5.688	0.599	10.782	3.212	4.315
75	Oceano	Sewer Farm Trunk Lines	22nd St.	L1-E		L1-A	398.63	1.50	0.0057	1062271	9700			737.69	1.593	3,186,813	2,213	4.780	3.492	6.985	3.953	0.228	0.684	0.316	5.688	0.606	10.908	3.130	4.229
76	Oceano	Sewer Farm Trunk Lines	Wilmar	L1-A		N1-A	508.23	1.50	0.0027	1052571	43500			730.95	1.579	3,157,713	2,193	4.737	2.404	4.807	2.720	0.328	0.985	0.392	7.056	0.804	14.472	2.416	3.101
77	Oceano	Sewer Farm Trunk Lines	23rd St.	N1-A		M2	273.12	1.50	0.0027	1009071	9700			700.74	1.514	3,027,213	2,102	4.541	2.408	4.816	2.725	0.314	0.943	0.386	6.948	0.774	13.932	2.387	3.091
78	Oceano	Sewer Farm Trunk Lines	Tamara Dr.	M2		M3	331.11	1.50	0.0027	999371				694.01	1.499	2,998,113	2,082	4.497	2.404	4.807	2.720	0.312	0.936	0.386	6.948	0.768	13.824	2.383	3.079
79	Oceano (AG flows in)	Sewer Farm Trunk Lines		M3		291	593.91	1.50	0.0018	999371		111648		694.01	1.499	2,998,113	2,082	4.497	1.984	3.968	2.246	0.378	1.133	0.422	7.596	1.000	18.000	2.066	2.246
80	AG	Sewer Farm Trunk Lines		291		289	375.06	1.50	0.0018	999371				694.01	1.499	2,998,113	2,082	4.497	1.963	3.925	2.221	0.382	1.146	0.428	7.704	1.000	18.000	2.043	2.221
81	AG	Sewer Farm Trunk Lines		289		287	366.22	1.50	0.0018	999371				694.01	1.499	2,998,113	2,082	4.497	1.963	3.925	2.221	0.382	1.146	0.428	7.704	1.000	18.000	2.043	2.221
82	AG	Sewer Farm Trunk Lines		287		285	358.45	1.50	0.0018	999371				694.01	1.499	2,998,113	2,082	4.497	1.963	3.925	2.221	0.382	1.146	0.428	7.704	1.000	18.000	2.043	2.221
83	AG	Sewer Farm Trunk Lines		285		283	366.97	1.50	0.0018	999371				694.01	1.499	2,998,113	2,082	4.497	1.963	3.925	2.221	0.382	1.146	0.428	7.704	1.000	18.000	2.043	2.221
84	AG	Sewer Farm Trunk Lines		283		281	59.17	1.50	0.0018	999371				694.01	1.499	2,998,113	2,082	4.497	1.963	3.925	2.221	0.382	1.146	0.428	7.704	1.000	18.000	2.043	2.221
85	AG	Sewer Farm Trunk Lines		281		279	363.04	1.50	0.0026	846395				587.77	1.270	2,539,185	1,763	3.809	2.359	4.717	2.670	0.269	0.807	0.348	6.264	0.675	12.150	2.210	2.958
86	AG	Sewer Farm Trunk Lines		279		277	365.80	1.50	0.0026	846395			7338	587.77	1.270	2,539,185	1,763	3.809	2.359	4.717	2.670	0.269	0.807	0.348	6.264	0.675	12.150	2.210	2.958
87	AG	Sewer Farm Trunk Lines		277		275	500.37	1.50	0.0080	560369				389.15	0.841	1,681,107	1,167	2.522	4.137	8.275	4.683	0.102	0.305	0.215	3.870	0.380	6.840	2.978	4.102
88	AG	Sewer Farm Trunk Lines		275		273	494.83	1.50	0.0060	560369				389.15	0.841	1,681,107	1,167	2.522	3.583	7.166	4.055	0.117	0.352	0.222	3.996	0.410	7.380	2.644	3.690
89	AG	Sewer Farm Trunk Lines		273		271	207.20	1.50	0.0060	560369			41969	389.15	0.841	1,681,107	1,167	2.522	3.583	7.166	4.055	0.117	0.352	0.222	3.996	0.410	7.380	2.644	3.690
90	Oceano		Ocean Ave	A6-A		A1-C	N/A	1.00	0.0025	109000	109000			75.69	0.164	327,000	227	0.491	0.784	1.569	1.998	0.104	0.313	0.215	2.580	0.386	4.632	1.271	1.750
91	Oceano		Fountain	A1-C		A1-A	N/A	1.00	0.0025	136000	27000			94.44	0.204	408,000	283	0.612	0.784	1.569	1.998	0.130	0.390	0.236	2.832	0.434	5.208	1.334	1.858
92	Oceano		At WWTP	A1-A		110	432.76	2.00	0.0010	1424500				989.24	2.137	4,273,500	2,968	6.410	3.150	6.300	2.006	0.339	1.017	0.398	9.552	0.830	19.920	1.781	2.286
93	Oceano			110		S1-A	397.31	2.00	0.0010	1424500	8000			989.24	2.137	4,273,500	2,968	6.410	3.150	6.300	2.006	0.339	1.017	0.398	9.552	0.830	19.920	1.781	2.286
94	Oceano			S1-A		130	175.87	2.00	0.0010	1416500				983.68	2.125	4,249,500	2,951	6.374	3.150	6.300	2.006	0.337	1.012	0.398	9.552	0.830	19.920	1.781	2.286
95	Oceano		San Luis Pl.	130		140	326.82	2.00	0.0010	1416500				983.68	2.125	4,249,500	2,951	6.374	3.150	6.300	2.006	0.337	1.012	0.398	9.552	0.830	19.920	1.781	2.286
96	Oceano			140		150	317.68	2.00	0.0010	1416500				983.68	2.125	4,249,500	2,951	6.374	3.150	6.300	2.006	0.337	1.012	0.398	9.552	0.830	19.920	1.781	2.286
97	Oceano			150		160	482.32	2.00	0.0010	1416500				983.68	2.125	4,249,500	2,951	6.374	3.150	6.300	2.006	0.337	1.012	0.398	9.552	0.830	19.920	1.781	2.286
98	Oceano			160	Pier & Mendel	T1-A	313.69	2.00	0.0010	1416500				983.68	2.125	4,249,500	2,951	6.374	3.150	6.300	2.006	0.337	1.012	0.398	9.552	0.830	19.920	1.781	2.286
99	Oceano		Mendel Dr.	T1-A		U1-A	280.18	2.00	0.0010	1416500	41500			983.68	2.125	4,249,500	2,951	6.374	3.150	6.300	2.006	0.337	1.012	0.398	9.552	0.830	19.920	1.781	2.286
100	Oceano		Norswing	U1-A		V1-A	282.84	2.00	0.0010	1375000				954.86	2.063	4,125,000	2,865	6.188	3.150	6.300	2.006	0.327	0.982	0.392	9.408	0.804	19.296	1.781	2.286
101	Oceano			V1-A		W1-A	266.50	2.00	0.0010	1375000	6250			954.86	2.063	4,125,000	2,865	6.188	3.150	6.300	2.006	0.327	0.982	0.392	9.408	0.804	19.296	1.781	2.286
102	Oceano			W1-A		X1-A	266.50	2.00	0.0010	1368750	6250			950.52	2.053	4,106,250	2,852	6.159	3.150	6.300	2.006	0.326	0.978	0.392	9.408	0.796	19.104	1.781	2.282
103	Oceano			X1-A		Y1-A	266.50	2.00	0.0010	1362500	6250			946.18	2.044	4,087,500	2,839	6.131	3.150	6.300	2.006	0.324	0.973	0.392	9.408	0.796	19.104	1.781	2.282
104	Oceano			Y1-A		TR13-A	265.14	2.00	0.0010	1356250	6250			941.84	2.034	4,068,750	2,826	6.103	3.150	6.300	2.006	0.323	0.969	0.392	9.408	0.788	18.912	1.781	2.278
105	Oceano		Coolidge Dr.	TR13-A		240	540.05	2.00	0.0010	1350000	10000			937.50	2.025	4,050,000	2,813	6.075	3.150	6.300	2.006	0.321	0.964	0.392	9.408	0.788	18.912	1.781	2.278

Appendix F -Table 3
Future Conditions

Mannings coefficient: n=.015 is value for VCP see Appendix 19-A from CERM 7th Edition

			From		To		A	B	D	E					F	G		H		I	J	K	L	M	N	O	P	Q	R
Line #	Location	Description	Road	Manhole	Road	Manhole	Distance (ft)	Diameter (ft)	Slope (ft/ft)	Avg. Flow (gpd)	Added Ave Flows (gpd)	Future Additions Ave Flows (gpd)	Future Additions Ave Flows (outside of AGWWMP Projections) (gpd)	Avg. Flow (gpm)	Avg. Flow (cfs)	Peak Flow (gpd)	Peak Flow (gpm)	Peak Flow (cfs)	Max Capacity (50%)	Qfull	Velocity (ft/s)	Q_{avg}/Q_{full}	Q_{peak}/Q_{full}	d/D avg flow	$d_{avg\ flow}$ (in)	d/D peak flow	$d_{peak\ flow}$ (in)	Velocity Avg Flow (ft/s)	Velocity Peak Flow (ft/s)
106	Grover Beach			240		250	326.18	1.75	0.0010	1340000				930.56	2.010	4,020,000	2,792	6.030	2.206	4.413	1.835	0.455	1.366	0.470	9.870	1.000	21.000	1.780	1.835
107	Grover Beach		Hwy 1	250		260	500.00	1.75	0.0018	1340000				930.56	2.010	4,020,000	2,792	6.030	2.960	5.921	2.462	0.339	1.018	0.398	8.358	0.830	17.430	2.186	2.806
108	Grover Beach			260		270	500.00	1.75	0.0018	1340000				930.56	2.010	4,020,000	2,792	6.030	2.960	5.921	2.462	0.339	1.018	0.398	8.358	0.830	17.430	2.186	2.806
109	Grover Beach			270		280	72.77	1.75	0.0018	1340000				930.56	2.010	4,020,000	2,792	6.030	2.960	5.921	2.462	0.339	1.018	0.398	8.358	0.830	17.430	2.186	2.806
110	Grover Beach			280		290	467.23	1.75	0.0010	1340000				930.56	2.010	4,020,000	2,792	6.030	2.206	4.413	1.835	0.455	1.366	0.470	9.870	1.000	21.000	1.780	1.835
111	Grover Beach			290		300	500.00	1.75	0.0010	1340000				930.56	2.010	4,020,000	2,792	6.030	2.206	4.413	1.835	0.455	1.366	0.470	9.870	1.000	21.000	1.780	1.835
112	Grover Beach			300		310	470.00	1.75	0.0010	1340000				930.56	2.010	4,020,000	2,792	6.030	2.206	4.413	1.835	0.455	1.366	0.470	9.870	1.000	21.000	1.780	1.835
113	Grover Beach			310		320	500.00	1.50	0.0022	1340000				930.56	2.010	4,020,000	2,792	6.030	2.170	4.339	2.456	0.463	1.390	0.476	8.568	1.000	18.000	2.382	2.456
114	Grover Beach			320		330	264.95	1.50	0.0022	1340000				930.56	2.010	4,020,000	2,792	6.030	2.170	4.339	2.456	0.463	1.390	0.476	8.568	1.000	18.000	2.382	2.456
115	Grover Beach		Cross Railroad	330		340	307.00	1.50	0.0022	1340000	770000	300000		930.56	2.010	4,020,000	2,792	6.030	2.170	4.339	2.456	0.463	1.390	0.476	8.568	1.000	18.000	2.382	2.456
116	Grover Beach		Railroad	340		350	319.78	1.25	0.0014	270000				187.50	0.405	810,000	563	1.215	1.064	2.129	1.735	0.190	0.571	0.290	4.350	0.536	8.040	1.325	1.776
117	Grover Beach			400		410	531.31	1.25	0.0018	270000				187.50	0.405	810,000	563	1.215	1.207	2.414	1.967	0.168	0.503	0.260	3.900	0.500	7.500	1.408	1.967
118	Grover Beach			410		420	566.19	1.00	0.0020	270000	260000	10000		187.50	0.405	810,000	563	1.215	0.702	1.403	1.787	0.289	0.866	0.364	4.368	0.718	8.616	1.522	2.005

Mannings coefficient: n=.015 is value for VCP see Appendix 19-A from CERM 7th Edition

Appendix F -Table 3
Future Conditions

			From		To		A	B	C	D	E	F	G	H		I	J	K	L	M	N	O	P	Q	R
Line #	Location	Description	Road	Manhole	Road	Manhole	Distance (ft)	Diameter (ft)	Area (ft^2)	Slope (ft/ft)	Avg. Flow (gpd)	Avg. Flow (cfs)	Peak Flow (gpd)	Peak Flow (cfs)	Max Capacity (50%)	Qfull	Velocity (ft/s)	Q_{avg}/Q_{full}	Q_{peak}/Q_{full}	$d/D_{avg\ flow}$	$d_{avg\ flow}$ (in)	$d/D_{peak\ flow}$	$d_{peak\ flow}$ (in)	Velocity Avg Flow (ft/s)	Velocity Peak Flow (ft/s)
1	WWTP		Honolulu	A1-A		A	509.16	2.50	4.9086	0.00250	3782001	5.673	11,346,003	17.019	8.911	17.821	3.631	0.318	0.955	0.386	11.580	0.780	23.400	3.180	4.124
2	Oceano			A		B	530.10	2.50	4.9086	0.00250	2231501	3.347	6,694,503	10.042	8.911	17.821	3.631	0.188	0.563	0.280	8.400	0.528	15.840	2.658	3.689
3	Oceano			B		C	809.32	2.50	4.9086	0.00250	2231501	3.347	6,694,503	10.042	8.911	17.821	3.631	0.188	0.563	0.280	8.400	0.528	15.840	2.658	3.689
4	Oceano			C		TR1-B	593.03	2.50	4.9086	0.00250	2231501	3.347	6,694,503	10.042	8.911	17.821	3.631	0.188	0.563	0.280	8.400	0.528	15.840	2.658	3.689
5	Oceano		Sand Dollar	TR1-B	Railroad	1	622.00	2.50	4.9086	0.00250	2231501	3.347	6,694,503	10.042	8.911	17.821	3.631	0.188	0.563	0.280	8.400	0.528	15.840	2.658	3.689
6	Oceano		Railroad	1		2	173.53	2.50	4.9086	0.00250	2152501	3.229	6,457,503	9.686	8.911	17.821	3.631	0.181	0.544	0.280	8.400	0.516	15.480	2.658	3.660
7	Oceano			2	Hwy 1	3	350.29	2.50	4.9086	0.00250	2152501	3.229	6,457,503	9.686	8.911	17.821	3.631	0.181	0.544	0.280	8.400	0.516	15.480	2.658	3.660
8	Oceano	Southside Trunk Lines	Hwy 1	3		TR7-C	752.60	2.25	3.9760	0.00489	962431	1.444	2,887,293	4.331	9.410	18.819	4.733	0.077	0.230	0.176	4.752	0.324	8.748	2.622	3.806
9	Oceano	Southside Trunk Lines	Nipomo St	TR7-C		4	632.90	2.25	3.9760	0.00580	938231	1.407	2,814,693	4.222	10.248	20.496	5.155	0.069	0.206	0.163	4.401	0.300	8.100	2.742	4.021
10	Oceano	Southside Trunk Lines		4		5	602.42	2.25	3.9760	0.00580	938231	1.407	2,814,693	4.222	10.248	20.496	5.155	0.069	0.206	0.163	4.401	0.300	8.100	2.742	4.021
11	Oceano	Southside Trunk Lines		5		TR8-A	636.61	2.25	3.9760	0.00422	938231	1.407	2,814,693	4.222	8.741	17.483	4.397	0.080	0.241	0.189	5.103	0.332	8.964	2.533	3.588
12	Oceano	Southside Trunk Lines		TR8-A		TR8-B	495.00	2.25	3.9760	0.00764	938231	1.407	2,814,693	4.222	11.762	23.523	5.916	0.060	0.179	0.150	4.050	0.270	7.290	3.017	4.331
13	Oceano	Southside Trunk Lines		TR8-B		TR8-C	424.55	2.25	3.9760	0.00760	938231	1.407	2,814,693	4.222	11.731	23.462	5.901	0.060	0.180	0.150	4.050	0.270	7.290	3.009	4.319
14	Oceano	Southside Trunk Lines		TR8-C	Elm St	Q'1-A	391.00	2.25	3.9760	0.00760	930231	1.395	2,790,693	4.186	11.731	23.462	5.901	0.059	0.178	0.150	4.050	0.270	7.290	3.009	4.319
15	Oceano	Southside Trunk Lines	Hwy 1	Q'1-A		Q'1-Aa	89.45	2.25	3.9760	0.00690	930231	1.395	2,790,693	4.186	11.178	22.355	5.623	0.062	0.187	0.163	4.401	0.280	7.560	2.991	4.116
16	Oceano	Southside Trunk Lines		Q'1-Aa		Q1-A	200.15	2.25	3.9760	0.00200	852231	1.278	2,556,693	3.835	6.018	12.036	3.027	0.106	0.319	0.215	5.805	0.386	10.422	1.925	2.652
17	Oceano	Southside Trunk Lines		Q1-A		TR9-A	476.62	2.25	3.9760	0.00200	852231	1.278	2,556,693	3.835	6.018	12.036	3.027	0.106	0.319	0.215	5.805	0.386	10.422	1.925	2.652
18	Oceano	Southside Trunk Lines		TR9-A		TR10-A	532.31	2.25	3.9760	0.00200	844231	1.266	2,532,693	3.799	6.018	12.036	3.027	0.105	0.316	0.215	5.805	0.386	10.422	1.925	2.652
19	Oceano	Southside Trunk Lines		TR10-A		6	412.57	2.25	3.9760	0.00200	807981	1.212	2,423,943	3.636	6.018	12.036	3.027	0.101	0.302	0.215	5.805	0.380	10.260	1.925	2.652
20	Oceano	Southside Trunk Lines		6		7	380.55	2.25	3.9760	0.00200	807981	1.212	2,423,943	3.636	6.018	12.036	3.027	0.101	0.302	0.215	5.805	0.380	10.260	1.925	2.652
21	Oceano	Southside Trunk Lines		7		8	275.65	2.25	3.9760	0.00200	807981	1.212	2,423,943	3.636	6.018	12.036	3.027	0.101	0.302	0.215	5.805	0.380	10.260	1.925	2.652
22	Oceano	Southside Trunk Lines		8		9a	287.95	2.25	3.9760	0.00200	807981	1.212	2,423,943	3.636	6.018	12.036	3.027	0.101	0.302	0.215	5.805	0.380	10.260	1.925	2.652
23	Oceano	Southside Trunk Lines		9a		9	134.20	2.25	3.9760	0.00200	807981	1.212	2,423,943	3.636	6.018	12.036	3.027	0.101	0.302	0.215	5.805	0.380	10.260	1.925	2.652
24	Oceano	Southside Trunk Lines		9		10	318.30	2.25	3.9760	0.00424	807981	1.212	2,423,943	3.636	8.762	17.524	4.408	0.069	0.207	0.163	4.401	0.300	8.100	2.345	3.438
25	Oceano	Southside Trunk Lines		10		11	426.80	2.25	3.9760	0.00420	807981	1.212	2,423,943	3.636	8.721	17.441	4.387	0.069	0.208	0.163	4.401	0.300	8.100	2.334	3.422
26	Oceano	Southside Trunk Lines	Halcyon	11		137	853.10	2.25	3.9760	0.00420	807981	1.212	2,423,943	3.636	8.721	17.441	4.387	0.069	0.208	0.163	4.401	0.300	8.100	2.334	3.422
27	Oceano	Southside Trunk Lines		137		135	397.03	2.25	3.9760	0.00223	807981	1.212	2,423,943	3.636	6.354	12.709	3.196	0.095	0.286	0.202	5.454	0.364	9.828	1.982	2.723
28	Oceano(AG flows in)	Southside Trunk Lines		135		133	399.23	2.25	3.9760	0.00223	737981	1.107	2,213,943	3.321	6.354	12.709	3.196	0.087	0.261	0.189	5.103	0.348	9.396	1.841	2.647
29	Oceano	Southside Trunk Lines	AG Creek	133	(inverse siphon)	131	163.15	1.50	1.7671	0.00250	737981	1.107	2,213,943	3.321	2.282	4.564	2.583	0.243	0.728	0.332	5.976	0.630	11.340	2.108	2.810
30	Oceano	Southside Trunk Lines		131		129	158.77	2.25	3.9760	0.00211	737981	1.107	2,213,943	3.321	6.181	12.362	3.109	0.090	0.269	0.189	5.103	0.348	9.396	1.791	2.574
31	Oceano	Southside Trunk Lines		129		127	301.76	2.25	3.9760	0.00210	737981	1.107	2,213,943	3.321	6.166	12.333	3.102	0.090	0.269	0.189	5.103	0.348	9.396	1.787	2.568
32	Oceano	Southside Trunk Lines		127		125	626.37	2.25	3.9760	0.00210	737981	1.107	2,213,943	3.321	6.166	12.333	3.102	0.090	0.269	0.189	5.103	0.348	9.396	1.787	2.568
33	Oceano	Southside Trunk Lines		125		123	123.68	2.00	3.1415	0.00250	737981	1.107	2,213,943	3.321	4.915	9.829	3.129	0.113	0.338	0.222	5.328	0.398	9.552	2.040	2.778
34	Oceano	Southside Trunk Lines		123		123a	131.82	2.00	3.1415	0.00250	737981	1.107	2,213,943	3.321	4.915	9.829	3.129	0.113	0.338	0.222	5.328	0.398	9.552	2.040	2.778
35	Oceano	Southside Trunk Lines		123a		121	344.85	2.00	3.1415	0.00585	737981	1.107	2,213,943	3.321	7.518	15.036	4.786	0.074	0.221	0.176	4.224	0.316	7.584	2.652	3.791
36	Oceano	Southside Trunk Lines		121		119	501.62	2.00	3.1415	0.00598	737981	1.107	2,213,943	3.321	7.601	15.202	4.839	0.073	0.218	0.176	4.224	0.308	7.392	2.681	3.774
37	Oceano	Southside Trunk Lines	Valley Road	119		117a	527.49	2.00	3.1415	0.00476	737981	1.107	2,213,943	3.321	6.781	13.563	4.317	0.082	0.245	0.189	4.536	0.332	7.968	2.487	3.523
38	Oceano	Southside Trunk Lines		117a		117	326.84	2.00	3.1415	0.00470	737981	1.107	2,213,943	3.321	6.739	13.477	4.290	0.082	0.246	0.189	4.536	0.332	7.968	2.471	3.501
39	Oceano	Southside Trunk Lines		117		113	278	2.00	3.1415	0.00644	737981	1.107	2,213,943	3.321	7.888	15.776	5.022	0.070	0.211	0.176	4.224	0.308	7.392	2.782	3.917
40	Oceano	Southside Trunk Lines		113		111	622.17	2.00	3.1415	0.00650	660816	0.991	1,982,448	2.974	7.925	15.849	5.045	0.063	0.188	0.163	3.912	0.280	6.720	2.684	3.693
41	Oceano	Southside Trunk Lines		111		111a	99.83	2.00	3.1415	0.00650	660816	0.991	1,982,448	2.974	7.925	15.849	5.045	0.063	0.188	0.163	3.912	0.280	6.720	2.684	3.693
42	Oceano	Southside Trunk Lines		111a		109	190.45	2.00	3.1415	0.00790	660816	0.991	1,982,448	2.974		17.473	5.562	0.057	0.170	0.150	3.600	0.270	6.480	2.837	4.071
43	Oceano	Southside Trunk Lines		109		107	622.84	2.00	3.1415	0.00787	660816	0.991	1,982,448	2.974	8.720	17.439	5.551	0.057	0.171	0.150	3.600	0.270	6.480	2.831	4.064
44	Oceano	Southside Trunk Lines		107		105	575.74	2.00	3.1415	0.00395	660816	0.991	1,982,448	2.974	6.178	12.355	3.933	0.080	0.241	0.189	4.536	0.332	7.968	2.265	3.209
45	Oceano	Southside Trunk Lines		105		103	442.64	2.00	3.1415	0.00395	660816	0.991	1,982,448	2.974	6.178	12.355	3.933	0.080	0.241	0.189	4.536	0.332	7.968	2.265	3.209
46	Oceano	Southside Trunk Lines		103		101	543.72	2.00	3.1415	0.00250	660816	0.991	1,982,448	2.974	4.915	9.829	3.129	0.101	0.303	0.215	5.160	0.380	9.120	1.990	2.741
47	Oceano	Southside Trunk Lines		101		97	555.54	2.00	3.1415	0.00250	660816	0.991	1,982,448	2.974	4.915	9.829	3.129	0.101	0.303	0.215	5.160	0.380	9.120	1.990	2.741
48	AG	Southside Trunk Lines	Fair Oaks	97		95	624.62	1.00	0.7854	0.00200	622416	0.934	1,867,248	2.801	0.692	1.385	1.763	0.674	2.023	0.599	7.188	1.000	12.000	1.876	1.763
49	AG	Southside Trunk Lines		95		89	783.35	1.00	0.7854	0.00740	622416	0.934	1,867,248	2.801	1.332	2.663	3.391	0.351	1.052	0.410	4.920	0.860	10.320	3.086	3.852
50	AG	Southside Trunk Lines		89		87	58.09	1.00	0.7854	0.05850	622416	0.934	1,867,248	2.801	3.744	7.488	9.535	0.125	0.374	0.229	2.748	0.422	5.064	6.217	8.772
51	AG	Southside Trunk Lines		87		85	122.12	1.00	0.7854	0.00250	610512	0.916	1,831,536	2.747	0.774	1.548	1.971	0.592	1.775	0.552	6.624	1.000	12.000	2.050	1.971

Appendix F - Table 4
Future Conditions
(Gravity Only)

Mannings coefficient: n=.015 is value for VCP see Appendix 19-A from CERM 7th Edition

			From		To		A	B	C	D	E	F	G	H		I	J	K	L	M	N	O	P	Q	R
Line #	Location	Description	Road	Manhole	Road	Manhole	Distance (ft)	Diameter (ft)	Area (ft^2)	Slope (ft/ft)	Avg. Flow (gpd)	Avg. Flow (cfs)	Peak Flow (gpd)	Peak Flow (cfs)	Max Capacity (50%)	Qfull	Velocity (ft/s)	Q_{avg}/Q_{full}	Q_{peak}/Q_{full}	$d/D_{avg\ flow}$	$d_{avg\ flow}$ (in)	$d/D_{peak\ flow}$	$d_{peak\ flow}$ (in)	Velocity Avg Flow (ft/s)	Velocity Peak Flow (ft/s)
52	AG	Southside Trunk Lines		85		83	197.1	1.00	0.7854	0.00240	610512	0.916	1,831,536	2.747	0.758	1.517	1.931	0.604	1.811	0.560	6.720	1.000	12.000	2.020	1.931
53	AG	Southside Trunk Lines		83		81	230.44	1.20	1.1309	0.00240	610512	0.916	1,831,536	2.747	1.233	2.466	2.181	0.371	1.114	0.422	6.077	1.000	14.400	2.006	2.181
54	AG	Southside Trunk Lines		81		79	277.4	1.25	1.2271	0.00210	610512	0.916	1,831,536	2.747	1.286	2.572	2.096	0.356	1.068	0.410	6.150	0.870	13.050	1.908	2.373
55	AG	Cherry Ave Trunk Lines		79		77	192.46	1.33	1.3892	0.00260	610512	0.916	1,831,536	2.747	1.689	3.377	2.431	0.271	0.813	0.356	5.682	0.682	10.885	2.042	2.703
56	AG	Cherry Ave Trunk Lines		77		75	54.75	1.33	1.3892	0.00320	610512	0.916	1,831,536	2.747	1.873	3.747	2.697	0.244	0.733	0.332	5.299	0.635	10.135	2.201	2.934
57	AG	Cherry Ave Trunk Lines		75		73	158.69	1.50	1.7671	0.00440	483216	0.725	1,449,648	2.174	3.027	6.055	3.426	0.120	0.359	0.222	3.996	0.410	7.380	2.234	3.118
58	AG	Cherry Ave Trunk Lines		73		69	103.01	1.50	1.7671	0.00500	483216	0.725	1,449,648	2.174	3.227	6.454	3.653	0.112	0.337	0.222	3.996	0.398	7.164	2.381	3.243
59	AG	Cherry Ave Trunk Lines		69		67	467.81	1.50	1.7671	0.00710	483216	0.725	1,449,648	2.174	3.846	7.691	4.353	0.094	0.283	0.202	3.636	0.364	6.552	2.699	3.708
60	AG	Cherry Ave Trunk Lines		67		61	902.65	1.50	1.7671	0.00390	483216	0.725	1,449,648	2.174	2.850	5.700	3.226	0.127	0.381	0.229	4.122	0.428	7.704	2.103	2.968
61	AG	Cherry Ave Trunk Lines		61		2189	199.48	1.50	1.7671	0.00250	386784	0.580	1,160,352	1.741	2.282	4.564	2.583	0.127	0.381	0.229	4.122	0.428	7.704	1.684	2.376
62	AG	Cherry Ave Trunk Lines		2189		53	439.03	1.50	1.7671	0.00200	386784	0.580	1,160,352	1.741	2.041	4.082	2.310	0.142	0.426	0.243	4.374	0.452	8.136	1.580	2.195
63	AG	Cherry Ave Trunk Lines		53		49	908.34	1.50	1.7671	0.00200	386784	0.580	1,160,352	1.741	2.041	4.082	2.310	0.142	0.426	0.243	4.374	0.452	8.136	1.580	2.195
64	AG	Cherry Ave Trunk Lines		49		47	132.01	1.50	1.7671	0.00300	386784	0.580	1,160,352	1.741	2.500	5.000	2.829	0.116	0.348	0.222	3.996	0.404	7.272	1.845	2.546
65	AG	Cherry Ave Trunk Lines		47		45	208.69	1.50	1.7671	0.00690	386784	0.580	1,160,352	1.741	3.791	7.582	4.291	0.077	0.230	0.176	3.168	0.316	5.688	2.377	3.398
66	AG	Cherry Ave Trunk Lines		45		41	252.36	1.50	1.7671	0.00240	386784	0.580	1,160,352	1.741	2.236	4.472	2.531	0.130	0.389	0.229	4.122	0.428	7.704	1.650	2.328
67	Oceano	Sewer Farm Trunk Lines	Front St.	3		TR2-B	157.70	1.50	1.7671	0.00403	1190070	1.785	3,570,210	5.355	2.897	5.795	3.279	0.308	0.924	0.380	6.840	0.762	13.716	2.873	3.712
68	Oceano	Sewer Farm Trunk Lines	17th	TR2-B		D1-A	497.30	1.50	1.7671	0.01680	1190070	1.785	3,570,210	5.355	5.916	11.831	6.695	0.151	0.453	0.250	4.500	0.470	8.460	4.687	6.494
69	Oceano	Sewer Farm Trunk Lines		D1-A		D	374.66	1.50	1.7671	0.01740	1057170	1.586	3,171,510	4.757	6.020	12.041	6.814	0.132	0.395	0.236	4.248	0.434	7.812	4.552	6.337
70	Oceano	Sewer Farm Trunk Lines	Paso Robles	D		F1-A	498.27	1.50	1.7671	0.01600	1057170	1.586	3,171,510	4.757	5.773	11.546	6.534	0.137	0.412	0.236	4.248	0.446	8.028	4.365	6.142
71	Oceano	Sewer Farm Trunk Lines	19th Street	F1-A		TR4-A	438.64	1.50	1.7671	0.01780	1020920	1.531	3,062,760	4.594	6.089	12.178	6.892	0.126	0.377	0.229	4.122	0.422	7.596	4.493	6.340
72	Oceano	Sewer Farm Trunk Lines		TR4-A		TR4-B	244.25	1.50	1.7671	0.01780	1008820	1.513	3,026,460	4.540	6.089	12.178	6.892	0.124	0.373	0.229	4.122	0.422	7.596	4.493	6.340
73	Oceano	Sewer Farm Trunk Lines	Vista	TR4-B		J1-A	518.05	1.50	1.7671	0.00600	996720	1.495	2,990,160	4.485	3.535	7.071	4.001	0.211	0.634	0.308	5.544	0.575	10.350	3.121	4.209
74	Oceano	Sewer Farm Trunk Lines		J1-A		L1-E	513.33	1.50	1.7671	0.00600	984620	1.477	2,953,860	4.431	3.535	7.071	4.001	0.209	0.627	0.300	5.400	0.570	10.260	3.121	4.209
75	Oceano	Sewer Farm Trunk Lines	22nd St.	L1-E		L1-A	398.63	1.50	1.7671	0.00570	974920	1.462	2,924,760	4.387	3.446	6.891	3.900	0.212	0.637	0.308	5.544	0.575	10.350	3.042	4.103
76	Oceano	Sewer Farm Trunk Lines	Wilmar	L1-A		N1-A	508.23	1.50	1.7671	0.00270	965220	1.448	2,895,660	4.343	2.372	4.743	2.684	0.305	0.916	0.380	6.840	0.756	13.608	2.351	3.033
77	Oceano	Sewer Farm Trunk Lines	23rd St.	N1-A		M2	273.12	1.50	1.7671	0.00271	921720	1.383	2,765,160	4.148	2.376	4.752	2.689	0.291	0.873	0.372	6.696	0.726	13.068	2.323	3.023
78	Oceano	Sewer Farm Trunk Lines	Tamara Dr.	M2		M3	331.11	1.50	1.7671	0.00270	912020	1.368	2,736,060	4.104	2.372	4.743	2.684	0.288	0.865	0.364	6.552	0.718	12.924	2.287	3.012
79	Oceano (AG flows in)	Sewer Farm Trunk Lines		M3		291	593.91	1.50	1.7671	0.00184	912020	1.368	2,736,060	4.104	1.958	3.915	2.216	0.349	1.048	0.404	7.272	0.850	15.300	1.994	2.526
80	AG	Sewer Farm Trunk Lines		291		289	375.06	1.50	1.7671	0.00184	912020	1.368	2,736,060	4.104	1.958	3.915	2.216	0.349	1.048	0.404	7.272	0.850	15.300	1.994	2.526
81	AG	Sewer Farm Trunk Lines		289		287	366.22	1.50	1.7671	0.00184	912020	1.368	2,736,060	4.104	1.958	3.915	2.216	0.349	1.048	0.404	7.272	0.850	15.300	1.994	2.526
82	AG	Sewer Farm Trunk Lines		287		285	358.45	1.50	1.7671	0.00184	912020	1.368	2,736,060	4.104	1.958	3.915	2.216	0.349	1.048	0.404	7.272	0.850	15.300	1.994	2.526
83	AG	Sewer Farm Trunk Lines		285		283	366.97	1.50	1.7671	0.00184	912020	1.368	2,736,060	4.104	1.958	3.915	2.216	0.349	1.048	0.404	7.272	0.850	15.300	1.994	2.526
84	AG	Sewer Farm Trunk Lines		283		281	59.17	1.50	1.7671	0.00184	912020	1.368	2,736,060	4.104	1.958	3.915	2.216	0.349	1.048	0.404	7.272	0.850	15.300	1.994	2.526
85	AG	Sewer Farm Trunk Lines		281		279	363.04	1.50	1.7671	0.00260	912020	1.368	2,736,060	4.104	2.327	4.654	2.634	0.294	0.882	0.372	6.696	0.734	13.212	2.276	2.966
86	AG	Sewer Farm Trunk Lines		279		277	365.80	1.50	1.7671	0.00260	912020	1.368	2,736,060	4.104	2.327	4.654	2.634	0.294	0.882	0.372	6.696	0.734	13.212	2.276	2.966
87	AG	Sewer Farm Trunk Lines		277		275	500.37	1.50	1.7671	0.00800	518400	0.778	1,555,200	2.333	4.082	8.164	4.620	0.095	0.286	0.202	3.636	0.364	6.552	2.865	3.936
88	AG	Sewer Farm Trunk Lines		275		273	494.83	1.50	1.7671	0.00600	518400	0.778	1,555,200	2.333	3.535	7.071	4.001	0.110	0.330	0.215	3.870	0.392	7.056	2.545	3.553
89	AG	Sewer Farm Trunk Lines		273		271	207.20	1.50	1.7671	0.00600	518400	0.778	1,555,200	2.333	3.535	7.071	4.001	0.110	0.330	0.215	3.870	0.392	7.056	2.545	3.553
90	Oceano		Ocean Ave	A6-A		A1-C	N/A	1.00	0.7854	0.00250	109000	0.164	327,000	0.491	0.774	1.548	1.971	0.106	0.317	0.215	2.580	0.386	4.632	1.254	1.727
91	Oceano		Fountain	A1-C		A1-A	N/A	1.00	0.7854	0.00250	136000	0.204	408,000	0.612	0.774	1.548	1.971	0.132	0.395	0.236	2.832	0.434	5.208	1.317	1.833
92	Oceano		At WWTP	A1-A		110	432.76	2.00	3.1415	0.00100	1414500	2.122	3,960,600	5.941	3.108	6.216	1.979	0.341	0.956	0.404	9.696	0.780	18.720	1.781	2.248
93	Oceano			110		S1-A	397.31	2.00	3.1415	0.00100	1414500	2.122	3,960,600	5.941	3.108	6.216	1.979	0.341	0.956	0.404	9.696	0.780	18.720	1.781	2.248
94	Oceano			S1-A		130	175.87	2.00	3.1415	0.00100	1406500	2.110	3,938,200	5.907	3.108	6.216	1.979	0.339	0.950	0.398	9.552	0.780	18.720	1.757	2.248
95	Oceano		San Luis Pl.	130		140	326.82	2.00	3.1415	0.00100	1406500	2.110	3,938,200	5.907	3.108	6.216	1.979	0.339	0.950	0.398	9.552	0.780	18.720	1.757	2.248
96	Oceano			140		150	317.68	2.00	3.1415	0.00100	1406500	2.110	3,938,200	5.907	3.108	6.216	1.979	0.339	0.950	0.398	9.552	0.780	18.720	1.757	2.248
97	Oceano			150		160	482.32	2.00	3.1415	0.00100	1406500	2.110	3,938,200	5.907	3.108	6.216	1.979	0.339	0.950	0.398	9.552	0.780	18.720	1.757	2.248
98	Oceano			160	Pier & Mendel	T1-A	313.69	2.00	3.1415	0.00100	1406500	2.110	3,938,200	5.907	3.108	6.216	1.979	0.339	0.950	0.398	9.552	0.780	18.720	1.757	2.248
99	Oceano		Mendel Dr.	T1-A		U1-A	280.18	2.00	3.1415	0.00100	1406500	2.110	3,938,200	5.907	3.108	6.216	1.979	0.339	0.950	0.398	9.552	0.780	18.720	1.757	2.248

Appendix F - Table 4
Future Conditions
(Gravity Only)

Mannings coefficient: n=.015 is value for VCP see Appendix 19-A from CERM 7th Edition

			From		To		A	B	C	D	E	F	G	H		I	J	K	L	M	N	O	P	Q	R
Line #	Location	Description	Road	Manhole	Road	Manhole	Distance (ft)	Diameter (ft)	Area (ft^2)	Slope (ft/ft)	Avg. Flow (gpd)	Avg. Flow (cfs)	Peak Flow (gpd)	Peak Flow (cfs)	Max Capacity (50%)	Qfull	Velocity (ft/s)	Q_{avg}/Q_{full}	Q_{peak}/Q_{full}	$d/D_{avg\ flow}$	$d_{avg\ flow}$ (in)	$d/D_{peak\ flow}$	$d_{peak\ flow}$ (in)	Velocity Avg Flow (ft/s)	Velocity Peak Flow (ft/s)
100	Oceano		Norswing	U1-A		V1-A	282.84	2.00	3.1415	0.00100	1365000	2.048	3,822,000	5.733	3.108	6.216	1.979	0.329	0.922	0.392	9.408	0.762	18.288	1.757	2.240
101	Oceano			V1-A		W1-A	266.50	2.00	3.1415	0.00100	1365000	2.048	3,822,000	5.733	3.108	6.216	1.979	0.329	0.922	0.392	9.408	0.762	18.288	1.757	2.240
102	Oceano			W1-A		X1-A	266.50	2.00	3.1415	0.00100	1358750	2.038	3,804,500	5.707	3.108	6.216	1.979	0.328	0.918	0.392	9.408	0.756	18.144	1.757	2.236
103	Oceano			X1-A		Y1-A	266.50	2.00	3.1415	0.00100	1352500	2.029	3,787,000	5.681	3.108	6.216	1.979	0.326	0.914	0.392	9.408	0.756	18.144	1.757	2.236
104	Oceano			Y1-A		TR13-A	265.14	2.00	3.1415	0.00100	1346250	2.019	3,769,500	5.654	3.108	6.216	1.979	0.325	0.910	0.392	9.408	0.750	18.000	1.757	2.236
105	Oceano		Coolidge Dr.	TR13-A		240	540.05	2.00	3.1415	0.00100	1340000	2.010	3,752,000	5.628	3.108	6.216	1.979	0.323	0.905	0.392	9.408	0.750	18.000	1.757	2.236
106	Grover Beach			240		250	326.18	1.75	2.4052	0.00100	1330000	1.995	3,724,000	5.586	2.177	4.354	1.810	0.458	1.283	0.470	9.870	1.000	21.000	1.756	1.810
107	Grover Beach		Hwy 1	250		260	500.00	1.75	2.4052	0.00180	1330000	1.995	3,724,000	5.586	2.921	5.842	2.429	0.342	0.956	0.404	8.484	0.780	16.380	2.186	2.759
108	Grover Beach			260		270	500.00	1.75	2.4052	0.00180	1330000	1.995	3,724,000	5.586	2.921	5.842	2.429	0.342	0.956	0.404	8.484	0.780	16.380	2.186	2.759
109	Grover Beach			270		280	72.77	1.75	2.4052	0.00180	1330000	1.995	3,724,000	5.586	2.921	5.842	2.429	0.342	0.956	0.404	8.484	0.780	16.380	2.186	2.759
110	Grover Beach			280		290	467.23	1.75	2.4052	0.00100	1330000	1.995	3,724,000	5.586	2.177	4.354	1.810	0.458	1.283	0.470	9.870	1.000	21.000	1.756	1.810
111	Grover Beach			290		300	500.00	1.75	2.4052	0.00100	1330000	1.995	3,724,000	5.586	2.177	4.354	1.810	0.458	1.283	0.470	9.870	1.000	21.000	1.756	1.810
112	Grover Beach			300		310	470.00	1.75	2.4052	0.00100	1330000	1.995	3,724,000	5.586	2.177	4.354	1.810	0.458	1.283	0.470	9.870	1.000	21.000	1.756	1.810
113	Grover Beach			310		320	500.00	1.50	1.7671	0.00220	1330000	1.995	3,724,000	5.586	2.141	4.281	2.423	0.466	1.305	0.476	8.568	1.000	18.000	2.350	2.423
114	Grover Beach			320		330	264.95	1.50	1.7671	0.00220	1330000	1.995	3,724,000	5.586	2.141	4.281	2.423	0.466	1.305	0.476	8.568	1.000	18.000	2.350	2.423
115	Grover Beach		Cross Railroad	330		340	307.00	1.50	1.7671	0.00220	1330000	1.995	3,724,000	5.586	2.141	4.281	2.423	0.466	1.305	0.476	8.568	1.000	18.000	2.350	2.423
116	Grover Beach		Railroad	340		350	319.78	1.25	1.2271	0.00140	260000	0.390	728,000	1.092	1.050	2.100	1.712	0.186	0.520	0.280	4.200	0.504	7.560	1.253	1.712
117	Grover Beach			400		410	531.31	1.25	1.2271	0.00180	260000	0.390	728,000	1.092	1.191	2.382	1.941	0.164	0.459	0.260	3.900	0.470	7.050	1.390	1.883
118	Grover Beach			410		420	566.19	1.00	0.7854	0.00200	260000	0.390	728,000	1.092	0.692	1.385	1.763	0.282	0.789	0.364	4.368	0.663	7.956	1.502	1.946

Appendix F - Table 4
Future Conditions
(Gravity Only)

Mannings coefficient: n=.015 is value for VCP see Appendix 19-A from CERM 7th Edition

SSLOCSD
Proposed By-Pass
Trunk Sewer

		From		To		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
Line #	Location	Road	Manhole	Road	Manhole	Distance (ft)	Diameter (ft)	Area (ft^2)	Slope (ft/ft)	Avg. Flow (gpd)	Avg. Flow (cfs)	Peak Flow (gpd)	Peak Flow (cfs)	Qfull	Velocity (ft/s)	Q_{avg}/Q_{full}	Q_{peak}/Q_{full}	$d/D_{avg\ flow}$	$d_{avg\ flow}$ (in)	$d/D_{peak\ flow}$	$d_{peak\ flow}$ (in)	Velocity Avg Flow (ft/s)	Velocity Peak Flow (ft/s)
EXISTING CONDITIONS																							
Scenario 1 - 30" Trunk	Fair Oaks / S Elm St	S Elm St	271		291	3700.00	**2.50**	4.9086	0.0025	440784	0.661	1,322,352	1.984	17.821	3.631	0.037	0.111	0.110	3.300	**0.222**	6.660	1.452	2.367
Scenario 2 - 27" Trunk	Fair Oaks / S Elm St	S Elm St	271		291	3700.00	**2.25**	3.9760	0.0025	440784	0.661	1,322,352	1.984	13.456	3.384	0.049	0.147	0.130	3.510	**0.243**	6.561	1.577	2.315
Scenario 3 - 24" Trunk	Fair Oaks / S Elm St	S Elm St	271		291	3700.00	**2.00**	3.1415	0.0025	440784	0.661	1,322,352	1.984	9.829	3.129	0.067	0.202	0.163	3.912	**0.300**	7.200	1.665	2.440
Scenario 4 - 21" Trunk	Fair Oaks / S Elm St	S Elm St	271		291	3700.00	**1.75**	2.4052	0.0025	440784	0.661	1,322,352	1.984	6.884	2.862	0.096	0.288	0.202	4.242	**0.364**	7.644	1.775	2.439
Scenario 5 - 18" Trunk	Fair Oaks / S Elm St	S Elm St	271		291	3700.00	**1.50**	1.7671	0.0025	440784	0.661	1,322,352	1.984	4.564	2.583	0.145	0.435	0.243	4.374	**0.458**	8.244	1.767	2.454
Scenario 6 - 12" Trunk	Fair Oaks / S Elm St	S Elm St	271		291	3700.00	**1.00**	0.7854	0.0025	440784	0.661	1,322,352	1.984	1.548	1.971	0.427	1.281	0.452	5.424	**1.000**	12.000	1.872	1.971
FUTURE CONDITIONS																							
Scenario 1 - 30" Trunk	Fair Oaks / S Elm St	S Elm St	271		291	3700.00	**2.50**	4.9086	0.0025	535000	0.803	1,605,000	2.408	17.821	3.631	0.045	0.135	0.130	3.900	**0.236**	7.080	1.692	2.425
Scenario 2 - 27" Trunk	Fair Oaks / S Elm St	S Elm St	271		291	3700.00	**2.25**	3.9760	0.0025	535000	0.803	1,605,000	2.408	13.456	3.384	0.060	0.179	0.150	4.050	**0.270**	7.290	1.726	2.477
Scenario 3 - 24" Trunk	Fair Oaks / S Elm St	S Elm St	271		291	3700.00	**2.00**	3.1415	0.0025	535000	0.803	1,605,000	2.408	9.829	3.129	0.082	0.245	0.189	4.536	**0.332**	7.968	1.802	2.553
Scenario 4 - 21" Trunk	Fair Oaks / S Elm St	S Elm St	271		291	3700.00	**1.75**	2.4052	0.0025	535000	0.803	1,605,000	2.408	6.884	2.862	0.117	0.350	0.222	4.662	**0.404**	8.484	1.866	2.576
Scenario 5 - 18" Trunk	Fair Oaks / S Elm St	S Elm St	271		291	3700.00	**1.50**	1.7671	0.0025	535000	0.803	1,605,000	2.408	4.564	2.583	0.176	0.527	0.270	4.860	**0.508**	9.144	1.891	2.583
Scenario 6 - 12" Trunk	Fair Oaks / S Elm St	S Elm St	271		291	3700.00	**1.00**	0.7854	0.0025	535000	0.803	1,605,000	2.408	1.548	1.971	0.518	1.555	0.504	6.048	**1.000**	12.000	1.971	1.971

Note:
MH 271 is the tie in point at Fair Oaks/ S Elm St
MH 291 is the tie in point at The Pike
Flows are based from the AGWWMP, adopted November 2001
Scenario 4 is the recommended by-pass relief trunk sewer diameter recommended

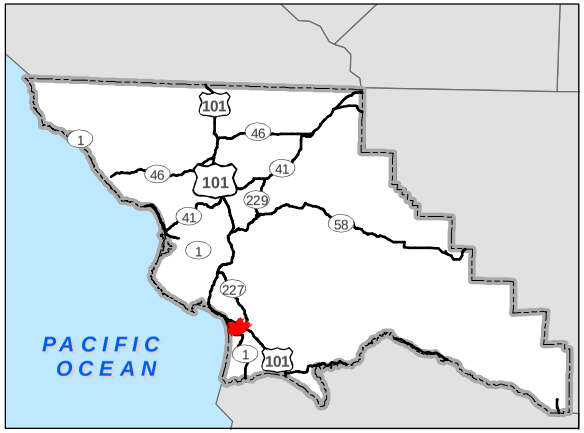
These flows take into account the flows upstream from Arroyo Grande as it enters the Fair Oaks & South Elm St interesection. All of these flows be conveyed by the proposed bypass sewer.

n = 0.015

Appendix G -- Scenarios of Proposed Bakeman By-pass Relief Trunk Sewer Diameters

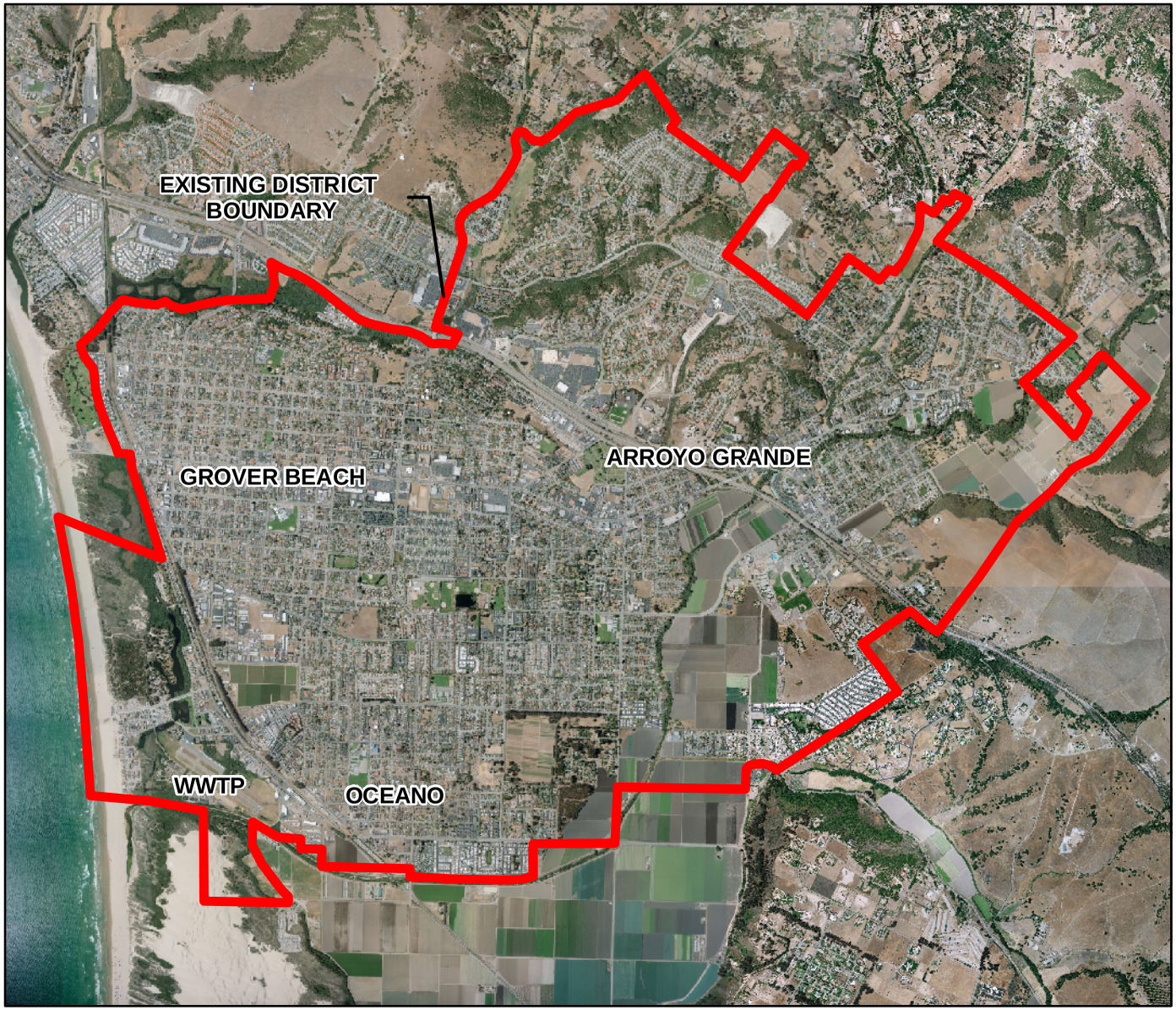
Mannings coefficient: n=.015 is value for VCP see Appendix 19-A from CERM 7th Edition

Deleted: ***SSLOCSD FY 10/11 Capital Improvement Plan and Budget***



County of San Luis Obispo

SSLOCSD Wastewater Treatment Plant



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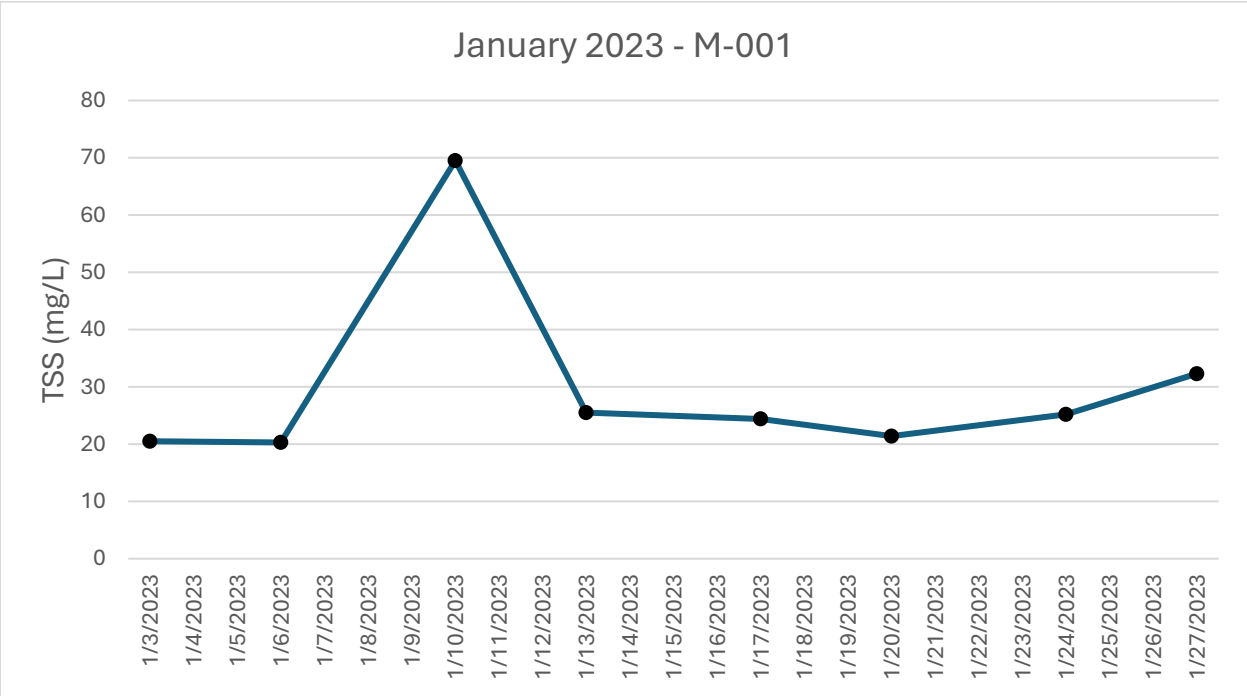
South San Luis Obispo County Sanitation District

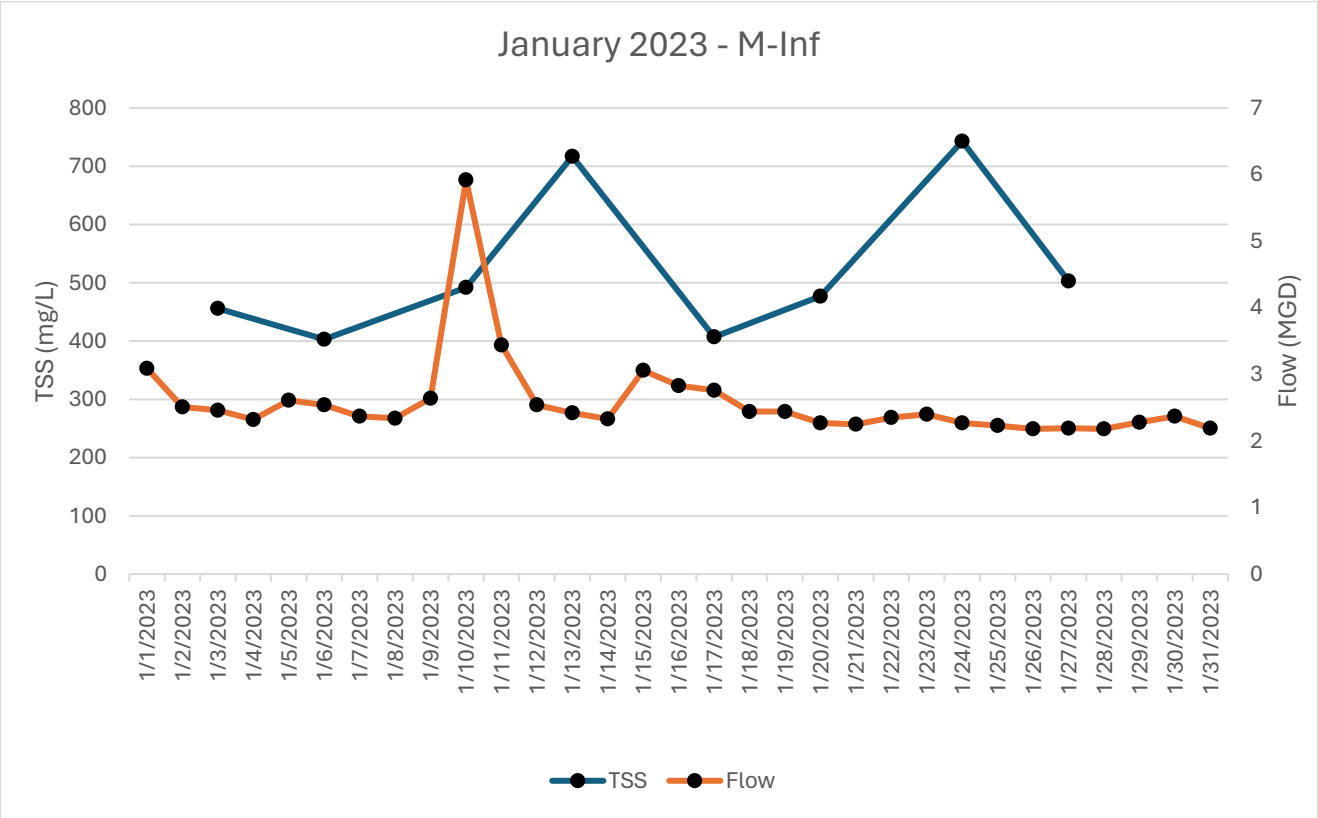
San Luis Obispo County, California

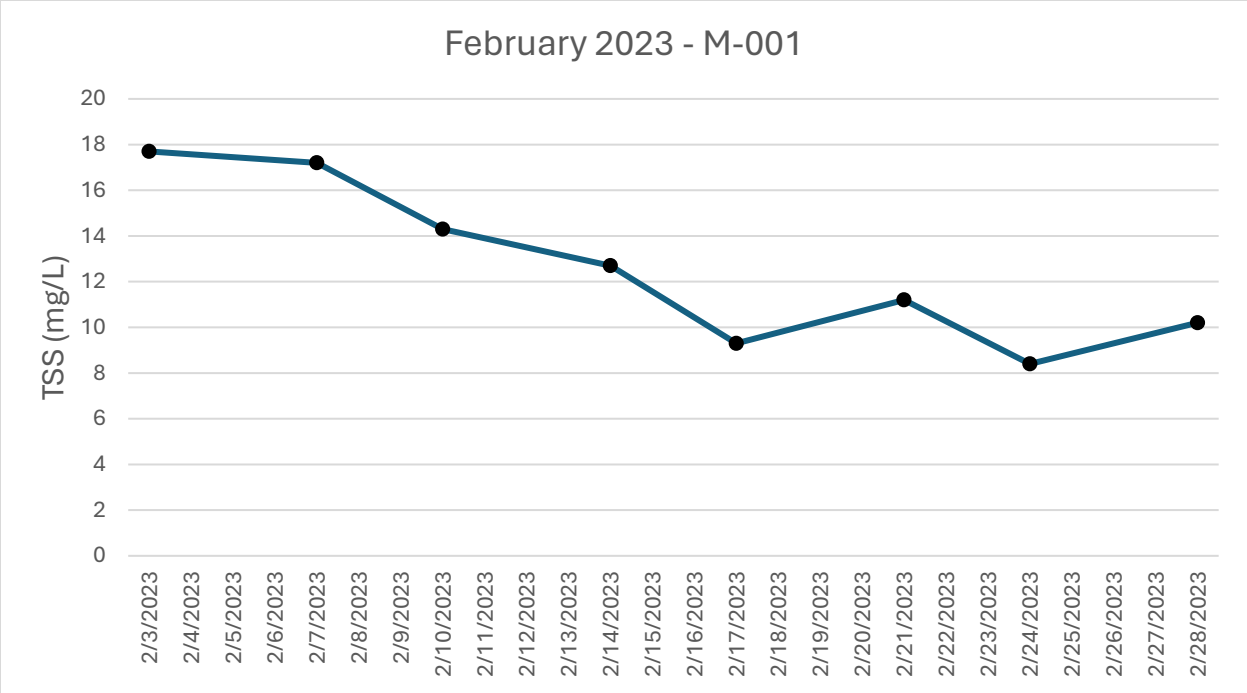
Appendix H

SSO Logs and Trend Data

Appendix H – SSO Logs and Trend Data






February 2023 - M-001
TSS (mg/L)
20
18
16
14
12
10
8
6
4
2
0
2/3/2023
2/4/2023
2/5/2023
2/6/2023
2/7/2023
2/8/2023
2/9/2023
2/10/2023
2/11/2023
2/12/2023
2/13/2023
2/14/2023
2/15/2023
2/16/2023
2/17/2023
2/18/2023
2/19/2023
2/20/2023
2/21/2023
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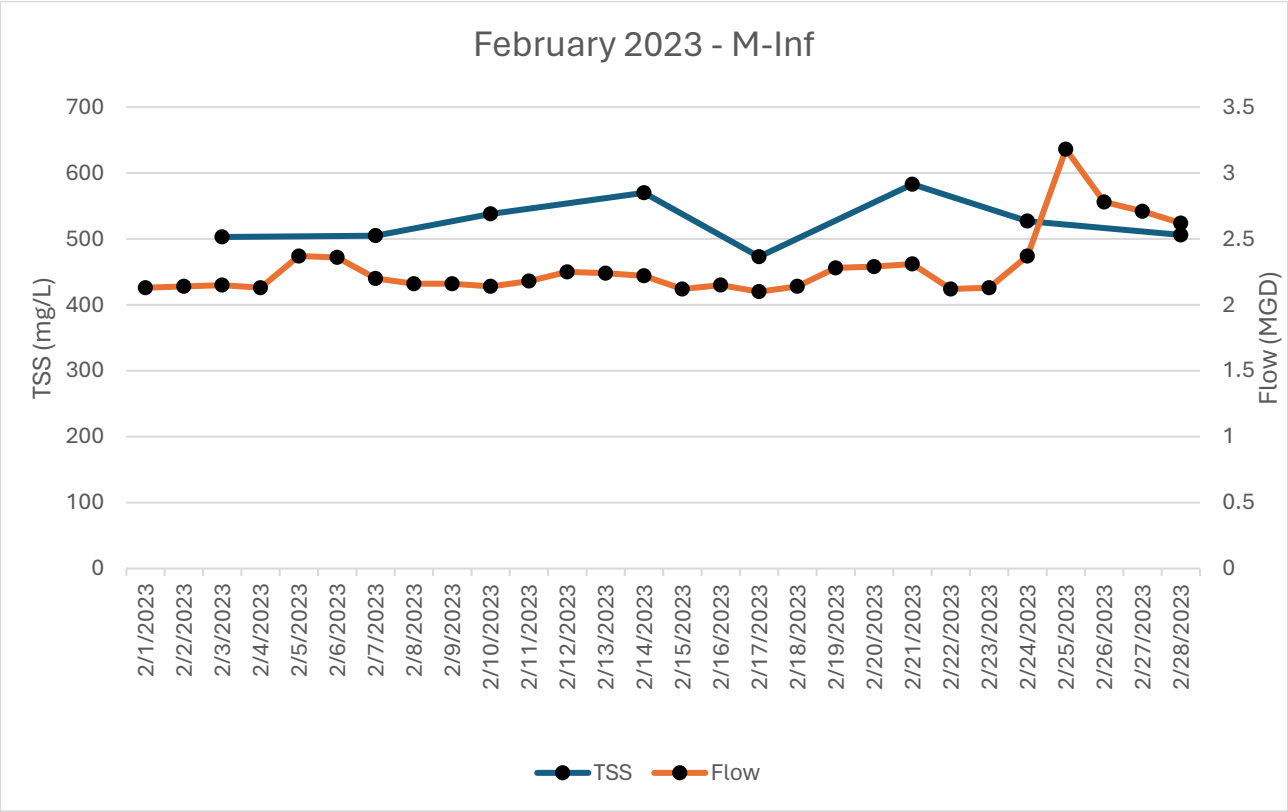
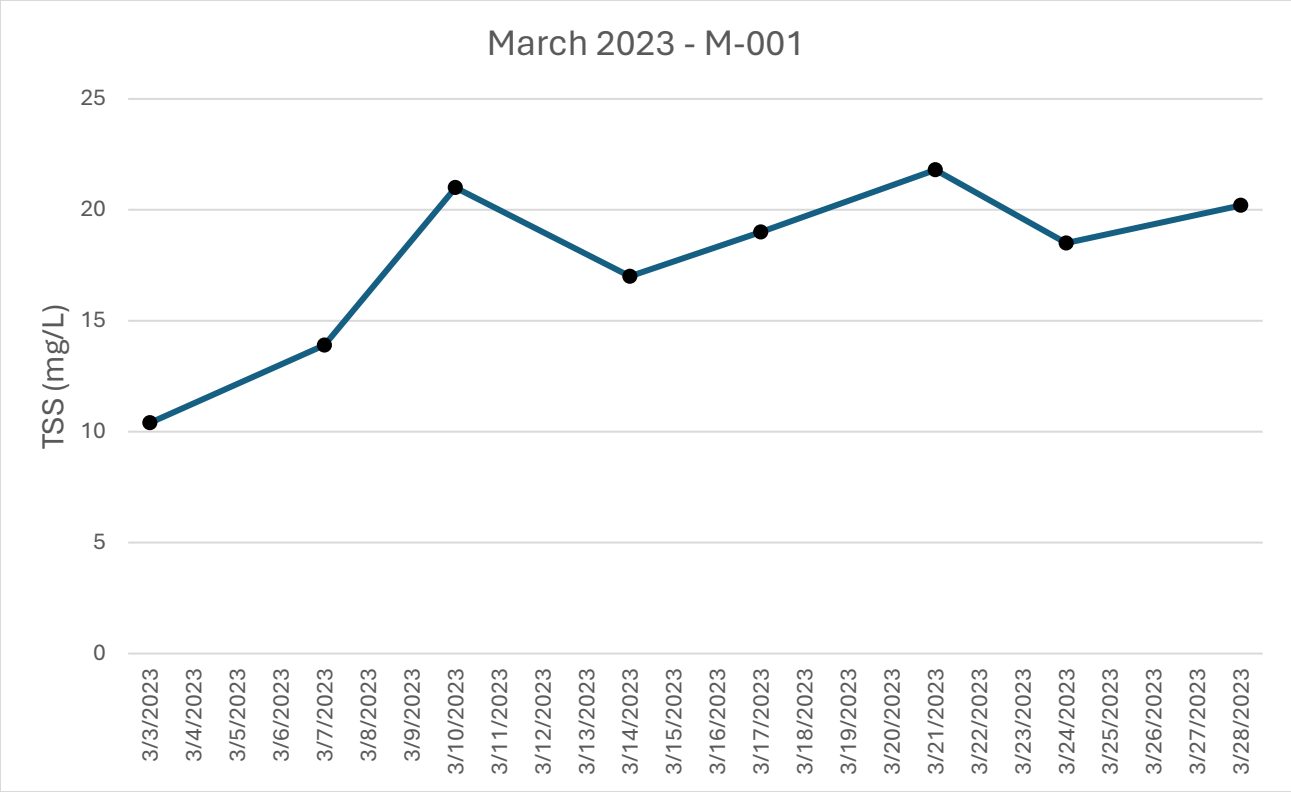
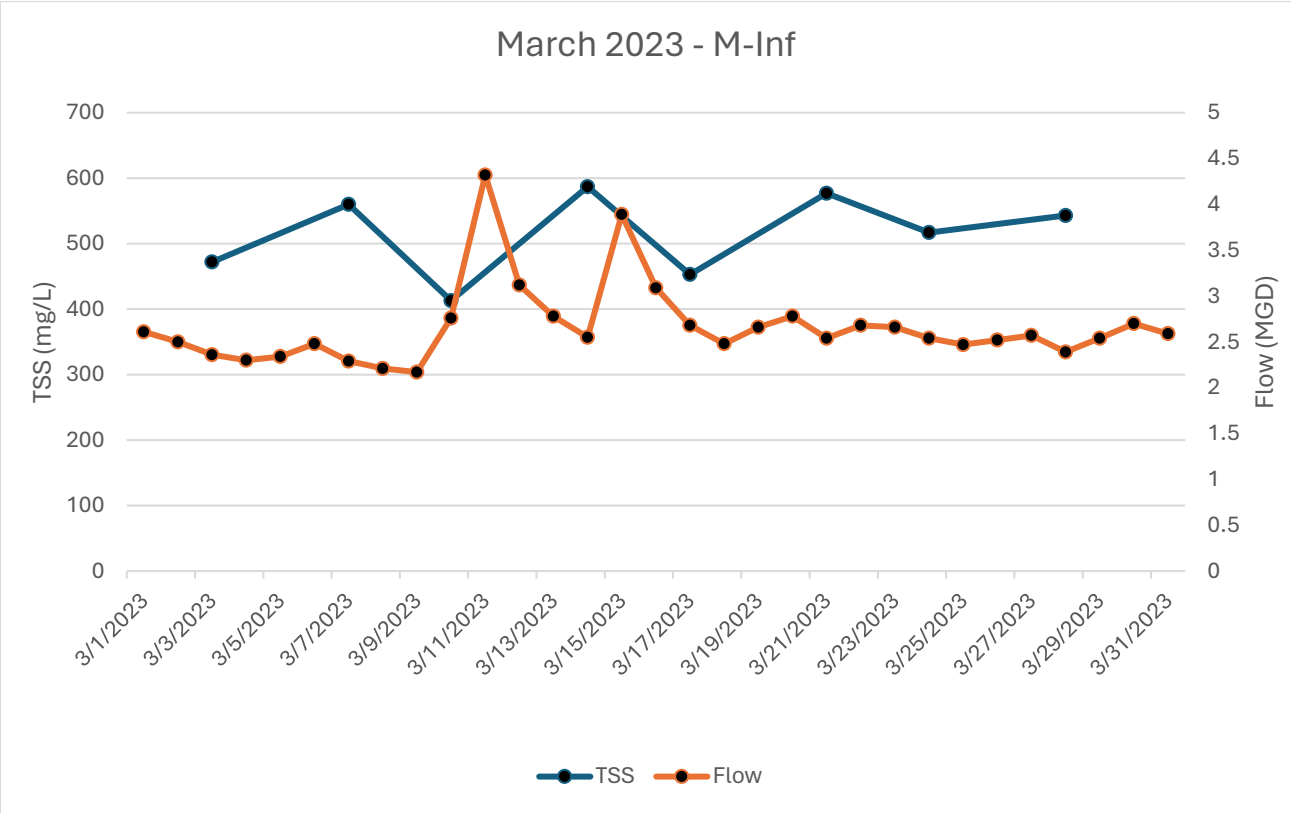
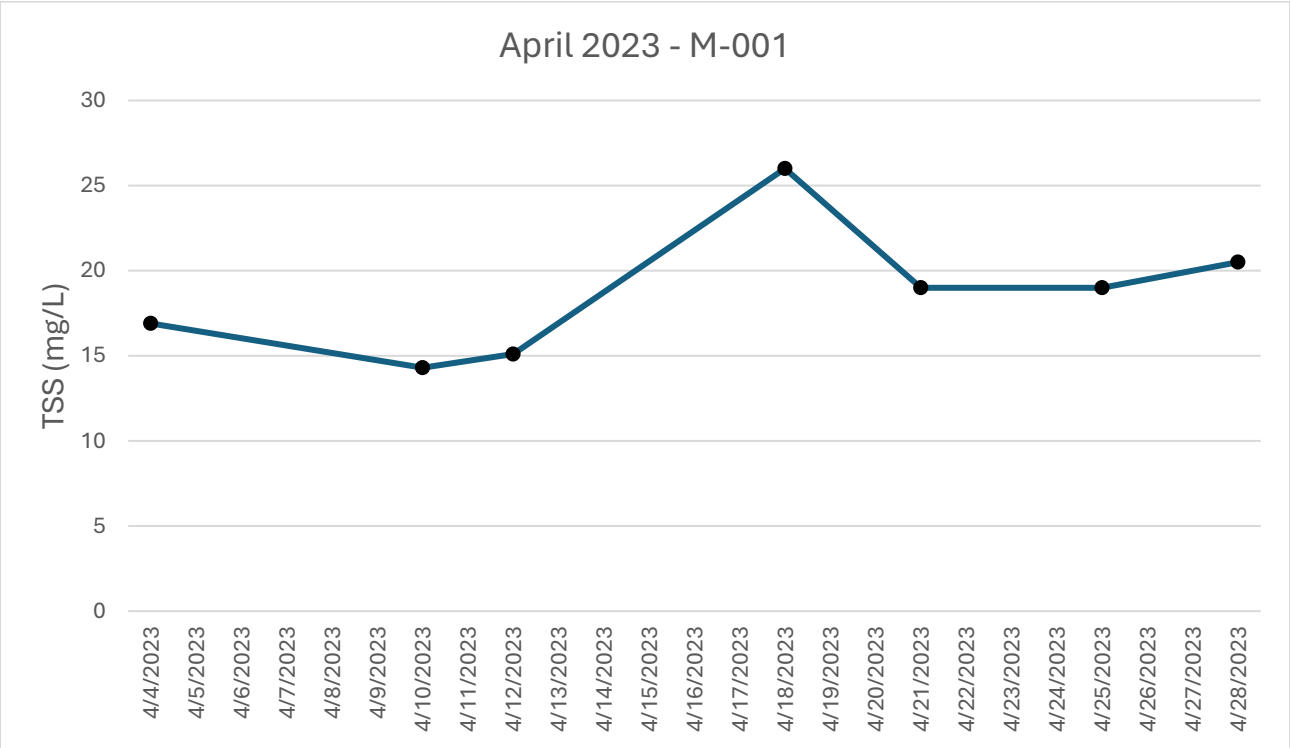
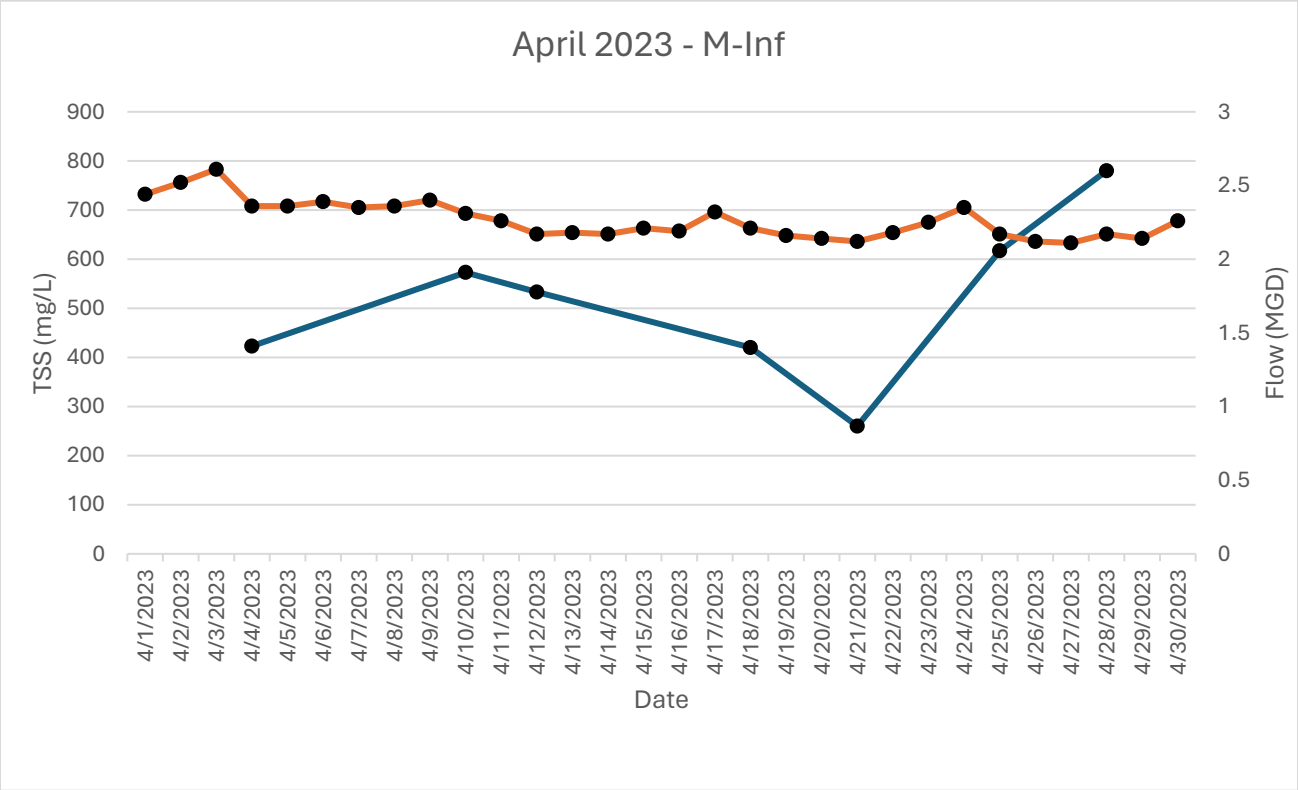
2/23/2023
2/24/2023
2/25/2023
2/26/2023
2/27/2023
2/28/2023

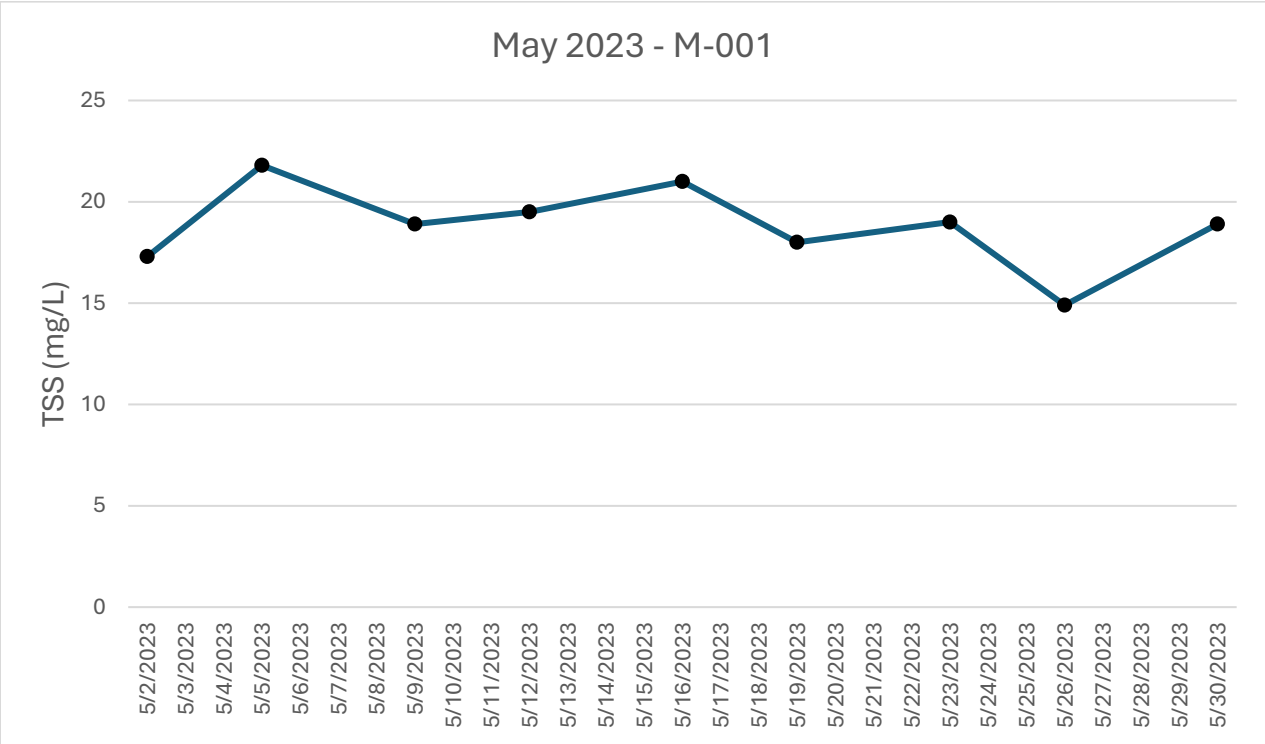

February 2023 - M-Inf
TSS (mg/L)
700
600
500
400
300
200
100
0
Flow (MGD)
3.5
3
2.5
2
1.5
1
0.5
0
2/1/2023
2/2/2023
2/3/2023
2/4/2023
2/5/2023
2/6/2023
2/7/2023
2/8/2023
2/9/2023
2/10/2023
2/11/2023
2/12/2023
2/13/2023
2/14/2023
2/15/2023
2/16/2023
2/17/2023
2/18/2023
2/19/2023
2/20/2023
2/21/2023
2/22/2023
2/23/2023
2/24/2023
2/25/2023
2/26/2023
2/27/2023
2/28/2023
TSS
Flow

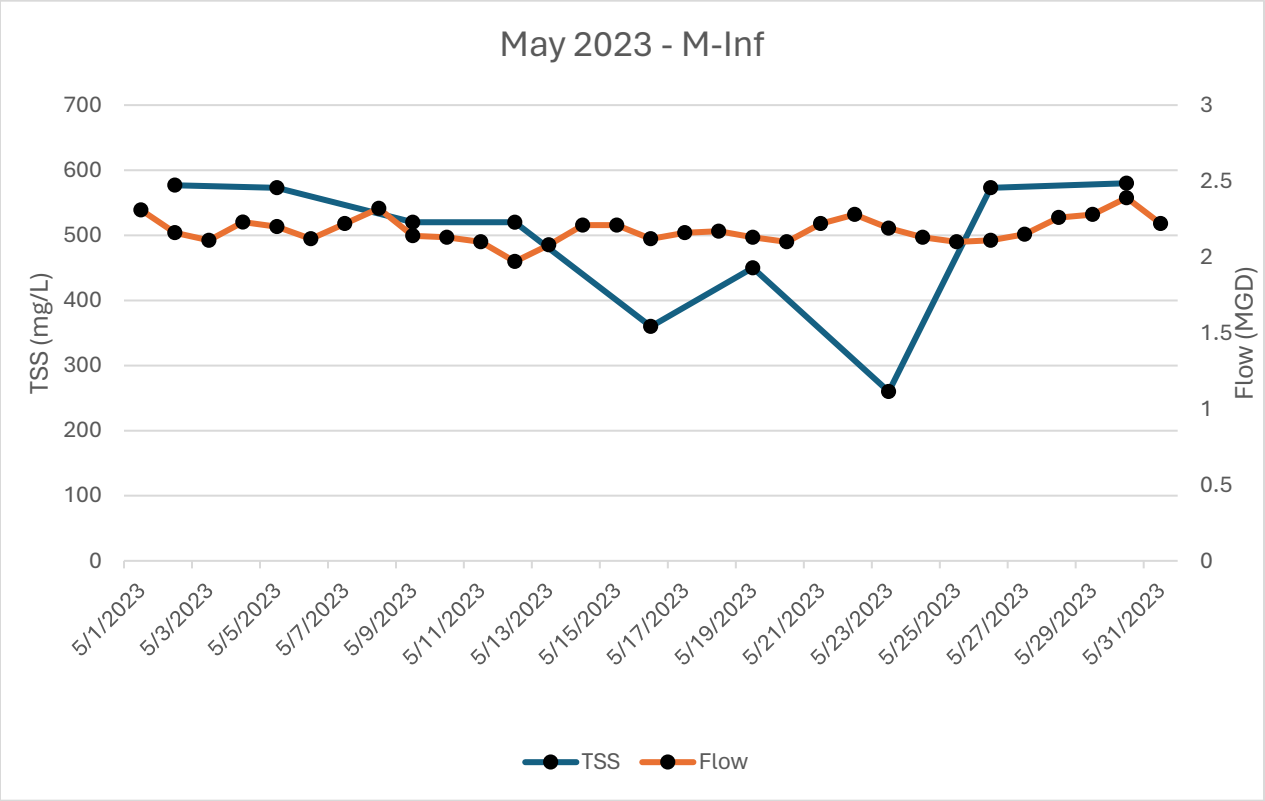

March 2023 - M-001
TSS (mg/L)
25
20
15
10
5
0
3/3/2023
3/4/2023
3/5/2023
3/6/2023
3/7/2023
3/8/2023
3/9/2023
3/10/2023
3/11/2023
3/12/2023
3/13/2023
3/14/2023
3/15/2023
3/16/2023
3/17/2023
3/18/2023
3/19/2023
3/20/2023
3/21/2023
3/22/2023
3/23/2023
3/24/2023
3/25/2023
3/26/2023
3/27/2023
3/28/2023

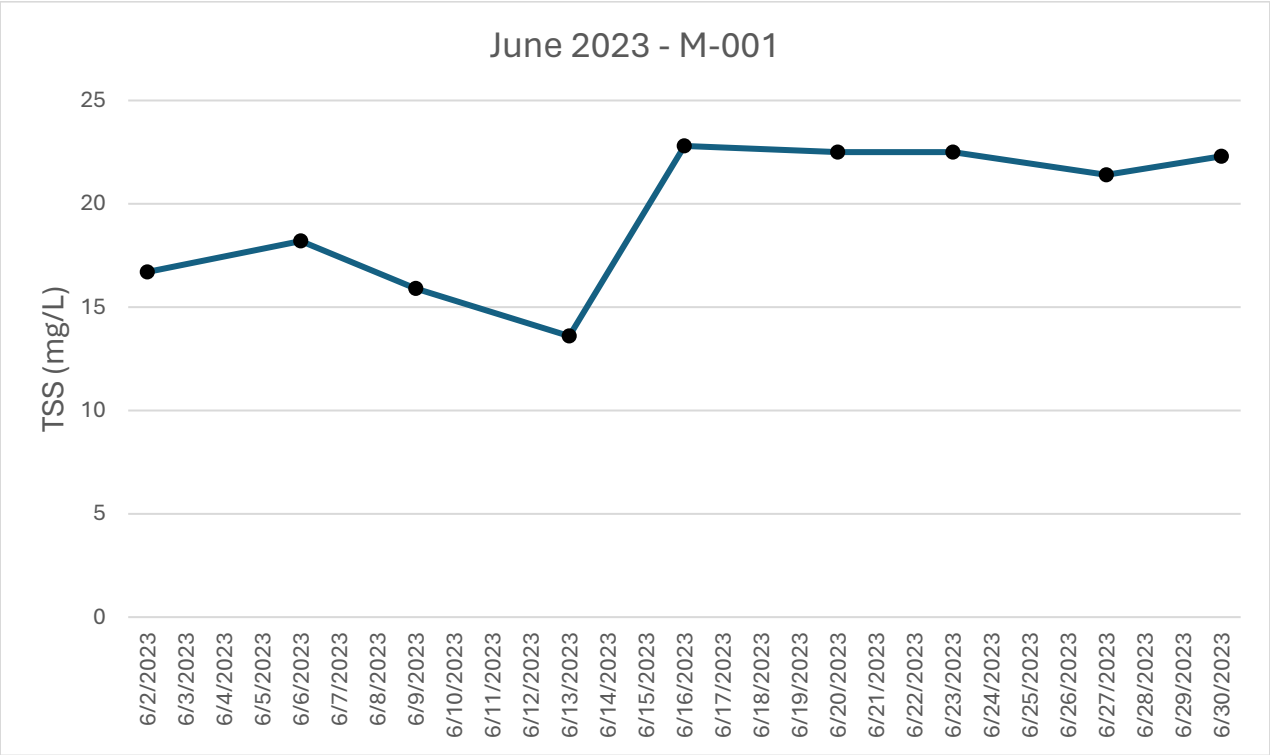

March 2023 - M-Inf
TSS (mg/L)
700
600
500
400
300
200
100
0
Flow (MGD)
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
3/1/2023
3/3/2023
3/5/2023
3/7/2023
3/9/2023
3/11/2023
3/13/2023
3/15/2023
3/17/2023
3/19/2023
3/21/2023
3/23/2023
3/25/2023
3/27/2023
3/29/2023
3/31/2023
TSS
Flow


April 2023 - M-001
TSS (mg/L)
30
25
20
15
10
5
0
4/4/2023
4/5/2023
4/6/2023
4/7/2023
4/8/2023
4/9/2023
4/10/2023
4/11/2023
4/12/2023
4/13/2023
4/14/2023
4/15/2023
4/16/2023
4/17/2023
4/18/2023
4/19/2023
4/20/2023
4/21/2023
4/22/2023
4/23/2023
4/24/2023
4/25/2023
4/26/2023
4/27/2023
4/28/2023


April 2023 - M-Inf
TSS (mg/L)
900
800
700
600
500
400
300
200
100
0
Flow (MGD)
3
2.5
2
1.5
1
0.5
0
4/1/2023
4/2/2023
4/3/2023
4/4/2023
4/5/2023
4/6/2023
4/7/2023
4/8/2023
4/9/2023
4/10/2023
4/11/2023
4/12/2023
4/13/2023
4/14/2023
4/15/2023
4/16/2023
4/17/2023
4/18/2023
4/19/2023
4/20/2023
4/21/2023
4/22/2023
4/23/2023
4/24/2023
4/25/2023
4/26/2023
4/27/2023
4/28/2023
4/29/2023
4/30/2023
Date


May 2023 - M-001
TSS (mg/L)
25
20
15
10
5
0
5/2/2023
5/3/2023
5/4/2023
5/5/2023
5/6/2023
5/7/2023
5/8/2023
5/9/2023
5/10/2023
5/11/2023
5/12/2023
5/13/2023
5/14/2023
5/15/2023
5/16/2023
5/17/2023
5/18/2023
5/19/2023
5/20/2023
5/21/2023
5/22/2023
5/23/2023
5/24/2023
5/25/2023
5/26/2023
5/27/2023
5/28/2023
5/29/2023
5/30/2023


May 2023 - M-Inf
TSS (mg/L)
700
600
500
400
300
200
100
0
Flow (MGD)
3
2.5
2
1.5
1
0.5
0
5/1/2023
5/3/2023
5/5/2023
5/7/2023
5/9/2023
5/11/2023
5/13/2023
5/15/2023
5/17/2023
5/19/2023
5/21/2023
5/23/2023
5/25/2023
5/27/2023
5/29/2023
5/31/2023
TSS
Flow


June 2023 - M-001
TSS (mg/L)
25
20
15
10
5
0
6/2/2023
6/3/2023
6/4/2023
6/5/2023
6/6/2023
6/7/2023
6/8/2023
6/9/2023
6/10/2023
6/11/2023
6/12/2023
6/13/2023
6/14/2023
6/15/2023
6/16/2023
6/17/2023
6/18/2023
6/19/2023
6/20/2023
6/21/2023
6/22/2023
6/23/2023
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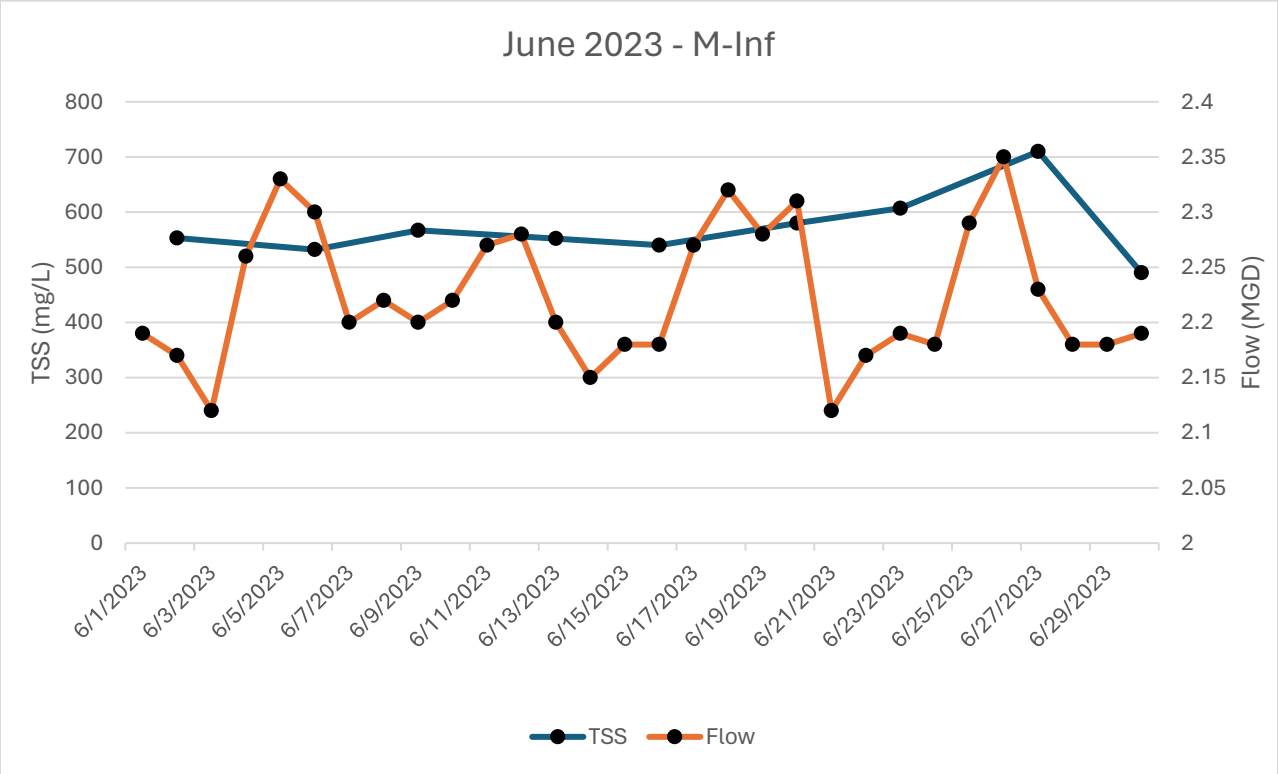
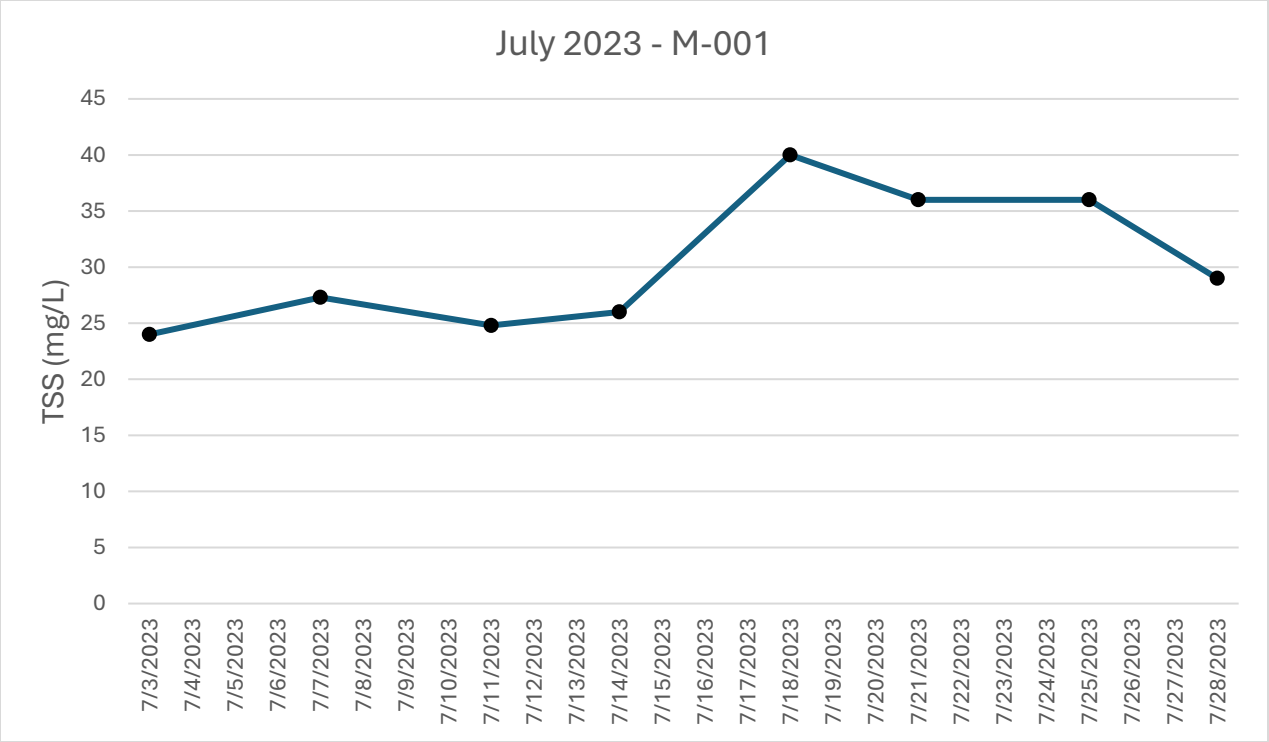
6/30/2023


June 2023 - M-Inf
TSS (mg/L)
800
700
600
500
400
300
200
100
0
Flow (MGD)
2.4
2.35
2.3
2.25
2.2
2.15
2.1
2.05
2
6/1/2023
6/3/2023
6/5/2023
6/7/2023
6/9/2023
6/11/2023
6/13/2023
6/15/2023
6/17/2023
6/19/2023
6/21/2023
6/23/2023
6/25/2023
6/27/2023
6/29/2023
TSS
Flow


July 2023 - M-001
TSS (mg/L)
45
40
35
30
25
20
15
10
5
0
7/3/2023
7/4/2023
7/5/2023
7/6/2023
7/7/2023
7/8/2023
7/9/2023
7/10/2023
7/11/2023
7/12/2023
7/13/2023
7/14/2023
7/15/2023
7/16/2023
7/17/2023
7/18/2023
7/19/2023
7/20/2023
7/21/2023
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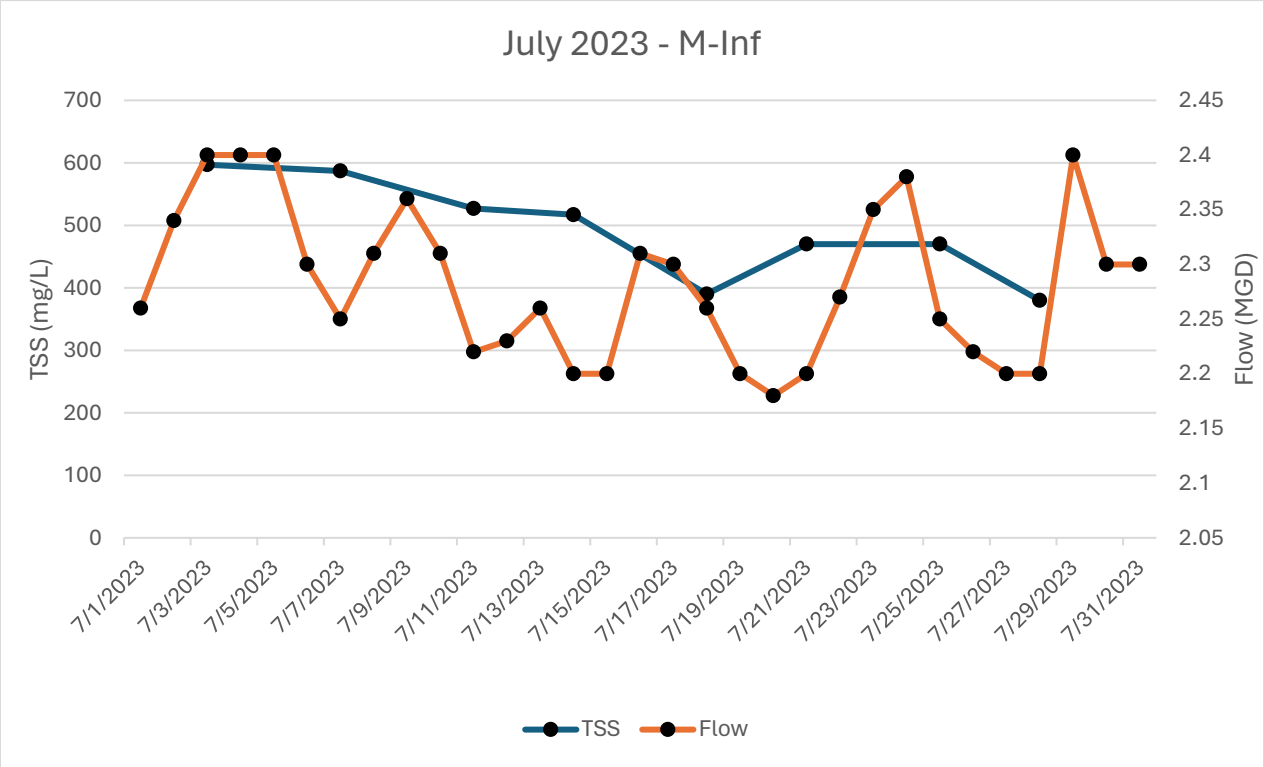
7/28/2023


July 2023 - M-Inf
TSS (mg/L)
700
600
500
400
300
200
100
0
Flow (MGD)
2.45
2.4
2.35
2.3
2.25
2.2
2.15
2.1
2.05
7/1/2023
7/3/2023
7/5/2023
7/7/2023
7/9/2023
7/11/2023
7/13/2023
7/15/2023
7/17/2023
7/19/2023
7/21/2023
7/23/2023
7/25/2023
7/27/2023
7/29/2023
7/31/2023
TSS
Flow

Appendix I

SSMP Audit Report Form

Sewer System Management Plan Audit Report

Name of Agency	
Date of Audit	
Name of Auditor	
System Overview	
LF of gravity sewer mains	
LF of Public force mains	
Total LF of all Public sewer lines	
Number of pump stations	
LF of private sewer mains, excl. laterals	*
LF of private sewer laterals	*
Population served	
Current average monthly single family residential sewer rate	

*Source:

I. GOALS

1. Are the goals stated in the SSMP still appropriate and accurate?
   - **Yes / No**
2. If you answered No to question 1, describe content and schedule for updates, or provide additional comments for Yes response.

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_____

II. ORGANIZATION

REFERENCE MATERIAL

- **Organization chart**
- **Phone list**

3. Is the SSMP up to date with agency organization and staffing contact information?
   - **Yes / No**
4. If you answered No to question 3, describe content and schedule for updates, or provide additional comments for Yes response.

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LEGAL AUTHORITY

REFERENCE MATERIAL
- **Ordinances**
- **Enforcement actions**

5 Does the SSMP contain up-to-date information about your agency's legal authority?
   - **Yes / No**

6 Does your agency have sufficient legal authority to control sewer use and maintenance?
   - **Yes / No**

7 If you answered No to question 5 or 6 describe content and schedule for necessary changes, or provide additional comments for Yes response.

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IV. OPERATIONS AND MAINTENANCE

a. COLLECTION SYSTEM MAPS

REFERENCE MATERIAL
- **Summary of information included in mapping system**

8 Does the SSMP contain up-to-date information about your agency's maps?
   - **Yes / No**

9 Are your agency's collection system maps complete, up-to-date, and sufficiently detailed?
   - **Yes / No**

10 If you answered No to question 8 or 9, describe content and schedule for necessary changes, or provide additional comments for Yes response.

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b. RESOURCES AND BUDGET

REFERENCE MATERIAL
- **Current Capital Improvement Plan (CIP)**
- **Current operating budget**

11 Does the SSMP contain up-to-date information about your agency's resources and budget?
   - **Yes / No**

12 Are your agency's resources and budget sufficient to support effective sewer system management?
   - **Yes / No**

13 Do your agency's planning efforts support long-term goals?
   - **Yes / No**

14 If you answered No to questions 11, 12 or 13, describe content and schedule for necessary changes, or provide additional comments for Yes response.

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c. PRIORITIZED PREVENTIVE MAINTENANCE

REFERENCE MATERIAL
- **Cleaning schedules**
- **List or map of hotspots**
- **Work orders**
- **Incidence Reports**
- **Customer feedback**

Table 1. Annual Preventive Maintenance Activities

Maintenance activities (lineal ft/yr)	**2009**	**2010**	**2011**	**2012**	**2013**
CCTV (video inspection)					
Cleaning with CCTV					
Cleaning					
Smoke testing					

15 Does the SSMP contain up-to-date information about your agency's preventive maintenance activities?
   - **Yes / No**

16 Considering the information in Tables 1-3, are your agency's preventive maintenance activities sufficient and effective in reducing and preventing SSO's and blockages?
- **Yes / No**

17 If you answered No to questions 15 or 16, describe content and schedule for necessary changes, or provide additional comments for Yes response.

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d. SCHEDULED INSPECTIONS AND CONDITION ASSESSMENT

REFERENCE MATERIAL
- **Inspection reports**
- **Infiltration and Inflow (I/I) monitoring studies and reports**
- **Pipe and manhole condition data**

18 Does the SSMP contain up-to-date information about your agency's inspections and condition assessment?
- **Yes / No**

19 Are your agency's scheduled inspections and condition assessment system effective in locating, identifying, and addressing deficiencies?
- **Yes / No**

20 If you answered No to questions 18 or 19, describe content and schedule for necessary changes, or provide additional comments for Yes response.

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e. CONTINGENCY EQUIPMENT AND REPLACEMENT INVENTORIES

REFERENCE MATERIAL
- **Funds spent on equipment and materials**
- **Equipment and parts inventory**

21 Does the SSMP contain up-to-date information about equipment and replacement inventories?
- **Yes / No**

22 Are contingency equipment and replacement parts sufficient to respond to emergencies and properly conduct regular maintenance?
- **Yes/No**

23 If you answered NO to question 21 and/or 22, describe content and schedule for necessary arrangements, or provide additional comments for YES response.

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f. TRAINING

REFERENCE MATERIAL
- **Employee training records**

24 Does the SSMP contain up-to-date information about your agency's training expectations and programs?
- **Yes /No**

25 Do supervisors believe that their staff is sufficiently trained?
- **Yes/No**

26 Are staff satisfied with the training opportunities and support offered to them?
- **Yes/No**

27 If you answered NO to questions 24, 25 and/or 26, describe content and schedule for necessary improvements, or provide additional comments for YES response.

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g. OUTREACH TO PLUMBERS AND BUILDING CONTRACTORS

REFERENCE MATERIAL
- **Flyers/mailings**
- **Mailing lists**

28 Does the SSMP contain up-to-date information about your agency's outreach to plumbers and building contractors?
- **Yes /No**

29 Has your agency conducted or participated in any outreach activities to plumbers and building contractors?
- **Yes/No**

30 If you answered NO to questions 28 and/or 29, describe content and schedule for future activities, or provide additional comments for YES response.

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Table 2. Number of Permits issued to plumbers for work that could impact District facilities:

2001:	2005:	2009:
2002:	2006:	2010:
2003:	2007:	2011:
2004:	2008:	2012:

Permit process includes inspection by District staff.

V. DESIGN AND CONSTRUCTION STANDARDS

REFERENCE MATERIAL

- **Design and construction standards**
- **Ordinances**

31 Does the SSMP contain up-to-date information about your agency's maps?
   - **Yes / No**

32 Are design and construction standards, as well as standards for inspection and testing of new and rehabilitated facilities, sufficiently comprehensive and up-to-date?
   - **Yes / No**

33 If you answered NO to questions 31 and/or 32, describe content and schedule for necessary revisions, or provide additional comments for YES response.

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OVERFLOW EMERGENCY RESPONSE PLAN

REFERENCE MATERIAL

- **Data submitted to CIWQS**
- **Service call data**

Table 3. Annual SSO Statistics

Indicator	2007	2008	2009	2010	2011
Number of SSO's (total)					
Wet season SSO's*					
Dry season SSO's*					
Number of SSO's (by volume range)					
< 10 gal					
10 – 99 gal					
100 – 999 gal					
1000 – 9999 gal					
≥ 10,000 gal					
Total SSO Volume					
Volume reaching waters of the State					
Volume not contained by not reaching waters of the State					
Volume recovered					
Net volume (total minus recovered)					
Number of SSO's per 100 mile of sewer per year					
Volume of SSO's per 100 mile of sewer per year					
Total Volume conveyed to the plant (million gal)					
Total volume SSO / Total volume conveyed, gallons / million gallons					
Number of SSO (by cause)					
Blockages:					
Roots					
Grease					
Debris					
Debris from Laterals					
Animal Carcass					
Construction Debris					
Multiple causes					
Infrastructure failure					
Inflow & Infiltration					
Electrical Power Failure					
Flow Capacity Deficiency					
Natural Disaster					
Bypass					
Cause Unknown					
Average Response Times, minutes					

Business Hours					
Notification to arrival on site					
Notification to complete clearage					
Non-business hours					
Notification to arrival on site					
Notification to complete clearage					
Number of locations with multiple SSO's					

*Wet season defined as _____, dry season _____. Season does not necessarily reflect conditions at the time of the SSO.

34 Does the SSMP contain up-to-date information of your agency's Overflow Emergency Response Plan?
- **Yes / No**

35 Considering the information in Table 3, is the Overflow Emergency Response Plan effective in handling SSO's?
- **Yes / No**

36 If you answered NO to questions 34 and/or 35, describe content and schedule for necessary revisions and implementation, or provide additional comments for YES response.

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VI. FATS, OILS, AND GREASE (FOG) CONTROL PLAN

REFERENCE MATERIAL
- **List or map of FOG sources in service area**
- **List or map of hotspots**
- **Cleaning schedules**
- **Restaurant inspection reports or summaries**
- **Data submitted to CIWQS**
- **Service call data**

Table 4. FOG Control Statistics

	2007	2008	2009	2010	2011
Number of SSO's caused by FOG					
Number of FOG inspections completed					

37 Does the SSMP contain up-to-date information about your agency's FOG control program?
- **Yes / No**

38 Considering the information in Table 4, is the current FOG program effective in documenting and controlling FOG sources?
- **Yes / No**

39 f you answered NO to questions 37 and/or 38, describe content and schedule for necessary changes, or provide additional comments for YES response.

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CAPACITY MANAGEMENT

REFERENCE MATERIAL
- **Capacity assessment reports**
- **CIP**
- **SSO data**

Table 5. SSO's Caused by Hydraulic Limitations

	2007	2008	2009	2010	2011
Number of SSO's caused by capacity limitations					

40 Does the SSMP contain up-to-date information about your agency's capacity assessment?
- **Yes / No**

41 Has your agency completed a capacity assessment and identified and addressed any hydraulic deficiencies in the system?
- **Yes / No**

42 If you answered NO to questions 40 and/or 41, describe content and schedule for necessary activities, or provide additional comments for YES response.

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VII. MONITORING, MEASUREMENT, AND PROGRAM MODIFICATIONS

43 Does the SSMP contain up-to-date information about your agency's data collection and organization?
- **Yes / No**

44 Is your agency's data collection and organization sufficient to evaluate the effectiveness of your SSMP?
- **Yes / No**

45 If you answered NO to questions 43 and/or 44, describe content and schedule for necessary improvements, or provide additional comments for YES response.

The District believes that the current performance indicators (Table 3) and tracking of preventive maintenance activities (Table 1) are sufficient to evaluate effectiveness of the SSMP in minimizing SSO's. However, the actual effectiveness of these indicators can only be determined by examining trends over multiple years.

VIII. SSMP AUDITS

46 Will this SSMP Audit be submitted with the Annual Report to the Regional Water Board by March 15?
- **Yes / No**

IX. COMMUNICATION PROGRAM

REFERENCE MATERIAL
- **Mailings and mailing lists**
- **Website**
- **Other communication records such as newspaper ads, site postings, or other outreach**
- **Customer feedback**

47 Does the SSMP contain up-to-date information about your agency's public outreach activities?
- **Yes / No**

48 Does the SSMP contain up-to-date information about your agency's communications with satellite and tributary agencies?
- **Yes / No**

49 Has your agency effectively communicated with the public and other agencies about the SSMP, and addressed feedback?

- **Yes / No**

50 If you answered NO to questions 47, 48, and/or 49, describe content and schedule for necessary improvements, or provide additional comments for YES response.

51. If you have any further questions or comments regarding this Audit Report please use the space provided.

Appendix J

Record of Training

South San Luis Obispo County Sanitation District
2011 District Staff Training Record
NPDES Program (O&M Manual, etc.) and SSMP Program

District Staff	Jan 18, 2011 - Overview of Training Program. Finalized plan and schedule	February 8, 2011 - NPDES Permit review	February 25, 2011 - NPDES Permit - Standard Provisions	March 3, 2011 - NPDES Permit and Enforcement (MMPs, 23 CCR, etc.)	March 15, 2011 - SSMP, GWDR and MRP	March 22, 2011 - SSMP Overflow Emergency Response Plan	April 5, 2011 - SSMP and NPDES Acronyms. Chapter 1 and 2 of SSLOCSD O&M Manual	April 14, 2011 - Test on Acronyms and Chapter 3 of O&M Manual	April 25, 2011 - SSMP, Trunk Collection System Inspection and Maintenance - Aaron Yonker	May 3, 2011, Chap 3 of O&M Manual	May 17, 2011, Chap 3 of O&M Manual
1. Jeff Appleton - On Medical Leave as of 2/1/11	X										
2. Bob Barlogio - Interim Plant Superintendent	X	X	X	X	X	X	X	X	X	X	X
3. Trini Rodriquez - Interim Shift Supervisor	X	X	X	X	X	X	X	X	X	X	X
4. Aaron Allen - Operator	X	X	X	X	X	X		X	X	X	X
5. Billy Rohhild - Operator	X	X	X	X	X	X	X			X	X
6. Rick Jackman - Operator	X	X	X	X	X	X	X	X	X	X	X
7. John Wallace - District Administrator	X										
8. *Heather Billing - Env Comp Inspector and Senior Engineer, Wallace Group	Trainer	Trainer	Trainer	Trainer	Trainer	Trainer	Trainer	Trainer		Ops Lead Training	Ops Lead Training
9. Anastasia Mylonas - Env Comp Inspector, Wallace Group				X							