

South San Luis Obispo County **SANITATION DISTRICT**

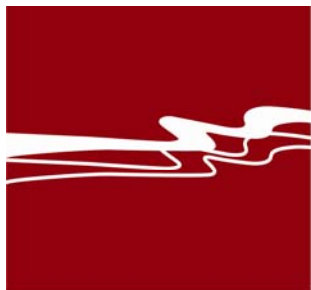
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Sewer System Management Plan



PREPARED BY:



WALLACE GROUP®

Revision 1—May 31, 2011

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List of Acronyms and Abbreviations

APCD	Air Pollution Control District
BMP	Best Management Practices
CAP	Capacity Assessment Plan
Cal EMA	California Emergency Management Agency (formerly State OES)
CCTV	Closed Circuit Television
CDFG	California Department of Fish and Game
CIP	Capital Improvement Plan
CIWQS	California Integrated Water Quality System
CWEA	California Water Environment Association
District	South San Luis Obispo County Sanitation District
EH	San Luis Obispo County Environmental Health Department
ELAP	Environmental Laboratory Accreditation Program
FOG	Fats, Oil and Grease
FSE	Food Services Establishment
GWDR	General Waste Discharge Requirement
HMA	High Maintenance Area
I/I	Inflow & Infiltration
LRO	Legally Responsible Official
mgd	Million Gallons per Day
NOAA	National Oceanic and Atmospheric Administration
NPDES	National Pollutant Discharge Elimination System
OERP	Overflow Emergency Response Plan
OES	Office of Emergency Services (County)
O&M	Operation and Maintenance
PM	Preventative Maintenance
RWQCB	Regional Water Quality Control Board
SCADA	Supervisory Control and Data Acquisition
SHECAP	Sewer Hydraulic Evaluation and Capacity Assessment Plan
SSOR	Sewer System Overflow Report
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

Introduction

This Sewer System Management Plan (SSMP) was prepared in compliance with the requirements of the State Water Quality Control Board (SWQCB) pursuant to General Waste Discharge Requirement (GWDR) Order No. 2006-0003-DWQ as amended by Order No. WQ 2008-0002-EXEC (SSS Orders).

The SSS Orders require all public wastewater collection system agencies in California with greater than one mile of sewers to develop a Sewer System Management Plan (SSMP) and report Sanitary Sewer Overflows (SSOs) using the State's electronic reporting system (California Integrated Water Quality System - CIWQS).

The intent this SSMP is to meet the requirements of the GWDR. The SSMP includes eleven elements as follows:

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

0.1 South San Luis Obispo County Sanitation District System Overview

The County Board of Directors formed the South San Luis Obispo County Sanitation District (SSLOCSD or District) in 1963 for the purpose of providing wastewater treatment to its neighboring communities. Upon formation, the District included Arroyo Grande, the Communities of Oceano, Halcyon and several unincorporated areas in the vicinity. The City of Grover Beach was a contract agency.

By 1965, the District completed the construction of the Wastewater Treatment Plant (WWTP) on a 7.6 acre site located between the Oceano Airport and the Arroyo Grande Creek Channel on Aloha Place in Oceano.

Today, the District operates the WWTP using a fixed film reactor for secondary treatment with a design capacity flow rate of 5 million gallons per day (mgd) and a 9 mgd peak wet weather flow. Sewage collection services are provided by the Member Agencies of the District who are the City of Arroyo Grande, City Grover Beach, and the Oceano Community Services District. Sewage collected by these Member Agencies is transported through their collection systems into trunk sewers owned, operated, and maintained by the District which then feed to the WWTP.

It is incumbent upon the District to protect the environment to the greatest degree possible. The responsibility includes preventing Sanitary Sewer Overflows (SSOs) from the District's trunk system.

0.2 Governing Body

The District is governed by a three member body, known as the SSLOCSD Board of Directors whose members are appointed by the respective Member Agencies on a yearly basis. The Board of Directors includes one representative from each Member Agency; specifically, the City of Arroyo Grande, City of Grover Beach, and the Oceano Community Services District.

The Board of Directors makes decisions in the best interest of the District. The Board makes policy and operational decisions with the District Administrator, District Engineer, and District Staff who are responsible for the WWTP and District trunk system. The Board of Directors also 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**.

0.3 Regulatory Requirements

The SWRCB oversees the water quality and Sanitary Sewer System (SSS) requirements as defined in the SSS Orders. The SSS Orders apply to all the public agencies that own or operate a sanitary sewer system comprised of more than one mile of pipe or sewer lines which convey untreated wastewater to a publicly owned treatment facility within the State of California.

On May 2, 2006, the State Water Quality Control Board adopted Order No. 2006-0003-DWQ and on February 20, 2008 the State Board amended the Monitoring and Reporting Program requirements for SSOs through Executive Order WQ 2008-0002-EXEC. SSOs are a threat to public health and water quality.

The SSS Orders placed three requirements on the District:

- Apply for coverage by submitting a Notice of Intent (NOI) to comply by November 2, 2006 (complete).
- Begin SSO electronic reporting using the California Integrated Water Quality System (CIWQS) database by May 2, 2007 (complete).
- Develop a phased in SSMP with a final document approved by the Board and electronically certified by the Legally Responsible Officer (LRO) on CIWQS by August 2, 2009. (completed – July 15, 2009)

Element 1 – Goals

This element identifies the goals SSLOCSD has established for the management and maintenance of the sanitary sewer collection system and discusses the role of the SSMP in supporting these goals. These goals provide focus for the District staff to continue high-quality work and to implement improvements in the management of the collection system.

1.1 Regulatory Requirements

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

SWRCB 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.

Element 1 – Goals Appendix

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

- **SSMP Development Plan and Schedule**
- **Minutes of Board Meetings for SSMP Approval (10-17-07 and 07-15-09)**

1.2 Goals Discussion

The District seeks to provide high quality and cost-effective wastewater collection for its clients by meeting the following goals:

- 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.
- Properly manage and maintain the District trunk sanitary sewer collection system to minimize SSOs.
- Identify, prioritize, and continuously renew and/or replace sewer collection system to maintain reliability now and into the future.
- Provide adequate capacity for peak wet weather wastewater flows.

Element 2 – Organization

The intent of the Organization element of the SSMP is to identify the SSLOCSD staff that is responsible for implementing this SSMP, responding to SSO events, and meet the SSO reporting requirements. This section also includes the designation of the Legally Responsible Official (LRO) in order to meet the SWRCB requirements for completing and certifying SSO reports.

2.1 Regulatory Requirements

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

SWRCB 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.

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 Regional Water Quality Control Board, SLO County Public Health Officers, SLO County Office of Emergency Services, SLO County Environmental Health Agency, California Department of Fish and Game, and the California Emergency Management Agency.

Element 2 - Organization Appendix

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

- **List of Board Members**
- **List of District Staff**
- **Chain of Communicating Sanitary Sewer Overflows**
- **District Organizational Chart**

2.2 Organization Discussion

The following section outlines the District organization, general and SSMP responsibilities of personnel, authorized representative, and chains of communication for

SSOs responding and reporting. Names and contact information for current Staff is available in **Appendix B** and is expected to be revised when changes are made.

2.3 District Organization

The District provides wastewater treatment to a combined population of approximately 36,442 residents (Year 2000 Census and 2001 District Assessment) and is governed by a three member body, known as the Board of Directors. The members of the Board of Directors each serve a one year term unless directed otherwise by the Member Agencies. The Board of Directors includes one representative each from the City Arroyo Grande, City of Grover Beach, and Oceano Community Services District. The Board of Directors makes policy decisions with advice from in-house District Staff and contracted District Administrator, District Engineer and District Staff.

Daily District management of the Wastewater Treatment Plant (WWTP) and collection system is carried out by the Plant Superintendent, Shift Supervisor, and Plant Operators. The Plant Superintendent reports directly to the District Administrator and the District Board of Directors.

The Plant Superintendent and District Administrator are jointly responsible for the implementation of the Sewer System Management Plan (SSMP). The Plant Superintendent is also the designated staff member who is responsible for all wastewater collection operations.

Operations staff is on-call twenty four (24) hours per day with an estimated 45 minute response time during non-business hours.

The complete organizational chart of the District is located in **Appendix B**.

2.4 Description of General Responsibilities

This section includes a brief description of the job title, authority and respective responsibilities associated with each position.

Board of Directors

The legislative head of SSLOCSD consists of Member Agency representatives from the City of Arroyo Grande, City of Grover Beach, and Oceano Community Services District and is composed of three members. The three members are appointed, on a non-partisan basis. Each member of the Board of Directors serves a one-year term. These members establish District policies, approve ordinances and resolutions, make financial decisions, approve agreements and contracts, and hear appeals on decisions made.

District Administrator

The District Administrator is the Executive Officer of the District and for the Board of Directors. He/she administers the District and has exclusive management and control of the operations, maintenance, and works of the District, subject to approval of the Board of Directors, and provides day-to-day leadership for the District. He/she has general charge, responsibility and control over all property of the district. He/she shall:

- Attend all meetings of the District's Board and meetings the Board specifies from time to time;
- Employ such assistants and other employees as he/she deems necessary for the proper administration of the District and the proper operation of the works of the District;
- Delegate authority at his/her discretion and has authority over and directs all employees, including terminating for cause;
- Provide a motivating work climate for District employees;
- Maintain cordial relations with all persons entitled to the services of the District;
- Attempt to resolve all public and employee complaints;
- Encourage citizen participation in the affairs of the District;
- Seek to carry into effect the expressed policies of the Board of Directors, including planning the short, medium and long term work program for the District, facilitating constructive and harmonious Board relations;
- Translate the goals and objectives of the Board to the community;
- Prepare and manage the District budget, conducting studies, making oral and written presentations;
- Supervise and perform a variety of duties related to the recording, classifying, examining and analyzing of District financial transactions and associated data and records;
- Supervise and perform a variety of duties relating to maintenance of the District's accounting system by interpreting, supplementing and revising the system as necessary;
- Supervise and perform a variety of duties relating to the resolution of customer problems, and providing information requested by customers and other members of the public having an interest in District affairs;
- Serve as the District Treasurer upon appointment by the Board of Directors;
- Oversee the District's investment policy;
- Oversee the District's personnel policies, including vacation scheduling, discipline, termination, etc.; and
- Supervise and maintain the District's various insurance policies to ensure appropriate coverage.

District Engineer

The District Engineer is responsible for engineering plans of all facilities, plans strategy, and oversees outside contractors performing services for the WWTP and collection system. He/she is also responsible for reviewing design and construction documents to ensure that all construction projects meet the District standards and for updating standards for installation, rehabilitation and repair, as needed. Also, this individual is responsible for the inspection of construction projects to ensure District standards have been followed.

Plant Superintendent

The Plant Superintendent is responsible for WWTP operation activities. This includes administering all wastewater treatment, reclamation and disposal functions for SSLOCSD WWTP and providing work oversight, review and evaluation to plant personnel. Successful performance of the work requires a high degree of technical and regulatory knowledge to ensure that all plant operations and laboratory activities are in regulatory compliance.

The Plant Superintendent manages, reviews, and evaluates all collection system operations and maintenance activities. A majority of these activities are contracted out for cost savings and infrequency of these activities, due to the large diameter of the District's trunk sewer. The Plant Superintendent is responsible for initiating the Overflow Emergency Response Plan when an SSO occurs and for assisting the District Administrator in the monitoring, measuring, and SSMP Program modifications.

Shift Supervisor

The Shift Supervisor plans, organizes and communicates assignments clearly to District staff. The Shift Supervisor is responsible for daily operations of the WWTP and collection system (trunk sewer). The Shift Supervisor coordinates operational and maintenance activities with the Plant Superintendent, District Engineer, and District staff.

Plant Operator

The Plant Operators operate and maintain the District WWTP and collection system in a safe, clean, and orderly manner. The Plant Operators perform operational and maintenance activities at the direction of the Plant Superintendent and Shift Supervisor. The Operators operate a variety of equipment, vehicles, and power tools, including trucks, dump trucks, articulated loader, light crane, welders, and presses. The Plant Operators work weekends and are on standby on a rotating schedule.

Environmental Compliance Inspector

The Environmental Compliance Inspector implements the District's Fats, Oils, and Grease (FOG) Program for the Member Agencies in addition to the District's Pretreatment Program. This service is currently contracted to Wallace Group, a private Engineering consulting firm.

Bookkeeper/Secretary

The District Bookkeeper/Secretary is responsible for performing a variety of financial duties following standard guidelines, but occasionally requiring the use of independent judgment. The Bookkeeper/Secretary interprets and implements policies, procedures and computer applications related to the finance system. Duties include accounting, report writing, data entry, processing payments, and extensive public contact.

Office & 24 Hr. Emergency

South San Luis Obispo County Sanitation District
1600 Aloha Pl / P.O. Box 339

2.5 Responsibility for SSMP Implementation

The District Administrator and Plant Superintendent are jointly responsible for overseeing the overall implementation of the SSMP. Various individuals within the District organization are responsible for implementing one or more of the SSMP elements. Table 2-1 summarizes the responsibilities for SSMP implementation by element. The District Engineer and the District Administrator also have roles in implementing the SSMP.

Table 2-1: Responsibility for SSMP Implementation by Element

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

Responsibility for Element 1 – Goals

The District Administrator is responsible for leading District Staff in the implementation of the goals.

Responsibility for Element 2 – Organization

The District Administrator is responsible for updating the organizational structure, SSMP implementation assignments, and SSO responding and reporting.

Responsibility for Element 3 – Legal Authority

The District Administrator is responsible for upholding the District Sewer Use Code and for revising existing ordinances and creating new ordinances when needed.

Responsibility for Element 4 – Operations and Maintenance

The District Engineer and Plant Superintendent are jointly responsible for: 1) Resources and Budget, and 2) Hiring Contractors 3) Prioritizing Preventative Maintenance, 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 Engineer is responsible for reviewing design and construction documents to ensure all construction projects meet the District standards. This position is responsible for updating standards for installation, rehabilitation and repair, as needed. This position is also responsible for the inspection of construction projects to ensure District standards are followed.

Responsibility for Element 6– Overflow Emergency Response Plan

The District Administrator and Plant Superintendent are responsible for implementing the Overflow Emergency Response Plan (OERP), including revisions to the OERP and training District Staff annually.

Responsibility for Element 7 – Fats, Oils and Grease (FOG) Control Program

The District Engineer is responsible for identifying grease hot spots and maintains an effective cleaning program for grease problematic sewers. The Environmental Compliance Inspectors are responsible for inspecting and permitting Food Service Establishments (FSEs) for the Member Agencies.

Responsibility for Element 8 – System Evaluation and Capacity Assurance Plan

The District Engineer is responsible for establishing and assessing capacity requirements for the District trunk line system and for the preparation and implementation of District Evaluation and Capacity Assurance Plan. This individual is 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. 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 nearby regulatory agencies of the status of the District's SSMP.

2.6 Chain of Communication for Responding to SSOs

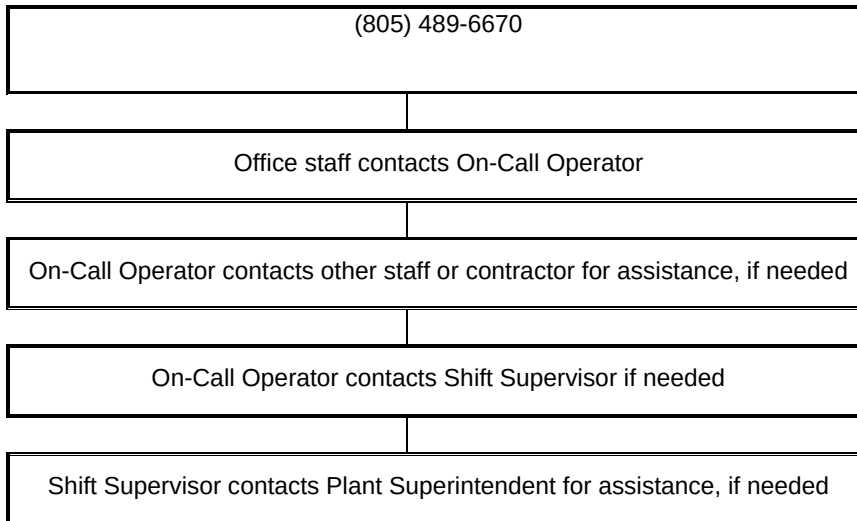
The Chain of Communication for reporting SSOs begins with contact at the Plant office either by residents, 911 dispatchers or police and fire departments. There are times where police and fire personnel may contact the Plant Superintendent or his delegate directly. The SSLOCSD telephone contact number is (805) 489-6670. This telephone number is forwarded to the on-call operator after hours. 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 is provided in **Appendix D**. 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 Shift 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 following steps are taken to verify the report and ensure the safety of the public.

1. The receiver of the call (Operations Staff Member or 911 Operator) will obtain the location from contact and any description they may have of the problem. Additionally, the name and phone number of the caller is to be obtained and recorded in the District Incident Form for follow-up information if necessary.
2. The call receiver will contact the on-call Operator by phone immediately and direct Staff to the described location. The OERP is initiated and provided to the responding Staff.
3. District Staff proceed to the location to verify report.
4. If an SSO is verified, the On-call Staff member will contact the Shift Supervisor and request appropriate support.
5. Operations Staff will notify the Superintendent and District Administrator.
6. Plant Superintendent and/or Shift Supervisor will notify the appropriate public agencies. The Shift Supervisor or his delegate contacts applicable agencies, including the Board of Directors if the trunk sewer system is affected. SLO County Environmental Health, Cal EMA, and the RWQCB will be contacted within two (2) hours when the SSO is over 1,000 gallons or reaches the surface water.

Figure 2-1: Chain of Communication for Responding to SSOs

Public Caller or Emergency Dispatch (911) contacts South San Luis Obispo County Sanitation District



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

1. San Luis Obispo County Environmental Health Department (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), (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 (Contact within 2 hours if spill over 1,000 gallons **or** reaches waters of the state)
4. Cal EMA Warning Center (Contact within 2 hours if spill over 1,000 gallons **or** reaches waters of the state)
5. CA Department of Fish & Game (Contact within 2 hours if spill affects fish and/or wildlife)

Upon completion of containment and clean-up, the Plant Superintendent, Shift Supervisor and District Engineer will use the CIWQS SSO Discharger Work Book to initiate the draft SSO report to the CIWQS database.

Element 3 - Legal Authority

The District maintains the Legal Authority for the trunk system in its General Sewerage Regulations described in Resolution 22A, a Pretreatment Ordinance and a FOG Ordinance. The District Member Agencies requested that the District administer and enforce their Pretreatment and FOG Programs. All other agreements and Ordinances set forth by the District pertain specifically to sewer rate fees. These fees are set by resolution, and each of the Member Agencies bill their respective customers. The Member Agency then pays the agreed resolution portion to the District for the treatment of the sewage at the plant. The District does not have any direct customers. The Member Agencies are responsible for maintaining proper records, new construction, building permits, and billing customers. The District is responsible for the maintenance and upkeep of the treatment plant and the trunk lines. In some instances where the legal authority falls outside jurisdiction lines of the Member Agencies, San Luis Obispo County has the authority to enforce current building, construction codes, and ordinances.

3.1 Regulatory Requirements

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

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

Element 3: Legal Authority Appendix

There is no Appendix related to Element 3.

3.2 Prevent Illicit Discharges

It is essential to protect SSLOCSD from illicit discharges that may interfere with the proper functioning of the collection system and WWTP. The District's current regulatory abilities to prohibiting illicit discharge are found in the following ordinances:

SSLOCSD Resolution 22A –

- Article VII, Section 2 – Prohibited Wastes

SSLOCSD Pretreatment Ordinance 1994-1

- Article I, Section 3 – Prohibited Discharges

SSLOCSD Fats, Oils, and Grease Ordinance

- Article II, Section 2.3 – Prohibited FOG Discharges

3.3 Design and Construction

Standards and Design Specifications ensure the sewer lines and connections are properly designed and constructed. The purpose of the Standards and Specifications is to 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.

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

SSLOCSD Resolution 22A –

- 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

The District Engineer uses the Standards and Design 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 2008-01

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

3.5 FOG Control

A FOG Ordinance was adopted by the District in 2008 and provides the legal authority for each Member Agency FOG Control Program to regulate the Food Service

Establishments (FSEs) located within the District service area. FSEs are permitted and inspected on a semi-annually by the District, who currently contracts with Wallace Group to provide Environmental Compliance Inspectors.

3.6 Enforcement of its Sewer Ordinance

It is essential to protect SSLOCSD from illicit discharges that may interfere with the proper functioning of the treatment plant. In the event of a violation of the sewer ordinance that is the result of a chronic problem, if the Member Agencies are unable to obtain correction by the violator, the District shall become involved. SSLOCSD has the authority to become involved if the violation pertains to general sewerage use, Pretreatment or FOG. The District's current regulatory abilities to enforce against illicit 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 FOG Ordinance 2008-01

- 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 VI and VII allow SSLOCSD to order temporary or permanent injunctive relief with the assistance of Legal Counsel.

3.7 Sewer Use Fees

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

SSLOCSD Ordinance 2006-1

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

Fees are collected by the Member Agencies from their collection system customers. The District does not have any direct customers. The Member Agencies pay fees to the District to discharge into the District owned and operated trunk lines, which in turn discharge into the Treatment Plant. The fees fund the daily operation, maintenance and administration of the treatment plant and trunk lines. Fees are reviewed and adopted by the Board of Directors.

Element 4 – Operations and Maintenance

The District's operation and maintenance of its collection system ensures that the system is kept in good working condition. It requires that the system be regularly maintained so that the wastewater enters the treatment plant in an efficient way. Due to the large diameter size of the trunk system, District staff infrequently performs repairs and upkeep. The majority of this work is contracted out. This element explains the actions that are performed (mostly contracted out) to accomplish the optimal Operation and Maintenance of the District's collection system.

4.1 Regulatory Requirements

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

- (a) Maintain an up-to-date map of the sanitary sewer system, showing all gravity line segments and manholes, pumping facilities, pressure pipes and valves, and applicable stormwater conveyance facilities;
- (b) Describe routine preventive operation and maintenance activities by staff and contractors, including a system for scheduling regular maintenance and cleaning of the sanitary sewer system with more frequent cleaning and maintenance targeted at known problem areas. The Preventative Maintenance (PM) program should have a system to document scheduled and conducted activities, such as work orders;
- (c) Develop a rehabilitation and replacement plan to identify and prioritize system deficiencies and implement short-term and long-term rehabilitation actions to address each deficiency. The program should include regular visual and TV inspections of manholes and sewer pipes, and a system for ranking the condition of sewer pipes and scheduling rehabilitation. Rehabilitation and replacement should focus on sewer pipes that are at risk of collapse or prone to more frequent blockages due to pipe defects. Finally, the rehabilitation and replacement plan should include a capital improvement plan that addresses proper management and protection of the infrastructure assets. The plan shall include a time schedule for implementing the short- and long-term plans plus a schedule for developing the funds needed for the capital improvement plan;
- (d) Provide training on a regular basis for staff in sanitary sewer system operations and maintenance, and require contractors to be appropriately trained; and
- (e) Provide equipment and replacement part inventories, including identification of critical replacement parts.

Element 4: Operations and Maintenance Appendix

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

- **Capital Improvement Plan and Budget**
- **Trunk Sewer Geographic Information System Sample Map**

4.2 Collection System Map

SSLOCSD maintains up- to-date electronic collection system maps created and maintained by the District Engineer using a Geographic Information System (GIS). Overlaid onto aerial imagery, these maps provide detailed locations of the system's components with references to roads, homes, trees, etc. within the District boundary.

In addition to providing general location mapping, the electronic map is updated as needed to include precise information relating to the general characteristics of the system components. This information includes: material composition, pipe diameters, segment lengths, slopes, grade elevations, invert elevations, and survey data. Interactive links incorporated into the electronic maps provide immediate access to system photos, Closed Circuit Television (CCTV) inspection videos and the trunk system's construction drawings.

Collection system maps are printed to hard copy and provided to the District's staff and contractors for use during routine maintenance and operations and during capital improvement projects (CIP). As-built plans and construction drawings are maintained as the system is improved through the CIP, and data is routinely integrated back into collection system mapping.

4.3 Preventative Maintenance

The District's CCTV inspection and cleaning program is an integral component of preventative maintenance. These services are performed simultaneously and are executed under a publicly bid service contract awarded by the District. Performing CCTV inspection in conjunction with cleaning operations provides quality control to the District by providing real-time visual verification that the debris encountered is completely removed from the system and allowing for additional efforts if necessary while the contractor is still onsite. After a cleaning, the next round of maintenance will be scheduled according to the findings from the last round of inspection and maintenance (i.e. if roots have yet to re-establish or grease is not evident, then the next round may be 2-3 years). 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. Traditionally these spots 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 District understands that as sewer collection systems age, the risk for deterioration, blockages, and collapse increase considerably. In an effort 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 system deficiencies noted. 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.

In 2008 the District completed system-wide CCTV inspection of the collection system. Assessment of that inspection resulted in the development of a CIP in which a substantial amount of the collection system will be internally relined by trenchless rehabilitation technology. Funding for this long-term rehabilitation project is allocated in the FY 11/12 budgets.

Also in 2008, a survey of the existing collection system discovered that twenty of the District's trunk line manholes were inaccessible due to changes in grade, road construction, blocked access, and easement. The District implemented a project which rehabilitated the manholes by clearing encroaching vegetation, dirt, and debris, thereby providing secure access to the manholes and allowing for routine maintenance and emergency response. This short-term rehabilitation action was funded through the annual operating budget developed for collection system maintenance.

4.5 Training

Training programs include formal classroom training and on-the-job training. Training is facilitated by both District staff and by outside training workshops. On-the-job cross training is pursued to ensure staff has a proficient working knowledge of the sewer system. District staff is cross-trained so that critical tasks can be performed without interruption. Task proficiency is a requirement for all job positions and promotions, and training records are maintained by the Plant Superintendent 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 an integral aspect of the District's program. Every staff member receives formal safety training. Staff is 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. As evidence, District staff reviewed and trained on the revised OERP on March 22, 2011. A practical training session in SSO Category 1 and 2 responses is planned for June 2011.

4.6 Equipment and Parts Inventory

Emergency repair would normally be related to lift stations. 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.

Ferguson Enterprises is recognized in SLO County as the largest distributor of plumbing and builder products. Ferguson's is located a short distance from the District. They were contacted in early 2009 and confirmed that the majority of the items required for repair and replacement are currently stocked and available for immediate purchase. Mid State Concrete Products, also located in SLO County, manufactures a comprehensive line of precast concrete products, including manholes, grade rings, and commercial and industrial waste system structures and piping. Mid State Concrete was contacted in early 2009 and confirmed that the majority of these items are readily stocked and available for immediate purchase.

Element 5 - Design and Performance Standards

The intent of this element is to identify the standards and specifications used in new construction as well as repair of existing sewer systems to ensure a high quality, well designed and functioning sanitary sewer system. This element also includes procedures for inspection of newly constructed and repaired sewer systems.

Element 5 – Design and Performance Standards Appendix

There is no Appendix related to Element 5.

5.1 Regulatory Requirements

The SSMP must identify:

1. Design and construction standards and specifications for the installation of new sanitary sewer systems, pump stations and other appurtenances; and for the rehabilitation and repair of existing sanitary sewer systems.
2. Procedures and standards for inspection and testing the installation of new sewers, pumps, and other appurtenances and for rehabilitation and repair projects.

5.2 Design and Construction Standards

With respect to 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 located on the internet at the following websites:

- City of Arroyo Grande Engineering Standards for Sewers and Sanitation: <http://www.arroyogrande.org/document-center/standards/engineering-standards/section-2/>;
- City of Grover Beach Standards and Specifications, Section 6 Sewerage: <http://www.grover.org/DocumentView.aspx?DID=268>
- Oceano CSD uses SLO County Department of Public Works Standard Improvement Specifications and Drawings at: <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 SLO County Department of Public Works Standard Improvement Specifications and Drawings are used to set . These standards are located at the SLO County website at:

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

With respect to rehabilitation and repair, the District may use a combination of measures (spot repairs, linings, coatings, etc.) depending on the site-specific conditions to restore

Element 6 - Overflow Emergency Response Plan

The OERP is summarized in this element and provided in its entirety in Appendix D. The OERP addresses issues such as spill response, detection, mitigation, clean up, investigation, documentation and reporting.

6.1 Regulatory Requirements

The Agency must develop and implement an OERP that identifies measures to protect public health and the environment. At a minimum, the plan will 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 agencies, regional water boards, water purveyors, 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 WDRs or NPDES permit requirements. The SSMP should identify the officials who will receive immediate notification;
4. Procedures to ensure that appropriate staff and contractor personnel are aware of and follow the OERP 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 to minimize or correct any adverse impact on the environment resulting from the SSOs, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the discharge.

Element 6 - OERP Appendix

Supporting information for Element 6 is included in **Appendix D**, which contains the following documents:

- **District Overflow Emergency Response Plan**
- **CIWQS SSO Discharger Work Book**
- **SSO Report Forms – Incident and Telephone Log**

6.2 SSO Notification

The District is responsible for spills caused by a blockage or overflow in the District trunk lines only. The Plant Superintendent 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.

trunk system performance to acceptable levels. 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 Inspection Standards

The District provides, through a hired contractor, continuous inspection during the construction and repair of sewer facilities along the trunk lines. The District's standard procedure requires work to be placed into service only after it is accepted by the District Engineer or its delegate following satisfactory inspection and testing. A draft of the standard procedure (which is undergoing revision and approval in June 2011) is included in **Appendix H**.

Inspection and testing requirements for 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 to new, rehabilitated and repaired facilities as described in Section 3 of this SSMP. The District currently contracts this work out to inspectors.

The District may receive calls reporting sewer spills at the wastewater treatment plant 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 SSO 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 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 to contact appropriate District staff and contract support as required.
5. The Plant Superintendent may notify the District Engineer or other staff as necessary.
6. The Plant Superintendent 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 or first responder will use the SSOR to complete the spill report(s) to the State Water Board CIWQS database, the RWQCB, County OES, CalEMA and the San Luis Obispo County Environmental Health Department as necessary.
8. The LRO will certify the CIWQS spill report within 3 days of a Category 1 SSO and within 30 days of the end of the month in which the spill occurred for a Category 2 SSO.

6.4 SSO Reporting

The District is registered with the SWRCB CIWQS electronic sewage spill reporting system. The Plant Superintendent and District Administrator are the Legally Responsible Officials (LROs), who are 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 Wastewater Treatment Plant office.

Category 1 SSO:

1. Spills greater than 1,000 gallons – call Plant Superintendent. Within 2 hours call Cal EMA, 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 CalEMA, SLO County OES, SLO County Environmental Health, and RWQCB, within 2 hours.

Category 2 SSO:

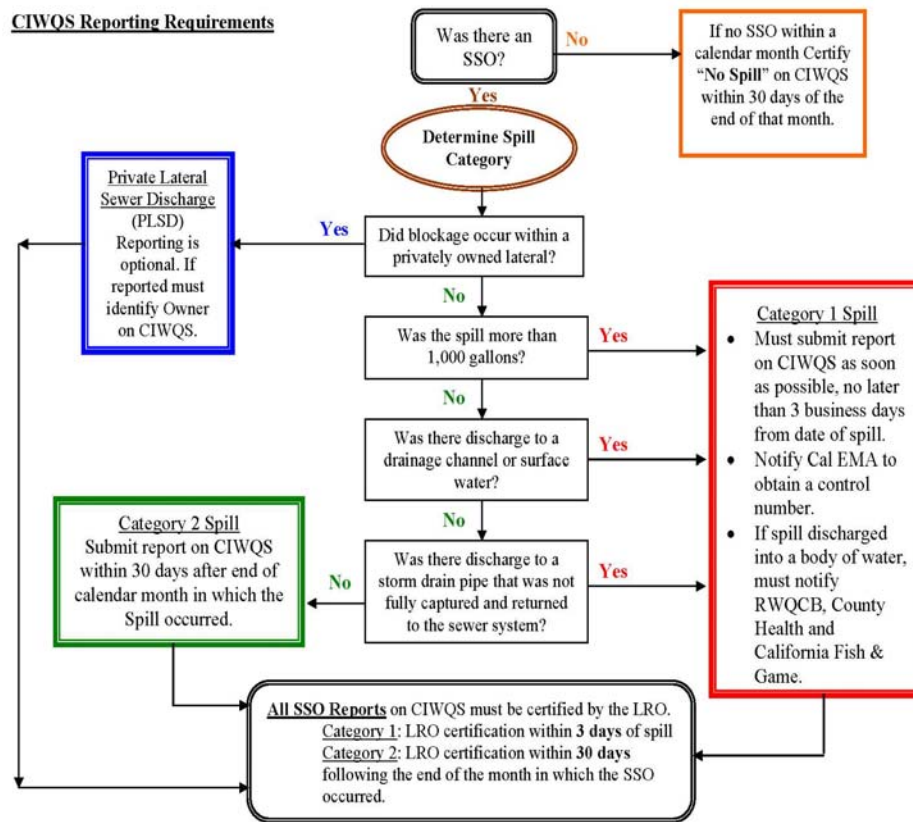
3. Spills less than 1,000 gallons **and** does not reach body of surface water or drainage swale – report to Plant Superintendent and notify RWQCB within 24 hours.

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 OERP Training

District staff are trained annually in the requirements of the OERP. Training includes:

Training Requirement	Month Scheduled
1. Review of the OERP in a classroom setting;	March
2. Practice in response to an SSO event;	July
3. Practice in SSO reporting using SSOR form and CIWQS.	July

6.6 Traffic and Crowd Control

SSOs often occur where public contact is likely. In order 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 Sheriff's Department (Oceano CSD), Grover Beach City Police or Arroyo Grande City Police may be contacted to assist with crowd control.

6.7 SSO 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 surface waters and minimize or correct any adverse impact on the environment resulting from the SSO, including such accelerated or additional monitoring to determine the nature and impact of the discharge.

Operations staff will use suitable materials, to block the catch basin entrances to storm drains and will also use a one of the contract companies in the table below to vacuum up spills and to provide wash down water where appropriate.

Table 6.2.a – 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	(805) 688-2571 or (805) 929-5065
Speeds Transportation Services 1573 E. Betteravia Road Santa Maria, CA 93454	(805) 925-1369
Valley Septic Service Solvang, CA 934563	(805) 688-8972

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 SSLOCSD 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 - Fats, Oils and Grease (FOG) Control Program

This section of the SSMP describes the FOG Program for the District. At this time, 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 to 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.

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:

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

Element 7 - FOG Appendix

Supporting information for Element 7 is included in **Appendix E**, which contains the following documents:

- **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 E**.

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 for FOG Program

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 POTW.

- To protect the District Sanitary Sewer System and its Member Agencies, its personnel, and members of the general public, who may be affected by sewer blockages and obstructions.
- To prevent 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 (CPC), 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.
- Requirement 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 element identifies the procedures in place to evaluate the collection system. The design criteria will be discussed as well as a Capital Improvement Plan (CIP) and a schedule for implementation. This element will ensure the collection system is able to handle the changes to the communities it services.

Element 8 –Capital Improvements Appendix

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

- **Capital Improvement Plan and Budget**
- **System Hydraulic Evaluation & Capacity Assurance Study**

8.1 Regulatory Requirements

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

1. **Evaluation:** Actions needed to evaluate those portions of the sanitary sewer system that are experiencing or contributing to a SSOs discharge deficiency. The evaluation should provide estimates of peak flows associated with conditions similar to those causing overflow events, estimates of the treatment plant's key system components, hydraulic deficiencies (including components of the system with limiting capacity) and the major sources that contribute to the peak flows associated with overflow events;
2. **Design Criteria:** Where design criteria do not exist or are deficient, undertake the evaluation identified above to establish appropriate design criteria; and
3. **Capacity Enhancement Measures:** The steps needed to establish a short- and long-term CIP to address identified hydraulic deficiencies, including prioritization, alternatives analysis, and schedules. The CIP may include increases in pipe size, I/I reduction programs, increases and redundancy in pumping capacity, and storage facilities. The CIP may include an implementation schedule and may identify sources of funding.
4. **Schedule:** The District will develop a schedule of completion dates for all portions of the capital improvement program developed in (1)-(3) above. This schedule may be reviewed and updated consistent with the SSMP requirements as described by the SWRCB GWDR.

8.2 System Hydraulic Evaluation and Capacity Assurance Plan

A Trunk Sewer System Capacity Study was completed in 2006, the Trunk Sewer System Capacity Study is provided in **Appendix E**. It was concluded in the report that overall flow capacities were within the design flow capacities. There were 3 main problem areas which have been addressed by the cities in which they are located.

Element 9 - Monitoring, Measurement and Program Modifications

This element discusses how the District monitors implementation of the SSMP elements. It also shows the steps taken to measure the effectiveness of the SSMP in reducing SSOs. This includes tracking performance indicators and updating the SSMP when necessary to keep it current and useful over time.

Element 9 –Monitoring, Measurement and Program Modifications Appendix

There is no Appendix associated with this Element.

9.1 Regulatory Requirements

The District will develop a monitoring, measurement and modifications program to maintain the relevant information that can be used to establish and prioritize appropriate policies, procedures, processes and programs funding within the SSMP. These measurements shall include the following information:

- How the agency maintains relevant information, which can be used to establish and prioritize appropriate processes within the SSMP;
- How the agency monitors the implementation and, where appropriate, measures the effectiveness of each element of the SSMP;
- How the agency assesses the success of the preventative maintenance program;
- How the agency will update program elements, as appropriate, based on monitoring or performance evaluations; and
- How the agency identifies and illustrates SSOs trends, including: frequency, location, and volume.

9.2 Maintenance Records

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 to prioritize activities, programs and policies that may help to eliminate future SSOs.

9.3 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 maintaining 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.

9.4 Identifying Trends

The District will use data collected during and following SSOs to track frequency, location and volume. Table 9-1 will be used to track trends in cause, volume, season, and response time. This information will be reviewed regularly and trends will be identified. If a chronic problem is identified, the "hot spots" or HMAs will be included in the regular maintenance schedule. If increased maintenance does not appear to be enough, repair or replacement will be considered as discussed in *Element 4 - Operation and Maintenance* of this document.

Table 9-1 SSO Trends

INDICATOR	2009	2010	2011	2012
Number of SSOs (by season)				
Wet Season (Oct-Apr)	0	1		
Dry Season (May-Sep)	0	0		
Number of SSOs (by volume)				
< 10 gal	0	0		
10-99 gal	0	0		
100-999 gal	0	0		
≥ 1000 gal	0	1		
Estimated SSO Volume				
Estimated Total SSO Volume (Gallons)	0	382,000		
Number of SSOs (by cause)				
Blockages	0	0		
Roots	0	0		
Grease	0	0		
Debris	0	0		
Debris from laterals	0	0		
Animal carcass	0	0		
Construction debris	0	0		
Multiple causes	0	0		
Infrastructure failure	0	0		
Inflow & Infiltration (I&I)	0	0		
Electrical power failure	0	1		
Flow capacity deficiency	0	0		
Natural disaster	0	0		
Bypass	0	0		
Cause unknown	0	0		
**Number of SSOs per mile of sewer	0	0.11		
**Volume of SSOs per mile of sewer	0	42,444		
Average Emergency Response Time				
Business hours	0	0		
Non-business hours	0.75	0.75		
Maintenance Activities (lineal ft)				
Televised inspection (CCTV)*	0	0		
Regular cleaning*	0	0		
Hot Spot (HMA) cleaning*	0	0		

*The trunk system was inspected with CCTV in 2007 and 2008 and was cleaned where needed.

** Metrics collected mirror those collected by SWRCB in CIWQS, however metrics collected are appropriate to collection systems that are greater than 100 miles in length. The District operates and maintains 9 miles of collection system.

Element 10 - Sewer System Management Plan Audits

This element is to identify a process 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.

Element 10 – SSMP Audits Appendix

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

- **SSMP Audit Report Form**

10.1 Regulatory Requirements

As part of the SSMP, the District shall conduct an internal audit, appropriate to the size of the system and the number of overflows, and write a report of the audit findings, evaluating the effectiveness SSMP and its compliance with the SSS Orders. The report will be kept on file with the SSMP in the District office.

At a minimum, these audits will occur every two years.

10.2 SSMP Audit Procedure

The District Engineer or their delegate will be responsible for conducting the SSMP Audit with cooperation from the Plant Superintendant. The SSMP Report shall be prepared using the SSMP Audit Report Form in **Appendix G**. 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. The first SSMP Audit is due to be certified complete by the LRO on CIWQS by August 2, 2011. The SSMP Audit Report and resulting revisions to the SSMP will be kept on file with the SSMP in the District office.

Element 11 - Communication Plan

The intent of this element of the SSMP is to identify the plan for communicating with the public as well as the Member Agencies and regulatory agencies.

Element 11 – Communication Plan

There is no Appendix for Element 11.

11.1 Regulatory Requirements

The Agency 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 Agency as the program is developed and implemented.

The Agency shall also create a plan of communication with systems that are tributary and/or satellite to the Agency's sanitary sewer system.

11.2 Communication Plan

Public meetings are held in the Oceano Community Services District, 1655 Front Street Oceano, California 93475 at 6:00 p.m. on the first and third Wednesday of each month. However, if a regular meeting date falls on a holiday, meetings are usually scheduled the following day.

In addition to discussion at the public meetings the SSMP is posted on the District's website: www.SSLOCSO.org under Environmental Programs. The public is welcome to comment at any time.

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.

Table 11-1 Communication Program Plan

			Implementation Year		
Activity / Best Management Practice	Stakeholders to be contacted	Contact Frequency	FY 10/11	FY 11/12	Note
Update SSMP Webpage	All	As needed	x		1
Present substantial SSMP Revisions	Board of Directors	As needed	x		2
Follow-up on SSO with Education	All	Following SSOs	x		3
Distribute SSO Prevention Materials	All	Ongoing	x		3

Notes:

1. 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.
2. When substantial SSMP revisions occur, the District engineer will present the revisions to the Board at a public meeting.
3. 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 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 on who received training and when.

Table 11.3-1: SSLOCSD SSMP Annual Training Plan		
Training Requirement	Month Planned	Date Completed
1. Review of the SSMP in a classroom setting;	March 2011	March 15, 2011
2. Test on SSMP Acronyms	April 2011	April 5, 2011
3. District Trunk System Inspection and Maintenance	April 2011	April 25, 2011

A record of training as of May 2011 is included in **Appendix D**.

Appendices

Appendix A

Plan and Schedule and *Minutes of July 15, 2009 Board of Directors Approval* Sewer System Management Plan (SSMP)

Plan and Schedule

South San Luis Obispo County Sanitation District

Main Task/Sub-Task	Actions	Due Date / Status
(i) SSMP Development Plan and Schedule	Initial plan on how the agency intends on developing and implementing their SSMP.	Due November 2, 2007
District certification of Development Plan and Schedule	Present SSMP Development plan to District Board for approval.	Completed
(ii) Goal 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.	Due: November 2, 2007
SSMP Goals	Stated goals for SSMP	Completed
(iii) Organization Ele 2	Names and staff positions responsible for developing and implementing the SSMP.	Due: November 2, 2007
Organizational Chart for SSLOCSD	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) Overflow Emergency Response Plan Ele 6	Written Procedures defining how the District responds to SSO's.	Due: May 2, 2009
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 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
(v) Legal Authority Ele 3	District's legal authority to operate and maintain it's sewage collection system.	Due: May 2, 2009
Ordinance Development for Preventing Prohibited Discharges	Develop/amend required ordinance to comply with Order. Add a FOG Ordinance (Fats, Oils and Grease) to the SSLOCSD Municipal Code	Completed
Ordinance Development Requiring Proper Design and Construction	Develop/amend required ordinance to comply with Order. Add Design and Construction Standards to be met for any new projects.	Completed
Ordinance Development for the Limiting of the Fats, Oils and Grease	Develop/amend required ordinance to comply with Order. Add a FOG Ordinance (Fats, Oils and Grease) to SSLOCSD Municipal Code	Completed
Ordinance Development to Enforce Violations	Develop/amend required ordinance to comply with Order. Add a FOG Ordinance (Fats, Oils and Grease) to SSLOCSD Municipal Code	Completed
Ordinance Legal Review	Ordinances developed, amended, and reviewed by District's legal counsel.	Completed
Ordinance Adoption	Adoption of required ordinances by District Board	Completed

Main Task/Sub-Task	Actions	Status / Due Date
(vi) Operation and Maintenance Ele 4	Collection System operations program and procedures.	Due: May 2, 2009
Mapping	Up to date mapping of the sewage collection system facilities.	Completed
Mapping Updates	Develop procedures for maintaining 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	No pumping facilities in District	Not applicable
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 or 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.	Completed
Critical parts	Develop an inventory of critical replacement parts including procedures for acquisition.	Completed
(vii) Grease Control Program - FOG (Fats, Oils & Grease) Ele 7	Prepare and implement a FOG Control Program to reduce the amount of these substances from being discharged into the collection system.	Due: May 2, 2009
Determination of FOG problems	Evaluate System to determine if FOG related problems exist.	Completed
FOG characterization Study	If FOG problems are present, perform a FOG Characterization Study to determine the location and extent of the problem.	Not applicable
FOG Ordinance	Develop ordinance/policy to ensure legal authority to prevent the discharge of FOG into the sewer system.	Completed
FOG Program	Develop a program to reduce and/or eliminate FOG related sources.	Not applicable
Develop a FOG Source Control Program	Establish an appropriate FOG source control program.	Completed
Public Outreach	Develop an appropriate public education, outreach program and marketing materials designed to assist in the reduction of FOG.	Completed
FOG Disposal	Develop a list of authorized FOG disposal sites.	Not applicable
FOG Inspections	Develop and implement a FOG inspection program.	Not applicable
(viii) Design and Performance Ele 5	Develop and Implement the Capital Improvement Plan that will provide for equipment and system replacements.	Due: August 2, 2009
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
(ix) System Evaluation and Capacity Assurance Plan (CAP) Ele 8	Evaluate current capacity of Collection System and provide solutions to areas with needed improvement	Due: August 2, 2009
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	Capital Improvements: Identify existing and/or future hydraulic bottlenecks, to include rate studies, capacity enhancement, scheduling for completions, and annual reporting.	Completed

Main Task/Sub-Task	Actions	Status / Due Date
(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.	Due: August 2, 2009
Data Management	Develop procedures for accumulating and analyzing system maintenance, repairs, projects, reductions of SSO's, and any other pertinent data.	Completed
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) SSMP Program Audits Ele 10	Program audits are required every two years following the adoption of the final SSMP. Audits shall document the success of the SSMP and improvements made to it.	Due: August 2, 2009
Document Control	Develop procedure for SSMP document control.	Completed
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 Cities and Districts for peer review and direction.	Completed
Checklist	Develop a checklist to assist and ensure the SSMP is 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 is the agency's outreach to the community and satellite contributors about the public collection system and the SSMP document.	Due: August 2, 2009
Public Outreach	Develop a protocol for soliciting and responding to public input.	Completed
Staff SSMP Awareness	Develop a program to ensure staff awareness of SSMP procedures, protocol, etc.	Completed
FINAL SSMP CERTIFICATION	Final SSMP document, after all elements have been developed, documented and implemented.	Due: August 2, 2009
Review by District Attorney	Review of completed SSMP by the District's Attorney.	Completed
Adoption/Certification of SSMP by District Board	Adoption and certification of final SSMP document by the District's governing body.	July 15, 2009;

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

List of SSLOCSD Board Members

2010/11 Board Members

City of Arroyo Grande:

Oceano Community Services District

City of Grover Beach:

TONY FERRARA, Director

LORI ANGELLO, Director

BILL NICOLLS, Chairman

List of SSLOCSD District Staff

**Bob Barlogio, Interim Plant
Superintendent**

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District Administrator**

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Billy Romhild, Operator

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Rick Jackman, Operator

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(805) 489-2765 Fax

rick@sslocsd.us

**Sabrina Spears,
Bookkeeper/Secretary**

(805) 489-6666 Tel

(805) 489-2765 Fax

(805) 748-9455 Cell

sabrina@sslocsd.us

**Heather Billing, Anastasia Mylonas,
and Tammie Nichols: Environmental
Compliance Inspectors**

(805) 544-4011 Tel

(805) 544-4294 Fax

24 hour Emergency Number

South San Luis Obispo County

Sanitation District

1600 Aloha Place

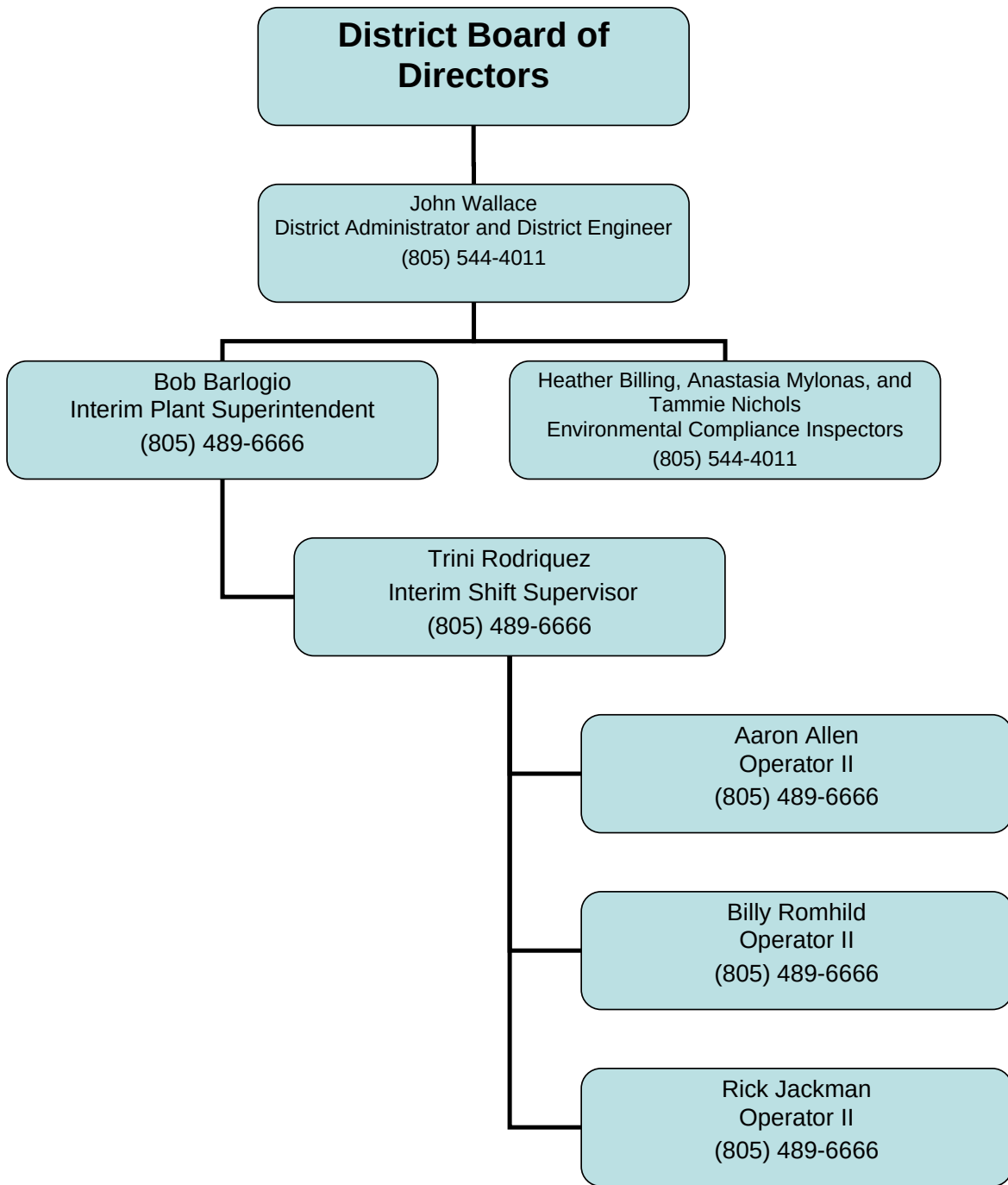
Oceano, CA 93445

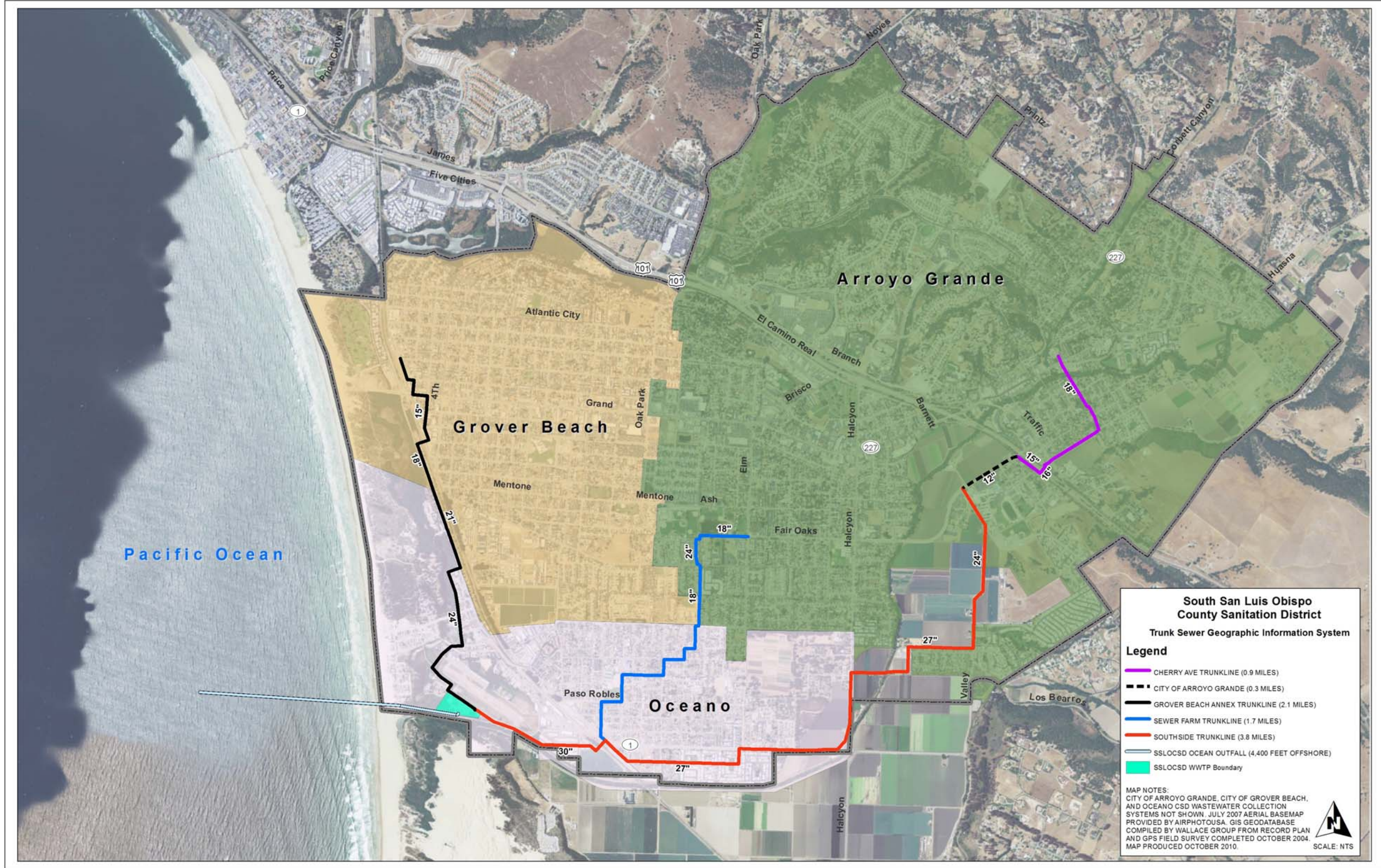
(805) 489-6670 Tel

Chain of Communicating Sanitary Sewer Overflows

Organization	Contact Person	Phone Number
Cal EMA Warning Center (Contact within 2 hours if SSO over 1,000 gallons or SSO reaches surface water)	N/A	1-800-852-7550
Central Coast Regional Water Quality Control Board (Contact within 2 hours if SSO over 1,000 gallons or if SSO reaches surface water. A written report must also be submitted to RWQCB within 24 hours if SSO over 1,000 gallons or reaches surface water)	Matt Keeling Dispatch	(805) 549-3685 (805) 549-3147
San Luis Obispo County Environmental Health Department (Contact immediately if public contact; contact within 2 hours if SSO over 1,000 gallons or SSO reaches surface water))	N/A	(805) 781-5544
San Luis Obispo County OES (Contact within 2 hours if SSO over 1,000 gallons or SSO reaches surface water)	N/A	(805) 781-5011
CA Department of Fish & Game (Contact within 24 hours if spill affects fish and/or wildlife)	Central Dispatch Dennis Michniuk	(831) 649-2810 (805) 594-6119

District Organization Chart





Appendix C

| **SSLOCSD FY 10/11** *Capital Improvement Plan and Budget*

*South San Luis Obispo County
Sanitation District*

BUDGET
2010-11 Fiscal Year

**MEMBERS OF THE
BOARD OF DIRECTORS:**

Tony Ferrara – Chairman
Vern Dahl - Director
Bill Nicolls – 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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SOUTH SAN LUIS OBISPO COUNTY SANITATION DISTRICT RESOLUTION
RESOLUTION NO. 2010-277

A RESOLUTION ADOPTING THE 2010-11 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 2010-11 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:

1. That the proposed budget entitled, "South San Luis Obispo County Sanitation District, Fiscal Year Budget 2010-11" be adopted as amended.
2. That the final budget be administered as established by past policies and practices.

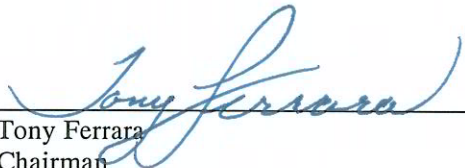
Upon motion of Nicolls seconded by Dahl and on the following roll call vote to wit:

AYES: Nicolls, Dahl, Ferrara

NOES: None

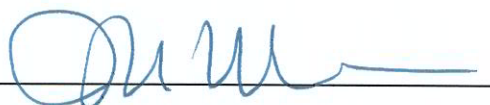
ABSENT: None

the foregoing resolution was passed and adopted this 7th day of July 2010.



Tony Ferrara
Chairman

ATTEST:



John L. Wallace
District Administrator

**NOTICE OF PUBLIC HEARING
SOUTH SAN LUIS OBISPO COUNTY
SANITATION DISTRICT
ADOPTION OF FISCAL YEAR 2010-11 BUDGET**

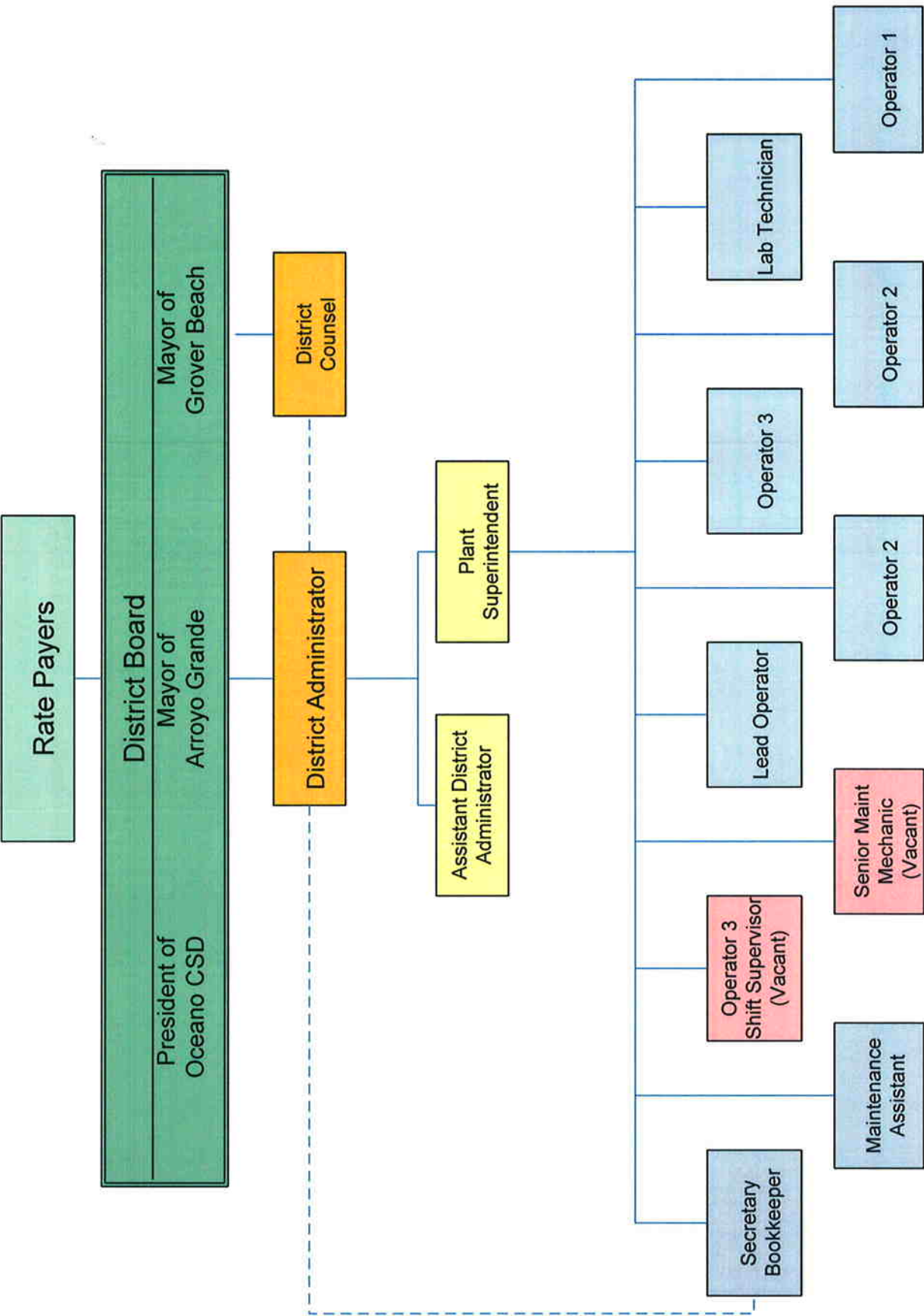
DATE: July 7, 2010
TIME: 6:00 pm
PLACE: Oceano Community Services District
1655 Front Street, Oceano

PLEASE TAKE NOTICE:

- 1. The District Administrator has prepared a proposed final Budget which is available for inspection, during regular District business hours, at the District's Office located at 1600 Aloha Place, Oceano, California.**
- 2. On July 7, 2010, at 6:00pm at the Oceano Community Services District Board Room, located at 1655 Front Street Oceano, California, the South San Luis Obispo County Sanitation District Board of Directors will meet to consider and adopt the final Budget.**
- 3. 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.**
- 4. The hearing on the Budget may be continued from time to time.**

If you should have questions related to the Budget, please contact Sabrina Spears, District Secretary at (805) 489-6666.

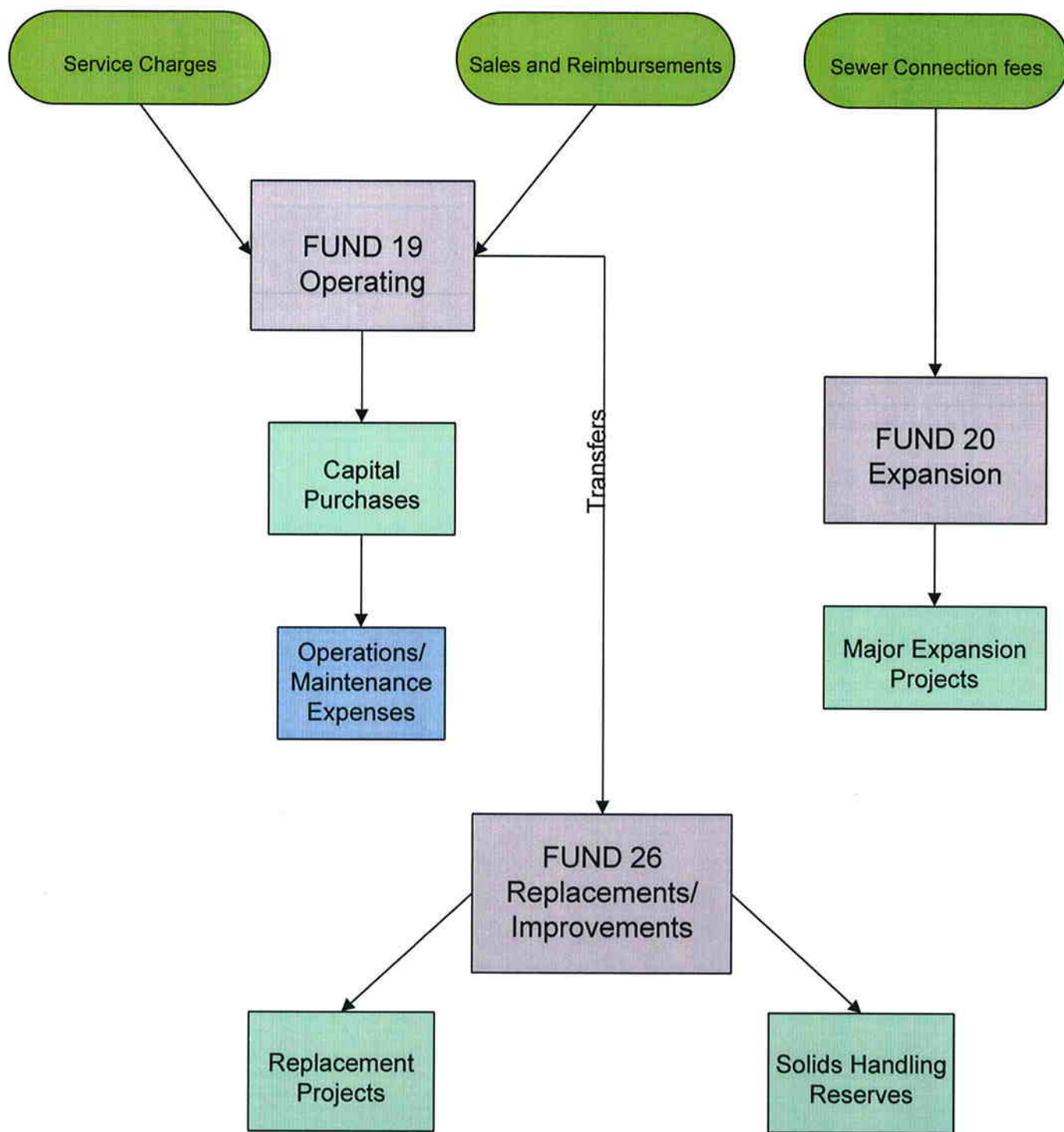
South San Luis Obispo County Sanitation District Table of Organization



— primary reporting relationship
 - - - - - secondary reporting relationship

South San Luis Obispo County Sanitation District

Accounting Funds



Operating Fund 19

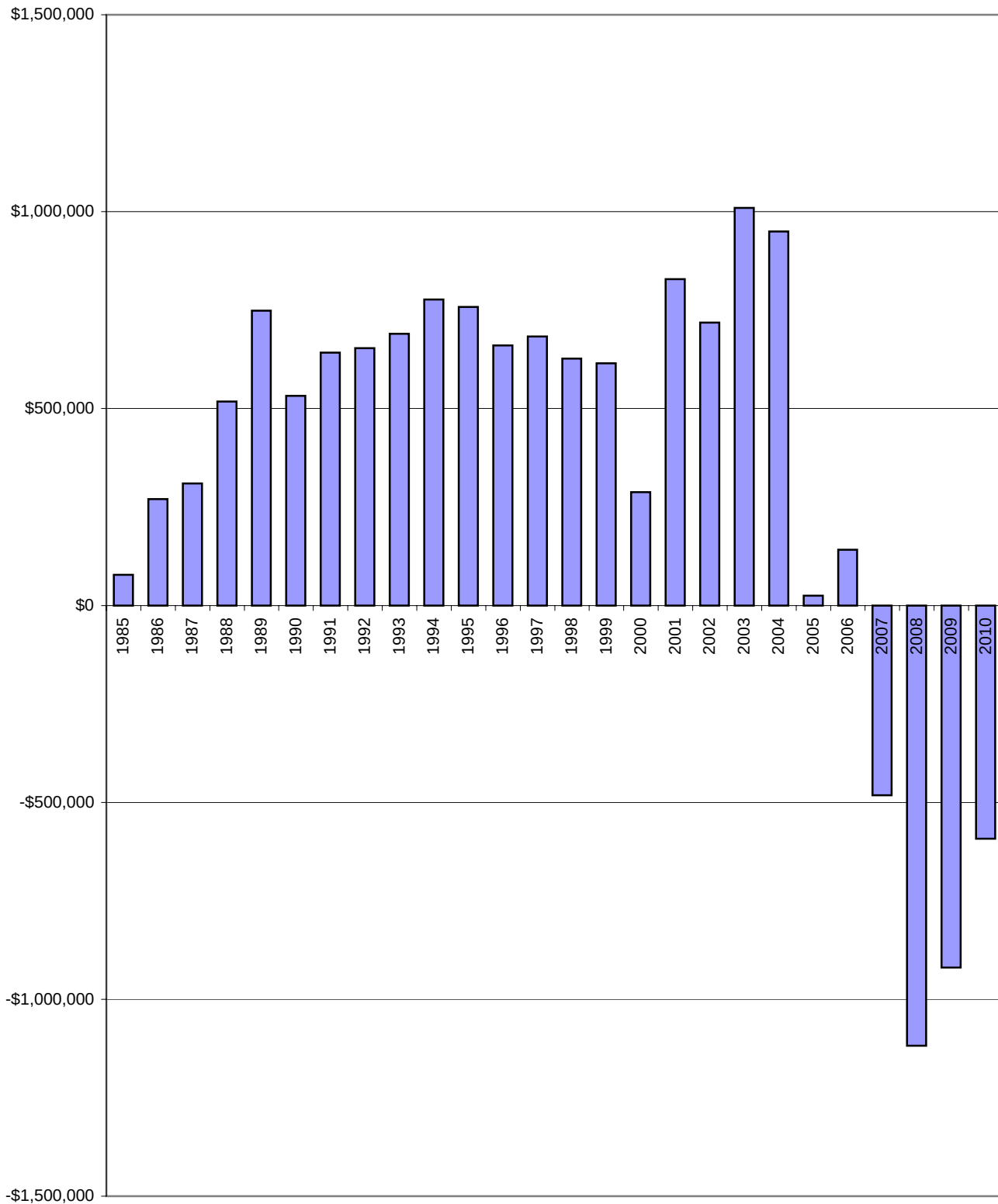
Provides for routine daily operations, as well as funding transfers for major maintenance and capital purchases.
Primarily funded by user service fees

SOUTH SAN LUIS OBISPO COUNTY SANITATION DISTRICT

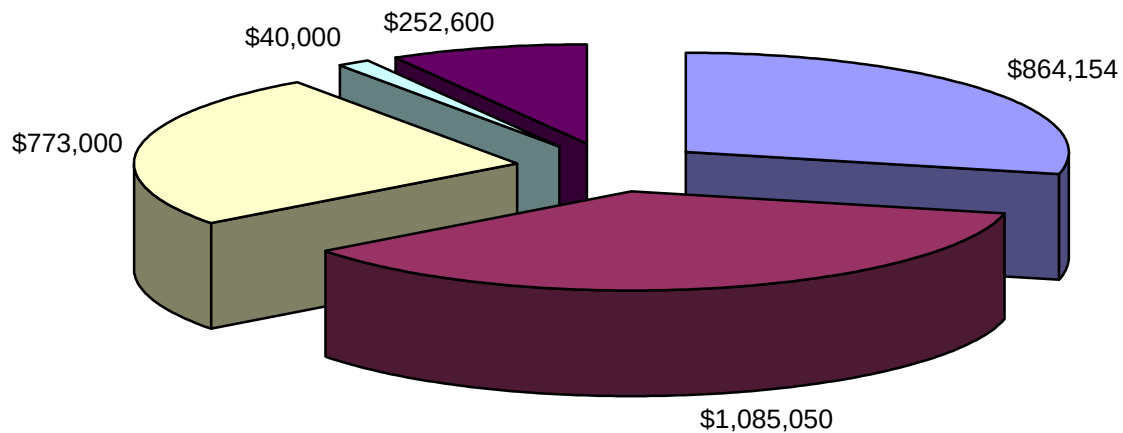
OPERATING FUND 19

CASH BALANCE HISTORY

1985 - 2010



2010-11 BUDGET ALLOCATIONS OPERATING FUND 19



Personnel Expenses	\$864,154
Operating Expenses	\$1,085,050
Materials & Supplies	\$773,000
Capital Equipment	\$40,000
Structure Maintenance-Major	\$252,600

TOTAL OPERATING BUDGET
\$3,014,804

SOUTH SAN LUIS OBISPO COUNTY SANITATION DISTRICT

Fund 19 Operating

Budget Proposal FY 2010-11

	2009-10 Budget	ESTIMATED YE TOTAL	OVER / UNDER BUDGET	PROPOSED 2010-11
REVENUE				
19-4015 Arroyo Grande Services	1,333,000.00	1,340,393.74	7,393.74	1,474,000.00
19-4022 Grover Beach Services	761,000.00	940,411.33	179,411.33	1,034,000.00
19-4035 OCSD Services	472,000.00	455,845.32	-16,154.68	501,000.00
19-4040 Pismo Beach Reimbursement	0.00	0.00	0.00	29,000.00
19-4045 School Services	24,000.00	23,470.50	-529.50	24,000.00
19-4050 Brine Disposal Service	5,000.00	6,118.00	1,118.00	7,000.00
19-4055 Lease (Cellular One)	18,572.00	18,573.38	1.38	19,500.00
19-5015 Interest	5,000.00	721.57	-4,278.43	1,000.00
19-5020 Other Reimbursements	2,040.00	1,000.00	-1,040.00	2,000.00
19-5021 FEMA Funding	70,606.00	76,658.75	6,052.75	0.00
19-5022 WDR Reimbursement	22,000.00	8,100.00	-13,900.00	9,000.00
19-5023 FOG Reimbursement	35,000.00	34,000.00	-1,000.00	34,000.00
19 5024 Water Recycle Study Reimbursement	0.00	10,255.72	10,255.72	0.00
19-5025 Other Sales	2,000.00	1,899.99	-100.01	2,000.00
REVENUE TOTALS	2,750,218.00	2,917,448.30	167,230.30	3,136,500.00

PERSONNEL EXPENSES				
16-6010 Medical Insurance	128,000.00	121,827.38	-6,172.62	125,000.00
19-6025 Dental Insurance	9,500.00	9,182.44	-317.56	9,800.00
19-6030 Plant Operators	518,724.00	492,458.61	-26,265.39	500,000.00
19-6040 Secretary/Bookkeeper	49,200.00	48,276.14	-923.86	50,832.00
19-6050 Social Security & Medicare	43,200.00	41,377.09	-1,822.91	44,242.00
19-6055 State Disability Insurance	2,900.00	2,966.58	66.58	3,180.00
19-6060 State Retirement	76,000.00	78,584.10	2,584.10	79,200.00
19-6075 Medical Reimbursement	4,500.00	4,500.00	0.00	4,500.00
19-6080 Workers Compensation	40,000.00	40,539.29	539.29	45,000.00
19-6090 Payroll Process Fee	2,400.00	2,292.56	-107.44	2,400.00
PERSONNEL TOTALS	874,424.00	842,004.19	-32,419.81	864,154.00
OPERATING EXPENSES				
19-7005 Advertisements / Legal & Recruit	5,000.00	1,479.60	-3,520.40	2,500.00
19-7011 Communications - USA, Alarm	3,000.00	2,432.15	-567.85	3,000.00
Web Hosting & Internet				
19-7013 Communications - Telephone	5,800.00	6,196.26	396.26	5,800.00
19-7014 Communications - Paging	800.00	295.80	-504.20	500.00
19-7015 Office Equipment/Computer Supplies	12,000.00	9,938.36	-2,061.64	12,000.00
19-7025 Employee Uniforms	10,000.00	9,993.30	-6.70	11,000.00
19-7032 Equipment Rental Other	5,000.00	3,336.81	-1,663.19	5,000.00
19-7043 Insurance, Liability/Auto	18,110.00	17,929.79	-180.21	19,000.00
19-7050 Membships/Seminars/Meetings	10,000.00	9,858.12	-141.88	12,000.00
19-7060 Ocean Outfall Maintenance				
10 MBI 09 Tri-Annual Outfall Inspection	0.00	0.00	0.00	58,000.00
Total 19-7060 Ocean Outfall Maintenance	0.00	0.00	0.00	58,000.00

SOUTH SAN LUIS OBISPO COUNTY SANITATION DISTRICT

Fund 19 Operating

Budget Proposal FY 2010-11

	2009-10 Budget	ESTIMATED YE TOTAL	OVER / UNDER BUDGET	PROPOSED 2010-11
19-7065 Source Control Program	50,000.00	45,000.00	-5,000.00	45,000.00
19-7068 Permits/Fees/License	57,180.00	57,180.00	0.00	60,000.00
19-7069 LAFCO Budget Share	8,862.00	8,862.49	0.49	9,000.00
19-7071 Prof Services - Attorney Fee	95,000.00	114,766.50	19,766.50	110,000.00
19-7072 Prof Services - Auditing	5,800.00	5,300.00	-500.00	5,300.00
19-7073 Prof Services - AG Billing	15,000.00	13,838.50	-1,161.50	15,000.00
19-7074 Prof Services - OCSD Bill	5,000.00	4,930.00	-70.00	5,000.00
19-7075 Prof Services - Board Members	7,200.00	7,100.00	-100.00	7,200.00
19-7076 Prof Services - Distrist Administration	150,000.00	150,000.00	0.00	150,000.00
19-7077 Prof Services - Engineering	90,000.00	90,000.00	0.00	90,000.00
19-7078 Prof Services - Chemical Analysis	35,000.00	26,796.64	-8,203.36	35,000.00
19-7079 Prof Services - Other Bill	5,000.00	4,980.00	-20.00	5,000.00
19-7081 Prof Services - GB Bill	4,000.00	4,000.00	0.00	4,000.00
19-7082 FEMA Expenditures	0.00	0.00	0.00	0.00
19-7083 WDR Reporting	22,000.00	8,100.00	-13,900.00	10,000.00
19-7084 FOG (Parent Agencies)	35,000.00	34,000.00	-1,000.00	34,000.00
19-7085 Solids Handling	100,000.00	67,539.34	-32,460.66	100,000.00
19-7086 Brine Disposal Exp	5,000.00	5,000.00	0.00	5,000.00
19-7087 WDR Expense	20,000.00	2,000.00	-18,000.00	20,000.00
19-7088 Water Recycling Study	39.00	38.25	-0.75	0.00
19-7091 Util-Elec	160,000.00	151,748.49	-8,251.51	96,000.00
19-7092 Util-Gas	15,500.00	20,233.73	4,733.73	12,000.00
19-7093 Util-Rubbish	2,000.00	1,291.31	-708.69	2,000.00
19-7094 Util-Water	1,500.00	747.30	-752.70	1,500.00
19-7095 Zone 1/1A Agreement	30,000.00	26,748.00	-3,252.00	30,000.00
19-7096 Cogeneration EISA (Debt Service)	0.00	0.00	0.00	75,000.00
17-7097 Cogeneration Service Contract	0.00	0.00	0.00	30,250.00
OPERATING TOTALS	988,791.00	911,660.74	-77,130.26	1,085,050.00
MATERIALS AND SUPPLIES EXPENSES				
19-8015 Trunk Sewer Maint	0.00	0.00	0.00	70,000.00
19-8020 Gas & Oil	12,000.00	10,272.53	-1,727.47	12,000.00
19-8030 Equipment Maintenance - Regular	65,000.00	51,965.80	-13,034.20	65,000.00
19-8031 Equipment Maintenance - Major	0.00	0.00	0.00	0.00
19-8032 Automotive Maintenance	8,000.00	6,657.00	-1,343.00	8,000.00
19-8035 Household Expense	4,500.00	4,455.00	-45.00	5,000.00
19-8040 Laboratory Supplies	20,000.00	19,999.85	-0.15	20,000.00
19-8045 Office Supplies & Expense	8,000.00	6,192.24	-1,807.76	8,000.00
19-8050 Plant Chemicals	455,000.00	549,594.63	94,594.63	500,000.00
19-8055 Small Tools	8,000.00	4,659.35	-3,340.65	8,000.00
19-8056 Safety Supplies	12,000.00	5,570.12	-6,429.88	12,000.00
19-8060 Structure Maintenance - Regular	65,000.00	38,023.88	-26,976.12	65,000.00
MATERIALS AND SUPPLIES TOTALS	657,500.00	697,390.40	39,890.40	773,000.00
TOTAL EXPENSES	2,520,715.00	2,451,055.33	-69,659.67	2,722,204.00
NET INCOME	229,503.00	466,392.97	236,889.97	414,296.00

SOUTH SAN LUIS OBISPO COUNTY SANITATION DISTRICT

Fund 19 Operating

Budget Proposal FY 2010-11

	2009-10 Budget	ESTIMATED YE TOTAL	OVER / UNDER BUDGET	PROPOSED 2010-11
MAJOR BUDGET ITEMS (MBIs)				
19-8010 Capital Equipment				
07 MBI 11 Portable Scaffolding	0.00	0.00	0.00	0.00
08 MBI 04 Paperwork Archive	6,500.00	0.00	-6,500.00	6,500.00
08 MBI 11 Chemical Tote Mixer	4,000.00	0.00	-4,000.00	4,000.00
08 MBI 12 Portable Air Compressor	12,449.00	12,448.75	-0.25	0.00
08 MBI 13 Lab Centrifuge	10,000.00	0.00	-10,000.00	10,000.00
08 MBI 17 Replacement Maintenance Cart	10,452.00	10,452.33	0.33	0.00
09 MBI 02 Office Copier	6,995.00	6,995.00	0.00	0.00
09 MBI 05 Dessicator	0.00	0.00	0.00	0.00
10 MBI 02 Jack Hammer Purchase	0.00	0.00	0.00	3,000.00
10 MBI 03 Drying Bed Valve Replacement	0.00	0.00	0.00	10,000.00
10 MBI 04 Street Sweeper Repair and Maint	0.00	0.00	0.00	4,000.00
10 MBI 06 Ferric Tote Containment	0.00	0.00	0.00	2,500.00
Total 19-8010 Capital Equipment	50,396.00	29,896.08	-20,499.92	40,000.00
19-8061 Structure Maintenance - Major				
04 MBI 03 Annual Influent Grinder Service	38,581.00	4,000.00	-34,581.00	55,000.00
04 MBI 11 Annual GIS/GPS Survey	5,590.00	0.00	-5,590.00	5,600.00
07 MBI 13 AG Creek Pipe Bridge	2,800.00	2,800.25	0.25	0.00
09 MBI 03 Polymer Tank Removal	0.00	0.00	0.00	0.00
10 MBI 01 O&M Manual Update	0.00	0.00	0.00	40,000.00
10 MBI 05 Front Gate Recoating	0.00	0.00	0.00	12,000.00
10 MBI 07 Emergency Response Plan	0.00	0.00	0.00	25,000.00
10 MBI 08 Entrance Road Light Relocations	0.00	0.00	0.00	15,000.00
10 MBI 10 Influent Screenings Transport System	0.00	0.00	0.00	100,000.00
Total 19-8061 Structure Maintenance - Major	46,971.00	6,800.25	-40,170.75	252,600.00
MAJOR BUDGET ITEMS TOTALS	97,367.00	36,696.33	-60,670.67	292,600.00
EXPENSES TOTALS	2,618,082.00	2,487,751.66	-130,330.34	3,014,804.00

FUND 19 CASH BALANCE @ 5/4/10	-971,955.25
Estimated Remaining Expenses	-446,637.42
Estimated Remaining Revenue	826,608.45
 Estimated Balance @ 7/1/10	 -591,984.22

OPERATING FUND REVENUE FUND 19		
<i>Account No.</i>	<i>Title</i>	<i>Description</i>
OPERATING REVENUE		
4015	Arroyo Grande Services	User service fees collected from the City of Arroyo Grande
4022	Grover Beach Service Charges	User service fees collected from the City of Grover Beach
4035	OCSD Service	User service fees collected from Oceano Community Services District
4040	Pismo Beach/Receiving Water Monitoring	Pismo Beach share expenses incurred for outfall line maintenance and monitoring
4045	School Services	School services which are billed annually
4050	Brine Disposal	Fees collected for brine disposal service at plant
4055	Lease Revenue	Fees collected from Cellular One for Antennae site lease
NON-OPERATING REVENUE		
5015	Interest Income	Interest received on account balances
5020	Other Reimbursements	Miscellaneous reimbursements received (insurance premiums, refunds, etc.)
5021	FEMA Funding	FEMA funding related to earthquake damage expenses
5022	Waste Discharge Report Reimbursement	Reimbursement from parent agencies for expenses related to report assistance
5023	FOG (fat, oil, grease) Reimbursement	Reimbursement from parent agencies for expenses related to FOG program
5024	Water Recycling Study Reimbursement	
5025	Other Sales	Miscellaneous funds collected through sale of District property, plans and specs

OPERATING FUND EXPENDITURES FUND 19		
<i>Account No.</i>	<i>Title</i>	<i>Description</i>
PERSONNEL EXPENDITURES		
6010	Medical Insurance	Provides District portion of Health Insurance
6025	Dental Insurance	Provides District portion of Dental Insurance
6030	Plant Operators	Wages & Salaries for Plant Superintendent and Technical Staff
6040	Bookkeeper/Secretary	Wages & Salary for Bookkeeper/Secretary
6050	Social Security & Medicare	As defined in the <i>Contributions on Behalf of Employee</i> section of the Budget
6055	State Disability Insurance	As defined in the <i>Contributions on Behalf of Employee</i> section of the Budget
6060	State Retirement	As defined in the <i>Contributions on Behalf of Employee</i> section of the Budget
6075	Medical Reimbursement	As defined in the <i>Contributions on Behalf of Employee</i> section of the Budget
6080	Workers' Compensation	Provides District contribution of State Compensation Insurance at 1.14% for Clerical and 14.01% for Plant Employees with a 79% experience modification
6090	Payroll Process Fee	Fee expended for outsourced payroll
OPERATING EXPENSES		
7005	Advertising	Provides for recruitment and legal advertising costs
7011	Communications - USA, Alarm, Web Hosting & Internet	Provides for Underground Service Alert information service, Plant alarm fees, Web hosting fee, & Internet Fees

7013	Communications - Telephone	Local service and lease of equipment. Payment of cellular accounts
7014	Communications - Paging Service	Plant paging service
7015	Office Equipment/ Computer Support Maintenance	Provides for all office equipment maintenance/ computer upgrades and support
7025	Employee Uniforms	Provides for monthly uniform maintenance and shop towels used at the plant
7032	Equipment Rental - Other	Provides for miscellaneous equipment rental
7043	Insurance - Liability/ Automotive	Provides for Plant Operations and Automobile Liability Insurance
7050	Memberships/ Seminars/ Meetings	Provides for those expenses incurred by District personnel to maintain required memberships and to attend required schools and meetings. Also provides for subscriptions
7060	Ocean Outfall Maintenance Receiving Water Monitoring	Expenses incurred for testing and maintenance of the outfall line (expenses are shared with the City of Pismo Beach)
7065	Source Control Program	Provides for expenses incurred during implementation of District's Source Control Program
7068	Permits, Fees, License	Provides for costs of permits, fees, and licenses required by the District
7069	LAFCO Budget Share	Provides for District Share of LAFCO Budget
7071	Professional Services - Attorney Fees	Monthly legal retainer and any other occasional legal fees
7072	Professional Services - Auditing Fees	Provides for fiscal year end audit
7073	Professional Services - Billing Services Arroyo Grande	Provides for Arroyo Grande's service user and hook up fees billing service

7074	Professional Services - Billing Services OCSD	Provides for OCSD's user fees billing service
7075	Professional Services - Board Members	Compensates Board Members for District Board Meetings
7076	Professional Services - District Admin	Provides for Administration services of Wallace Group
7077	Professional Services - Engineering	Provides for miscellaneous engineering services.
7078	Professional Services - Chemical Analysis	Provides for monthly testing as required by the Water Quality Control Board
7079	Professional Services - Other Billings	Provides for incidental services
7081	Professional Services - Billing Services Grover Beach	Provides for Grover Beach's user fees billing services
7082	FEMA Authorized Expenditures	Expenditures as authorized by FEMA for Earthquake Damage Repairs
7083	Waste Discharge Reporting	Expenses incurred while assisting Parent Agencies with reporting requirements per agreement
7084	FOG (fats, oil, grease) Parent agencies	Expenses incurred while assisting Parent Agencies with FOG Program. (To be reimbursed by Parent Agencies)
7085	Solids Handling- Off-site	Provides for all expenses pertaining to off-site disposal of treated solids
7086	Brine Disposal Expense	Provide for all expenses pertaining to providing brine disposal service
7087	WDR Expense	Provides for all expenses related to Waste Discharge Reporting (expenses not related to parent agencies)
7088	Water Recycling Study	Feasibility study of various water recycling alternatives and associated costs
7091	Utilities - Electricity	Plant electric service and power
7092	Utilities - Gas	Plant natural gas service

7093	Utilities - Rubbish	Garbage pick-up and dump charges
7094	Utilities - Water Service	Plant water service
7095	Zone 1/1A Agreement	Expenses associated with Zone 1/1A
7096	Cogeneration EISA (Debt Service)	Self-funded Equipment Installation Sales Agreement
7097	Cogeneration Services Contract	Provides for annual maintenance of cogeneration facility
MATERIALS AND SUPPLIES		
8010	Capital Equipment	Purchase of all capital plant equipment, includes any item with purchase price over \$1,000 or which is an approved Major Budget Item
8015	Trunk Sewer Maintenance	Provides for maintenance of District owned trunk sewer lines
8020	Gas & Oil	Provides for Plant vehicle gas & oil
8030	Equipment Maint - Reg	Provides for routine maintenance of plant equipment
8031	Equipment Maint - Major	Provides for major maintenance of plant equipment as approved as a major budget item
8032	Vehicle Maintenance	Provides for routine maintenance of rolling stock
8035	Household Expense	Supplies for simple routine maintenance of plant buildings and grounds, including cleaning and paper supplies, etc
8040	Laboratory Supplies	All supplies used at the Plant lab to perform routine testing, also includes distilled water
8045	Office Supplies and Expense	Provides for all expenses relating to District administration including office supplies, postage, shipping expenses, mileage, etc
8050	Plant Chemicals	Provides for chemicals required in plant operations including chlorine, round-up, and degreasers
8055	Small Tools and Equipment	Provides for the purchase of small tools used in plant operations

8056	Safety Supplies	Provides for supplies related to safety equipment
8060	Structure Maintenance - Regular	Provides for routine maintenance of plant structures and grounds
8061	Structure Maintenance - Major	Provides for major maintenance of structures and grounds as approved as a major budget item

Service Charges and Connection Fees

ORDINANCE NO. 2006-01

AN ORDINANCE OF THE GOVERNING BOARD OF THE SOUTH
SAN LUIS OBISPO COUNTY SANITATION DISTRICT ESTABLISHING
MONTHLY RATES FOR SERVICE CHARGES AND SETTING CONNECTION
FEES.

THE BOARD OF DIRECTORS OF THE SOUTH SAN LUIS OBISPO
COUNTY SANITATION DISTRICT DOES ORDAIN AS FOLLOWS:

WHEREAS, the South County Sanitation District (District) operates a waste water treatment facility and maintains trunk lines that services the Communities of Arroyo Grande, Grover Beach and the Oceano Community Services District (Oceano) and;

WHEREAS, the entirety of it's funding from service charges and connection fees and the District has not raised connection and service fees since 1983 and 1986 and;

WHEREAS, the District has determined a need based upon a short fall for overhead expenses and for capital projects and;

WHEREAS, the District has retained the services of Tuckfield and Associates to conduct a rates study to determine rates appropriately fund the District for capital improvements and overhead expenses into the future and;

WHEREAS, the Districts Board of Directors has considered The Tuckfield report and has asked for modifications based upon local knowledge regarding actual flows and;

WHEREAS, the District has reviewed the Report and associated information with the Utilities Staff for Arroyo Grande, Grover Beach and Oceano and has reached concurrence in regards to the data contained therein.

WHEREAS, based upon facts and analysis presented Tuckfield and Associates, the Rate Study, the District Engineer's analysis, and the Staff Report, the Board of Directors finds:

- A. The public meetings adopting this Ordinance have been properly noticed pursuant to Government Code Section 54954.2 (The Brown Act); and
- B. That notice has been published and Mailed as required by law; and
- C. The fees, rates and charges that are the subject of this Ordinance do not exceed the estimated reasonable cost of providing the services for which the fees and/or charges are imposed; and
- D. That the public benefits from the logical, long-range approach to the operation, maintenance and financing of public facilities:

NOW THEREFORE, be it resolved and judged and determined that the District Rates structure shall be as follows:

The chart attached as **Exhibit A** to this Ordinance sets forth each customer classification, the existing rates and the rates by classification.

The chart attached as **Exhibit B** sets forth the connection fees.

The Board of Directors of the District hereby determines that it is necessary for the effective operation of the District to fund all projects that are anticipated and in anticipation of overhead costs and that the charges and fees outlined in **Exhibit A** and **Exhibit B** are necessary and hereby orders these fees to be implemented as set forth in **Exhibit A** and **Exhibit B**.

Section 3. The Recitals to this Ordinance are true and correct and incorporated herein by reference.

Section 4. Repeal of Prior Ordinances and Resolutions

All Ordinances, sections of Ordinances and Resolutions that are inconsistent with this ordinance are hereby repealed.

Section 5. Effect of Repeal on Past Actions and Obligations.

This Ordinance does not affect prosecutions for Ordinance violations committed prior to the effective date of this Ordinance, does not waive any fee or penalty due and unpaid on the effective date of this Ordinance..

Section 6. CEQA Findings

The Board of Directors of the District finds that the fees and charges adopted by this Ordinance are exempt from the California Environmental Quality Act pursuant to Public Resources Code § 21080(b)(8) and CEQA Guidelines Section 15273. The Board of Directors further finds that the adoption of the Rules and Regulations established by this Ordinance fall within the activities described in Section 15378(b)(4) and (5) of the CEQA Guidelines which are deemed not to be "projects" for the purposes of CEQA, because it can be seen with certainty that the adoption of the Fees and Charges that are the subject of this Ordinance will not have a significant effect on the environment. The District Administrator is directed to prepare and file an appropriate notice of exemption.

Section 7. Severance Clause.

If any section, subsection, sentence, clause or phrase of this Ordinance is for any reason held to be unconstitutional, ineffective or in any manner in conflict with the laws of the United States, or the State of California, such decision shall not affect the validity of the remaining portions of this Ordinance. The Governing Board of the District hereby declares that it would have passed this Ordinance and each section, subsection, sentence, clause and phrase thereof, irrespective of the fact that any one or more sections, subsection, sentence, clause or phrase be declared unconstitutional, ineffective, or in any manner in conflict with the laws of the United States or the State of California.

Section 8. Effect of Headings in Ordinance.

Title, division, part, chapter, article, and section headings contained herein do not in any manner affect the scope, meaning, or intent of the provisions of this Ordinance.

Section 9. Effective Date.

The Connection fees established by this Ordinance shall take effect sixty (60) days after passage. The Service Charges established by this Ordinance shall take effect thirty (30) days after passage. Before the expiration of fifteen (15) days after passage it shall be posted in three (3) public places with the names of the members voting for and against the Ordinance and shall remain posted thereafter for at least one (1) week. The Ordinance shall be published once with the names of the members of the Board of Directors voting for and against the Ordinance in a newspaper of general circulation within the District.

Based upon motion made by: Director Ekbom

Seconded by: Director Dahl

And upon Roll Call Vote:

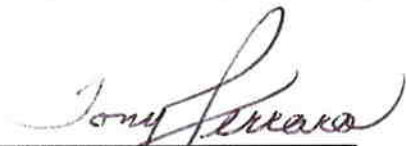
AYES: Director Ferrara, Director Ekbom, Director Dahl

NOES: None

ABSENT: None

ABSTAINING: None

This Ordinance is hereby adopted as of November 29, 2006.



Vice Chairman



Secretary of Board



MICHAEL W. SEITZ
District Legal Counsel

South San Luis Obispo County Sanitation District

NOTICE OF PROPOSED SERVICE CHARGE AND CONNECTION FEE INCREASE

Dear Property Owner:

This is a notice to explain the proposed increases in service charges and connection fees for the South San Luis Obispo County Sanitation District (SCSD). This notice is being sent to all property owners within the District or who currently receive service outside the District. The proposed rate increases will be recommended for adoption by the SCSD's Board of Directors at a public hearing described in this notice.

NOTICE OF PUBLIC HEARING

At a public hearing the SCSD will consider proposed increases for service charges and connection fees. The proposed changes are listed in this notice. The public hearing will be held on November 29th, 2006 at 6 o'clock p.m. at the Oceano Community Services District office building located at : 1655 Front Street Oceano, CA.

Annual rate increases beginning in January 2007 through May 1st, 2010 with subsequent inflationary adjustments will be recommended for adoption by the Board of Directors at the November 29th, 2006 public hearing. If approved, these rate increases will take effect January 1st, 2007.

Customers may voice their support or opposition to the proposed rate changes during the public hearing. In addition, customers may support or protest the proposed rates by filing a written statement with the District's secretary at or before the time set for the public hearing. A written statement of support or protest should include the property owner's name and address and which portion of the rate changes are being supported or protested and mailed to SCSD P.O. Box 339 Oceano, CA 93445.

The SCSD Board of Directors will be discussing the proposed rates on November 1st at the Board's regular meeting at 6 P.M. at 1655 Front Street Oceano, CA. The public will also have the opportunity to ask questions of the District Staff and make comments to the Board at that meeting.

WHY CHANGE THE SEWER RATES

Providing reliable and affordable sewer service is the mission of the District. The District is required to provide service primarily through user rates. It receives no other funding by property taxes or otherwise for the provision of sewer service. The proposed sewer rate increases are needed to:

1. Provide sufficient funds for ongoing operation and maintenance.
2. Support rehabilitation and upgrade of the facilities, which provide service and to comply with governmental regulations.
3. To maintain reserves to reduce risk and prudently manage Districts' resources.

What follows is additional information for your consideration. First you will see the current and proposed service charges. Following you will see a comparison of current and proposed connection fees.

HOW THE TYPICAL SEWER BILL BE AFFECTED

Current and Proposed Monthly Wastewater Service Rates

Customer Classification		Existing Rates	Future Rate As of Jan 1, 2007	Future Rate As of May 1, 2007	Future Rate As of May 1, 2008	Future Rate As of May 1, 2009	Future Rate As of May 1, 2010
a.	Residences and Apartments	\$6.50	\$8.93	\$10.70	\$12.31	\$13.52	\$14.86
b.	Hotel Units with Kitchens	5.20	9.41	11.29	12.98	14.28	15.71
c.	Motel Units without Kitchens	4.40	6.02	7.22	8.30	9.12	10.02
d.	Hotel Room	4.55	6.22	7.46	8.58	9.42	10.36
e.	Commercial Establishments	6.73	4.59	5.51	6.26	6.97	7.65
	Each additional employee above 5	0.44	0.92	1.10	1.25	1.39	1.53
f.	Beauty Shops	8.66	8.49	10.19	11.60	12.73	13.97
	Each additional operator above 6	0.86	1.41	1.70	1.93	2.12	2.33
g.	Eating Establishments w/o Grinders	9.31	9.11	10.92	12.56	13.79	15.16
	Each additional 5 seats above 30	1.01	1.52	1.82	2.09	2.30	2.53
h.	Restaurants (w/ Grinders) less than 30 seats	14.78	17.30	20.67	24.31	28.12	31.07
	Restaurants (w/ Grinders) seats over 30	18.29	22.18	26.51	31.17	36.06	39.84
i.	Laundromats - per washing machine	2.96	5.83	7.01	7.98	8.85	9.71
	minimum charge	8.71	17.50	21.03	23.93	26.54	29.14
j.	Service Stations - no wash/rack	7.86	23.26	27.91	31.84	34.11	37.41
	Service Stations - with wash/rack	12.47	34.18	41.06	46.56	49.65	54.40
k.	Factories	12.47	13.34	16.02	18.30	20.08	22.05
	Each additional employee above 20	0.38	0.66	0.80	0.91	1.00	1.10
l.	Churches	6.71	7.57	9.10	10.34	11.44	12.56
	Per ADA with elementary school	0.21	0.21	0.25	0.28	0.31	0.34
	Per ADA with other school	0.30	0.30	0.36	0.42	0.46	0.51
m.	Bottling Plants	12.47	13.34	16.02	18.30	20.08	22.05
n.	Schools (Non-boarding)	3.25	4.27	5.13	5.83	6.44	7.07
	Per ADA with elementary school	0.21	0.20	0.24	0.27	0.30	0.33
	Per ADA with other school	0.30	0.31	0.38	0.43	0.47	0.52
o.	Schools (Boarding)	3.25	4.27	5.13	5.83	6.44	7.07
	Per ADA with elementary school	0.38	0.43	0.51	0.59	0.65	0.71
	Per ADA with other school	0.48	0.57	0.68	0.78	0.86	0.95
p.	Trailer/Mobile Home Space	6.50	2.52	3.02	3.47	3.81	4.19
q.	RV Dump Stations - Less Than 50 services	21.00	25.22	30.15	35.20	38.75	42.69
r.	Brine (per gallon)	\$0.01125	\$0.01125	\$0.01125	\$0.01125	\$0.01125	\$0.01125

FY 2006-07 rates to be implemented January 1. All other rates to be implemented May 1 of fiscal year. After FY 2010-11, rates increase by the change in CPI. Rate adjustments reflect changes in capital cost allocations with the addition of capital improvements to fixed assets.

Comparison of Existing and Proposed Connection Fees

Dwelling Unit or Meter Size	Existing Connection Fee	Proposed Connection Fee
Single Family Dwelling unit	\$2,000	\$2,475
Apartment Complex (Bachelor, 1 or 2 bedrooms)	\$1,500	\$1,856
Apartment Complex (3 or more bedrooms)	\$2,000	\$2,475
Motel/Hotel (per room)	\$1,000	\$1,237
Hybrid Use	\$1,500	\$1,856
Condominium (per unit)	\$2,000	\$2,475
Mobile Home Parks (per space)	\$2,000	\$2,475
Travel Trailer (per space)	\$1,000	\$1,237
5 / 8 inch (meter)	\$2,000	\$2,475
3 / 4 inch (meter)	\$2,800	\$3,712
1 inch (meter)	\$4,900	\$6,187
1 to 1 1 / 2 inch (meter)	\$11,000	\$13,612
2 inch (meter)	\$19,500	\$24,131
3 inch (meter)	\$44,000	\$54,450

Expansion Fund 20

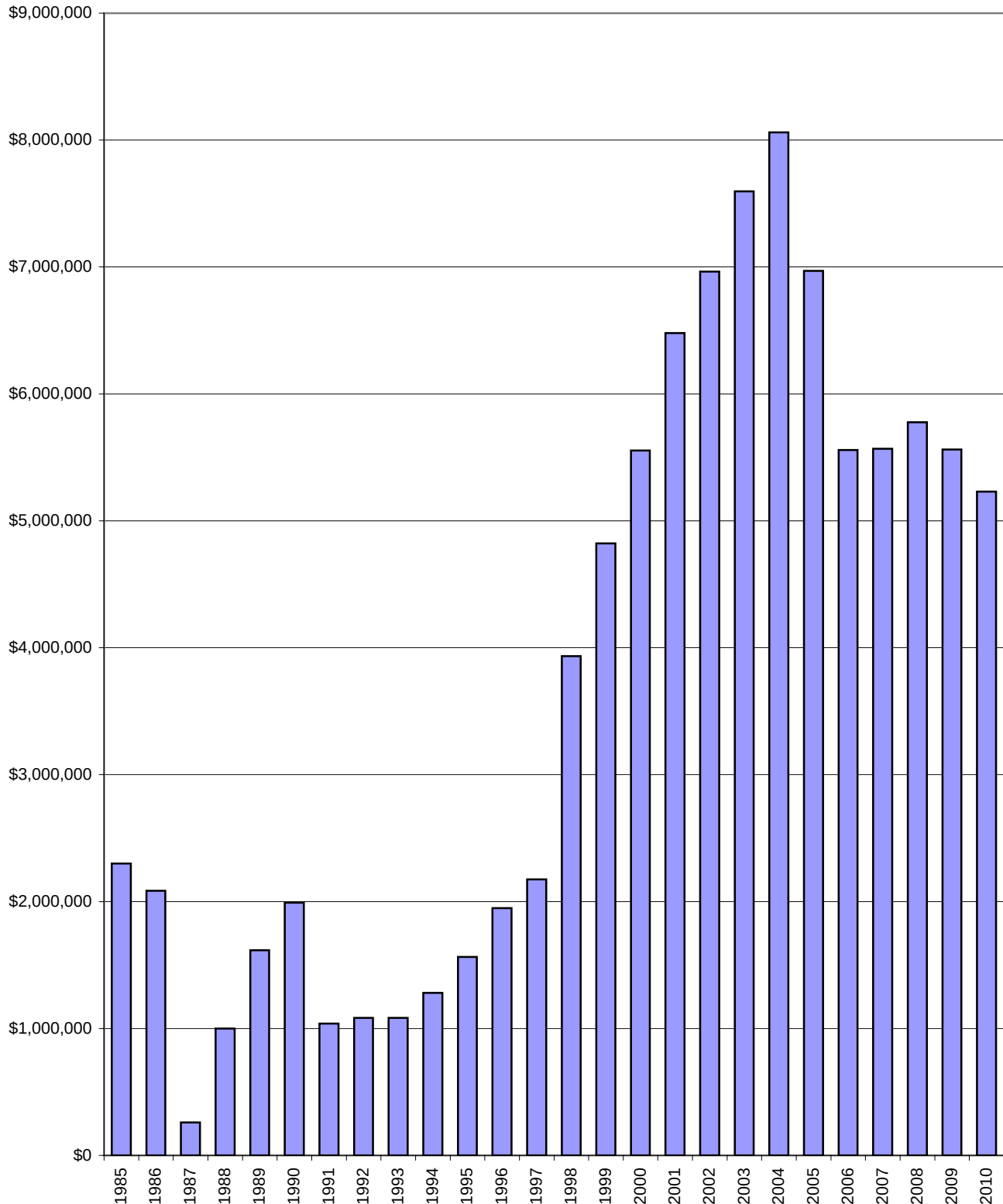
To provide for major expenses in order to increase
plant capacity or new equipment as required.
Primarily funded by new user connection fees

SOUTH SAN LUIS OBISPO COUNTY SANITATION DISTRICT

EXPANSION FUND 20

CASH BALANCE HISTORY

1985 - 2010



SOUTH SAN LUIS OBISPO COUNTY SANITATION DISTRICT

Fund 20 Expansion

Budget Proposal FY 2010-11

2009-10 Budget	ESTIMATED YE TOTAL	OVER / UNDER BUDGET	PROPOSED 2010-11
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REVENUE				
20-4010 AG Connections	78,200.00	16,656.00	-61,544.00	15,000.00
20-4020 GB Connections	30,566.00	47,618.00	17,052.00	30,000.00
20-4030 OCSD Connections	11,756.00	7,400.00	-4,356.00	7,500.00
20-5015 Interest Income	146,543.00	21,209.49	-125,333.51	20,000.00
REVENUE TOTALS	267,065.00	92,883.49	-174,181.51	72,500.00

EXPENSES				
20-8010 Capital Equipment				
01 MBI 01 Energy Services SGIP Refund	152,138.00	150,000.00	-2,138.00	2,138.00
08 MBI 21 Polyblend Unit	7,570.00	7,569.45	-0.55	0.00
08 MBI 22 Hellen Strainer Drive Unit	0.00	0.00	0.00	0.00
09 MBI 6 Reclaimed Water Filtration	15,000.00	0.00	-15,000.00	20,000.00
99 MBI 01 SCADA Phase 2	5,000.00	5,000.00	0.00	2,000.00
Total 20-8010 Capital Equipment	179,708.00	162,569.45	-17,138.55	24,138.00
20-8065 Structures/Grounds Replacement-Improvement				
01 MBI 01 Energy Services Project	262,815.00	262,815.00	0.00	37,162.00
05 MBI 06 New Centrifuge	1,519,340.00	484,518.00	-1,034,822.00	1,104,422.00
07 MBI 14 Long Range Plant Expansion	652,000.00	49,600.00	-602,400.00	760,000.00
07 MBI 16 Grease to Gas System	120,000.00	10,000.00	-110,000.00	110,000.00
08 MBI 25 Biosolids Lagoon Lining	5,063.00	5,063.25	0.25	0.00
Total 20-8065 Structures/Grounds Replace-Improve	2,559,218.00	811,996.25	-1,747,221.75	2,011,584.00
EXPENSES TOTALS	2,738,926.00	974,565.70	-1,764,360.30	2,035,722.00

Fund 20 Cash Balance @ 5/31/10	5,300,649.88
Estimated Remaining Expenses	-89,134.22
Estimated Remaining Revenue	18,656.00

Estimated Balance @ 7/1/10	5,230,171.66
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EXPANSION FUND REVENUE FUND 20		
<i>Account No.</i>	<i>Title</i>	<i>Description</i>
4010	Arroyo Grande Connections	Hook up fees collected from the City of Arroyo Grande for new service connections
4020	Grover Beach Connections	Hook up fees collected from the City of Grover Beach for new service connections
4030	OCSD Connections	Hook up fees collected from the Oceano Community Services District for new service connections
5015	Interest Income	Interest received

EXPANSION FUND EXPENDITURES FUND 20		
<i>Account No.</i>	<i>Title</i>	<i>Description</i>
8010	Capital Equipment	Capital Equipment purchased for plant expansion
8065	Structure/Grounds Maint. – Major	Major Budget Item Structure/Grounds Maintenance related to plant expansion

Replacement Fund 26

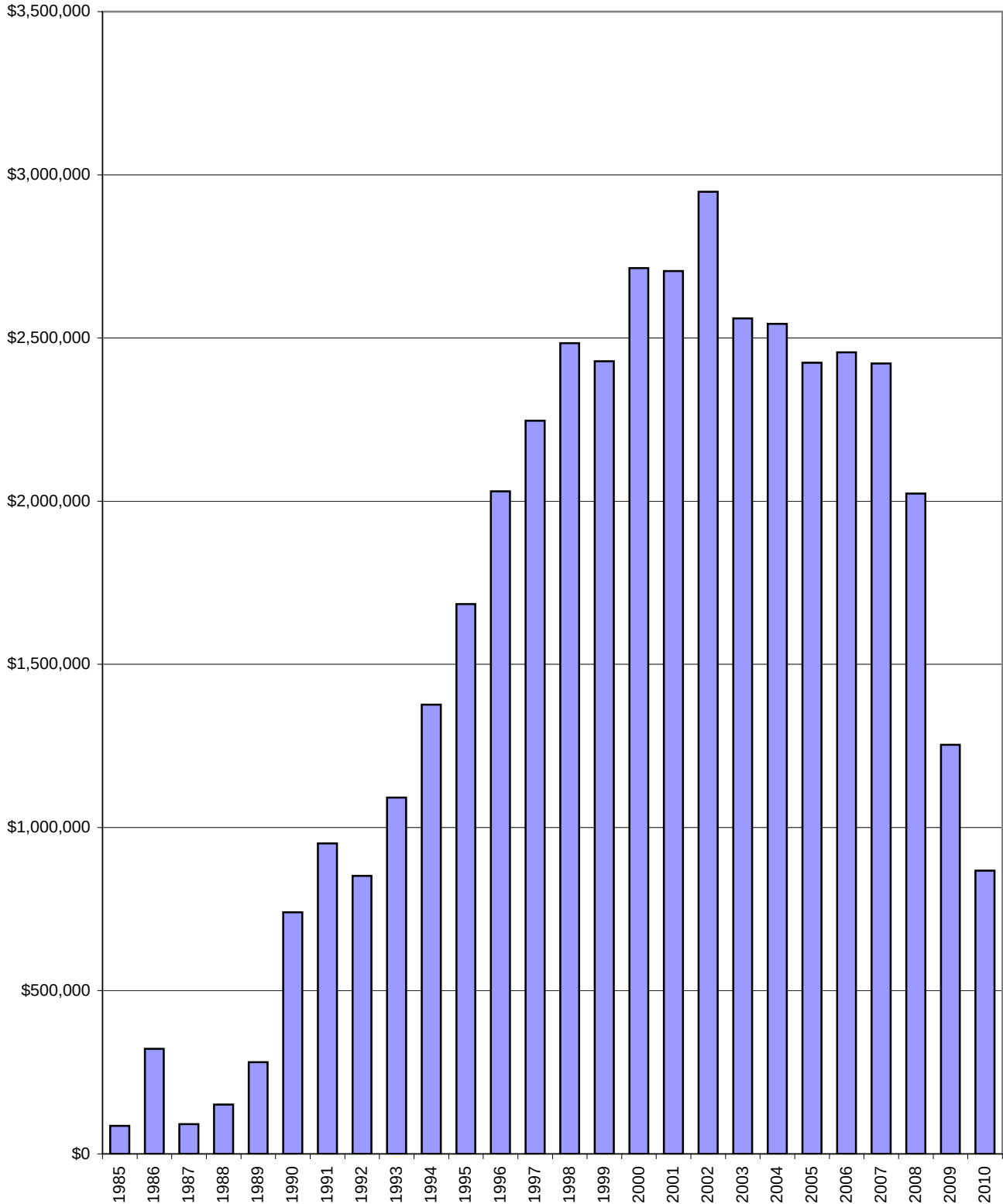
To provide for the replacement of Plant treatment and processing equipment. Also provides for future solids handling requirements. Primarily funded by user service fees provided for through transfers from the Operating Fund as budgeted annually.

SOUTH SAN LUIS OBISPO COUNTY SANITATION DISTRICT

REPLACEMENT FUND 26

CASH BALANCE HISTORY

1985 - 2010



SOUTH SAN LUIS OBISPO COUNTY SANITATION DISTRICT

Fund 26 Replacement

Budget Proposal FY 2010-11

2009-10 Budget	ESTIMATED YE TOTAL	OVER / UNDER BUDGET	PROPOSED 2010-11
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REVENUE				
26-5015 Interest Income	48,848.00	10,617.60	-38,230.40	8,000.00
REVENUE TOTALS	48,848.00	10,617.60	-38,230.40	8,000.00

EXPENSES				
26-8015 Trunk Sewer Maintenance				
08 MBI 19 CIPP Lining	717,800.00	25,155.00	-692,645.00	1,300,000.00
26-8015 Trunk Sewer Maintenanc - Other	17,200.00	17,200.00	0.00	50,000.00
Total 26-8015 Trunk Sewer Maintenance	735,000.00	42,355.00	-692,645.00	1,350,000.00
26-8061 Structures/Grounds Maintenance-Major				
04 MBI 15 Sludge Withdrawal Line Repair	4,000.00	4,000.00	0.00	0.00
06 MBI 04 Primary Clarifier No. 1 Catwalk	16,800.00	0.00	-16,800.00	140,000.00
06 MBI 05 Primary Clarifier No. 2 Catwalk	16,800.00	0.00	-16,800.00	20,000.00
09 MBI 01 FFR Pump Refurbishment	147,000.00	6,000.00	-141,000.00	170,000.00
Total 26-8061 Structures/Grounds Maint-Major	184,600.00	10,000.00	-174,600.00	330,000.00
26-8065 Structures/Grounds Replacement-Improvement				
04 MBI 16 Electrical System Upgrade	415,588.00	5,060.00	-410,528.00	500,000.00
05 MBI 08 Upgrade Natural Gas Dist System	18.00	18.25	0.25	0.00
05 MBI 24 Digester #2 Rehab and Coating	9,412.00	9,412.28	0.28	0.00
06 MBI 12 Primary Clarifier Drive No. 1	7,918.00	7,918.00	0.00	0.00
06 MBI 13 Influent Pumps Gate/Check Valves	226,285.00	226,285.00	0.00	416,484.00
07 MBI 12 Influent Pump Room Fan/Vent	6,652.00	6,651.96	-0.04	0.00
08 MBI 18 Flood Gate Upgrade Project	1,323.00	1,323.00	0.00	0.00
08 MBI 23 Chemical Tank Replacement	278.00	278.21	0.21	0.00
08 MBI 26 Methane Gas Line Replacement	142,416.00	142,416.19	0.19	0.00
Total 26-8065 Structures/Grounds Replace-Improve	809,890.00	399,362.89	-410,527.11	916,484.00
26-8070 Emergency Equipment Repair				
Emergency Equipment Repair	150,000.00	10,000.00	-140,000.00	154,500.00
Total 26-8070 Emergency Equipment Repair	150,000.00	10,000.00	-140,000.00	154,500.00
EXPENSES TOTALS	1,879,490.00	461,717.89	-1,417,772.11	2,750,984.00

Fund 26 Cash Balance @ 5/31/10	911,461.65
Estimated Remaining Expenses	-47,629.23
Estimated Remaining Revenue	4,000.00
 Estimated Balance @ 7/1/10	 867,832.42

REPLACEMENT AND IMPROVEMENT FUND REVENUE FUND 26		
<i>Account No.</i>	<i>Title</i>	<i>Description</i>
5015	Interest Income	Interest received

REPLACEMENT AND IMPROVEMENT FUND EXPENDITURES FUND 26		
<i>Account No.</i>	<i>Title</i>	<i>Description</i>
8015	Trunk Sewer Maintenance	Provides for maintenance of District owned trunk sewer lines
8061	Structure Maintenance - Major	Provides for major maintenance of structures and grounds as approved as a major budget item
8065	Structures/Grounds Repl & Improvement	Expenses related to structure/grounds replacement
8070	Emergency Equipment Repair	

Major Budget Item Summary

South San Luis Obispo Sanitation District

***Major Budget Items / Four Year Planning Budget
FY 2010-11 through FY 2013-14***

Expenditures by Account

Acct #	Acct. Description	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14	Total 2010-14
<u>Operating Fund</u>						
19-7060	Operating Fund - Ocean Outfall Maintenance	\$58,000			\$33,571	\$91,571
19-8010	Operating Fund - Capital Equipment	\$40,000	\$302,250	\$168,683	\$173,764	\$684,697
19-8061	Operating Fund - Struct/Grnds Maint-Major	\$252,600	\$18,000	\$18,150	\$18,308	\$307,058
	Operating Fund Subtotal	\$350,600	\$320,250	\$186,833	\$225,643	\$1,083,326
<u>Expansion Fund</u>						
20-8010	Expansion Fund - Capital Equipment	\$22,001	\$23,000			\$45,001
20-8010	Expansion Fund - State (Utility) SGIP Refund	\$2,138				\$2,138
20-8065	Expansion Fund - Struct/Grnds Replace-Impr	\$2,011,584	\$3,870,000	\$4,024,500		\$9,906,084
	Expansion Fund Subtotal	\$2,035,722	\$3,893,000	\$4,024,500		\$9,953,222
<u>Replacement Fund</u>						
26-8015	Replacement Fund - Trunk Sewer Maintenance	\$1,300,000		\$800,000		\$2,100,000
26-8061	Replacement Fund - Struct/Grnds Maint-Major	\$330,000		\$175,000		\$505,000
26-8065	Replacement Fund - Struct/Grnds Replace-Impr	\$916,483	\$212,337	\$175,000	\$1,400,000	\$2,703,820
26-8070	Emergency Equipment Repairs	\$154,500	\$159,132	\$163,909	\$168,826	\$646,367
	Replacement Fund Subtotal	\$2,700,983	\$371,469	\$1,313,909	\$1,568,826	\$5,955,187

<i>Grand Total</i>		\$5,087,305	\$4,584,719	\$5,525,242	\$1,794,469	\$16,991,735
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South San Luis Obispo Sanitation District
***Major Budget Items / Four Year Planning Budget
FY 2010-11 through FY 2013-14***

Expenditures by Activity

Account	Activity	FY 2010-11 Budget	FY 2011-12 Budget	FY 2012-13 Budget	FY 2013-14 Budget	Total 2010-14
0001	Capital Equipment	464,922	496,382	347,592	357,590	1,666,486
0002	Studies	200,600				200,600
0003	Testing / Troubleshooting				50,000	50,000
0004	Design & Survey	714,983	12,037	39,750	93,308	860,078
0005	Contract Administration	219,766	319,500	357,500	89,000	985,766
0006	Const Contingencies	292,767	477,500	484,000	371,000	1,625,267
0007	Construction	3,194,267	3,279,300	4,296,400	833,571	11,603,538
		5,087,305	4,584,719	5,525,242	1,794,469	16,991,735

South San Luis Obispo Sanitation District
Major Budget Items / Five Year Planning Budget

Proj. No.	Project Name	Total Project Budget	Account Number	Source of Funds	2010-11	2011-12	2012-13	2013-14	Cost to Complete
<u>CAPITAL PURCHASES</u>									
04 MBI 03	Annual Influent Grinder Maintenance	142,195	19-8061	Operating Fund - Struct/Grnds Maint-Major	55,000	15,000	15,000	15,000	100,000
04 MBI 11	Annual GIS/GPS Survey	56,429	19-8061	Operating Fund - Struct/Grnds Maint-Major	5,600	3,000	3,150	3,308	15,058
			26-8065	Replacement Fund - Struct/Grnds Replace-Impr					
08 MBI 04	Paperwork Archive	9,653	19-8010	Operating Fund - Capital Equipment	6,500	1,000	1,050	1,103	9,653
08 MBI 11	Chemical Tote Mixer	4,000	19-8010	Operating Fund - Capital Equipment	4,000				4,000
08 MBI 13	Lab Centrifuge	10,000	19-8010	Operating Fund - Capital Equipment	10,000				10,000
08 MBI 20	Sludge Discing Attachment	120,000	19-8010	Operating Fund - Capital Equipment		120,000			120,000
09 MBI 04	Vehicle Replacement	18,500	19-8010	Operating Fund - Capital Equipment		18,500			18,500
10 MBI 01	O&M Manual Update	40,000	19-8061	Operating Fund - Struct/Grnds Maint-Major	40,000				40,000
10 MBI 02	Jack Hammer Purchase	3,000	19-8010	Operating Fund - Capital Equipment	3,000				3,000
10 MBI 03	Drying Bed Valve Replacement	10,000	19-8010	Operating Fund - Capital Equipment	10,000				10,000
10 MBI 04	Street Sweeper Repair and Maintenance	4,000	19-8010	Operating Fund - Capital Equipment	4,000				4,000
10 MBI 05	Front Gate Recoating	12,000	19-8061	Operating Fund - Struct/Grnds Maint-Major	12,000				12,000

South San Luis Obispo Sanitation District

Major Budget Items / Five Year Planning Budget

Proj. No.	Project Name	Total Project Budget	Account Number	Source of Funds	2010-11	2011-12	2012-13	2013-14	Cost to Complete
<i>CAPITAL PURCHASES - Con't</i>									
10 MBI 06	Ferric Tote Containment	2,500	19-8010	Operating Fund - Capital Equipment	2,500				2,500
10 MBI 07	Emergency Response Plan	25,000	19-8061	Operating Fund - Struct/Grnds Maint-Major	25,000				25,000
10 MBI 08	Entrance Road Light Relocation	15,000	19-8061	Operating Fund - Studies	15,000				15,000
10 MBI 09	Tri-Annual Outfall Inspection	91,571	19-7060	Operating Fund - Ocean Outfall Maint	58,000			33,571	91,571
10 MBI 10	Influent Screenings Transport System	100,000	19-8061	Operating Fund -	100,000				100,000
N/A	Miscellaneous MBI Projects	503,044	19-8010	Operating Fund - Capital Equipment	503,044	162,750	167,633	172,661	503,044
<i>Subtotal - Capital Purchases</i>		1,207,158			350,600	320,250	186,833	225,643	1,083,326

South San Luis Obispo Sanitation District
Major Budget Items / Five Year Planning Budget

Proj. No.	Project Name	Total Project Budget	Account Number	Source of Funds	2010-11	2011-12	2012-13	2013-14	Cost to Complete
<u>EXPANSION PROJECTS</u>									
99 MBI 01	SCADA System - Phase 2	14,320	20-8010	Expansion Fund - Capital Equipment	14,320	2,000			2,000
01 MBI 01	Energy Services Project	1,026,129	20-5120	State (Utility) SGIP Refund	128,103				
			20-8010	Expansion Fund - State (Utility) SGIP Refund	152,138	2,138			2,138
			20-8065	Expansion Fund - Struct/Grnds Replace-Impr	745,888	37,162			37,162
05 MBI 06	New Centrifuge	1,870,076	20-8065	Expansion Fund - Struct/Grnds Replace-Impr	1,870,076	1,104,422			1,104,422
			26-8065	Replacement Fund - Struct/Grnds Replace-Impr					
07 MBI 14	Long Range Plant Expansion	8,639,391	20-8010	Expansion Fund - Capital Equipment	89,791				
			20-8065	Expansion Fund - Struct/Grnds Replace-Impr	8,549,600	3,870,000	3,870,000		8,500,000
07 MBI 16	Grease to Gas System	130,833	20-8065	Expansion Fund - Struct/Grnds Replace-Impr	130,833	110,000			110,000
08 MBI 22	Hellan Strainer Drive Unit	23,000	20-8010	Expansion Fund - Capital Equipment	23,000	23,000			23,000
08 MBI 25	Lagoon Lining Project	162,346	20-8065	Expansion Fund - Struct/Grnds Replace-Impr	159,563	0	154,500		154,500
			26-8065	Replacement Fund - Struct/Grnds Replace-Impr	2,783				
09 MBI 06	Reclaimed Water Filtration	20,000	20-8010	Expansion Fund - Capital Equipment	20,000	20,000			20,000
Subtotal - Expansion Projects		11,886,094			11,886,094	2,035,722	4,024,500		9,953,222

South San Luis Obispo Sanitation District
Major Budget Items / Five Year Planning Budget

Proj. No.	Project Name	Total Project Budget	Account Number	Source of Funds	2010-11	2011-12	2012-13	2013-14	Cost to Complete
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REPLACEMENT PROJECTS

04 MBI 16	Electrical System Upgrade	538,902	20-8065	Expansion Fund - Struct/Grnds Replace-Impr	33,842				
			26-8065	Replacement Fund - Struct/Grnds Replace-Impr	505,060				500,000
06 MBI 04	Primary Clarifier No. 1 Catwalk	140,000	26-8061	Replacement Fund - Struct/Grnds Maint-Major	140,000				140,000
06 MBI 05	Primary Clarifier No. 2 Catwalk	20,000	26-8061	Replacement Fund - Struct/Grnds Maint-Major	20,000				20,000
06 MBI 13	Influent Pumps Gate and Check Valves	733,455	26-8065	Replacement Fund - Struct/Grnds Replace-Impr	733,455				416,484
08 MBI 18	Flood Gate Upgrade Project	219,050	26-8065	Replacement Fund - Struct/Grnds Replace-Impr	219,050	212,337			212,337
08 MBI 19	CIPP Lining of SSLOCSD Trunk Sewer	2,136,237	26-8015	Replacement Fund - Trunk Sewer Maint	2,136,237		800,000		2,100,000
09 MBI 01	FFR Pump Refurbishment	176,000	26-8061	Replacement Fund - Struct/Grnds Maint-Major	176,000				170,000
10 MBI 11	Upgrade Co-Generation from 150 to 200 kW Generat	175,000	26-8065	Replacement Fund - Struct/Grnds Replace-Impr	175,000		175,000		175,000
10 MBI 12	Arroyo Grande Pipe Bridge Recoating	175,000	26-8061	Replacement Fund - Struct/Grnds Maint-Major	175,000		175,000		175,000
10 MBI 13	FFR Plastic Media Replacement	1,000,000	26-8065	Replacement Fund - Struct/Grnds Replace-Impr	1,000,000			1,000,000	1,000,000
10 MBI 14	FFR Distribution Arm Replacement	400,000	26-8065	Replacement Fund - Struct/Grnds Replace-Impr	400,000			400,000	400,000
N/A	Emergency Equipment Repair	656,367	26-8070	Replacement Fund - Emergency Equipment Repair	656,367	159,132	163,909	168,826	646,367
Subtotal - Replacement Projects		7,345,847			7,345,847	371,469	1,313,909	1,568,826	5,955,187

Grand Total		20,439,099			5,087,305	4,584,719	5,525,242	1,794,469	16,991,735
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Major Budget Item Descriptions

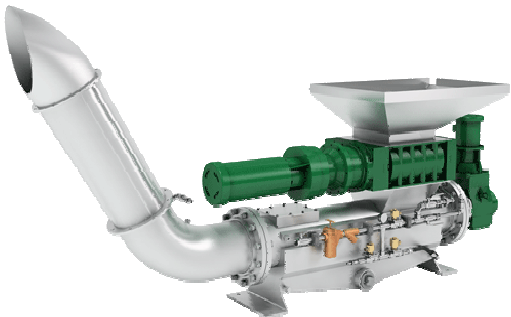
MAJOR BUDGET ITEMS

FISCAL BUDGET YEAR 2010-11

ITEM #	PROJECT TITLE	FY 10-11 COST	[COST TO COMPLETE]
10 MBI 01	O&M MANUAL UPDATE	\$40,000	[\$40,000]
		The latest Plant O&M manual was authored in 1990. When the CCT was completed in 2006, the manual was not updated due to an excessive cost estimate. As an updated O&M manual is required by the Regional Water Quality Control Board, these funds will cover the cost of bringing the O&M manual current.	
10 MBI 02	JACK HAMMER PURCHASE	\$3,000	[\$3,000]
		Operations staff has been actively engaged in saving the District money by taking on projects around the plant that fit with the available skill set. The District's jack hammer was purchased used approximately 25 years ago and is at the end of its useful life. The funds will be used to purchase a new jack hammer to allow the continued demolition of concrete, asphalt, etc. as it pertains to staff performed maintenance projects. The old unit will be declared surplus.	

10 MBI 03 DRYING BED VALVE REPLACEMENT	\$10,000 [\$10,000]
	The current drying bed 3-way valves were installed about 9 years ago. The recent issues with the centrifuge and the increased reliance on the drying beds have brought to light the state of disrepair and difficulty of use of these valves. 3 of the 4 valves are in bad shape, with the remaining valve operating OK. The funds will be used to purchase 4 new 3-way valves.
10 MBI 04 STREET SWEEPER REPAIR AND MAINTENANCE	\$4,000 [\$4,000]
	The street sweeper was purchased around 1990, making it about 20 years old. Operations staff uses the sweeper to sweep the roads around the plant to maintain its overall impeccable cleanliness. The two filter shaker motors failed, causing supplemental damage to other parts on the sweeper. The funds will be used to repair all the miscellaneous failed parts on the unit as well as some modifications to the shaker motor assembly that will prolong the unit's overall useful service life and prevent this type of damage in the future.

10 MBI 05 FRONT GATE RECOATING	\$12,000 [\$12,000]
	The security gate was installed at the entrance to the facility in response to neighborhood kids having unrestricted access to the plant during unmanned hours. The gate's coating system over time has peeled exposing the base metal which has subsequently oxidized. The funds will pay for preparing and coating the gate with a higher strength, longer life system such as powder coating. It will also cover the cost of temporary fencing during the repair. Staff will also look into totally replacing the fence and opt for the least expensive option.
10 MBI 06 FERRIC TOTE CONTAINMENT	\$2,500 [\$2,500]
	The District uses ferric chloride injection at the head-works to help more solids settle out in the primary clarifiers, helping control the loading of the FFR. The ferric is stored in totes which are physically stored by the influent structure. The funds will pay for two containment tanks that will help contain the mess made by the ferric, as well as protect against any catastrophic damage to the tote, valves, etc.

10 MBI 09	TRI-ANNUAL OUTFALL INSPECTION	\$58,000	[\$91,571]
		The District's NPDES permit requires that SSLOCSD inspect the ocean outfall line once every three years – a cost that is shared with Pismo Beach. There are two parts of the inspection: the video inspection of the physical pipe (about \$8,000), and benthic biota monitoring, which requires taking sediment samples at designated monitoring locations on the ocean floor. The sediment is analyzed for metals, etc. The results are reported in a lengthy report which is included in the Annual Report with any issues identified highlighted. (about \$50,000). Historically the District has handled the analysis, paid the contractor, and been reimbursed by Pismo Beach.	
10 MBI 10	INFLUENT SCREENINGS TRANSPORT SYSTEM	\$100,000	[\$100,000]
		As the Auger Monster manufacturer's solution to the screening problem is generating substantially more screenings, the problem of transporting the bag full of screenings up a flight of stairs is becoming a safety risk. Staff is still investigating solutions, but the funds will pay for a solids transport system with or without a washer. This will transport the solids out of the sub-grade head-works and up to a dumpster for simple disposal.	

CARRY-OVER BUDGET ITEMS	FY 10-11 COST [COST TO COMPLETE]
09 MBI 01 FFR PUMP REFURBISHMENT	\$170,000 [\$170,000]
 	When the Fixed Film Reactor (FFR) was installed, piping was furnished to accommodate three large circulation pumps, but only two were installed. The pumps are responsible for pumping wastewater water up the center column pipe located in the center of the FFR and into the distribution arms where it is evenly distributed over plastic media. The pumps are variable speed pumps with the speed controlled by variable frequency drives (VFD) and have been in service for approximately 12 years. One VFD was replaced in March 2009. Given the current FFR recirculation parameters, the pumps cannot be taken offline without the plant operating in upset mode. The cost of the new pump and the refurbishments have increased due to a new seal design that will allow Staff servicing without total removal of the pump (as is currently the case). Funds will allow for: - the overhaul of existing pumps 1 & 2, (impellers, seals, motors); - the replacement of the second existing VFD; - the installation of a new, third pump, motor & VFD to provide needed maintenance and redundancy

09 MBI 06 RECLAIMED WATER FILTRATION	\$20,000 [\$20,000]
	The District currently uses processed effluent for a variety of purposes throughout the plant, including seal water supply to a large number of mechanical seals that are protecting expensive pieces of equipment. The process water is currently filtered through 1/16" perforated strainer baskets which: 1. potentially allows sediment and large particles to pass through and damage downstream equipment; 2. frequently "blind" and reduces the flow, starving the mechanical seals; The filters can be set up to self flush, increasing the reliability of the system. Funds would allow for purchase of a Sand Filter Filtration System which would provide an additional, much finer level of filtration to the process water and protect downstream mechanical seals from particles and damage due to reduced water flow. Operations staff is working with various suppliers and is currently engaged in a pilot program to determine the suitability of different filtration media.
08 MBI 04 PAPERWORK ARCHIVE	\$6,500 [\$9,653]
	Funds would allow for the purchase of a large format, high-speed scanner and digital media storage devices to archive 40+ years of deteriorating paperwork currently stored in the FFR basement. Staff will also investigate 3rd party scanning of materials to be archived and choose the most cost effective method considering staff time for scanning vs. hiring an outside service.

08 MBI 11 CHEMICAL TOTE MIXER	\$4,000 [\$4,000]
	To increase buying power, the District purchases chemicals in bulk. Sometimes there are adverse effects to chemicals being stored for long periods of time. The mixer prevents stored chemicals from separating and reducing their effectiveness.
08 MBI 13 LAB CENTRIFUGE	\$10,000 [\$10,000]
	In order to maintain accurate test results, the District has adopted a 10 year replacement plan for lab equipment. The current unit is over 10 years old, and is currently experiencing abnormal bearing wear noises.

08 MBI 19 CURED IN PLACE PIPE (CIPP) LINING OF SSLOCSD TRUNK SEWER	\$1,300,000 [\$2,100,000]
	Video inspections of the Trunk System have identified numerous locations which are in need of system rehabilitation due to degradation over time. This budget item allows for the installation of CIPP Liner on some high priority areas. The CIPP Liner will allow for a continuous joint-less lining of the collection system and is resistant to corrosion from domestic sewage and is capable of withstanding static, dynamic and hydrostatic loads over a fifty year lifespan. System installation is by means of trenchless technology, allowing for the liner to be inserted into the pipe through existing manholes. Total system rehabilitation is anticipated to occur in stages over multiple fiscal years. Current budget projections are worst case scenarios and will be refined by additional video inspection and analysis this fiscal year. Only \$15,000 was spent from FY2009-10 budget with the balance being rolled over. Staff is planning to line a large percentage of the “critical” sections this fiscal year. The Funding Projections can be seen in the ten year budget projection.

07 MBI 14 LONG RANGE PLANT EXPANSION	\$760,000 [\$8,500,000]
	Kennedy/Jenks (KJ) developed a long-range planning report in 2005 that addressed the plant capacity and redundancy concerns, as well as provided conceptual solutions. The result of the report was to recommend that secondary treatment facility improvements, including aeration tanks and a redundant secondary clarifier, be constructed. A Pre-Design Report was written in 2008 in order to gain a better understanding of the estimated construction costs and the feasibility of a phased project. The Report confirmed the size and location of equipment and pipework connections. Two aeration tanks with 295,000 gallon capacity each, and an 87 ft diameter secondary clarifier are planned to be added to the treatment process. In addition the report recommended that both pieces of equipment be constructed at one time. Staff hired Corollo Engineers to provide a peer review of the KJ report with a specific eye toward the cost estimate. KJ made their estimate at the height of the construction boom, while Corollo was aware of the economic difficulties in the construction industry. Regardless, project estimates have been revised downward from in excess of \$12 million to a more palatable \$7.5 million. This project is in the process of applying for SRF funding and is in the environmental review phase. Also as part of the SRF Process, Staff is also working on a rate study to determine if current rates are sufficient to qualify for the loan. Getting information from the member agencies has proved cumbersome as well as sorting through the custom categories. Staff will hire student auditors to walk the District to verify rate classification. All these activities have delayed the rate study significantly. This FY Budget item includes the design portion of the project. Estimated construction costs are projected in future years.

07 MBI 16 GREASE TO GAS SYSTEM	\$110,000 [\$110,000]
	Compliance with FOG programs, particularly with regard to disposing of brown grease, requires the availability of inexpensive and convenient means for owners and haulers to comply with the regulations and may reduce illegal dumping. Wastewater Treatment plants can uniquely benefit from kitchen grease. Timed, direct injection of kitchen greases into an anaerobic digester will increase the solids digestion, increase the production of digester gas and increase the energy content of the gas. The tipping fees the grease haulers will pay in addition to the additional power generated will help offset the costs. Based on other District's results, this will increase the benefit of the cogeneration unit.
06 MBI 04 PRIMARY CLARIFIER NO. 1 CATWALK	\$140,000 [\$140,000]
	The current condition of the Primary Clarifier No. 1 Catwalk is very poor as most of the structural members are damaged beyond repair due to excessive corrosion. Inspection by Staff has determined that this Catwalk will need to be completely replaced to ensure safety of personnel. The funds would allow for the installation of a new bridge, and for the replacement of existing galvanized steel plates with fiberglass grating. The new fiberglass grating, which is not susceptible to corrosion, will replace the existing galvanized catwalks that have significantly deteriorated due to exposure to the environment. Additionally, as the clarifier will be offline, the project 06 MBI 12, Primary Clarifier Drive No. 1 will be combined with this one. The funds will also provide for the purchase and installation of a replacement clarifier drive mechanism.

06 MBI 05	PRIMARY CLARIFIER NO. 2 CATWALK	\$20,000	[\$20,000]
		Due to the caustic nature of the clarifier environment, severe oxidation has occurred to the coating system and base metal of the clarifier bridge and decking.	
		These funds would allow for sandblasting and painting of the bridge along with the replacement of existing galvanized steel plates with fiberglass grating.	

06 MBI 13 INFLUENT PUMPS GATE AND CHECK VALVES	\$416,484 [\$416,484]
	As a result of the San Simeon Earthquake, a sinkhole developed above the 33-inch corrugated steel influent line directly to the south of the pumping plant. It was discovered through video inspection that significant infiltration exists in a 50-foot section of the line extending from the pumping plant to the upstream manhole. The project was broken into 3 phases: • Phase I, installation of 2 manholes onsite to ease the logistics of bypassing the headworks – STATUS: Complete • Phase II, coating of primary No. 1 section of splitter box, removal of the slide gates and installation of plug valves – STATUS: Complete Phase II ran into a lot of unanticipated work due to the discovery of a severely oxidized primary clarifier bypass pipe that required replacement. • Phase III, slip line approximately 55 ft of AG feeder from the influent plant to the first upstream manhole, replace the influent slide gate and replace all gate and check valves on the four (4) influent pumps –STATUS: In process Phase III has begun in FY2009-10 with the purchase of the influent valves. Operations staff requested the addition of coating the pump sump (not inspected since 1965), which will add significant cost to the project. Other additions will include replacing the Parshall flume, which is part of the system that measures plant flow.

05 MBI 06 NEW CENTRIFUGE	\$1,104,422 [\$1,104,422]
	The existing centrifuge that was installed in 1965 is worn and undersized. The Andritz centrifuge has been delivered to the District and given the situation with the poor reliability of the existing centrifuge, will be installed temporarily in a drying bed and used to dewater sludge until the building is complete. Final engineering design including sizing of structural components and completion of construction drawings, and specifications has been completed. The Construction Portion of the project is scheduled to go out to public bid in May 2010. Staff expects the construction to be complete sometime near January 2011.

04 MBI 03 ANNUAL INFLUENT GRINDER MAINTENANCE	\$55,000 [\$100,000]
	After 18 months of efforts, JWCE appears to have solved the issues plaguing the Channel Monster as it is removing greater amounts of screenings from the waste stream. The budgeted funds will provide for the upgrade of the second Muffin Monster to a Channel Monster, as well as the service agreement fees. The District withheld payment on the Service Contract during FY 2009-10 as JWCE was not providing timely service to the District's material bypass issue. The service agreement fees will become an annual budget item of about \$12,000 (ie. \$6,000 times 2 units) starting in FY2011-12.
04 MBI 11 ANNUAL GIS/GPS SURVEY	\$5,600 [\$15,058]
	It is important that GIS and GPS survey data is properly organized and stored to maintain its accuracy and accessibility. These funds would be used to maintain this information as well as incorporating data that will be obtained as part of the trunk line manhole location survey. No funds were expended in FY 2009-10. This is an annual budget item.

04 MBI 16	ELECTRICAL SYSTEM UPGRADE	\$500,000	[\$500,000]
		The original electrical system was installed in 1964-66 as part of the construction of the plant. Additional electrical equipment and wiring was installed in 1986. The wiring that connects the various motors with the motor control center, located in the Power Generation Plant, has begun to deteriorate due to being submerged by ground water. The existing wiring is not designed for this type of submerged service. As a result, there have been several instances where the wiring has failed and either caused an electrical fire or a loss of power. This project would replace all the wiring to the various motors and lighting in the plant with waterproof wire that is rated for this type of service. In order to keep the plant operating during this process, the wiring will be replaced in a sequenced fashion with one set of wires replaced at a time. In addition, as-built drawings will be created. Staff is 90% complete with the specifications and will be ready to bid this project early in the Fiscal Year.	

FUTURE FY BUDGET ITEMS	FY 10-11 COST [COST TO COMPLETE]
09 MBI 04 VEHICLE REPLACEMENT	\$0 [\$18,500]
	The District's 1997 Ford Ranger currently has 83,000 miles on it and is frequently in need of repair. In the past the District has employed a 10 year replacement policy on vehicles that have frequent use. Funds would provide for a replacement vehicle of similar size. The old vehicle would be declared surplus and sold or traded in to the biggest financial benefit of the District.
08 MBI 18 FLOOD GATE UPGRADE PROJECT	\$0 [\$212,337]
	This project would include the upgrade of the flood protection gates at the plant. Facilities will be evaluated to determine critical buildings and areas needed for plant operation. In the event of a flood, it is critical that the plant run at a basic level during a severe flooding event. The new gates will provide protection for these critical systems. New higher flood gates will be installed at these critical facilities. Non-critical systems will be left with the existing flood protection. Staff has prepared bid documents.

08 MBI 20 SLUDGE DISCING ATTACHMENT	\$0 [\$120,000]
	Discing or turning biosolids allows the District to thoroughly dry them – a key part of pathogen destruction. Due to the failure of the in-house fabricated discing unit, the plant can no longer achieve optimal drying and EQ quality biosolids and is currently achieving sub-Class B biosolids. An added benefit of drier biosolids is the reduction of the cost of sludge disposal (by lowering concentration of moisture – a key component of shipping weight). Staff is projecting this for a future budget year due to regulatory concerns. There's a likelihood the District's biosolids hauler/composter will only accept Class A biosolids in the future.
08 MBI 22 HELLAN STRAINER DRIVE UNIT	\$0 [\$23,000]
	The Hellan strainers were installed with the CCT project. The strainers frequently plug (often twice daily) causing low delivery pressures in the reclaimed water system. Staff manually cleans the strainers using a hand-wheel. Automated retrofit drive units are available that would provide automatic strainer basket clearing, providing continuous protection. Funds would allow for the purchase of two separate retrofit drive units. This MIB will only be pursued if 09 MBI 06 does not reduce the maintenance interval for clearing the scraper baskets.

08 MBI 25 LAGOON LINING PROJECT	\$0 [\$154,500]
	During normal plant operations, staff dewater biosolids utilizing a centrifuge and stockpiles the dewatered biosolids in the dirt lagoon, east of the last drying bed. The existing biosolids drying lagoon is unpaved however underlying the site is several feet of red rock that provides a hard compact subsurface. During heavy rains, rain water pools and is absorbed into the stored biosolids, resulting in a higher moisture content. There have not been any specific issues with biosolids leaching into groundwater. Creek testing on an intermittent basis has confirmed that there has been no negative impact on the creek. However, recently during the environmental review by the Coastal Commission (CC) of the new Centrifuge building, the CC inquired about the stockpiling practice, whether the lagoon was lined, the proximity to the creek, etc. To prevent the future possibility of biosolids coming into contact with the groundwater, the lagoon should be lined. Paving the entire lagoon would provide a hard surface upon which to stockpile the biosolids greatly reducing the chance for ground water contamination in the future, as well as provide a method to prevent pooling rainwater from being absorbed by the stored biosolids. Funds would provide for the creation of bid documents and the construction project to pave the lagoon.

Personnel Compensation

SOUTH SAN LUIS OBISPO COUNTY SANITATION DISTRICT
RESOLUTION NO. 2010-278

A RESOLUTION ADOPTING AN EMPLOYEE COMPENSATION PACKAGE
INCLUDING A SALARY SCHEDULE, POSITION CLASSIFICATIONS
AND SALARY STEPS WITHIN THE PERSPECTIVE RANGES
FOR THE 2010-11 FISCAL YEAR

THE BOARD OF DIRECTORS OF THE SOUTH SAN LUIS OBISPO COUNTY
SANITATION DISTRICT DOES RESOLVE AS FOLLOWS:

WHEREAS, this Board deems it to be in the best interests of the South San Luis Obispo County Sanitation District and its various employees that minimum and maximum compensation be fixed as well as any District contribution to medical, dental, vision and retirement plans on behalf of the employee for various classifications of employment in the District as hereinafter provided.

NOW, THEREFORE, BE IT RESOLVED that the terms of this resolution shall be effective July 1, 2010 and shall apply through June 30, 2011.

BE IT FURTHER RESOLVED this resolution shall supersede and repeal any position classifications.

BE IT FURTHER RESOLVED that the minimum compensation as of date of employment and the intermediate and maximum compensation for such employment shall be as hereinafter enumerated, effective July 1, 2010, and that said employees shall be assigned to salary steps within the respective pay range of the position classification as set forth in Exhibit A, and further, that any contributions made by the District on behalf of the employee to medical and/or retirement programs shall be set forth in Exhibit A, and further, that Exhibit A attached hereto is made a part hereof by reference, all of which are hereby adopted as follows:

ADMINISTRATION OF THE COMPENSATION PLAN

All full-time employees entering the employ of the District shall be paid at the first step of the salary range established for their classification unless authorized by the District Administrator and/or the Board of Directors. The District Administrator shall have the authority to place an individual at step 2 upon reviewing their experience and making a determination that said step 2 salary was in the best interest of the District to provide at the time of employment. The Board of Directors shall make the decision to hire any employee at step 3 and would only do so after reviewing recommendations made by the District Administrator with respect to the employee's experience and value to the District.

Salary step increase, as provided herein, are not automatic, but based on performance and merit. Employees shall be placed on a salary step and qualify for increase in compensation for advancement to the next higher step of the pay ranges in the manner following:

1. Employees may qualify for advancement to the second step, after completion of six months service, upon the recommendation of the Superintendent and approval by the District Administrator.
2. Employees may qualify for advancement to the third step, after the completion of one year of service instep two upon recommendation of the Superintendent and approval by the District Administrator.

3. Employees may qualify for advancement to the fourth step, after the completion of one year of service at the third step, upon recommendation of the Superintendent and approval by the District Administrator.
4. Employees may qualify for advancement to the fifth step, after completion of one year of service in step four, upon recommendation of the Superintendent and approval by the District Administrator.
5. A performance report on each employee recommended for advancement shall be submitted to the District Administrator, prior to final action on such recommendation.

All part-time employees shall be paid without benefit of salary range and at a rate or rates as specified in Exhibit A of this resolution.

On motion of Board Member Dahl, seconded by Board Member Nicolls,
and on the following roll call vote, to wit:

AYES: Dahl, Nicolls, Ferrara

NOES: None

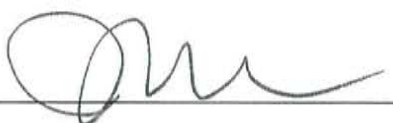
ABSENT: None

the foregoing resolution was passed and adopted this 7th day of July 2010.



Tony Ferrara
Chairman

ATTEST:



John L. Wallace
District Administrator

EXHIBIT "A"

2010-11 FISCAL YEAR SALARY/RANGE MONTHLY COMPENSATION

FULL TIME EMPLOYEES

<i>Level Authorized</i>	<i>Step 1</i>	<i>Step 2</i>	<i>Step 3</i>	<i>Step 4</i>	<i>Step 5</i>
1 Plant Superintendent	5684	5969	6268	6582	6912
0 Operator 3 (Shift Supervisor)	4644	4877	5121	5377	5646
1 Operator 3	4123	4330	4547	4775	5014
1 Senior Maintenance Mechanic (vacant)	4123	4330	4547	4775	5014
1 Lead Operator	3938	4135	4342	4560	4788
1 Lab Tech/Operator	3938	4135	4342	4560	4788
2 Operator 2	3825	4017	4218	4429	4651 4652
1 Operator 1 *** *** Grade II 2.5% increase	3552	3730	3917	4113	4319 4426
0 Operator In Training	3212	3373	3542	3719	3905
1 Maintenance Assistant	3212	3373	3542	3719	3905
1 Bookkeeper/Secretary	3484	3659	3842	4034	4236
10 TOTAL STAFF					

COLA to be determined

PART TIME EMPLOYEES - MONTHLY RATE

Board Member or Alternate

\$100 per meeting attended
(Resolution 1995-150)

Administrator

Per Contract

Attorney

Per Contract

Volunteers

See Resolution No. 76

CONTRIBUTIONS ON BEHALF OF EMPLOYEE

MEDICAL (ACCT 6010)

The District shall pay an amount equal to the current basic plan option monthly premium for the District's medical plan for the employee and the employees' dependent coverage.

DENTAL (ACCT 6025)

The District shall pay an amount equal to the current monthly premium for the District's dental plan for the employee and the employee's dependent coverage.

VISION/DENTAL/MEDICAL TRUST (ACCT 6075)

The District shall pay an initial amount of \$500 for each permanent employee and \$500 per year thereafter into a vision/dental/medical trust fund account. This account will provide for out of pocket expenses not covered by current formal insurance plans.

SOCIAL SECURITY AND MEDICARE (ACCT 6050)

Provides District contribution of Social Security Tax at 6.2% and Medicare at 1.45% of gross payroll. Employees pay matching contribution.

STATE RETIREMENT (PERS) (ACCT 6060)

In addition to the District's employer contributions, the District shall pay an amount equal to the employee's contribution to PERS (less the difference required to upgrade from prior 2%@55 to 2.5%@55 which is the employee's responsibility) on behalf of the employee. Current District contribution is 7% of gross payroll minus \$61 (excluding standby and overtime) for the employee's portion and 7.382% of gross payroll (excluding standby and overtime) for the employer's portion.

STATE DISABILITY INSURANCE PROGRAM (ACCT 6055)

The District shall contribute 50% of the total cost for each employee to become part of the State Disability Insurance Program. Current contribution rate is 1.45% of gross payroll

INCREASE FOR HIGHER OPERATOR GRADE (ACCT 6030)

A one time increase of 2.5% for operator grade obtained above that required for position will be paid upon certification. This bonus shall not be given in addition to an adjustment already made for Lab Technician.

STIPEND FOR COMMERCIAL DRIVERS LICENSE (ACCT 6030)

The District shall pay a stipend of \$100 per month in addition to other salary, to employees holding a valid Commercial Driver's License (Class A) while occupying a District position requiring use of that license and designated by the District to utilize the related equipment.

ADJUSTMENT FOR LAB TECHNICIAN (OP1, OP2 OP3) (ACCT 6030)

A one time 3.0% increase for designation and performance as the District's Laboratory Technician may be given after 6 months experience in that position and after recommendation by the Plant Superintendent and approval by the Administrator. This increase shall not be additive to any bonus for higher operator grade license.

STANDBY PAY (ACCT 6030)

Employees required to perform standby service will be paid at the rate of \$3.00 per hour. When required backup standby will be paid at a rate of .50 cents per hour.

VACATION (PER RESOLUTION NO. 86-100)

<u>Years of Service</u>	<u>Vacation Days</u>
0-2 years	10 days
2+ - 4 years	11 days
4+ - 5 years	12 days
5+ - 6 years	13 days
6+ - 7 years	14 days
7+ - 8 years	15 days
8+ - 10 years	16 days
10+ years	+ 1 day per year

SICK LEAVE

1 Day of sick leave per month to be accrued.

SICK LEAVE CONVERSION

Employees may convert a portion of sick leave earned within a fiscal year to regular pay as determine by Board Action (25% currently approved)

SICK LEAVE PAYOUT UPON TERMINATION

Upon termination of employment, long term employees' accumulated sick leave of up to a maximum of 480 hours to be paid out according to length of District service:

10 years service	25%
15 years service	50%
20 years service	100%

EMPLOYEE COMPUTER PURCHASE PROGRAM

Provides for \$1500.00 interest free computer purchase loan, payable within two years from employees salary as a payroll deduction.

HOLIDAYS

As presented in Resolution No. 62.

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. 2002- 199

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE
SOUTH SAN LUIS OBISPO COUNTY SANITATION DISTRICT
ADOPTING AN AMENDED STATEMENT OF FINANCIAL POLICY
FOR DISTRICT

WHEREAS, the Board of Directors of the South San Luis Obispo County Sanitation District ("District") believe that public funds should be invested in financial instruments and institutions in accordance with State law and District guidelines; and

WHEREAS, District funds will be available from time to time for the purpose of investing in financial instruments in accordance with the District's 2002 investment policy (Exhibit "A") and deposited in interest bearing accounts, in banks or financial institutions having offices within the State; and

WHEREAS, the Board of Directors finds that is in impractical to take individual action authorizing the investment of such funds which are permissible investments under the Government Code, as well as the District's financial policy, and finds and determines that the District's Finance Officer should be authorized to invest such funds in accordance with the provisions of the District's current Investment Policy and the California Government Code; and

WHEREAS the Board of Directors finds that it will be more convenient for District staff to have the option of reporting the information required on a monthly basis.

NOW, THEREFORE, BE IT RESOLVED, DETERMINED AND ORDERED by the Board of Directors of the South San Luis Obispo County Sanitation District as follows:

1. The District Finance Officer is hereby authorized to deposit for safekeeping all monies belonging to, or in the custody of, the District pursuant to Exhibit "A" the District's 2002 Investment Policy; and

2. The District hereby adopts a Statement of Investment Policy attached hereto as Exhibit "A", Investment Policy which supersedes any previously adopted or utilized policy and that this policy be effective immediately.

Upon motion of Board Member Doreen Arnoldson seconded by
Board Member Cady on the following roll call vote,
to wit:

AYES: 3

NOES: 0

ABSENT: 0

ABSTAINING: 0

the foregoing resolution is hereby passed and adopted this 4
day of September, 2002.

Bill Senna

BILL SENNA
Chairperson

ATTEST:

JOHN WALLACE

[Signature]

Secretary to the Board

APPROVED:

[Signature]

MICHAEL W. SEITZ, District Legal Counsel

EXHIBIT A

SOUTH SAN LUIS OBISPO COUNTY SANITATION DISTRICT

2002 INVESTMENT POLICY

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's funds). The objectives of this policy are safety, liquidity, yield, and compliance with California 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. The District's Finance Officer shall serve at the Board's pleasure.

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.

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

The 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 § 16429.2).
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. DIVERSIFICATION

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.

7. REPORTS

A. MONTHLY REPORT

The Finance Officer may elect to provide the Financial Report on a monthly basis pursuant to Government Code Section 53646(d). Required elements of the monthly 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 that there are sufficient funds to meet the next 180 days obligations
9. Accrued Interest (if applicable)

The monthly report must be filed with the District's Auditor.

B. QUARTERLY REPORT

If the Financial Officer elects not to give a monthly Financial Report, the Finance Officer shall file a quarterly report that identifies the District's investments and their compliance with the District's Investment Policy containing the same information as required pursuant to 7.A. above.

C. ANNUAL REPORT

Prior to February 1, 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. Re-adopt 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.A, above.

This special reporting policy does not relieve the Finance Officer of the obligation to prepare an annual investment statement as identified in paragraph 7.B, above.

Purchasing Policy

Policies and Procedures for the expenditure of District funds
For supplies, equipment, construction, and services.

**SOUTH SAN LUIS OBISPO COUNTY SANITATION DISTRICT
RESOLUTION NO. 2010-274**

**A RESOLUTION ADOPTING THE POLICIES AND PROCEDURES FOR THE
EXPENDITURE OF DISTRICT FUNDS FOR SUPPLIES, EQUIPMENT, CONSTRUCTION,
AND SERVICES**

ARTICLE 1

Adoption of Purchasing and Construction Policies

1.1 **Statutory Authority:** These policies and procedures are adopted pursuant to the Government Code Section 54201 (1), et. seq., and Public Contracts Code Section 20783 (2) 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. Further, it is the intent of the Board in inacting 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 \$35,000. 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 qualify as a local vendor, a business must have all current applicable city licenses and permits, must maintain its primary office, place of business within the district. This preference is not applicable for 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 Administrator Duties

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 four-fifths 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. However, 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 \$1,500.00**

- A. The Plant Superintendent shall act as purchasing agent for the District in connection in obtaining materials, supplies, and equipment with a cost of **\$1,500.00** 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 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 least 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 shall issue a purchase order which shall 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 \$5,000.00

The District Administrator shall act as purchasing agent for the District in connection with the obtaining of supplies, equipment, or services with a cost in excess of **\$1,500.00** and not more than **\$5,000.00**.

A. The purchase of supplies and equipment with a value of **\$1,500.00** to **\$5,000.00** 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, when ever 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 \$5,000.00 and less than \$35,000.00

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 \$5,000.00, but not more than \$35,000.00.

B. The District Administrator and/or his/her designee shall solicit quotations for all goods and supplies with a cost of more than \$5,000.00 and less than \$35,000.00. 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 Administrator and shall be awarded to the entity submitting the lowest responsive quote.

2. The Board of Directors of the District shall approve all purchases in excess of \$5,000.00 and less than \$35,000.00.

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 of equipment, supplies, or services.

2.6 Supplies and Equipment – District Purchases over \$35,000.00 - Formal Competitive Bidding/Notice

Except as otherwise provided in these procedures, purchases and contracts for supplies and equipment subject to the twenty-five thousand Dollar contract limitations of Public Contracts Code Section 20783 (2), (or an amount specified in a predecessor 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) A 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) A 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 day 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 return of bid security within 60 days from the time the award is made. However, a successful bidder shall forfeit his/her bid security 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 four fifths 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 Vern Dahl, seconded by Director Bill Nicolls, and on the following roll call vote, to wit:

AYES: Vern Dahl, Bill Nicolls, Tony Ferrara

NOES: None

ABSENT: None

ABSTAINING: None

the foregoing Resolution is hereby adopted this sixteenth day of June, 2010.


Tony Ferrara, Chairman

ATTEST:


JOHN WALLACE, Secretary to the Board

APPROVED AS TO FORM:


MICHAEL W. SEITZ, District Legal Counsel

Appendix D

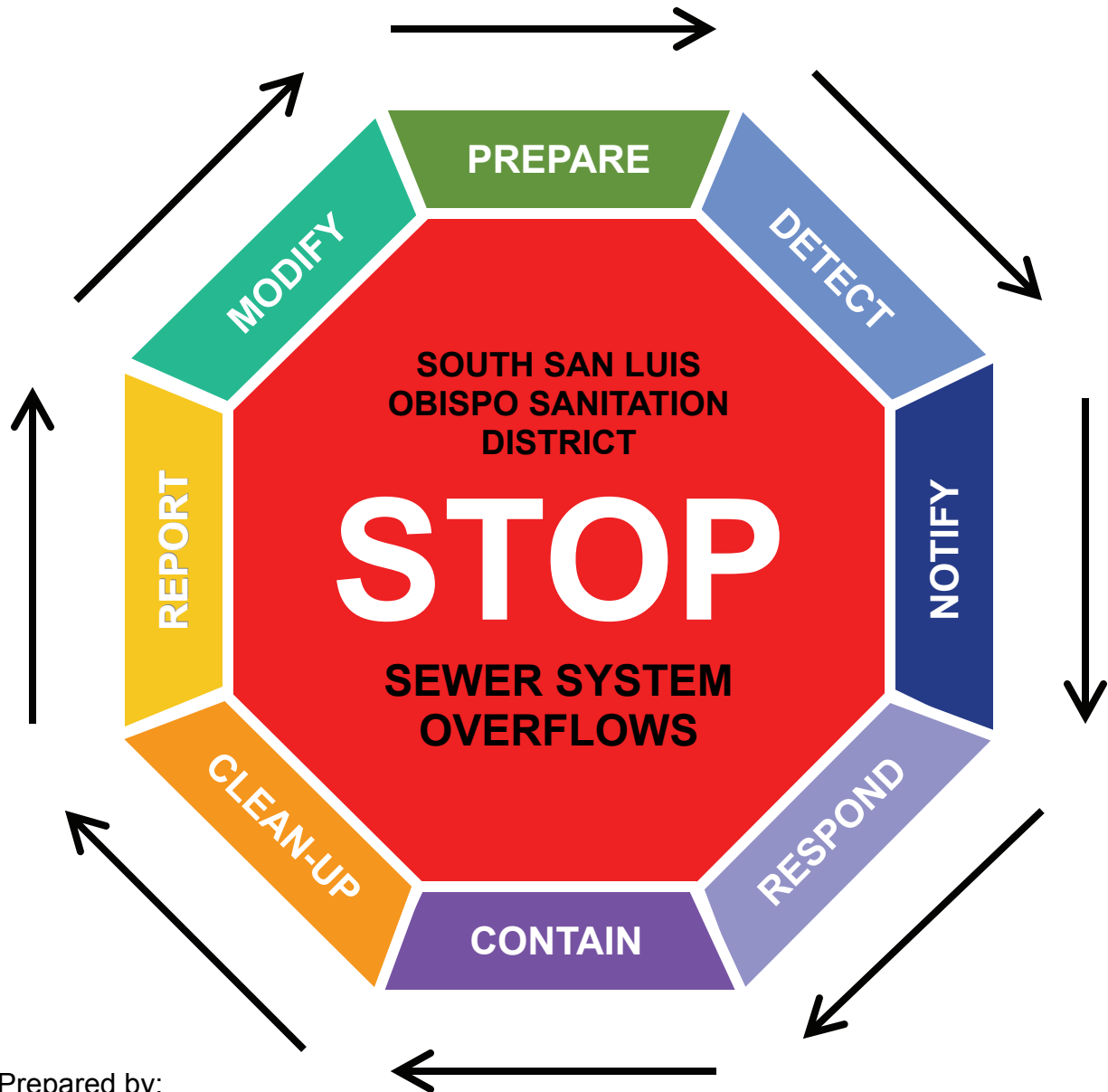
South San Luis Obispo County Sanitation District - Overflow Emergency Response Plan (OERP)

| CIWQS SSO Discharger Work Book [and CIWQS List of Data Submitters and LRO](#)

SSLOCSD SSO Report Forms – Incident and Telephone

2011 SSLOCSD Training Record

OVERFLOW EMERGENCY RESPONSE PLAN (OERP)



Prepared by:



WALLACE GROUP®

WALLACE GROUP
Public Works Administration
612 Clarion Court
San Luis Obispo
(805) 544-4011



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QUICK REFERENCE

Emergency Contacts:

SSLOCSO Office(805) 489-6670
Plant Superintendent.....(805) 434-1315 home
(*Bob Barlogio*).....(805) 674-2415 cell
On-call Operator(805) 780-4422 pager
District Engineer(805) 544-4011 ofc
 John Wallace(805) 431-9732 cell
Police, Sheriff, Fire9-1-1

To reach On-call personnel in the following areas:

Arroyo Grande (during office hours)(805) 473-5460
 Arroyo Grande Police (after hours)(805) 473-5100
Grover Beach (during office hours)(805) 473-4520
 Grover Beach Police (after hours).....(805) 473-4511
Oceano CSD (24 hrs)(805) 481-6730
Pismo Beach (24 hrs)(805) 773-2208

Reporting Agencies:

Cal EMA(800) 852-7550
SLO County Health(805) 781-5544
SLO County OES(805) 781-5011
RWQCB Office.....(805) 549-3147
 Matt Keeling(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).....(805) 597-7100

Board Members: (Phone numbers in District Office; to be contacted by District Administrator or Plant Superintendent Only)

Tony Ferrara(AG)
Lori Angello(OCSD)
Bill Nicolls(GB)

Media: (to be contacted by District Administrator or Plant Superintendent Only)

Tribune.....(805) 781-7800
New Times(805) 546-8208
KSBY(805) 597-8400
KCOY(805) 928-4748

Testing Lab

Abalone Coast Bacteriology(805) 595-1080
 On-call.....(805) 235-2330 cell

PREPARE

Staff experienced a large scale SSO in December 2010. Do 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.

CIWQS SSO Categories

The District is registered with the SWRCB California Integrated Water Quality System (CIWQS) electronic sewage spill reporting system. The Plant Superintendent is the Legally Responsible Official (LRO), who certifies electronic spill reports submitted via CIWQS.

The Sanitary Sewer Overflow Report (SSOR) in CIWQS will be completed for all sewer spills resulting from back-ups and/or blockages in the District's trunk lines. The information recorded on the SSOR is entered by registered Data Submitters into CIWQS in accordance with the mandated reporting timelines and certified by the LRO. Copies of all SSO Reports are located in the District Wastewater Treatment Plant office.

Category 1 SSO:

Spills greater than 1,000 gallons – call Plant Superintendent. Within 2 hours call Cal EMA, SLO County OES, Environmental Health, and RWQCB. A written report must be submitted to RWQCB within 24 hours.

If a spill of any size flows into a body of surface water or drainage swale call CalEMA, SLO County OES, Environmental Health, and RWQCB, within 2 hours.

Category 2 SSO:

Spills less than 1,000 gallons and does not reach body of surface water or drainage swale – report to Plant Superintendent and notify RWQCB.

FORMS

Copies of all forms mentioned in this OERP are located in the District office and in the pocket at the back of this binder. The following forms are available for use in documenting and reporting SSOs.

Forms

- ☐ Incident Report Form
- ☐ Telephone Log
- ☐ Sanitary Sewer Overflow Report (SSOR) for CIWQS Category 1 and Category 2
- ☐ SSO Log Sheet

South San Luis Obispo County Sanitation District

Incident Report Form

Date: _____ Time: _____

Name: _____ Phone: _____

Address: _____

Location or address of sewer concern or complaint: _____

Nearest cross street: _____

Type of incident: ☐ Spill ☐ Blockage ☐ Odor

Spill appearance point: ☐ Pipeline ☐ Manhole ☐ Other _____

☐ Building / Structure ☐ Seeping from ground

☐ Sewer pump station

Private Lateral Incident

Name of responsible party: _____

Telephone of responsible party: _____

Where did the spill drain to?
(Check all that apply)

☐ Creek ☐ Drainage basin ☐ Storm drain ☐ Street/road and gutter

☐ Unpaved surface ☐ Surface water ☐ Other unpaved surface

☐ Other: _____

FOR OFFICE USE ONLY:

Report taken by: _____ Date: _____ Time: _____

California Integrated Water Quality System (CIWQS 100.0) - Build Number: mainTrunk.nm.dd.yyyy.1

Page 1 of

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

Matter addressed: _____

Messages Left:

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

Conversation Summary: _____

Follow-up Required: _____

Updated: 1/14/2011 By: Tammie Nichols, WG page 1 of 1

California Integrated Water Quality System (CIWQS 100.0) - Build Number: mainTrunk.nm.dd.yyyy.1

Page 1 of 1

CIWQS

Navigation to: _____ Menu Help Log out

You are logged-in as: SSO Demo. If this account does not belong to you, please log out.

SSO - General Information 7 | SSO Menu

SSO Event ID: New Regional Water Board: State Water Resources Control Board

Spill Location Name: Agency: Sanitary Sewer System: Demo North CS

General Info Spill Related Parties Attachments

Save Work in Progress Submit Draft Ready to Certify

Note: Questions with * are required to be answered to certify this report.

SSO Type: Category 1

Physical Location Details

*Spill location name: _____

*Latitude of spill location: _____ deg. _____ min. _____ sec. OR _____ decimal degrees

*Longitude of spill location: _____ deg. _____ min. _____ sec. OR _____ decimal degrees

Street number: _____ Street direction:

East
North
Northeast
Northwest
South
Southeast
Southwest
West

Street name: _____ Street type: _____ Suite/Apt: _____

http://10.1.1.179:8988/ciwqs/ssGeneralInformation.jsp?action=begin

4/12/200

CIWQS

Navigation to: _____ Menu Help Log out

You are logged-in as: SSO Demo. If this account does not belong to you, please log out.

SSO - General Information 7 | SSO Menu

SSO Event ID: New Regional Water Board: State Water Resources Control Board

Spill Location Name: Agency: Sanitary Sewer System: Demo North CS

General Info Spill Related Parties Attachments

Save Work in Progress Submit Draft Ready to Certify

Note: Questions with * are required to be answered to certify this report.

SSO Type: Category 2

Physical Location Details

*Spill location name: _____

*Latitude of spill location: _____ deg. _____ min. _____ sec. OR _____ decimal degrees

*Longitude of spill location: _____ deg. _____ min. _____ sec. OR _____ decimal degrees

Street number: _____ Street direction:

East
North
Northeast
Northwest
South
Southeast
Southwest
West

Street name: _____ Street type: _____ Suite/Apt: _____

http://10.1.1.179:8988/ciwqs/ssGeneralInformation.jsp?action=begin

4/12/200

Equipment List:

- ☐ **Field Manual**
- ☐ **Event Folder**
 - ◇ **SSORs (Category 1 and 2)**
 - ◇ **SSO Log Sheet**
 - ◇ **Telephone Log Sheet**
 - ◇ **Incident Report Form (filled out)**
- ☐ **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 (if needed)**
- ☐ **Atlas with manhole rim elevations**
- ☐ **Table of Manholes with latitude/longitude and which are locked, which have liners and which are pressure lids.**
- ☐ **Manhole pick and keys for locking manholes**
- ☐ **Technical data sheets for response equipment, pumps, generators, etc.**
- ☐ **Sand bags, absorbents, booms and other items to contain spill and protect storm drains.**

DETECT

The Chain of Communication for reporting SSOs begins with contact at the Plant office either by residents, 911 dispatchers or police and fire departments. There are times where police and fire personnel may contact the Plant Superintendent or his delegate directly. 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.

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:

- ☐ Obtain the 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 a *Telephone Log* and an *Incident Report Form*.

- ☒ TELEPHONE LOG
- ☒ INCIDENT REPORT FORM

NOTIFY

- ☐ **Contact the Plant Superintendent or designee who will dispatch a first responder to the scene. Plant Superintendent or designee will contact the appropriate Member Agency if necessary.**
- ☐ **Provide first responder with the filled out *Incident Report Form*.**
- ☐ **Upon arrival at the scene the first responder will assess the situation to determine if there is an actual overflow (SSO).**

ASSESS

- ☐ **Take photos of spill on arrival, during and after the spill noting: the location, if manhole has lifted, weather conditions, if pickholes are clean, flood elevation, presence of debris, flow of stormwater.**
- ☐ **Using the pictures and tables on the following pages assess the spill to determine the Category of SSO.**
 - ☒ **Category 1 - Spill has reached waterways or is over 1,000 gallons**
 - ☒ **Category 2 - Spill has NOT reached waterways and is less than 1,000 gallons.**
 - ☒ **PSLD - Spill is from a private sewer lateral. (not reportable)**
- ☐ **Once the assessment has been made, begin filling out the appropriate Sewer System Overflow Report (SSOR).**

Collection System Collaborative Benchmarking Group Best Practices for Sanitary Sewer Overflow (SSO) Prevention and Response Plan



City of San Diego
Metropolitan Wastewater Department

**Reference Sheet for Estimating Sewer Spills
from Overflowing Sewer Manholes**
All estimates are calculated in gallons per minute (gpm)

Wastewater Collection Division
(619) 654-4160



5 gpm



25 gpm



50 gpm



100 gpm



150 gpm



200 gpm



225 gpm



250 gpm



275 gpm

All photos were taken during a demonstration using metered water from a hydrant in cooperation with the City of San Diego's Water Department.

rev. 4/99

Flow Estimation Pictures

**Collection System Collaborative Benchmarking Group
Best Practices for Sanitary Sewer Overflow (SSO) Prevention and
Response Plan**

Attachment D - Sample Templates for SSO Volume Estimation

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

24" COVER				36" COVER			
Height of spout above M/H rim H in inches	S S O FLOW Q		Min. Sewer size in which these flows are possible	Height of spout above M/H rim H in inches	S S O FLOW Q		Min. Sewer size in which these flows are possible
	in gpm	in MGD			in gpm	in MGD	
1/4	1	0.001	6"	1/4	1	0.002	6"
1/2	3	0.004		1/2	4	0.006	
3/4	6	0.008		3/4	8	0.012	
1	9	0.013		1	13	0.019	
1 1/4	12	0.018		1 1/4	18	0.026	
1 1/2	16	0.024		1 1/2	24	0.035	
1 3/4	21	0.030		1 3/4	31	0.044	
2	25	0.037		2	37	0.054	
2 1/4	31	0.045		2 1/4	45	0.065	
2 1/2	38	0.054		2 1/2	55	0.079	
2 3/4	45	0.065		2 3/4	66	0.095	
3	54	0.077		3	78	0.113	
3 1/4	64	0.092		3 1/4	93	0.134	
3 1/2	75	0.107		3 1/2	109	0.157	
3 3/4	87	0.125		3 3/4	127	0.183	
4	100	0.145		4	147	0.211	
4 1/4	115	0.166		4 1/4	169	0.243	
4 1/2	131	0.189		4 1/2	192	0.276	
4 3/4	148	0.214		4 3/4	217	0.312	
5	166	0.240		5	243	0.350	
5 1/4	185	0.266		5 1/4	270	0.389	
5 1/2	204	0.294		5 1/2	299	0.430	
5 3/4	224	0.322		5 3/4	327	0.471	
6	244	0.352		6	357	0.514	
6 1/4	265	0.382		6 1/4	387	0.558	8"
6 1/2	286	0.412		6 1/2	419	0.603	
6 3/4	308	0.444		6 3/4	451	0.649	10"
7	331	0.476		7	483	0.696	
7 1/4	354	0.509	8"	7 1/4	517	0.744	10"
7 1/2	377	0.543		7 1/2	551	0.794	
7 3/4	401	0.578		7 3/4	587	0.845	
8	426	0.613		8	622	0.896	
8 1/4	451	0.649		8 1/4	659	0.949	
8 1/2	476	0.686		8 1/2	697	1.003	
8 3/4	502	0.723		8 3/4	734	1.057	
9	529	0.761		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.

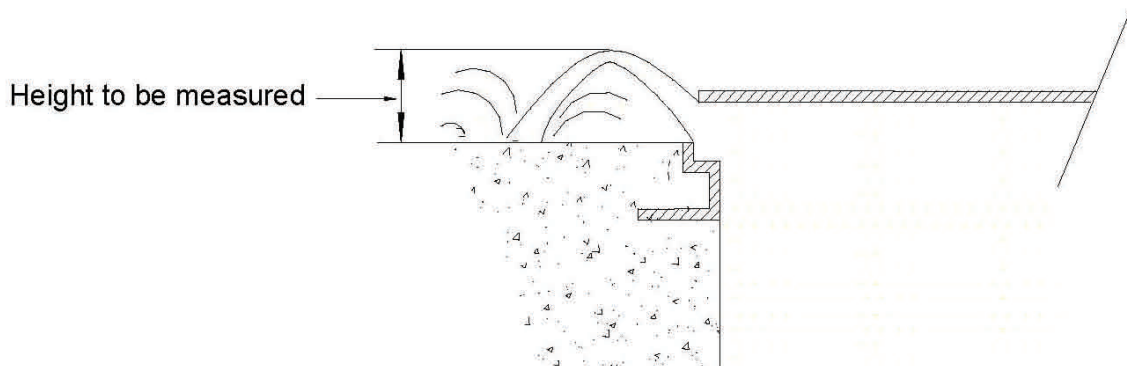
**Collection System Collaborative Benchmarking Group
Best Practices for Sanitary Sewer Overflow (SSO) Prevention and
Response Plan**

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.

**Collection System Collaborative Benchmarking Group
Best Practices for Sanitary Sewer Overflow (SSO) Prevention and
Response Plan**

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		Min. Sewer size in which these flows are possible
	in gpm	in MGD	
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		Min. Sewer size in which these flows are possible
	in gpm	in MGD	
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.

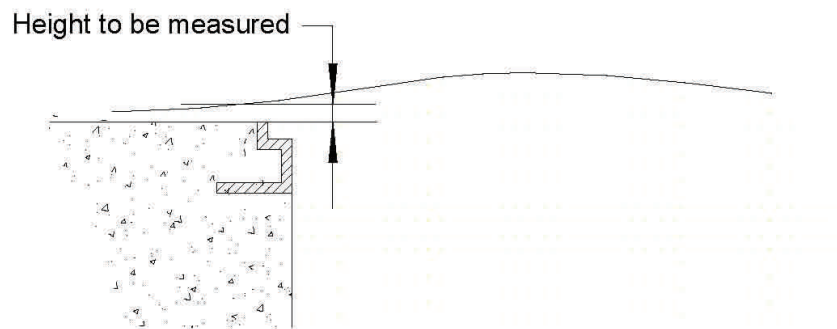
**Collection System Collaborative Benchmarking Group
Best Practices for Sanitary Sewer Overflow (SSO) Prevention and
Response Plan**

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.

**Collection System Collaborative Benchmarking Group
Best Practices for Sanitary Sewer Overflow (SSO) Prevention and
Response Plan**

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	
1 1/2	3.4	6 1/2	7.0	Unrestrained M/H cover will start to lift
1 5/8	3.5	6 5/8	7.0	
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.

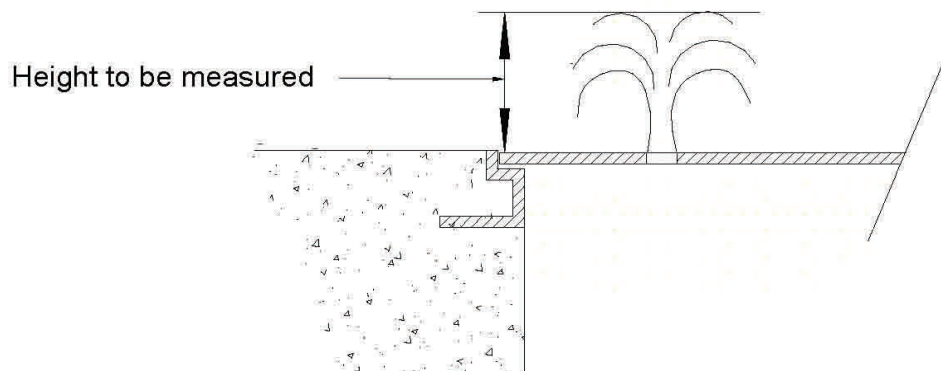
**Collection System Collaborative Benchmarking Group
Best Practices for Sanitary Sewer Overflow (SSO) Prevention and
Response Plan**

The formula used to develop Table C is $Q = C_cVA$, where Q is equal to the quantity of the flow in gallons per minute, C_c 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 $h = v^2 / 2G$, where h is equal to the height of the overflow, v is equal to velocity, and G is equal to the acceleration of gravity.

RESPOND

- ☐ Take photos of spill location on arrival, during and after the spill noting the location, if manhole has lifted, weather conditions, if pick-holes are clean, flood elevation, presence of debris, flow of stormwater.
- ☐ Document all phone calls on the Telephone Log sheets.
- ☐ Log contacts to reporting agencies including who, when and conversation
- ☐ Defer all Media requests to the Plant Superintendent and/or District Administrator
- ☐ The District Administrator or Plant Superintendent will contact the Board members within 2 hours.
- ☐ Notify affected Member Agency Public Works Department
- ☐ Determine if manholes are spilling in the collection system.
- ☐ Determine flow rates. Use charts and pictures on the previous pages.
- ☐ Cordon off spill and place public notifications with delineators
- ☐ Designate a person to log the event every 15 minutes as well as significant events. Use the SSO Log Sheet.
- ☐ Clean and disinfect as soon as the spill is stopped. Contact cleanup contractor listed on Page 3 if needed.

CONTAIN

- ☐ **Contain the SSO using suitable materials to block catch basin entrances to storm drains.**
- ☐ **Contact Arroyo Grande or a contractor (see list, page 3) for use of a Vactor Truck if necessary.**
- ☐ **A storm drain may be used as a containment device if needed. Block the outlet to the storm drain and then vacuum the spill and wash-down water from the line.**
- ☐ **For SSOs at the WWTP a tractor may be used to divert and/or contain to prevent migration to off-site. Use truck and trailer to import dirt if necessary.**
- ☐ **Once contained begin temporary or permanent repair to the sewage system as needed.**

CLEAN-UP

- ☐ **Clean-up of small spills may be accomplished with absorbents and buckets.**
- ☐ **Larger spills may require use of a vactor truck or other equipment (see Page 3 for contractors).**
- ☐ **For spills greater than 500 gallons pump liquid to headworks or primary clarifier at the WWTP.**
- ☐ **If pumping through WWTP is not advisable, use 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 chance of public contact.**
- ☐ **Once area has been secured and lime has been in place for a minimum of 1 hour, proceed with final clean-up of dirt, etc.**
- ☐ **Treat each incident separately for disinfection.**
- ☐ **Equipment used must be disinfected.**
- ☐ **Enlist the assistance of other public agencies or contractors if necessary.**
- ☐ **Document all procedures used.**

FOLLOW-UP

Follow-up Checklist

- ☐ **The following should be placed in the SSO EVENT FILE FOLDER that was started when the event was first reported. All data and documentation must be kept to aid in the follow-up process:**
 - ◇ **During or immediately after the spill contact all affected members of the public to offer assistance or other support. (document conversations on Telephone Log)**
 - ◇ **Interview staff, contractors and other responders within 2 days with interview sheet (in pocket in back of binder)**
 - ◇ **Interview eyewitnesses and residents in spill area within 2 days with interview sheet (in pocket in back of binder)**
 - ◇ **If SSO is due to power failure, Obtain power demand information from Plant Data-logger**
 - ◇ **Obtain Copies of circle charts from influent meter**
 - ◇ **Obtain Rainfall data if rain occurred during the event or contributed to the event.**
 - ◇ **If SSO is due to equipment failure, obtain equipment repair data (teardown sheets, etc.)**
 - ◇ **Effluent and other test results including when samples were taken.**
 - ◇ **Beach water test results if required.**
 - ◇ **Copy of alarm summary from alarm company.**
 - ◇ **Copies of plant logs**

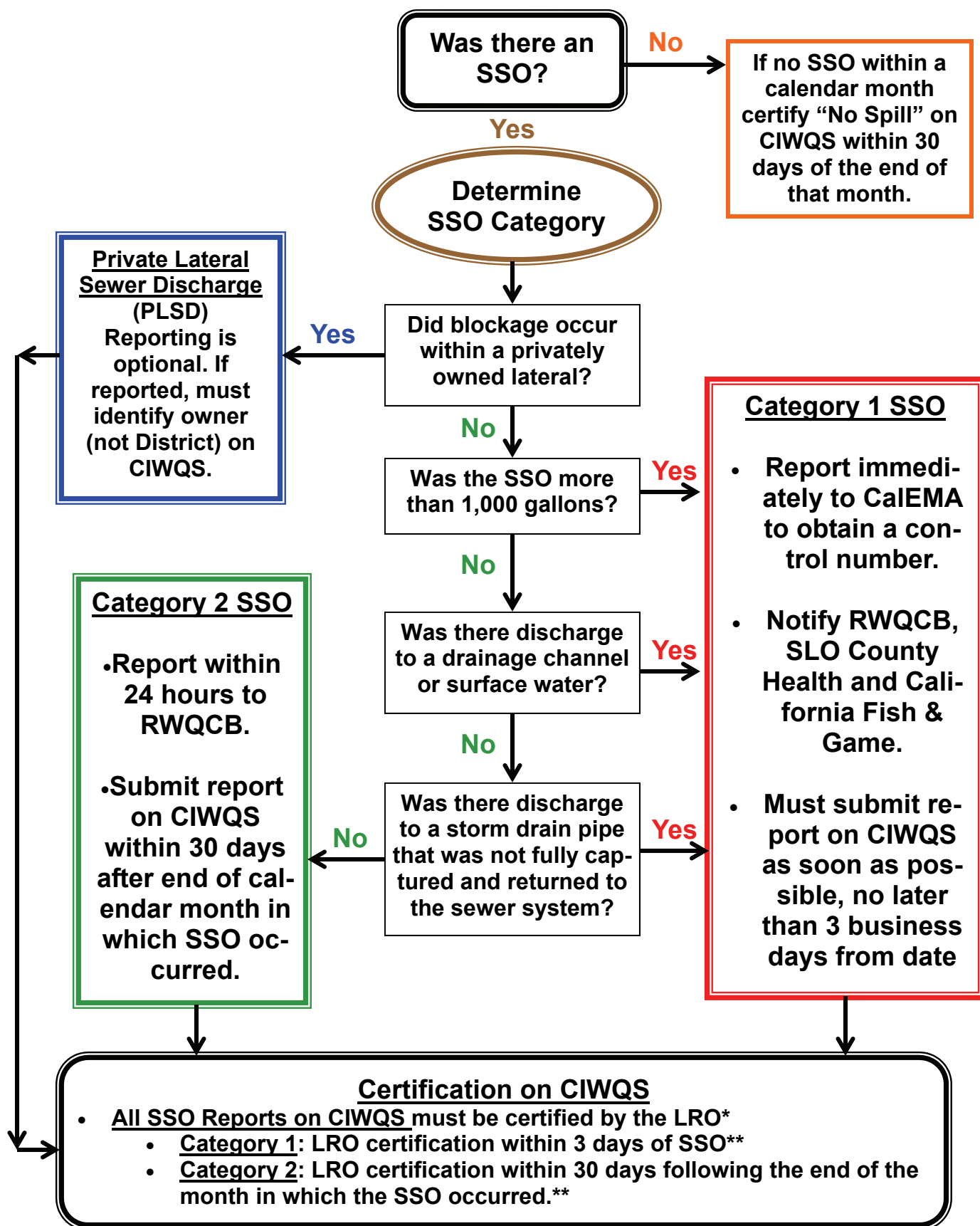
(Continued on page 19)

(Continued from page 18)

- ☐ Using the file information prepare a 24 hour written report for the RWQCB. RWQCB staff may additionally require a five (5) day written response. Staff will notify the District of this requirement after the 24 hour written report.
- ☐ Public notification may include temporary signage to indicate pollution of surface water or ground water and/or notification through media outlets. The District Administrator and/or Plant Superintendent will be the contact person for media notification.
- ☐ For mitigation purposes, the San Luis Obispo Environmental Health (SLO EH) Department can provide SSLOCSD assistance in post-SSO 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.
- ☐ Calculate quantity of spill using the SSO Calculation Spreadsheet.
- ☐ Report on CIWQS as required based on spill category.

REPORT

- ☐ Once the SSO has been contained and clean-up has begun, finish filling out the appropriate (Category 1 or 2) CIWQS Sewer System Overflow Report (SSOR).
- ☐ The Plant Superintendent or designee will notify the District Engineer, District Administrator, Board of Directors or other staff as necessary.
- ☐ The Plant Superintendent, designee or first responder will notify all appropriate regulatory agencies as required by the category of spill.
 - ☐ Category 1 - CalEMA, RWQCB and SLO County Health Department immediately upon verification of SSO
 - ☐ Category 2 - RWQCB within 24 hours
- ☐ Upon mitigation, containment and clean-up of the spill the Plant Superintendent or first responder will use the SSOR to complete the spill report to CIWQS.
- ☐ The LRO will certify the CIWQS spill report within 3 days of a Category 1 spill and within 30 days of the end of the month in which a Category 2 spill occurred.



* Reports on CIWQS may be amended at any time, however, any amended reports must be certified by the LRO.

** If the CIWQS website is not available, fax the report to RWQCB and reattempt as soon as possible.

MODIFY

After clean-up and reporting are completed meet with staff that was involved and any outside agencies and/or contractors that provided assistance.

- ☐ **Determine the cause of the SSO and discuss ways in which it could be prevented in the future (preventative maintenance, improved training, etc.).**
- ☐ **Discuss the Overflow Emergency Response Plan and whether it needs revision to make it more efficient and relevant.**
- ☐ **Discuss the training that is done and whether it is sufficient.**
- ☐ **Make any revisions necessary and notify all staff and interested parties of the changes that were made.**
- ☐ **Conduct training on the revised plan if necessary.**



California Integrated Water Quality System Project (CIWQS)

FACILITY AT-A GLANCE REPORT

Here is your Customized Facility at-a Glance Report!

[VIEW PRINTER FRIENDLY VERSION](#) [EXPORT THIS REPORT TO EXCEL](#)

SEARCH CRITERIA: [\[REFINE SEARCH\]](#)

Display Type City (Oceano), County (San Luis Obispo)

DRILLDOWN HISTORY: [\[GO BACK TO FACILITIES AT A GLANCE LIST\]](#)

PLACE ID: 631801

General Information							 	
Region	Place ID	Place Name	Place Type	Place Address		Place County		
3	631801	South San Luis Obispo Sd CS	Collection_System	P.O. Box 339 Oceano, CA, 93445		San Luis Obispo		



Related Parties						
Party	Party Type	Party Name	Role	Classification	Relationship Start Date	Relationship End Date
504773	Person	Heather Billing	Is A Data Submitter For		04/15/2009	
504783	Person	Doug Groshart	Is A Data Submitter For		04/15/2009	
385266	Person	Joy Castaing	Is A Data Submitter For		10/09/2007	10/18/2010
303814	Person	Jeff Appleton	Is Onsite Manager For		09/14/2007	04/01/2011
347463	Person	Aaron Allen	Is A Data Submitter For		07/10/2007	
375607	Person	Melissa Mudgett (South San Luis Obispo)	Is A Data Submitter For		07/10/2007	10/18/2010
386576	Person	Nick Kamp1	Is A Data Submitter For		07/02/2007	03/25/2011
386578	Person	Richard Almendarez1	Is A Data Submitter For		07/02/2007	04/01/2011
375681	Person	Scott Mascolo	Is A Data Submitter For		04/26/2007	10/18/2010
69735	Person	John Wallace	Is Onsite Manager For		12/22/2006	
300145	Person	Jeff Appleton	Is Onsite Manager For		04/06/2006	04/01/2011

41595	Organization	SOUTH SAN LUIS OBISPO CO SD	Owner	Special District	04/06/2006
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Total Related Parties:12



Regulatory Measures

Reg Measure ID	Reg Measure Type	Region	Program	Order No.	WDID	Effective Date	Expiration Date	Status
300006	Enrollee	3	NON15	2006-0003-DWQ	3SSO10337	11/28/2006		Active

Total Reg Measures:1



Violations

Violation ID	Occurred Date	Violation Type	(+/-) Violation Description	Status	Classification	Source
887828	12/19/2010	SSOS	Other (specify below);Major storm event and inflow and infiltration caused colle	Violation	1	SSO
887829	12/19/2010	SSOS	Other (specify below);Major storm event and inflow and infiltration caused colle	Violation	1	SSO
887826	12/19/2010	SSOS	Other (specify below);Major storm event and inflow and infiltration caused colle	Violation	1	SSO
887815	12/19/2010	SSOS	Other (specify below);Major storm event and inflow and infiltration caused colle	Violation	1	SSO
887824	12/19/2010	SSOS	Other (specify below);Major storm event and inflow and infiltration caused colle	Violation	1	SSO
887820	12/19/2010	SSOS	Other (specify below);Major storm event and inflow and infiltration caused colle	Violation	1	SSO
887813	12/19/2010	SSOS	Other (specify below);Major storm event and inflow and infiltration caused colle	Violation	1	SSO
887822	12/19/2010	SSOS	Other (specify below);Major storm event and inflow and infiltration caused colle	Violation	1	SSO

Report displays most recent five years of violations. Refer to the [Interactive Violation Report](#) for more data.

Total Violations: 8

Priority Violations: 0

*Click the "(+/-) Violation Description" link to expand and contract the violation description.

*As of 5/20/2010, the Water Board's Enforcement Policy requires that all violations be classified as 1, 2 or 3, with class 1 being the highest. Prior to this, violations were simply classified as Yes or No. If a 123 classification has been assigned to a violation that occurred before this date, that classification data will be displayed instead of the Yes/No data.

Violation Types

SSOS = Sanitary Sewer Overflow/Spill/



Enforcement Actions

Enf Id	Enf Type	Enf Order No.	Effective Date	Status
Total Enf Actions:0				



Inspections

Inspection ID	Inspection Type	Lead Inspector	Actual End Date	Planned	Violations
Total Inspections:0			Last Inspection:None		

The current report was generated with data as of: Monday, May 23, 2011

Regional Boards are in the process of entering backlogged data.

As a result, data may be incomplete.

Reports are constructed from all entered data as of the close of business the previous day.

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[Cal/EPA](#) | [ARB](#) | [DPR](#) | [DTSC](#) | [OEHHA](#) | [SWRCB](#)



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.



User ID:
Change Password
My Name:
Prefix:
First Name:

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

New Password: *	
Confirm New Password: *	
Save	Cancel

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.

My Address:	
Street Number:	
Street Name:	
Apt.:	
City:	
State:	California
Zip Code:	
My Phone Number:	
My Fax Number:	
My Email Address:	

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.

A screenshot of the CIWQS Main Menu. The title "Main Menu" is at the top left. Below it, there is a list of four links: "Run Reports", "View/Change My Personal Information", "Administer System", and "SSO". Each link is preceded by a small square bullet point.

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.

A screenshot of the "SSO - Sanitary Sewer Systems" form. The title "SSO - Sanitary Sewer Systems" is at the top. Below the title, there is a label "Select a sanitary sewer system:" followed by a dropdown menu. At the bottom of the form, there is a "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?

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?

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?

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.

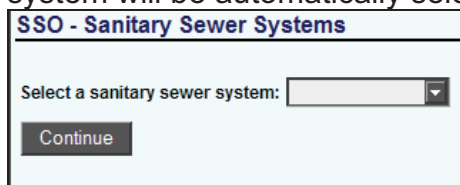
Note: In the SSO report screens only the fields with asterisks must be filled out before the report can be readied for certification or certified. This document goes over every field in the order they appear. Fewer fields must be completed to save a work in progress and to submit a draft. These mandatory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



- [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.

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.
- 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.
 - If you answer no to both questions and the spill amount is under 1000 the event is considered a Category 2 spill.

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

Determine Spill Type: ?

* 1. Estimated spill volume? gallons

* 2. Did the spill discharge to a drainage channel and/or surface water?

* 3. Did the spill discharge to a storm drainpipe that was not fully captured and returned to the sanitary sewer system?

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.

* 4. Private Lateral Spill? No

5. Name of responsible party (for private lateral spill only, if known):

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.

Physical Location Details

* Spill location name:



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”.

* Latitude of spill location:		deg.		min.		sec. OR		decimal degrees
* Longitude of spill location:		deg.		min.		sec. OR		decimal degrees

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

Street number:		Street direction:	
Street name:		Street type:	
Cross street:			

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”.

City:		State:	CA	Zip:	
* County:					

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.

Spill location description:	
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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”.

* Regional Water Quality Control Board:	
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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”.



Spill Details	
* Spill appearance point:	
Spill appearance point explanation: (Required if spill appearance point is "Other")	

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.

* Did the spill discharge to a drainage channel and/or surface water?	No
* Did the spill discharge to a storm drainpipe that was not fully captured and returned to the sanitary sewer system?	No
* Private lateral spill?	No
Name of responsible party (for private lateral spill only, if known):	

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.

* Final spill destination: (Hold Ctrl key to Select Multiple answers from the list)	Beach Building or structure Other paved surface
Explanation of final spill destination: (Required if final spill destination is "Other")	

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.

* Estimated spill volume:	1000 gallons
---------------------------	---

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.

* Estimated volume of spill recovered:	gallons
--	------------------------------



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.

* Estimated volume of spill that reached surface water, drainage channel, or not recovered from a storm drain:		gallons
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21. If the spill is still occurring enter the current spill rate.

Estimated current spill rate (if applicable):		gallons per minute
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22. The next four fields require you to enter date and time information:

- Enter the "Estimated Spill Start Date/Time"
- Enter the Date/Time your agency discovered or was notified of the spill.
- Enter the "Estimated Operator Arrival Date/Time"
- 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".

Estimated spill start date/time:	11/08/2006	10	:	00	Date Format: MM/DD/YY
* Date and time sanitary sewer system agency was notified of or discovered spill:		12	:	00	Date Format: MM/DD/YY
* Estimated Operator arrival date/time:		12	:	00	Date Format: MM/DD/YY
* Estimated spill end date/time:		12	:	00	Date Format: MM/DD/YY

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".

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

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

If spill caused by wet weather, choose size of storm:	
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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:						Date Format: MM/DD/YY
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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?	
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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):	
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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.

* Name of impacted surface water(s) (enter NA if not applicable):	
--	----------------------

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.

* Is there an ongoing investigation?	☐
---	--------------------------

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.

* Water quality samples analyzed for: (Hold Ctrl key to Select Multiple answers from the list)	Dissolved oxygen Other chemical indicator(s) - specify below Biological indicator(s) - specify below
Explanation of water quality samples analyzed for: (Required if water quality samples analyzed for is "Other chemical indicator(s)", "Biological indicator(s)", or "Other")	

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.

* Water quality sample results reported To: (Hold Ctrl key to Select Multiple answers)	County Health Agency Regional Water Quality Control Board None of the above
Explanation of water quality sample results reported to: (Required if water quality sample results reported to is "Other")	

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.



* Spill corrective action taken: (Hold Ctrl key to Select Multiple answers from the list)	Added sewer to preventive maintenance program Adjusted schedule/method of preventive maintenance Enforcement action against FOG source
Explanation of spill corrective action taken: (Required if spill corrective action is "Other")	

36. Enter an overall description of the spill.

Overall Spill Description:	
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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.

Notification Details	
OES Control Number (Required for Category 1 spill report if estimated spill volume $\geq$ 1000 Gals):	
OES Called Date/Time (Required for Category 1 spill report if estimated spill volume $\geq$ 1000 Gals):	12 : 00 Date Format: MM/DD/YY

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.

* County health agency notified:	No
County health agency notified date/time: (required if County health agency notified is "Yes")	12 : 00 Date Format: MM/DD/YY

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.

Regional Water Quality Control Board notified date/time:	12 : 00 Date Format: MM/DD/YY
---	---

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

Other Agency Notified:	
-------------------------------	--



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.

Was any of this spill report information submitted via fax to the Regional Water Quality Control Board?	No
Date and time spill report information was submitted via fax to the Regional Water quality Control Board: (required if spill report information submitted via fax to Regional Water Board is "Yes")	12 : 00 Date Format: MM/DD/YY

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

General Info	Spill Related Parties	Attachments
Save Work in Progress	Submit Draft	Ready to Certify
Note: Questions with "*" are required to be answered.		

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.

General Info	Spill Related Parties	Attachments
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44. Enter the names of any individual or representatives in the "Party Name" field.

General Info	Spill Related Part
Party Name	

45. Enter the organization name in the "Organization" field.

General Info	Spill Related Part
Organization	

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



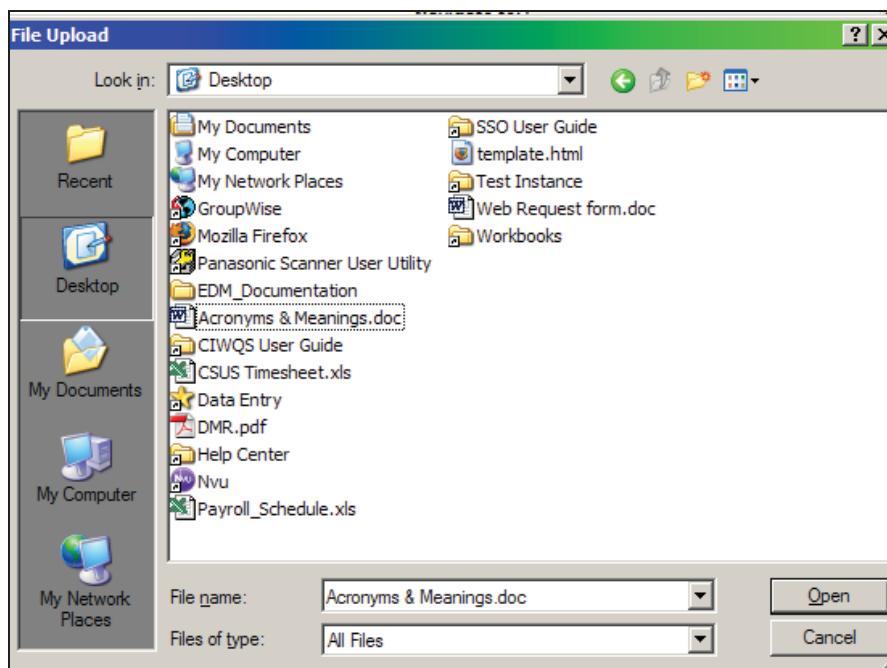
47. Enter a description of how the party is related to the spill in the “Description” field.

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.

File Description	
	Upload File

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.

Report new SSO.	
▪ Modifying Existing SSO ?	
View/Modify existing SSO Report.	

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.

Report new SSO.
■ [Modify Existing SSO](#) ?
View/Modify existing SSO Report.

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.

SSO - Search ?

Enter any search criteria and click "Search".

Location Name:

Physical Address:

City: Zip: County:

Regional Water Board:

Latitude: deg. min. sec. OR decimal degrees

Longitude: deg. min. sec. OR decimal degrees

Spill Start Date Range: to (Date Format: MM/DD/YYYY)

SSO Certification Step:

3. Your 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.

General Info

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



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 penalties 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:*
Certifier Title:*

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.

Executed On:*	08/15/2006
Executed At:*	

11. Once all four fields 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.

Incident Report Form

South San Luis Obispo County Sanitation District
Incident Report Form



Date: _____ Time: _____

Name: _____ Phone: _____

Address: _____

Location or address of sewer concern or complaint: _____

Nearest cross street: _____

Type of Incident: ☐ Spill ☐ Blockage ☐ Odor

Spill appearance point: ☐ Pipeline ☐ Manhole ☐ Other _____

☐ Building / Structure ☐ Seeping from ground

☐ Sewer pump station

Private Lateral Incident

Name of responsible party: _____

Telephone of responsible party: _____

Where did the spill drain to?

(Check all that apply)

☐ Creek ☐ Drainage basin ☐ Storm drain ☐ Street/curb and gutter

☐ Unpaved surface ☐ Surface water ☐ Other unpaved surface

☐ Other: _____

FOR OFFICE USE ONLY:

Report taken by: _____ Date: _____ Time: _____

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: _____



South San Luis Obispo County Sanitation District
2011 District Staff Training Record
NPDES Program (O&M Manual, etc.) and SSMP Program

	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
District Staff											
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							

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. <i>[40 CFR §403.17(a)]</i>
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 WASTEWATER 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 waste haulers 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 Ordinance 1994-1, Article V, Sections 27 Civil Remedies, 28 Criminal Penalties & 29 Termination of Service.

APPENDIX A

SSLOCSD Survey

SSLOCSD Permit Application

Appendix F

Trunk Sewer System Capacity Study 2006

South San Luis Obispo County Sanitation District

Trunk Sewer System Capacity Study

Final Draft Report

May 12, 2006

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SSLOCSD Trunk Sewer System Capacity Study

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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.

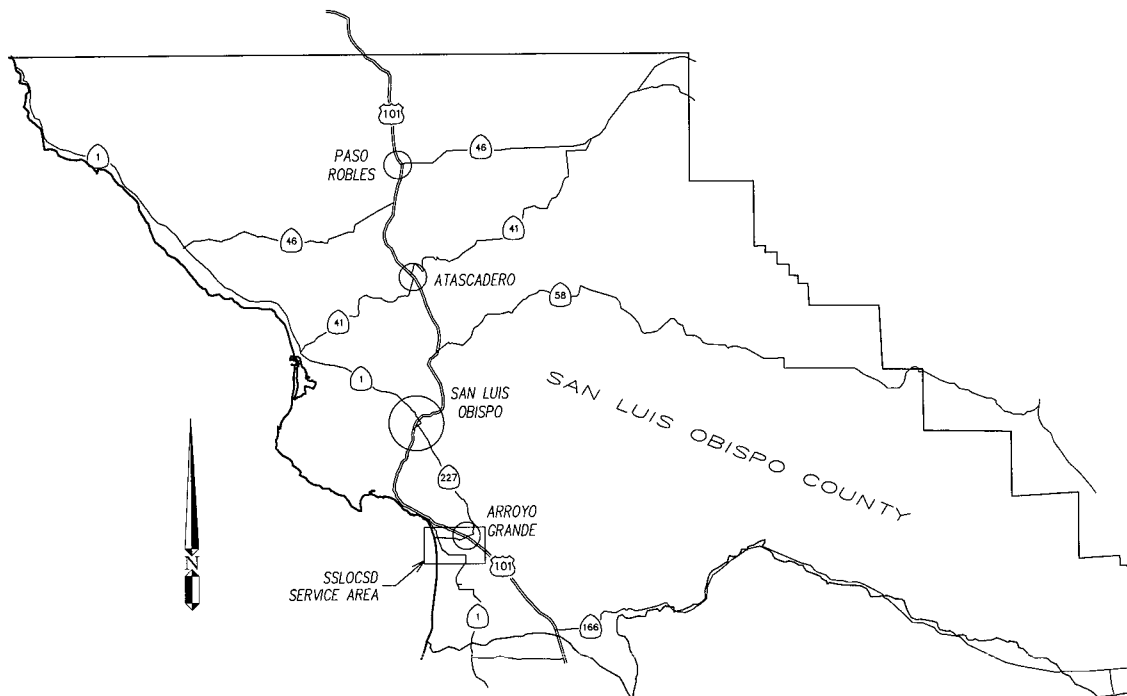


Figure 2-1 Vicinity Map

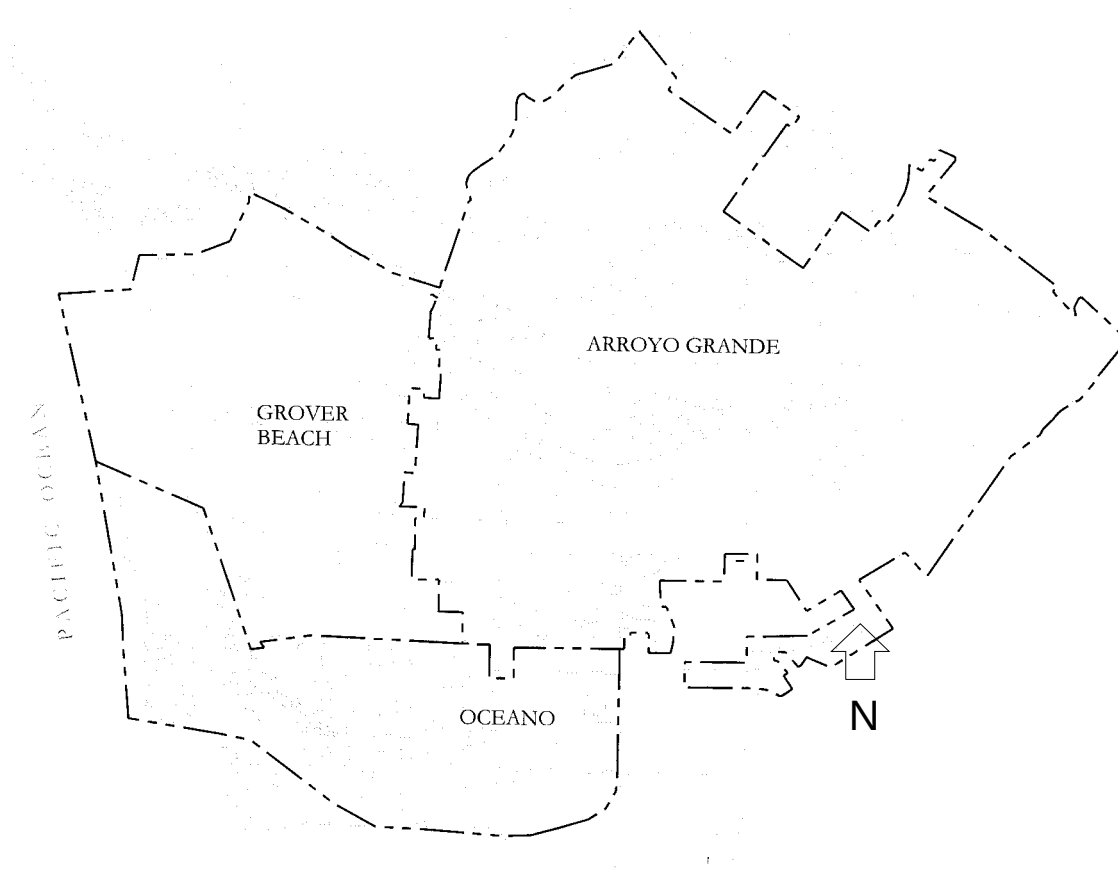


Figure 2-2 SSLOCSD Service Area Boundaries

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 capacity¹ (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 16,115² 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 Use¹			
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	36,802³	N/A	2.88²

- 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.		

¹According 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 Ratios¹ graph for d/D vs. Q/Q_{full} . 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 staff² 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).

¹From Civil Engineering Reference Manual 7th Edition Appendix 19.C

²Jeff 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 SSLOCSO Trunk Sewer Study can be applied to this study.

Table 6-1 – Developments at West Arroyo Grande¹

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 Flows¹

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 confirmed¹ 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.

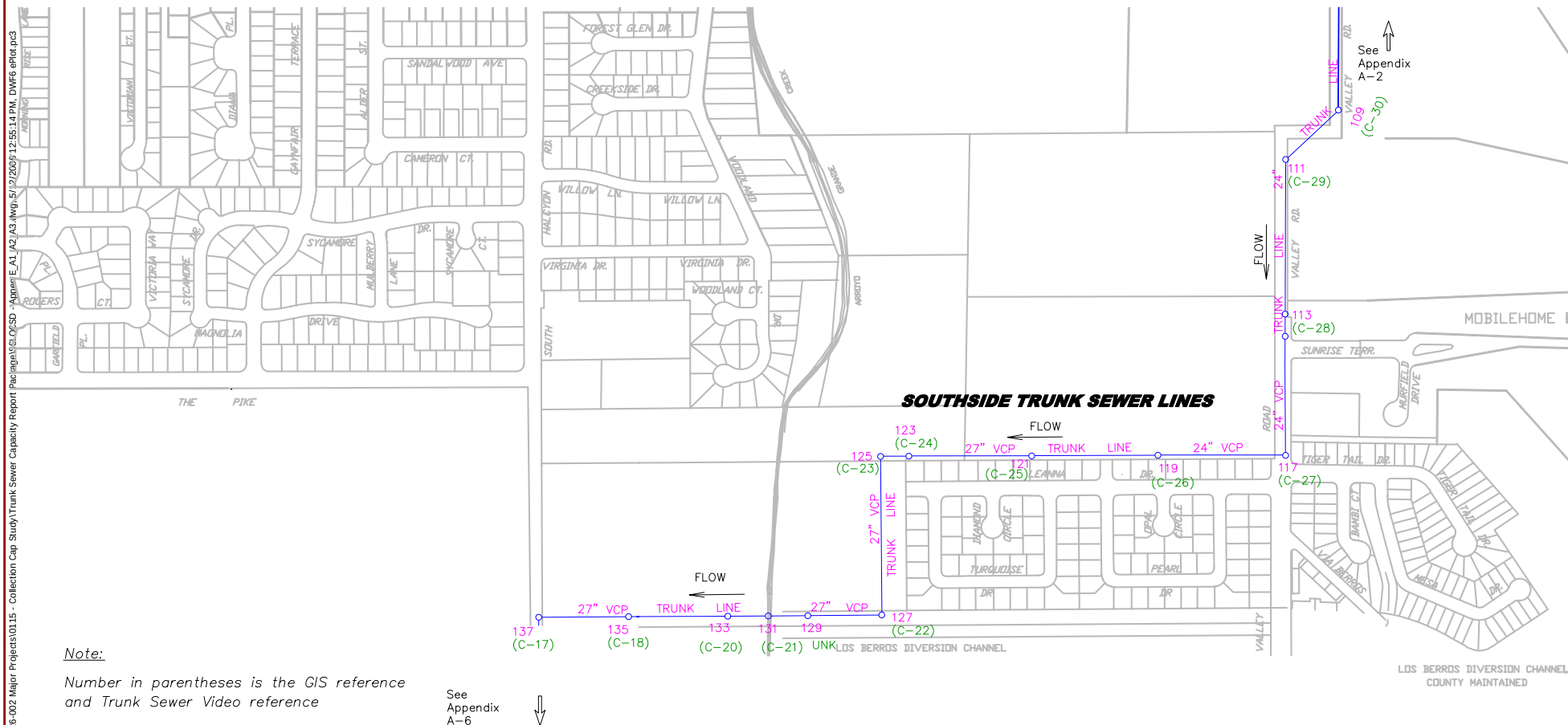
This chapter concludes that construction of a by-pass sewer alignment (along South Elm Street and The Pike) is feasible – although costly. Utility coordination and traffic control are issues that can be addressed in more detail during design phase. The estimated total costs (see Table 6-5) for this gravity 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

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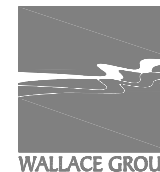
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District Trunk Sewer Pipe and Manhole Map

Arroyo Grande East - Southside Trunk Sewer Line



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District Trunk Sewer Pipe and Manhole Map
Arroyo Grande East - Southside and Cherry Ave
Trunk Lines

Note:
Number in parentheses is the GIS reference
and Trunk Sewer Video reference



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Note:

Number in parentheses is the GIS reference
and Trunk Sewer Video reference

See
Appendix
A-6



SSLOCS0- Appendix A-3

District Trunk Sewer Pipe and Manhole Map
Arroyo Grande West - Sewer Farm Trunk Line



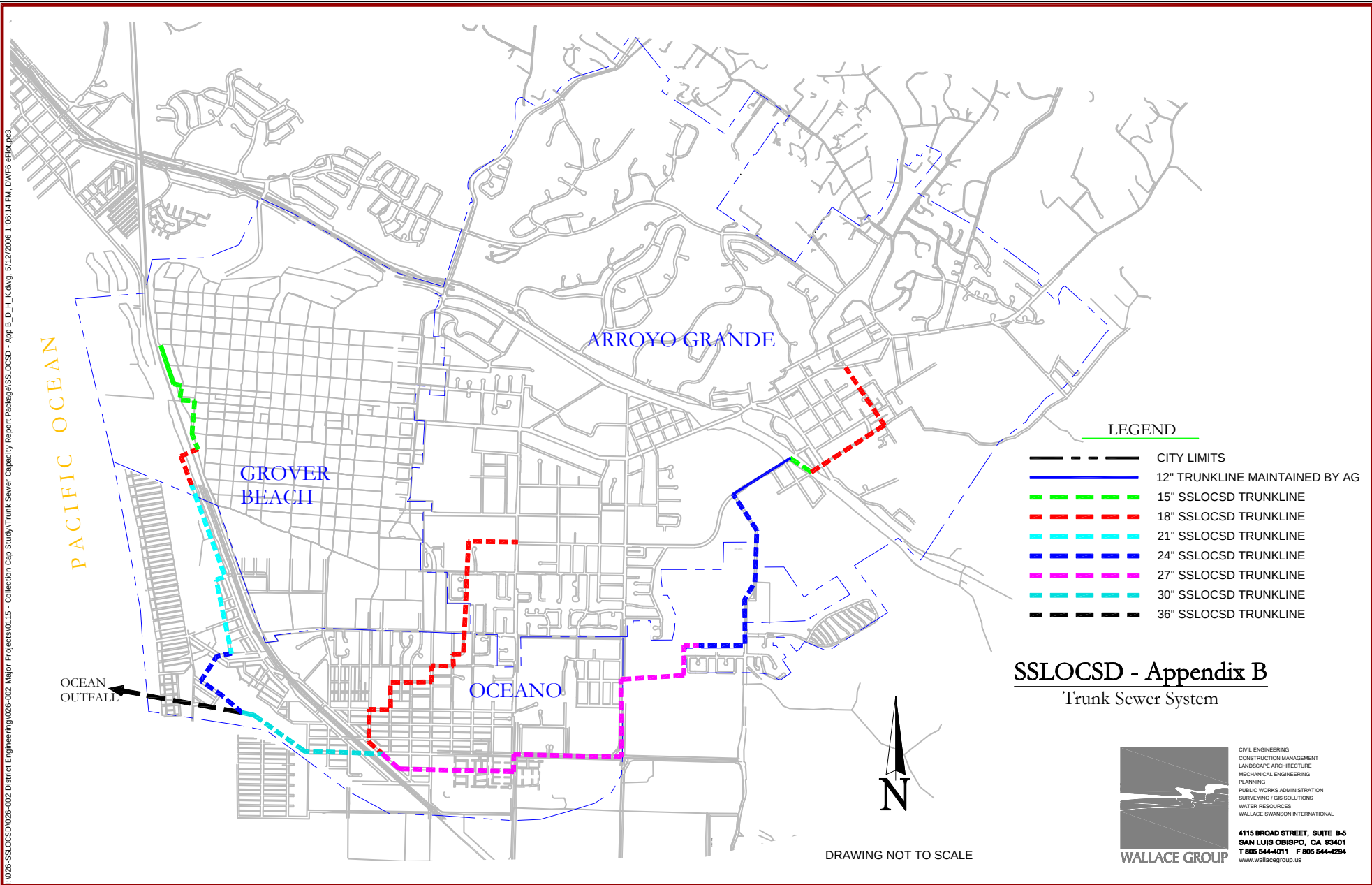
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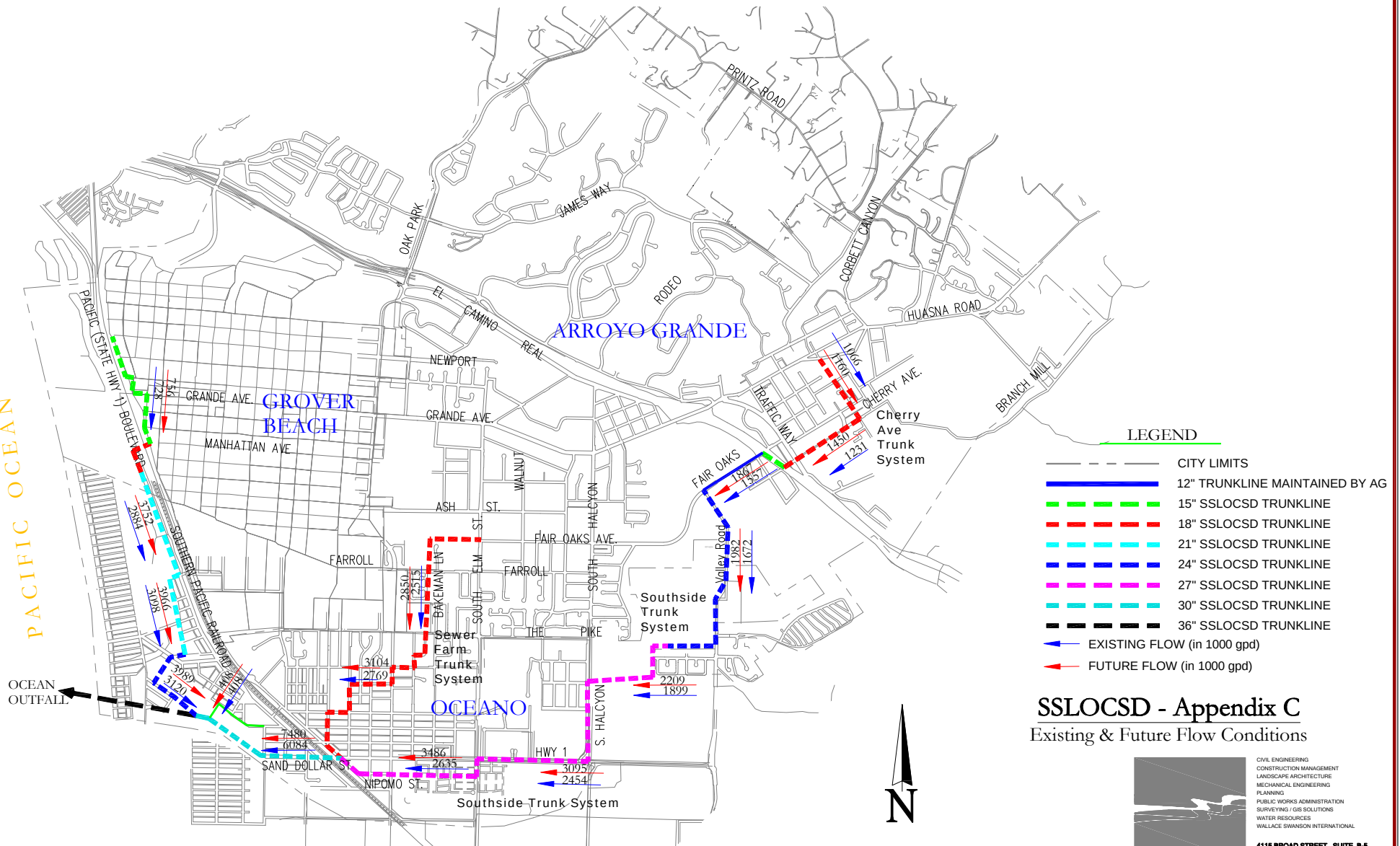
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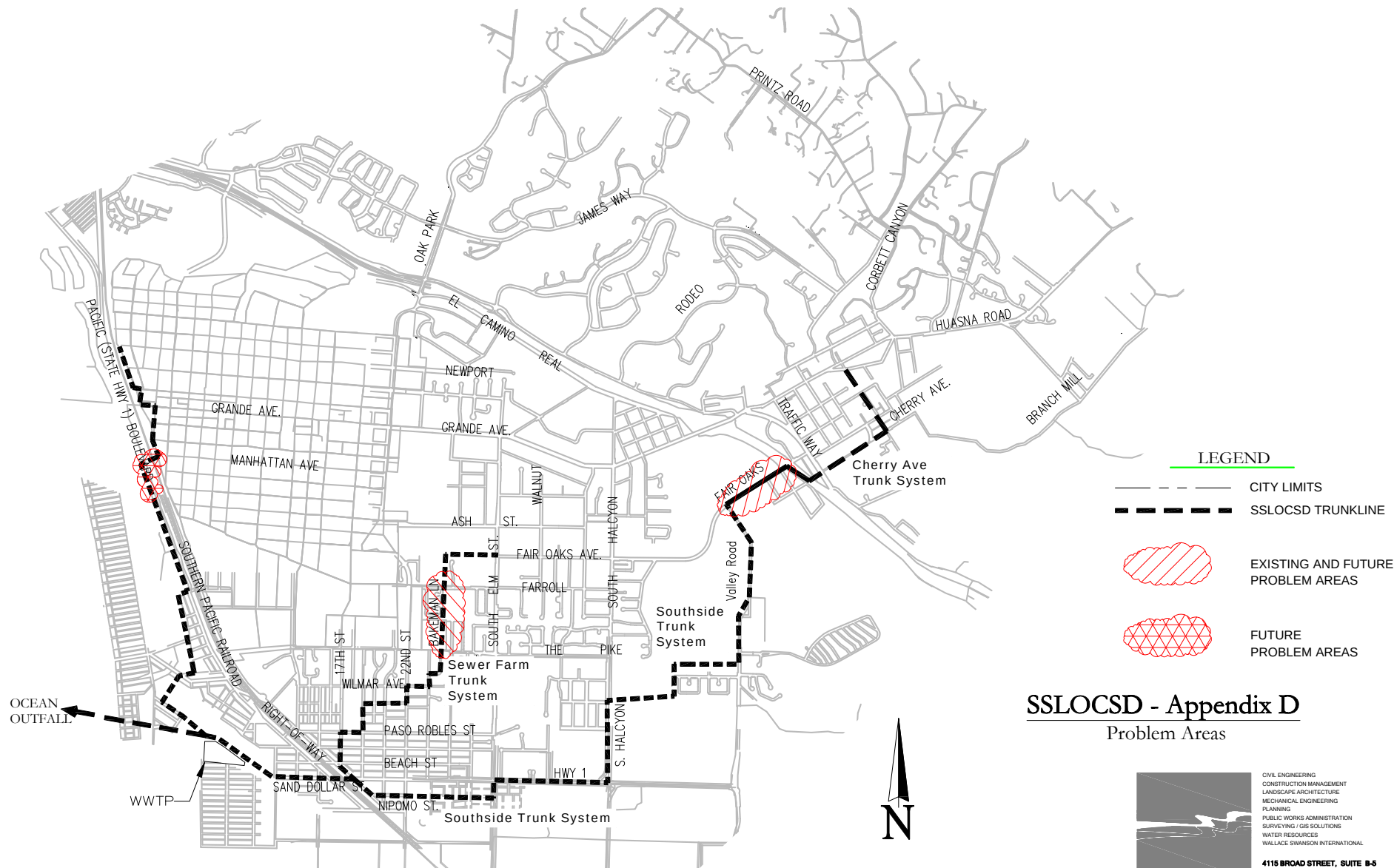
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PACIFIC OCEAN



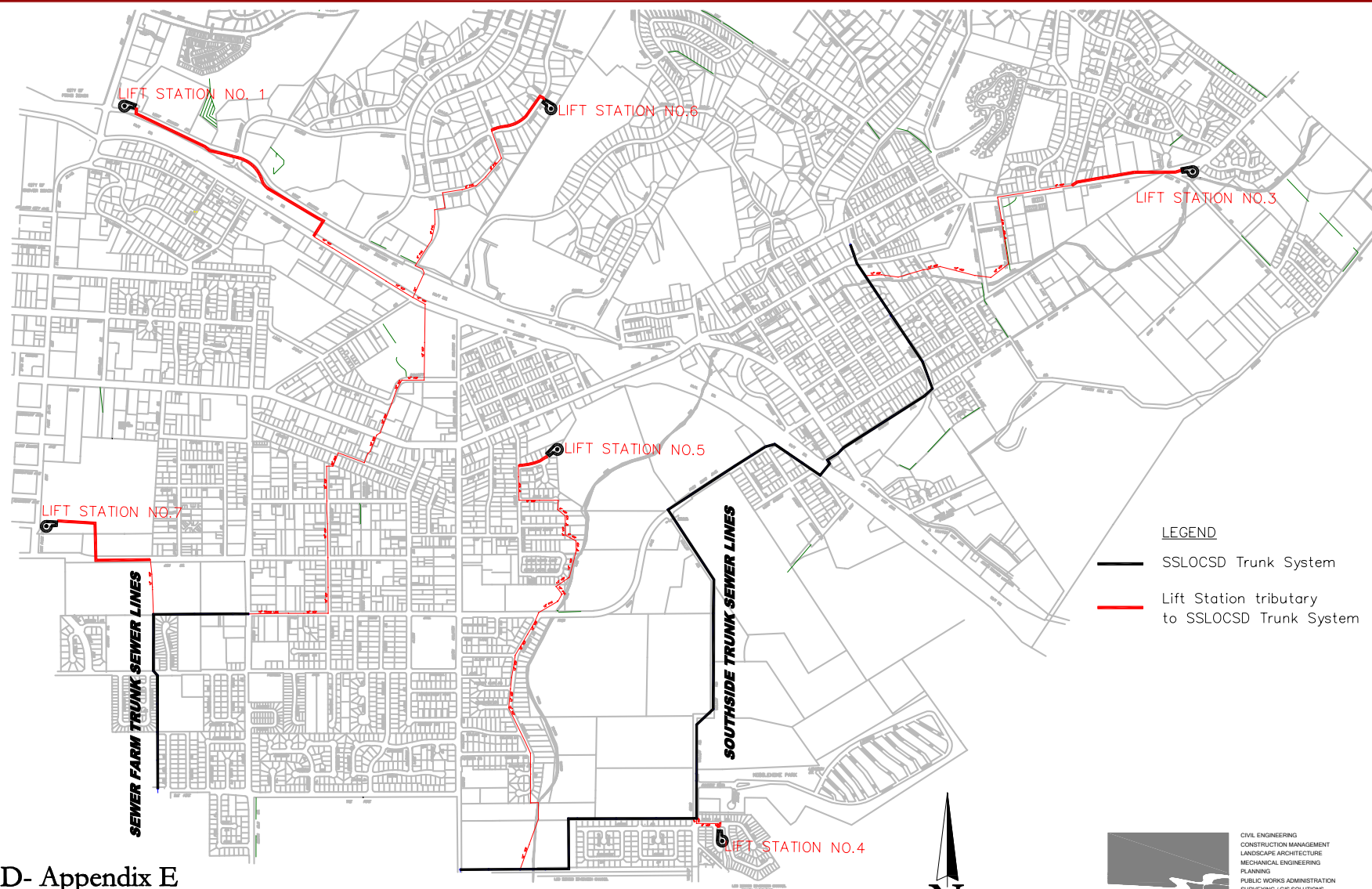
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SSLOCSD- Appendix E

Location of Lift Stations
Arroyo Grande



SSLOCS
Trunk System Data

Line #	Location	Description	From		To		A	B	C	D	E		F	G		H		I	J	K	L	M	N	O	P	Q	R
			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			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	Q1-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	Q1-A		Q1-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		Q1-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	3.019	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	2.488	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									

SSLOCS
Trunk System Data

Line #	Location	Description	From		To		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R			
			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%)	Q _{full}	Velocity (ft/s)	Q _{avg} /Q _{full}	Q _{peak} /Q _{full}	d/D avg	d avg flow (in)	d/D peak flow (in)	d peak flow (in)	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	2.285	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				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	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	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	

SSLOCSD
Trunk System Data

			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 (ft²)	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

Appendix F - Table 1
Existing Conditions

SSLOCS
Trunk System Data

		From		To		A	B	C	D	E		F	G	H	I	J	K	L	M	N	O	P	Q	R
		Road	Manhole	Road	Manhole	Distance (ft)	Diameter (ft)	Area (ft²)	Slope (ft/ft)	Avg. Flow (gpd)	Avg Flow (gpm)	Avg. Flow (cfs)	Peak Flow (gpd)	Peak Flow (cfs)	Qfull	Velocity (ft/s)	Qavg/Qfull	Qpeak/Qfull	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)
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)

SSLOCS
Trunk System Data

Location	Description	From		To		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	
		Road	Manhole	Road	Manhole	Distance (ft)	Diameter (ft)	Area (ft ²)	Slope (ft/ft)	Avg. Flow (gpd)	Avg. Flow (gpm)	Avg. Flow (cfs)	Peak Flow (gpd)	Peak Flow (cfs)	Q _{full}	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 (ft/s)	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)

SSLOCSD
Trunk System Data

Location	Description	From		To		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	
		Road	Manhole	Road	Manhole	Distance (ft)	Diameter (ft)	Area (ft ²)	Slope (ft/ft)	Avg. Flow (gpd)	Avg Flow (gpm)	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/D _{peak flow}	d _{avg flow} (in)	d _{peak flow} (in)	Velocity Avg Flow (ft/s)	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

Appendix F - Table 2
Existing Conditions
(Gravity only)

SSLOCS
Trunk System Data

			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 (gpd) (outside of AGWMP)	Avg. Flow (gpm)	Avg. Flow (cfs)	Peak Flow (gpd)	Peak Flow (gpm)	Peak Flow (cfs)	Max Capacity (50%)	Qfull	Velocity (ft/s)	Qavg/Qfull	Qpeak/Qfull	d/Davg flow	d/Dpeak flow	Avg Flow (ft/s)	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	4.554	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	4.554	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	Q1-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	Q1-A		Q1-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		Q1-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										

SSLOCS
Trunk System Data

Line #	Location	Description	From Road	To Manhole	Distance (ft)	A Diameter (ft)	B Slope (ft/ft)	D Avg. Flow (gpd)	E Added Ave Flows (gpd)	F Future Additions Ave Flows (gpd)	G Future Additions Ave Flows (gpd)	H Avg. Flow (gpm)	I Avg. Flow (cfs)	J Peak Flow (gpd)	K Peak Flow (gpm)	L Peak Flow (cfs)	M Max Capacity (50%)	N Q _{full}	O Velocity (ft/s)	P Q _{avg}	Q _{peak}	d/D	d _{avg flow}	d _{peak flow}	Velocity (ft/s)	Velocity (ft/s)	
55	AG	Cherry Ave Trunk Lines		79	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	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	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	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	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	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		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	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	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	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	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			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			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	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

SSLOCS
Trunk System Data

Line #	Location	Description	From		To		A	B	D	E	Added Ave Flows (gpd)	Future Additions Ave Flows (gpd)	Future Additions Ave Flows (gpd) (outside of AGWMSPP Projection)	Avg. Flow (gpm)	Avg. Flow (cfs)	Peak Flow (gpd)	Peak Flow (gpm)	Peak Flow (cfs)	Max Capacity (50%)	Q _{full}	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 (ft/s)	Peak Velocity (ft/s)
			Road	Manhole	Road	Manhole	Distance (ft)	Diameter (ft)	Slope (ft/ft)	Avg. Flow (gpd)																			
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	0.396	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	0.396	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	0.396	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

Appendix F -Table 3
Future Conditions

SSLOCS
Trunk System Data

Line #	Location	Description	From		To		A	B	C	D	E	F	G	H	Max Capacity (50%)	I	J	K	L	M	N	O	P	Q	R
			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)		Q _{full}	Velocity (ft/s)	Q _{avg} /Q _{full}	Q _{peak} /Q _{full}	d/D _{avg}	d _{avg} flow (in)	d/D _{peak}	d _{peak} flow (in)	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	Q1-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	Q1-A		Q1-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		Q1-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	2.776
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	2.776
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

SSLOCS
Trunk System Data

Line #	Location	Description	From		To		A	B	C	D	E	F	G	H	Max Capacity (50%)	I	J	K	L	M	N	O	P	Q	R	
			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)		Q _{full}	Velocity (ft/s)	Q _{avg} /Q _{full}	Q _{peak} /Q _{full}	d/D _{avg}	d _{avg} flow (in)	d/D _{peak}	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.																							

SSLOCS
Trunk System Data

Line #	Location	Description	From		To		A	B	C	D	E	F	G	H	Max Capacity (50%)	I	J	K	L	M	N	O	P	Q	R	
			Road	Manhole	Road	Manhole	Distance (ft)	Diameter (ft)	Area (ft²)	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}	d _{avg} flow (in)	d/D _{peak}	d _{peak} flow (in)	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	

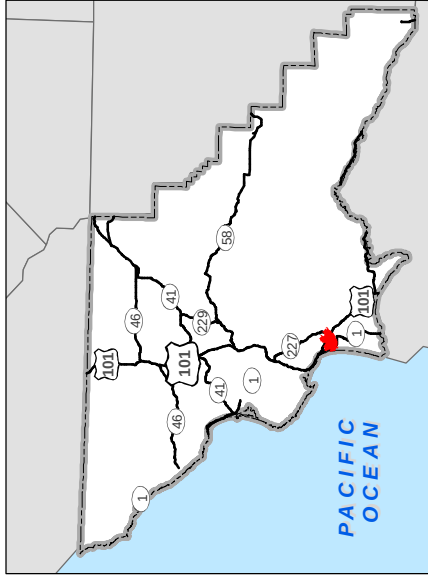
Appendix F - Table 4
Future Conditions
(Gravity Only)

SSLOCS
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)	Q _{full}	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

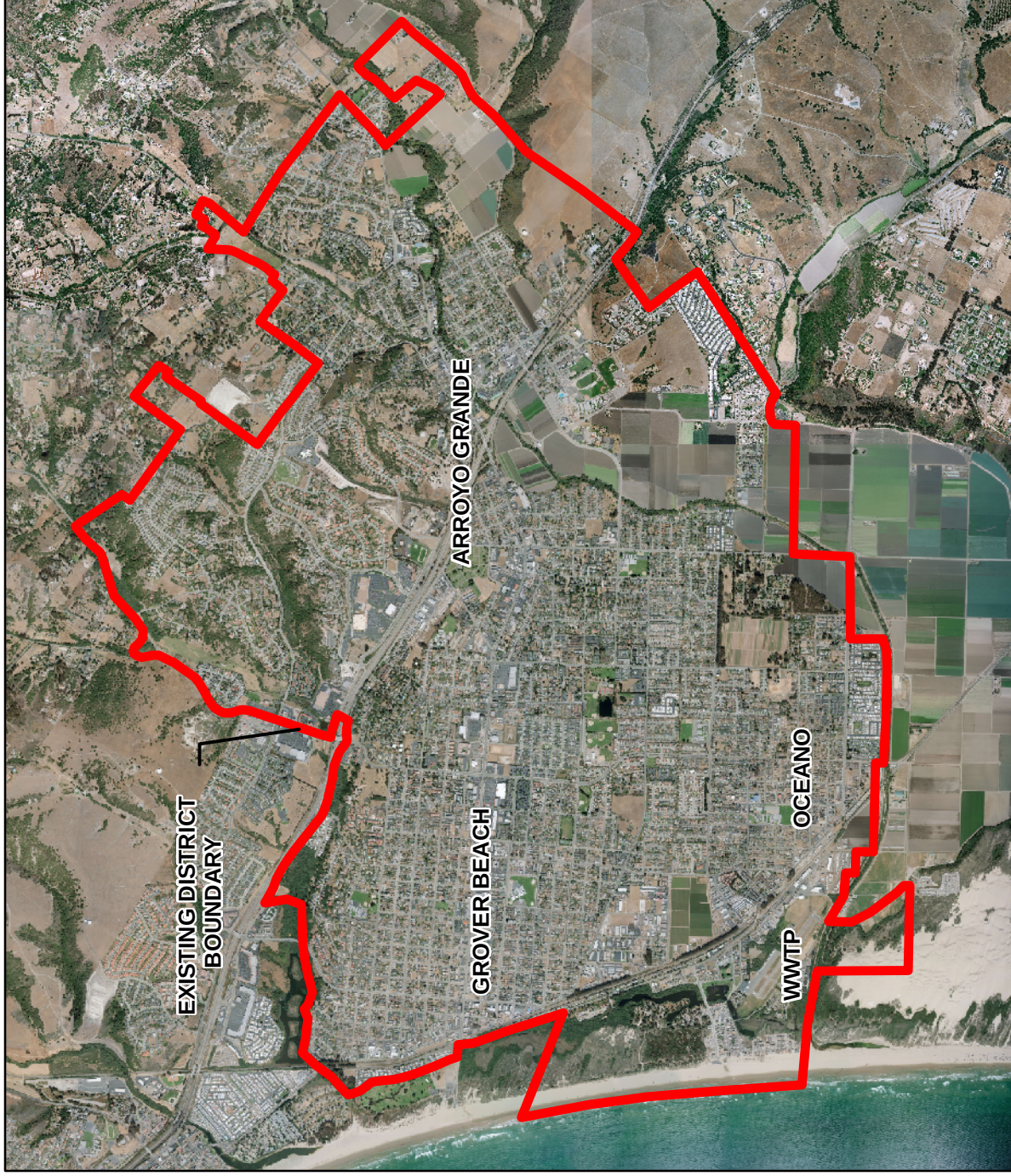
Appendix G -- Scenarios of Proposed Bakeman By-pass Relief Trunk Sewer Diameters

Deleted: SSLOCSD FY 10/11
Capital Improvement Plan and
Budget



County of San Luis Obispo

SSLOCSD Wastewater Treatment Plant



Appendix G
Audit Report Form

Sewer System Management Plan Audit Report

Name of Agency	
Date of Audit	
Name of Auditor	
<i>System Overview</i>	
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.

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.

Sewer System Management Plan Audit Report

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.

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.

Sewer System Management Plan Audit Report

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.
-
-
-

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**

Sewer System Management Plan Audit Report

- 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.
-
-
-

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.
-
-
-

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**

Sewer System Management Plan Audit Report

- 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.
-
-
-

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.
-
-
-

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**

Sewer System Management Plan Audit Report

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.

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.

Sewer System Management Plan Audit Report

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					

Sewer System Management Plan Audit Report

Business Hours					
Notification to arrival on site					
Notification to complete clearance					
Non-business hours					
Notification to arrival on site					
Notification to complete clearance					
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.

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**

Sewer System Management Plan Audit Report

38 Considering the information in Table 4, is the current FOG program effective in documenting and controlling FOG sources?

▪ **Yes / No**

39 If you answered NO to questions 37 and/or 38, describe content and schedule for necessary changes, or provide additional comments for YES response.

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.

Sewer System Management Plan Audit Report

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**

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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.

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

Appendix H

SSLOCSD O-SOP-021: Trunk Sewer Connection Request

 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 Bookkeeper 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 I

SSMP Revision Record Form

SSSLOCSD SSMP Revision History

REV #	DATE	DESCRIPTION OF CHANGE	CHANGE BY	APPROVAL	COMMENTS
0	7/15/09	Issue SSMP		Board of Directors	Initial release of SSMP
1	5/31/11	Revised each element of SSMP based on SWRCB inspection 3/7&8/11 and 12/19/10 SSO.	HB	JLW – District Administrator	Anticipate another revision after comments received by SWRCB after issuance of Technical Report to SWRCB 5/31/11.