

## TABLE OF CONTENTS

<b>LIST OF ACRONYMS .....</b>	<b>4</b>
<b>INTRODUCTION .....</b>	<b>5</b>
s.1 CITY SERVICE AREA AND SEWER SYSTEM .....	5
Figure 1 – City of Gonzales topographic map .....	5
Figure 1.1 – Facility Diagram .....	6
Figure 1.2 – Flow Process After Phase I.....	7
s.2 REQUIREMENT BACKGROUND .....	8
<b>SSMP PLAN &amp; IMPLEMENTATION SCHEDULE .....</b>	<b>10</b>
<b>ELEMENT 1 - GOALS .....</b>	<b>15</b>
1.1 REGULATORY REQUIREMENTS .....	15
1.2 GOALS DISCUSSION .....	15
<b>ELEMENT 2 - ORGANIZATION .....</b>	<b>17</b>
2.1 REGULATORY REQUIREMENTS .....	17
2.2 ORGANIZATION DISCUSSION .....	17
Figure 2 – Public Works Division Chain of Command .....	18
Figure 2.1 – City Organization Chart .....	20
2.3 DESCRIPTION OF GENERAL RESPONSIBILITIES.....	21
2.4 SSMP ROLES AND RESPONSIBILITIES .....	22
Table 2.0 - Roles & Responsibilities for the SSMP .....	23
<b>ELEMENT 3 - OVERFLOW EMERGENCY RESPONSE PLAN .....</b>	<b>25</b>
3.1 REGULATORY REQUIREMENTS .....	25
3.2 OVERFLOW EMERGENCY RESPONSE PLAN DISCUSSION .....	26
Table 3.0 – SSO City Contact Information .....	27
Figure 3.0 - SSO Reporting Chain of Command.....	29
Figure 3.1 - Chain of Communication for Responding to Sewer System Overflows.....	31
3.3 REPORTING PROCEDURES .....	32
3.4 SSO CATEGORIES .....	33
3.5 SSO REPORTING TIMEFRAMES .....	33
<b>ELEMENT 4 - FATS, OILS AND GREASE (FOG) CONTROL PROGRAM .....</b>	<b>36</b>
4.1 REGULATORY REQUIREMENTS .....	36
4.2 FOG CONTROL PROGRAM DISCUSSION .....	37
4.3 IDENTIFICATION OF GREASE PROBLEM AREAS AND SEWER CLEANING .....	37
4.4 LEGAL AUTHORITY .....	38
4.5 IDENTIFY HMAS: .....	41
4.6 SOURCE CONTROL MEASURES: .....	41
<b>ELEMENT 5 - LEGAL AUTHORITY .....</b>	<b>42</b>
5.1 REGULATORY REQUIREMENTS .....	42
5.2 INSPECTIONS AND MAINTENANCE .....	42
5.3 DESIGN AND CONSTRUCTION.....	43
5.4 GREASE CONTROL.....	43

<b>ELEMENT 6 - MEASURES AND ACTIVITIES .....</b>	<b>45</b>
6.1 REGULATORY REQUIREMENTS .....	45
6.2 OPERATION AND MAINTENANCE PROGRAM.....	45
Table 6.0 – Sewer Enterprise Budget 2007-08 FY .....	48
Table 6.1 Collection System Replacement Cost Estimate.....	49
Table 6.2 Wastewater Treatment Replacement Cost Estimates.....	50
<b>ELEMENT 7 – DESIGN STANDARDS &amp; CONSTRUCTION SPECIFICATIONS .....</b>	<b>51</b>
7.1 REGULATORY REQUIREMENTS .....	51
7.2 DESIGN AND CONSTRUCTION STANDARDS .....	51
7.3 INSPECTION STANDARDS .....	51
<b>ELEMENT 8 – CAPACITY MANAGEMENT &amp; ASSURANCE .....</b>	<b>52</b>
8.1 REGULATORY REQUIREMENTS .....	52
8.2 SYSTEM HYDRAULIC EVALUATION AND CAPACITY ASSURANCE PLAN .....	53
8.3 SCHEDULE .....	54
<b>ELEMENT 9 - MONITORING, MEASUREMENT &amp; PROGRAM MODIFICATIONS.....</b>	<b>55</b>
9.1 REGULATORY REQUIREMENTS .....	55
9.2 MONITORING, MEASUREMENT AND MODIFICATION PROGRAM .....	55
9.3 UPDATES .....	56
9.4 IDENTIFYING TRENDS.....	56
<b>ELEMENT 10 – SSMP AUDITS .....</b>	<b>57</b>
10.1 REGULATORY REQUIREMENTS .....	57
10.2 SSMP PROGRAM AUDITS.....	57
<b>ELEMENT 11 –COMMUNICATIONS PROGRAM .....</b>	<b>58</b>
11.1 REGULATORY REQUIREMENTS .....	58
11.2 CITY COMMUNICATION PROGRAM .....	58
<b>SSMP APPENDICES.....</b>	<b>59</b>

## LIST OF ACRONYMS

APCD	Air Pollution Control District
CAP	Capacity Assessment Plan
CCTV	Closed Circuit Television
CDFG	California Department of Fish and Game
CIP	Capital Improvement Plan
City	City of Gonzales
CIWQS	California Integrated Water Quality System
CRWA	California Rural Water Association
CWEA	California Water Environment Association
EH	Environmental Health
FOG	Fats, Oils and Grease
FSE	Food Services Establishment
GWDR	General Waste Discharge Requirement
I/I	Inflow & Infiltration
mgd	Million Gallons per Day
NPDES	National Pollution Discharge Elimination System
OERP	Overflow Emergency Response Plan
OES	Office of Emergency Services
RWQCB	Regional Water Quality Control Board
SCADA	Supervisory Control and Data Acquisition
SHECAP	Sewer Hydraulic Evaluation and Capacity Assessment Plan
SSMP	SSMP
SORR	Sewer Overflow Response Report
SWMP	Storm Water Management Plan
SWRCB	State Water Resource Control Board
UPC	Uniform Plumbing Code
WDR	Waste Discharge Requirement
WWTP	Wastewater Treatment Plant

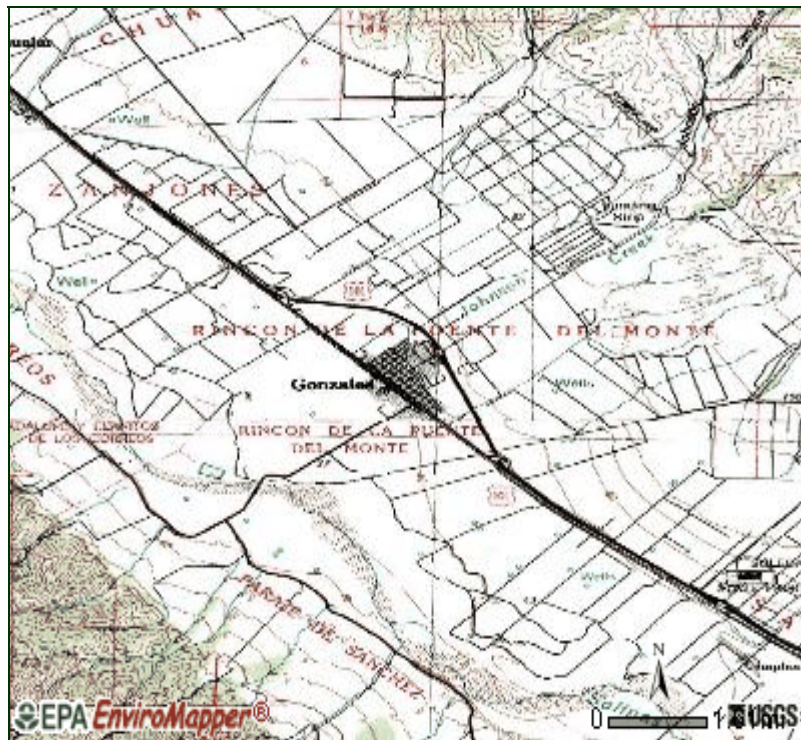
**Introduction**

**s.1 City Service Area and Sewer System**

The City of Gonzales is located in Monterey County, California. The mean elevation for the City is 130 feet above sea level. The City of Gonzales is located at 36°30'31" North, 121°26'34" West and is situated in the heart of the Salinas Valley along Highway 101. The City is approximately 340 miles north of Los Angeles, 115 miles south of San Francisco, 70 miles south of San Jose, 16 miles south of Salinas, and 35 miles inland from Monterey Bay. According to the United States Census Bureau, the city has a total area of 1.4 mi<sup>2</sup>.

As illustrated below in Figure 1, the City is situated on the upper Salinas River, which flows north from San Luis Obispo County towards Monterey County.

Figure 1 – City of Gonzales topographic map



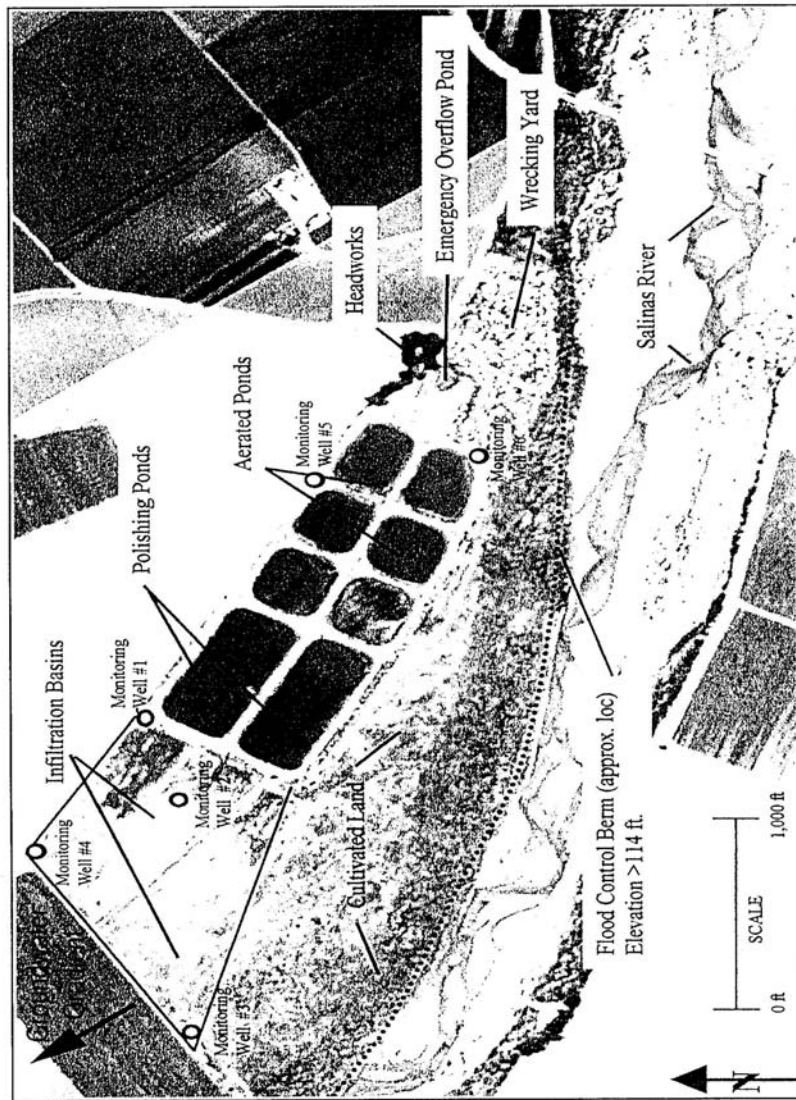
The City owns and operates the local wastewater treatment plant, which provides sewer service to City residents. The Facility is located on sixty-two acres with pretreatment headworks, an emergency overflow pond, eight treatment ponds and three infiltration basins.

The current treatment consists of six, approximately 2-acre ponds in parallel; two, approximately 5-acre polishing ponds in parallel, followed by three, approximately 7-acre infiltration basins used on an alternating basis. A wastewater treatment plant facility diagram is provided below as Figure 1.1. This facility diagram is also included as Attachment 2 in the City's Monitoring and Reporting Program Order No. R3-2006-0005 as provided by the Regional Water Quality Control Board.

Figure 1.1 – Facility Diagram



**City of Gonzales Wastewater Treatment Plant  
Order No. R3-2006-0005  
Facility Map**



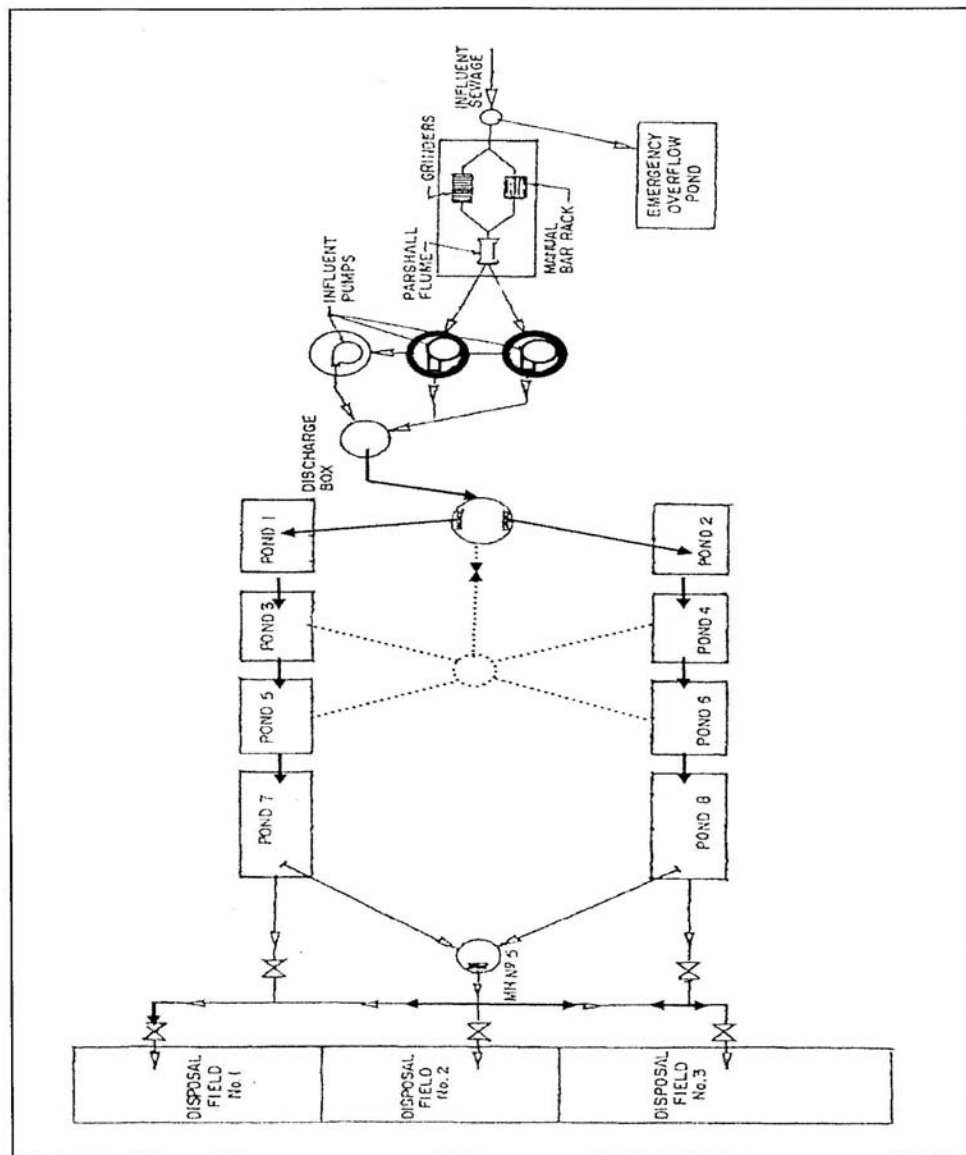


The facility discharges treated domestic and industrial wastewater and has experienced an annual monthly average of 0.763 million gallons per day (mgd). Following completion of Phase I, the design capacity increased to 1.3 mgd in accordance with the City's National Pollutant Discharge Elimination System (NPDES) permit (WDR Order No.R3-2006-0005). A representation of the wastewater treatment flow, following the expansion of Phase I is included as reference below in Figures 1.2

Figure 1.2 – Flow Process After Phase I



**City of Gonzales Wastewater Treatment Plant**  
**Order No. R4-2006-0005**  
**Flow Diagram**  
 (Phase I Expansion)



The City operates and maintains the sanitary sewer collection system including:

- Over 20.83 miles of sewer mains
- 5 sewer lift stations (facilities for collecting wastewater flows from a low elevation and pumping them to a higher elevation, allowing wastewater to travel by gravity to the wastewater treatment plant)
- 1.3 miles of force main
- Average peak monthly flow 0.624 mgd wastewater treatment plant
- 1,794 residential sewer connections
- 90 commercial/industrial sewer connections
- 21 industrial sewer connections

Land use in the City is a combination of agriculture, residential, commercial, office professional, industrial, public facilities, and parks and open space. Residential land uses make up the single largest land use category in the City.

The Regional Water Quality Control Board (RWQCB) Central Coast Region 3 of the State Water Quality Control Board (SWRCB) oversee the water quality and sanitary sewer system requirements as defined in the Monitoring and Reporting Program (MRP) for the City.

The City retains ownership and direct responsibility of wastewater collection and transport systems up to the point of discharge from the wastewater treatment facility. It is incumbent upon the City to protect the environment to the greatest degree possible and ensure the collection system is protected and utilized properly. The responsibility includes preventing overflows and may include restricting or prohibiting the volume, type, or concentration of wastes added to the system.

## **s.2 Requirement Background**

The Statewide General Waste Discharge Requirement (GWDR) Order No. 2006-0003-DWQ applies to all the public agencies that own/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.

One of the requirements of the GWDR is the preparation and implementation of a system specific Sewer System Management Plan (SSMP). By preparing and practicing the procedures in the plan, the occurrence of sewer spills should decrease.

The intent of this SSMP is to satisfy the requirements of both the Regional and State Waste Discharge Requirements. The organization of this document is consistent with Regional and State guidelines. The majority of the requirements are currently in practice by the City due to years of taking a proactive approach to sewer system management. The SSMP includes eleven elements, as follows:

1. Goals
2. Organization
3. Overflow Emergency Response Plan
4. Fats, Oils & Grease Control Program
5. Legal Authority
6. Measures and Activities (Operations and Maintenance Program)

7. Design and Construction Standards
8. Capacity Management (System Evaluation and Capacity Assurance Plan)
9. Monitoring, Measurement and Program Modifications
10. SSMP Audits
11. Communication Plan

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

- Description of the requirement for that element identified
- Identification of associated appendix and a list of supporting information shall be included in the SSMP Volume II Appendices.
- Discussion of the required element. The discussion may be split into multiple sub-sections depending on the length and complexity.

Supporting information for each element will be included in an appendix associated with that section, as applicable. In general, information expected to require relatively frequent updates (such as names and phone numbers of staff) are included in the appendices, as well as other supporting information, such as forms and schedules.



**SSMP Plan & Implementation Schedule**

**SSMP Plan & Implementation Schedule**

Both the SSMP document and the program to implement the SSMP must be certified by the City's Governing Board to be in compliance with the requirements set forth and must be present to the City's Governing Board for approval at a public meeting.

The City of Gonzales has developed a SSMP implementation schedule designed to address each mandated element and in accordance with the specified deadlines in the GWDR. The SSMP implementation schedule has been divided into three phases based upon the GWDR deadline dates as follows:

REQUIRED ELEMENT	PHASE 1 TASKS	STATUS/ DUE DATE	RESPONSIBLE PARTY
<b>SSMP Development Plan and Schedule</b>	<b>Initial plan on how the agency intends on developing and implementing the SSMP.</b>	<b>Due: February 2, 2008</b>	
Council certification of Development Plan and Schedule	Present SSMP Development plan to City Council for approval.	Status: Completed. Slated January 7, 2008 for Council Action and Approval.	Public Works Director
<b>(1) Goal</b>	<b>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.</b>	<b>Due: February 2, 2008</b>	
SSMP Goals	Stated goals for SSMP	Status: Completed	Public Works Director
<b>(2) Organization</b>	<b>Names and staff positions responsible for developing and implementing the SSMP.</b>	<b>Due: February 2, 2008</b>	
Organizational Chart for SSMP Development and Implementation	Develop organizational chart of management, administration and maintenance personnel.	Status: Completed	Public Works Director
SSO Chain of Communications	Develop the internal chain of communications for reporting SSOs.	Status: Completed	Public Works Director
<b>SSMP CERTIFICATION</b>	<b>Draft SSMP and Schedule CIWQS Certification.</b>	<b>Due: February 2, 2008</b>	
	Certify approved draft SSMP and schedule via CIWQS.	Status: Pending	Public Works Director

REQUIRED ELEMENT	PHASE 2 TASKS	STATUS/ DUE DATE	RESPONSIBLE PARTY
<b>(3) Overflow Emergency Response Plan</b>	<b>Written Procedures defining how the City responds to Sewer System Overflows (SSOs).</b>	<b>Due: November 2, 2009</b>	

Overflow Response Procedures	Develop standard operating procedures for SSO response.	Status: To Be Developed	Public Works Director, Public Works Supervisor
Notification Procedures	Develop notification procedures to ensure all required regulators (and others) are properly and timely notified of an SSO event.	Status: To Be Developed	Public Works Director, Public Works Supervisor
Emergency Response Training	Develop and implement Emergency Response Training Program for staff or contractors, if utilized.	Status: To Be Developed	Public Works Director, Public Works Supervisor
Traffic and Crowd Control	Develop procedures for traffic and crowd control to be utilized during an SSO event.	Status: To Be Developed	Public Works Director, Public Works Supervisor, Police Department
Monitoring and Sampling	Develop procedures for monitoring and sampling, if required, for an SSO event.	Status: To Be Developed	Public Works Director, Public Works Supervisor
Follow-Up	Develop procedures for following up on an SSO event, including investigation for the cause or responsible party.	Status: To Be Developed	Public Works Director, Public Works Supervisor
<b>(4) Grease Control Program - FOG (Fats, Oils &amp; Grease)</b>	<b>Prepare and implement a FOG Control Program to reduce the amount of these substances from being discharged into the collection system.</b>	<b>Due: November 2, 2009</b>	
Determination of FOG problems	Evaluate System to determine if FOG related problems exist.	Status: Ongoing Practice	Public Works Director, Public Works Supervisor
FOG characterization Study	If FOG problems are present, perform a FOG Characterization Study to determine the location and extent of the problem.	Status: To Be Developed	Public Works Director, Public Works Supervisor
FOG Ordinance	Develop ordinance/policy to ensure legal authority to prevent the discharge of FOG into the sewer system.	Status: To Be Developed	Public Works Director, Public Works Supervisor, City Attorney
FOG Program	Develop a program to reduce and/or eliminate FOG related sources.	Status: To Be Developed	Public Works Director, Public Works Supervisor
Develop a FOG Source Control Program	Establish an appropriate FOG source control program. A look at Residential as large contributors.	Status: To Be Developed	Public Works Director, Public Works Supervisor
Public Outreach	Develop an appropriate public education, outreach program and marketing materials designed to assist in the reduction of FOG.	Status: To Be Developed	Public Works Director, Public Works Supervisor, Administrative Assistant
FOG Disposal	Develop a list of authorized FOG disposal sites.	Status: To Be Developed	Public Works Director, Public Works Supervisor
FOG Inspections	Develop and implement a FOG inspection program.	Status: To Be Developed	Public Works Director, Public Works Supervisor, Lead Works, Maintenance Staff
<b>(5) Legal Authority</b>	<b>Agency's legal authority to operate and maintain its sewage collection system.</b>	<b>Due: November 2, 2009</b>	

Ordinance Development for Preventing Illicit Discharges, Requiring Proper Design & Construction of Grease Traps, establishing local limits and enforcement capabilities.	Develop/amend required ordinance or policies to comply with Order. Develop a FOG Program Policy supplementing the City's Municipal Code, Chapter 10.16 Sewage Disposal.	Status: To Be Developed	Public Works Director, Public Works Supervisor, City Attorney
Ordinance Legal Review	Ordinances or Policies developed, amended, and reviewed by City's legal counsel.	Status: To Be Developed	Public Works Director, Public Works Supervisor, City Attorney
Ordinance Adoption	Adoption of required ordinances or policies by City Council	Status: To Be Developed	Public Works Director, Public Works Supervisor, City Attorney
<b>(6) Measures and Activities</b>	<b>Collection System Operations and Maintenance Program.</b>	<b>Due: November 2, 2009</b>	
Collection System Mapping & Updates	Up to date mapping of the sewage collection system facilities including appropriate storm water systems. Develop procedures for maintaining mapping data.	Status: To Be Developed	Public Works Director, Public Works Supervisor, City Engineer
Preventative Maintenance Program	Develop a written description of the preventative maintenance activities the City employs.	Status: To Be Developed	Public Works Director, Public Works Supervisor
Pipeline Maintenance	Develop a schedule for line cleaning and maintenance.	Status: To Be Developed	Public Works Supervisor, Lead Worker
Pumping and Other Facilities	Develop a schedule for maintenance of pumping and other facilities	Status: To Be Developed	Public Works Supervisor, Lead Worker
Problem Areas	Identify problem areas (high maintenance areas; HMA) and develop procedures for their maintenance.	Status: To Be Developed	Public Works Director, Public Works Supervisor, Lead Worker
Rehabilitation and Replacement Program	Develop a short and long term plan for the rehabilitation or replacement due to system deficiencies, including funding (CIP).	Status: To Be Developed	Public Works Director, Public Works Supervisor
Inspection Program	Develop a program and schedule for the regular visual and CCTV inspection of the system.	Status: To Be Developed	Public Works Director, Public Works Supervisor, Lead Worker
Inspection Schedule	Develop a schedule for ongoing inspection of the entire collection system.	Status: To Be Developed	Public Works Supervisor, Lead Worker
Work Orders	Develop a system to track and schedule all maintenance activities.	Status: To Be Developed	Public Works Supervisor, Lead Worker, Administrative Assistant
Equipment and parts inventory & Critical Parts List	Develop an inventory of equipment and replacement parts. Develop an inventory of critical replacement parts including procedures for acquisition.	Status: To Be Developed	Public Works Supervisor, Lead Worker, Mechanic I/II, Administrative Assistant

REQUIRED ELEMENT	PHASE 3 TASKS	STATUS/ DUE DATE	RESPONSIBLE PARTY
<b>(7) Design and Performance</b>	<b>Prepare and implement a Capital Improvement Plan that will provide the hydraulic capacity of the sewer system under peak flow conditions.</b>	<b>Due: May 2, 2010</b>	
Design Standards	Develop design standards for new and rehabilitated systems including procedures to ensure capacity in existing system due to new or remodeled construction	Status: To Be Developed	Public Works Director, City Engineer
Inspection and testing standards	Develop inspection and testing standards for new and rehabilitated systems including acceptance testing procedures.	Status: To Be Developed	Public Works Director, City Engineer
<b>(8) System Hydraulic Evaluation and Capacity Assurance Plan (SHECAP)</b>	<b>Evaluated those portions of the system that are experiencing capacity related overflow. Establish steps to eliminate capacity related overflows including and I&amp;I program, short and long term CIP for capacity issues.</b>	<b>Due: May 2, 2010</b>	
Inflow and Infiltration (I&I)	Develop procedures to detect and remediate I&I problems.	Status: To Be Developed	Public Works Director, City Engineer
Hydraulic Model	Develop a hydraulic model of the system.	Status: To Be Developed	Public Works Director, City Engineer
Identify Deficiencies	Identify areas of the system that exhibit capacity deficiencies.	Status: To Be Developed	Public Works Director, City Engineer
Analyze Defects	Analyze and prioritize repairs/replacement of pipeline defects.	Status: To Be Developed	Public Works Director, City Engineer
Capital Improvement Projects	Develop a prioritized CIP for these improvements and a schedule of completion dates.	Status: To Be Developed	Public Works Director, City Engineer
<b>(9) Monitoring, Measurements and Plan Modifications</b>	<b>The ongoing evaluation of the performance of the SSMP document and its ability to achieve its stated goals.</b>	<b>Due: May 2, 2010</b>	
Data Management	Develop procedures for accumulated and analyzing system maintenance, repairs, projects, reductions of SSOs, and any other pertinent data.	Status: To Be Developed	Public Works Director, Public Works Supervisor, City Engineer, Administrative Assistant
Program Effectiveness	Develop procedures, report, etc. to measure the effectiveness of the SSMP.	Status: To Be Developed	Public Works Director, Public Works Supervisor, Lead Worker, Administrative Assistant
Program Changes	Develop procedures to initiate changes, enhancements, or correct deficiencies in the SSMP.	Status: To Be Developed	Public Works Director, Public Works Supervisor, Lead Worker, Administrative Assistant
<b>(10) SSMP Program Audits</b>	<b>Program audits are required every two years following the adoption of the final SSMP (August 2, 2011). Audits shall document the success of the SSMP and improvements made to it.</b>	<b>Due: May 2, 2010</b>	

Document Control	Develop procedure for SSMP document control.	Status: To Be Developed	Public Works Director, Administrative Assistant
Key Individual(s)	Identify key individual(s) responsible for the SSMP audit (every 2 years). Development of a SSMP Ad Hoc Audit team consisting of local agencies for peer review and direction.	Status: To Be Developed	Public Works Director, Public Works Supervisor, Administrative Assistant
Checklist	Develop a checklist to assist and ensure the SSMP is compliance and effective.	Status: To Be Developed	Public Works Director, Administrative Assistant
Reports	Develop reports to assist with analyzing the effectiveness of the SSMP.	Status: To Be Developed	Public Works Director, Public Works Supervisor, Administrative Assistant
Milestones	Develop milestones (time, events, etc.) that denote program review.	Status: To Be Developed	Public Works Director, Public Works Supervisor, Administrative Assistant
<b>(11) Communication Program</b>	<b>The communication program is the agency's outreach to the community and satellite contributors about the public collection system and the SSMP document.</b>	<b>Due: May 2, 2010</b>	
Public Outreach	Develop a protocol for soliciting and responding to public input.	Status: To Be Developed	Public Works Director, Public Works Supervisor, Administrative Assistant
Staff SSMP Awareness	Develop a program to ensure staff awareness of SSMP procedures, protocol, etc.	Status: To Be Developed	Public Works Director, Public Works Supervisor
<b>FINAL SSMP CERTIFICATION</b>	<b>Final SSMP document, after all elements have been developed, documented and implemented.</b>	<b>Due: May 2, 2010</b>	
Review by City Attorney	Review of completed SSMP by the City Attorney.	Status: To be developed	City Attorney
Adoption & Certification of SSMP by City Council	Adoption and certification of final SSMP document by City's governing body.	Status: To be developed	Public Works Director

## **SSMP GOALS**

This SSMP element identifies goals the City has set for management, operations and maintenance of the sewer system and discusses the role of the SSMP in supporting these goals. These goals provide focus for City staff to continue high-quality work and implement improvements in the management of the City's sewer collection system. This section fulfills the Goals requirements of both the Regional and State Water Boards.

### **1.1 Regulatory Requirements**

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

The collection system agency should develop goals to manage, operate, and maintain all parts of the collections system. The goals should address the provisions of adequate capacity to convey peak wastewater flows, as well as a reduction in the frequency of Sanitary Sewer Overflows and the mitigation of their impacts.

### **Element 1: Goals Appendix**

There is no Appendix associated with Element 1.

### **1.2 Goals Discussion**

Providing a safe, responsive, and reliable sewer service is a key component to fulfilling the City of Gonzales mission statement which is to realize the vision by providing leadership. Commitment and resources necessary to provide excellent service that enhance the quality of life of our diverse community. Services shall be delivered in a cost-effective, respectful and friendly manner to insure the safety and well being of the residents and the promotion of business, recreational, housing and employment opportunities in an environmentally sustainable manner.

The City has developed SSMP goals in effort to contribute to the proper management of the sewer collection system and to assist the City in minimizing the frequency and impacts of Sewer System Overflows (SSOs) by providing guidance for appropriate maintenance, capacity management and emergency response. In support of this mission, the Public Works department has developed the following goals for the operation and maintenance of its sewer system.

The City's SSMP goals are as follows:

1. Minimize the occurrence of SSOs by one-third (1/3). This goal is projected to be met within one year following SSMP final certification.
2. Prevent public health hazards through proper notification, emergency response and spill containment and clean up procedures.
3. Minimize inconveniences by responsibly handling interruptions in service.
4. Protect the large investment in the collection system by maintaining adequate capacities and extending its useful life.
5. Prevent unnecessary damage to public and private property.



6. Use available funds for sewer operations in the most efficient manner. Identify, prioritize, and continuously renew and replace sewer system facilities to maintain reliability.
7. Convey wastewater to treatment facilities with a minimum infiltration, inflow and exfiltration.
8. Provide adequate capacity to convey peak flows. Provide capacity for peak wastewater (flows from the design storm event).
9. Perform all operations in a safe manner to avoid personal injury or property damage.
10. 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 Sanitary Sewer Overflows (SSOs).
11. Implement regular, proactive maintenance of the sewer system to remove roots, debris, sand, and Fats, Oils and Greases (FOG) in areas prone to blockages that may cause SSOs or sewer backups.
12. Provide high quality and cost-effective wastewater collection for its constituents by meeting these goals.

### Organization

This section of the SSMP identifies City staff that are responsible for implementing the SSMP, responding to SSO events and meeting the SSO reporting requirements. This section also includes the designation of the Authorized Representative to meet the State requirements for completing and certifying spill reports electronically. This section fulfills the Organization requirement of both the Regional and State Water Boards.

### 2.1 Regulatory Requirements

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

The collection system agency's SSMP shall identify the following:

- Staff responsible for implementing measures outlined in the SSMP, including the names of those responsible and the authorized representative;
- The names and telephone numbers for management, administrative and maintenance positions responsible for implementing specific measures in the SSMP. Including 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 Sewer System Overflows to the STATE and Regional and other agencies if applicable (such as County Health Officers, County Environmental Health Agency, Fish and Game, Coast Guard and/or State Office of Emergency Services (OES).

### Element 2 - Organization Appendix

Supporting information for Element 2 shall be included in **Appendix A**. This Appendix shall include the following documents:

- Table of Wastewater Division and Public Works Department staff names and contact telephone numbers (updated as needed).

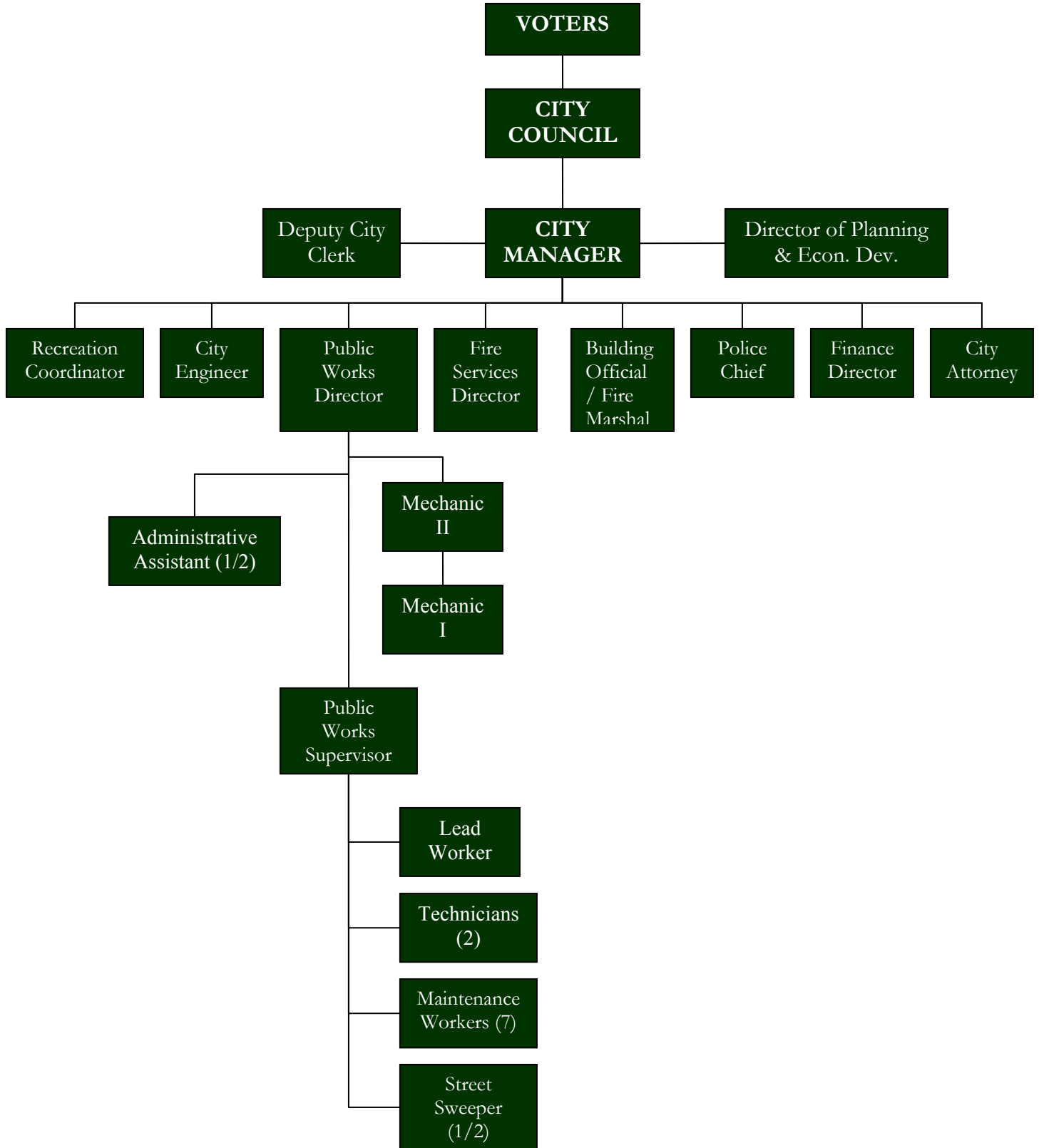
### 2.2 Organization Discussion

The following section outlines the City's organization, general and SSMP responsibilities of personnel, authorized representative, and chains of communication for SSO response and reporting. Key staff are responsible for implementing and maintaining the SSMP are designated in Appendix A.

#### 2.2.1 City Organization

The Organization chart for the management, operation, and maintenance of the City's wastewater collection system is illustrated in Figure 2 and 3. The names and telephone numbers of staff filling these positions are included in Appendix A.

Figure 2 – Public Works Division Chain of Command



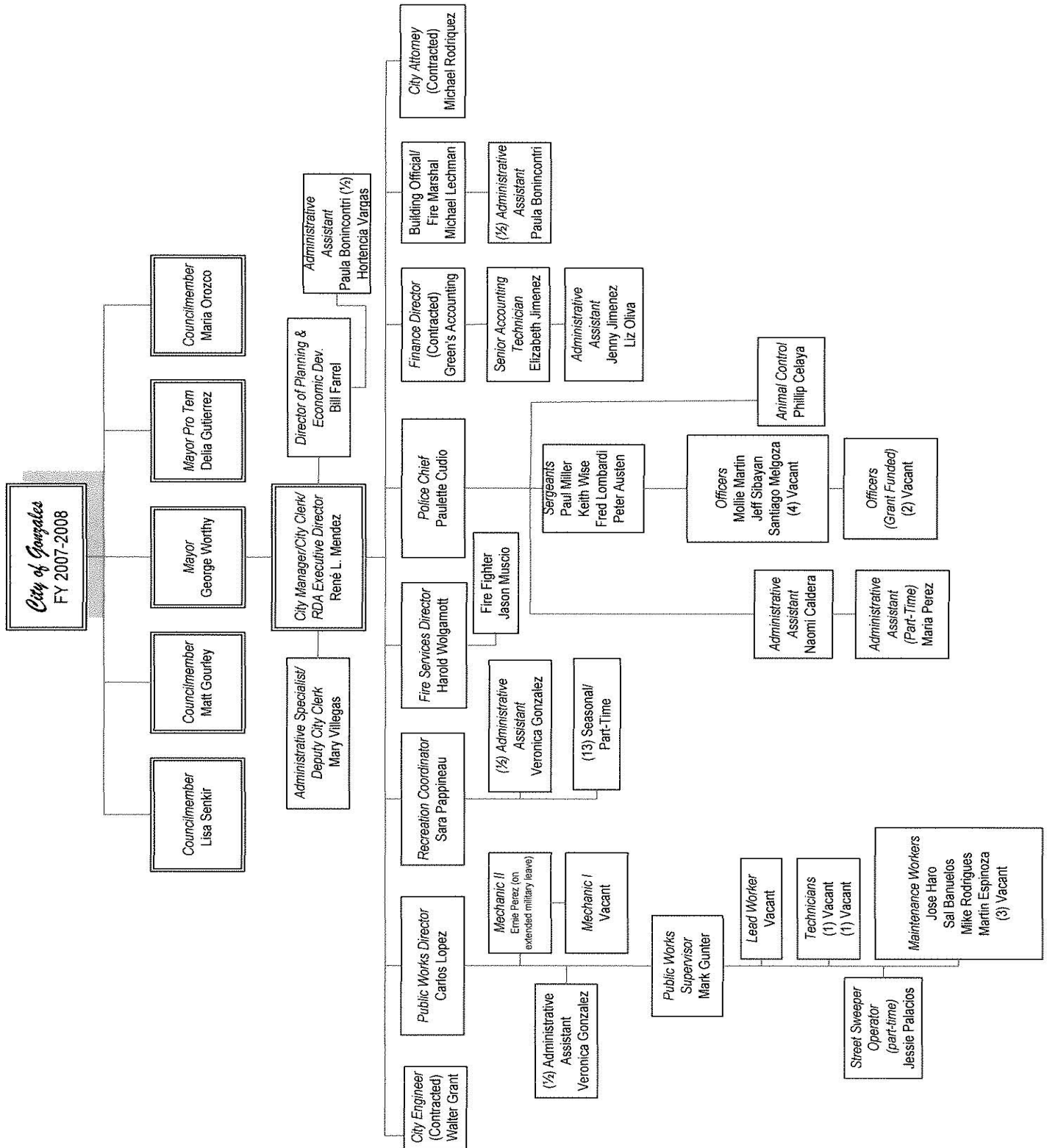
The Public Works Director and Public Works Supervisor are designated representatives responsible for implementation of the SSMP and CIWQS reporting.

The Public Works Director shall be responsible for, and has the authority for, maintenance and operations of the sewer system. The Public Works Division staff work under the direction of the Public Works Director.

Public Works Division Maintenance Technicians and Operations staff are on-call twenty four (24) hours per day. The Public Works Director and/or Public Works Supervisor are also on-call, or available for consultations, twenty four (24) hours per day.

The City's complete organizational chart, as follows in Figure 3, shows the lines of authority of all the administrative and field staff.

Figure 2.1 – City Organization Chart



### 2.3 Description of General Responsibilities

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

Public Works Director. Plans, organizes, directs and supervises the public works activities of the City. Advises the City Council and Planning commission on engineering and public works matters, including those related to the collection system. Prepares and control department budgets. Review project plans and specifications for public works projects and performs technical engineering planning studies. Confers with engineering consultants and official of other public works departments.

Public Works Supervisor. Works under the broad policy guidance and direction of the Public Works Director. Works to improve efficiency and effectiveness of operations. Assist the Public Work Director in the development of department plans and programs, including sewer operations and Capital Improvement Program. Supervises the review of private project development plans for compliance with codes, regulations, standards, adequacy of applications for permits and compliance with approved plans. Oversees and coordinates sewer maintenance operations. Plans, organizes and supervises the maintenance and repair of the City's public works infrastructure, sanitary sewer collection system and wastewater treatment plant facilities.

The Supervisor oversees all day-to-day public works maintenance, repair and operations activities. In addition, the incumbent performs a wide variety of work to ensure that the public facilities and infrastructure of the City are maintained in a safe and effective working condition. This position may be required to respond to emergency field calls

City Engineer (Contracted). May act as project manager on public works projects, including sewer projects. Responsible for preparing plans, specifications, and preliminary costs estimates. Coordinates and confers with Public Works Division staff on sanitary sewer system issues. May confer with contractors, consultants and the public on engineering and construction matters. Prepares reports on sewer and other public works projects on behalf of the Public Works Director.

City Attorney (Contracted). Provides legal advice to the City. City Attorney attends Council Meetings, when requested, to report on legal matters.

Lead Worker. Under general direction, assists the Public Works Supervise in assigning and reviewing work of Public Works Maintenance Workers and Technicians. This position may serve as the Public works Supervisor on a relief or assigned basis. The lead Works shall perform the full range of skilled and semi-skilled work in the construction, modification, maintenance, repair and operation of City infrastructure, including street, parks and landscaped areas, building, water and wastewater systems, and municipal pool. The lead worker shall perform a wide variety of work to ensure that the public facilities and infrastructure of the City are maintained in a safe and effective working condition.

Technician. Under supervision of the Public Works Supervisor, this position installs, maintain and repairs a variety of electronic and related devices to monitor, meter and control the flow of water, treatment chemical and other materials. This position shall assist other Public works Division staff with tasks in such areas as landscape or irrigation design and maintenance, plumbing, electronic or construction work, vehicle maintenance and repair, small machinery or pump repair, and swimming pool maintenance. This position includes both shop and fieldwork.



Maintenance Workers. Under general supervision, this position performs a variety of semi-skilled work in the construction, modification, maintenance, repair and operation of City infrastructure, including street, parks and landscaped areas, buildings, water and wastewater systems. This position performs a variety of work in all operational and maintenance areas, depending on the immediate needs of the City.

Mechanic I. Under general supervision, maintains, repairs and overhauls automobiles, heavy and light construction equipment and small gasoline engines and similar power equipment; operates and maintains a variety of hand, power and shop tools, and performs related work as require; welds and fabricates metal parts and processes equipment and systems.

Mechanic II. Under general supervision, maintains, repairs and overhauls a wide variety of fire apparatus & accessories, automobiles, heavy and light construction equipment, small gasoline engines, fire pumps and stationary power generators; operates and maintains a variety of hand, power and shop tools, and performs related work as require; welds and fabricates metal parts and processes equipment and systems. Performs safety inspections of vehicles and equipment, identifies safety hazards and makes necessary repairs and adjustments to assure safe operation of vehicles and equipment.

This is an advanced skilled journey-level position in the equipment maintenance trade that performs the full range of diagnosis, maintenance and repair work of a variety of vehicles and equipment. This is distinguished from other public works maintenance employees by the specialized knowledge and skill required for maintenance of rolling stock and other tools and equipment.

Street Sweeper Operator. This position operates street sweeper in cleaning streets of trash and other debris; drives sweeper on street near curb; manipulates controls to activate rotary brushes and water spray so that machine picks up dust and trash from paved streets and deposits it in dirt trap at rear of machine. Sweeps areas by hand which cannot be reached by the sweeper; removes obstructions from sweeper's path; operates dump trucks, loaders and other equipment as assigned; performs general street maintenance tasks.

Administrative Assistant. Provides administrative support for the Public Works Division and reports directly to the Public Works Director. This position performs secretarial, receptionist and administrative tasks, some of which are complex and confidential in nature. The assistant provides technical assistance to the general public and public agencies regarding the City procedures.

Office & 24 Hr. Emergency. The staff operate on a rotational on-call stand-by response. A stand-by roster is provided to emergency dispatch personnel. In the event of an after-hours situation, Public works staff are notified via pager. This contact number is answered twenty four (24) hours per day by either Public Works staff. The City's Stand-by Schedule shall be included in Appendix A.

## **2.4 SSMP Roles and Responsibilities**

The City's SSMP identifies staff responsible for implementing measures outlined in the SSMP, including management, administration, and maintenance positions. Table 2.0 summarizes the roles and responsibilities for each SSMP element.

Table 2.0 - Roles & Responsibilities for the SSMP

Element	SSMP Description	Responsible Person(s)
1	Goals	Public Works Director
2	Organization	Public Works Director, Public Works Supervisor
3	Overflow Emergency Response Plan	Public Works Director, Public Works Supervisor
4	FOG Control	Public Works Director, Public Works Supervisor, Technicians & Maintenance Workers
5	Legal Authority	Public Works Director, Public Works Supervisor, City Attorney (Contracted)
6	Measures and Activities	Public Works Director, Public Works Supervisor
7	Design and Construction Standards	Public Works Director, Public Works Supervisor, City Engineer (Contracted)
8	Capacity Management	Public Works Director, Public Works Supervisor, City Engineer (Contracted)
9	Monitoring, Measurement and Program Modifications	Public Works Director, Public Works Supervisor
10	SSMP Audits	Public Works Director, Public Works Supervisor, Administrative Assistant
11	Communication Plan	Public Works Director, Public Works Supervisor, Administrative Assistant

Responsibility for Element 1 – Goals

The Public Works Director is responsible for leading staff in the implementation of the SSMP goals.

Responsibility for Element 2 – Organization

The Public Works Director and Public Works Supervisor shall be responsible for updating the organizational structure, SSMP implementation assignments, and Sewer System Overflows responding and reporting chain of communication, as needed.

Responsibility for Element 3 – Overflow Emergency Response Plan (OERP)

The Public Works Director and Public Works Supervisor shall be responsible for implementation of the Overflow Emergency Response Plan, including revisions to the plan and annual trainings for maintenance crew members and staff.

#### Responsibility for Element 4 – Fats, Oils and Grease (FOG) Control Program

The Public Works Director, Public Works Supervisor and various wastewater technicians and maintenance staff shall be responsible for identifying grease hot spots, maintaining an effective cleaning program for grease problematic sewers, and inspecting grease traps/interceptors that have been installed at non-residential locations. The Industrial Waste Manager is responsible for enforcing discharge regulations, as needed.

#### Responsibility for Element 5 – Legal Authority

The Public Works Director and Public Works Supervisor, with the assistance of the City Attorney, shall be responsible for upholding the City's Municipal Code and for drafting ordinance amendments and program policies, as needed.

#### Responsibility for Element 6 – Measures and Activities

The Public Works Director and Public Works Supervisor shall be responsible for 1) Resources and Budget, and 2) Outreach to Plumbers and Building 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 7 – Design & Construction Standards

The Public Works Director and Public Works Supervisor, with the assistance of contracted City Engineering staff, shall be responsible for reviewing design and construction documents to ensure that all construction projects meet the City standards and responsible for updating standards for installation, rehabilitation and repair, as needed. Also, Engineering staff shall share in responsibilities for the inspection of construction projects to ensure City standards have been followed.

#### Responsibility for Element 8 – Capacity Measurement

The Public Works Director and Public Works Supervisor shall work with contracted City Engineering staff in establishing and assessing capacity requirements for the City collection system and for the preparation and implementation of the City's System Hydraulic Evaluation and Capacity Assurance Plan (SHECAP). These positions are responsible for the development and implementation of the City's long-term Capital Improvement Plan (CIP), including updating budgets and schedules.

#### Responsibility for Element 9 – Monitoring, Measurement and Program Modification

The Public Works Director and Public Works Supervisor shall be responsible for monitoring the implementation of and assessing success of the overall SSMP, with the assistance of various staff. These positions are responsible for identifying trends in Sewer System Overflows occurrences and providing recommendations to the Public Works Director and City Council.

#### Responsibility for Element 10 – SSMP Audits

The Public Works Director, Public Works Supervisor and Public Works Administrative staff shall be responsible for coordinating and overseeing the bi-annual SSMP audits.

#### Responsibility for Element 11 – Communication Plan

The Public Works Director, Public Works Supervisor and the Public Works Administrative Staff shall be responsible for communicating with the public and nearby regulatory agencies the status of the City's SSMP.

### Element 3 - Overflow Emergency Response Plan

This section of the SSMP provides a summary of the City's Overflow Emergency Response Plan (OERP). The OERP shall include appropriate notification and response procedures for sanitary sewer system overflows. This section fulfills the OERP requirements of both the Regional and State Water Boards.

#### 3.1 Regulatory Requirements

The summarized requirement for the OERP element of the SSMP are as follows:

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

- a. Proper notification procedures so that the primary responders and regulatory agencies are informed of all SSOs in a timely manner;
- b. A program to ensure appropriate response to all overflows;
- c. Procedures to ensure prompt notification to appropriate regulatory agencies and other potentially affected entities (e.g. health agencies, regional water boards, water suppliers, etc.) of all SSOs that potentially affect public health or reach the waters of the State. All SSOs shall be reported in accordance with the California Water Code, other State Law, and other applicable Regional WDR or NPDES permit requirements. The SSMP identifies the officials who will receive immediate notification;
- d. Procedures to ensure that appropriate staff and contractor personnel are aware of and follow the Emergency Response Plan and are appropriately trained;
- e. Procedures to address emergency operations, such as traffic and crowd control and other necessary response activities; and
- f. A program to ensure that all reasonable steps are taken to contain untreated wastewater and prevent discharge of untreated wastewater to waters of the United States and minimize or correct any adverse impact on the environment resulting from the SSOs, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the discharge.

#### Element 3 - OERP Appendix

Supporting information for Element 3 shall be included in **Appendix B**. The Appendix shall include the following documents:

- Public Works Division OERP
- Wastewater Division SSO Response and Operational Guidelines
- Sewer Overflow Response Report (SORR) and,
- Miscellaneous SSO Report Forms

### **3.2 Overflow Emergency Response Plan Discussion**

The City's sewer call-out protocol for spills into structures varies depending on the nature of the call. The City of Gonzales does not maintain private laterals. Private laterals are defined as those sewer collection system lines that run from their building to the City-operated public sewer. The lateral, including the connection to the mainline is considered private. If a spill into a structure resulted from a private lateral being blocked, the City of Gonzales would have no responsibility for the clean-up.

If the spill into a structure resulted from a confirmed City mainline blockage, the City would respond to clear the blockage. The field crews would initiate a call to a qualified vendor for cleaning and immediately turn the information over to the Risk Management Office.

The follow-up research determines the cause of the blockage to be roots from a private lateral; the City shall document the lateral via closed circuit television (CCTV). Risk Management shall send a letter to the owner of the lateral advising of possible liability for damages, and/or financial loss payable to the City of Gonzales.

The City shall develop an Emergency Response Plan with written procedures, guidelines and flow charts designed for specifically for emergency responses to sanitary sewer overflows. The OERP shall be included as part of the SSMP Volume II Appendices and shall address several issues such as spill response, spill detection, mitigation, clean up, investigation, documentation and required regulatory reporting.

#### **3.2.1 Sewer System Overflow Notification**

The OERP shall include spill detection including the procedures for initiating response and getting the first responder to the site of a potential SSO.

Currently, the public can report sanitary sewer issues to 911 or the non-emergency Police dispatch telephone line. The Police Department has the Public Works Division Standby personnel roster and is responsible for contacting (via pager) appropriate personnel. Public Works Division personnel maintain a continuous rotation on on-call staff that is available for emergency response.

City trained staff are on standby twenty-four (24) hours per day, seven (7) days per week that are aware of low manholes that may overflow during an emergency. The City can contact local companies to assist in spill response and clean-up efforts. A copy of the most current stand-by list shall be provided as part of Appendix A.

The City shall develop a spill response protocol in the event of a spill. This emergency response protocol may be used by various city department and emergency response personnel.

The City may consider the option of publishing an after-hours telephone number in the local telephone books and on the City website ([www.ci.gonzales.ca.us](http://www.ci.gonzales.ca.us)). The City may also consider the development of an interactive website form to report illegal dumping. This form may be filled out on the City's website and used as a method of tracking the City's effectiveness is responding to SSOs. Statistical data obtain by this method may be used to meet the monitoring, measurement and reporting requirements as required in Element 9.

#### **3.2.2 Sewer System Overflow Response**

The OERP shall be developed in accordance with regulations and incorporate spill response measures including response priorities, safety, and initial containment measures.

The City goal for responding to a SSO during business hours is 45-minutes from receipt of call to arrival at the scene of the blockage and/or spill. During non-business hours, the private security representative (as contracted by the City) calls the on-call City Public Works Division staff to respond to a potential SSO.

The City's goal for responding to SSOs during non-business hours is 90-minutes, including the on-call Public Works Division staff arriving at the Wastewater Treatment Plant to retrieve response equipment and then at the scene of the problem. The Public Works Division staff become the SSO First Responder and are responsible for mitigation, documentation, most reporting, and follow up.

### 3.2.3 Sewer System Overflow Reporting

The OERP shall cover Spill Reporting, including internal City reporting and external state and local agency reporting. Appendix B shall include the City's Notification procedures and current contact information for the agencies requiring reporting.

The City's policy is to follow the Regional and State guidelines in reporting spills. The City provides full disclosure of its operations and performance. The City shall develop a Sewer Overflow Response Form (SORR) which will mirror the reporting requirements of the State-wide general order. This form shall include a list of the public health agencies and officials who will receive immediate notification following a SSO.

### 3.2.4 Sewer System Overflow (SSO) Chain of Communication

The City's authorized representative in wastewater operations and collection system matters is the Public Works Director. This position is authorized to verify electronic spill reports submitted electronically via the State-wide database, the California Integrated Water Quality System (CIWQS).

The Public Works Supervisor shall be authorized to act in the Public Works Directors' absence and shall be authorized to submit and certify SSO reports and to initiate proper regulatory and governmental agency notifications as required by the nature of the spill.

Figure 3.0 contains the flowchart depicting the chain of communication for responding to and reporting SSOs, from observation of an SSO to reporting the SSO to the appropriate regulatory agencies. Table 3.0 lists contact phone numbers for the parties included in the chain of communication.

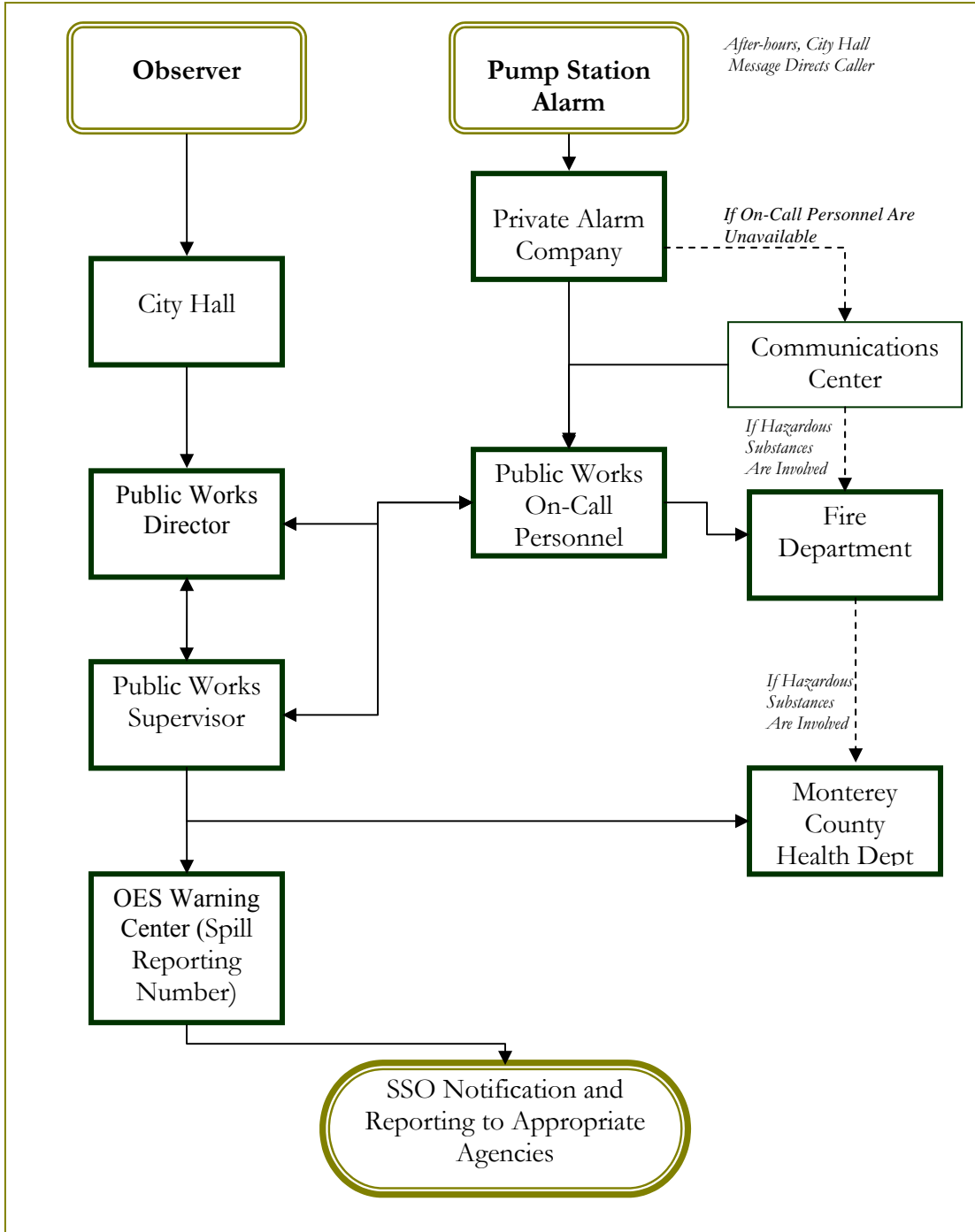
Table 3.0 – SSO City Contact Information

CONTACT	TELEPHONE NUMBER
POLICE (EMERGENCY)	911
FIRE (EMERGENCY)	911
CITY HALL	(831) 675-5000
PUBLIC WORKS DIRECTOR	(831) 675-4205
POLICE (COMMUNICATIONS)	(831) 755-5010
POLICE DISPATCH (NON-EMERGENCY)	(831) 755-5111
FIRE DEPARTMENT (NON-EMERGENCY)	(831) 675-3677
SEWER ON-CALL PERSONNEL	(831) 598-1518



To report a problem in the sewer main during the hours of 7:00 a.m. to 5:00 p.m., call the City of Gonzales, City Hall at (831) 675-5000. Between the hours of 5:00 p.m. and 7:00 a.m., contact the Police Department at (831) 675-5010, or (831) 755-5111.

Figure 3.0 - SSO Reporting Chain of Command



### 3.2.5 Chain of Communication for Responding to SSOs

The Chain of Communication for reporting Sewer System Overflows begin with contact at the City's Public Works Division. The City telephone contact number is (831) 675-5000. This telephone number

is answered Monday through Friday, 8:00am to 5:00pm. Callers may initiate after-hours contact with the Police or Fire Department Non-Emergency Numbers. The Police and Fire Communications initiate contact with Public Works Division standby personnel in the event of a spill outside of normal operating hours.

The City shall develop a common spill reporting procedure and associated forms. A Sewer Overflow Response Report (SORR) shall be included as part of the SSMP Volume II, Appendix B, and shall describe the nature of the SSO and other reported information. The office staff shall notify City Collection System Maintenance staff of the overflow and response to the SSO shall be conducted. The Public Works Supervisor shall be primarily responsible for reporting SSOs to the Regional Water Quality Control Board, Operation of Emergency Services (OES) and other applicable agencies as required.

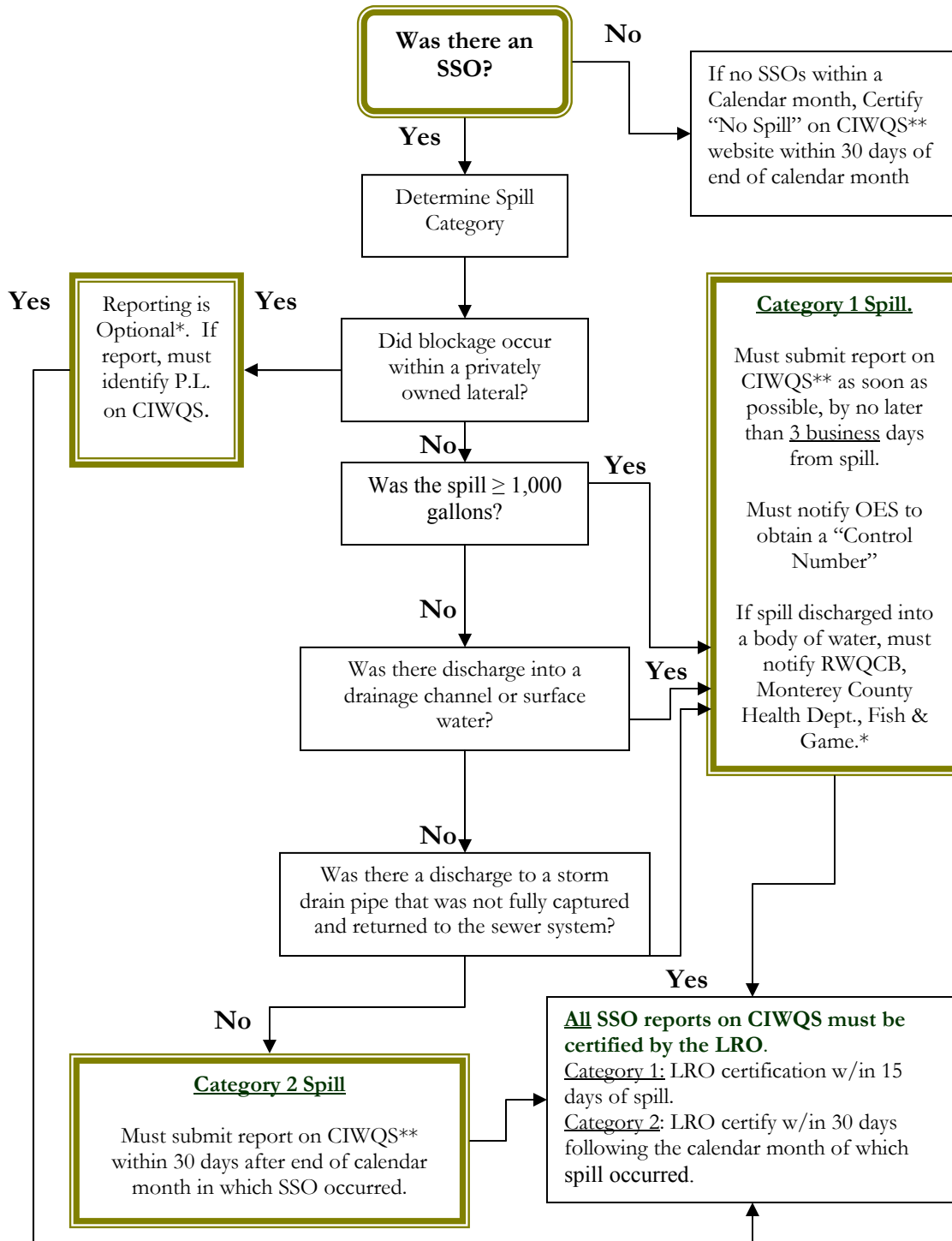
It is the City's intent to report all spills regardless of size and whether or not the spill reaches the waters of the State.

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. City Staff shall obtain the location and any description of the problem, name and phone number for follow-up information.
2. The SORR shall be initiated and provided to the Wastewater Division staff.
3. Public Works Division Staff will proceed to the location to verify report.
4. Contact Public Works Supervisor and request appropriate support. Operations staff to keep administrative staff informed of progress as necessary.
5. Public Works Supervisor shall notify the Public Works Director and/or other City representatives as necessary.
6. The Public Works Supervisor, or his/her designee, to notify all appropriate public or regulatory agencies as required by the complexity of the spill.
7. Upon mitigation, containment and clean-up of the spill, the Wastewater Divisions Supervisor, or his/her designee, shall use the SORR to complete the final spill reports to the State CIWQS database, the Regional, OES, and the County of Monterey Health Department as needed.

The communication chain for responding to a SSO is shown in Figure 3.1. Detailed information on the City's overflow response procedure shall be further developed and included as part of the City's SSMP Volume II Appendix B.

Figure 3.1 - Chain of Communication for Responding to Sewer System Overflows



\* These reporting requirements do not preclude other emergency notification requirements and timeframes mandated by other regulatory agencies (Environmental Health, RWQCB, OES, or State law).

\*\* If CIWQS website is not available, you must FAX to RWQCB and reattempt as soon as possible.

\*\*\* Reports on CIWQS can be amended at any time. However, any amended reports will need to be certified by the LRO.

### 3.3 Reporting Procedures

The City uses the State Water Resources Control Board CIWQS (California Integrated Water Quality System) electronic database for sewage spill reporting procedures. A SORR shall be developed and completed for all reportable spills. The information shall be recorded on the SORR is entered into CIWQS in accordance to the mandated reporting timelines. Copies of the SORR shall be saved and available for review in the Public Works Directors' office.

The following are reporting procedures for SSOs:

- a. Sewage spills equal to or greater than one thousand (1,000) gallons and/or all sewage spills that enter a water body of the State, or occur where public contact is likely, regardless of the size, will be considered a Category 1 spill. Category 1 spills will be reported immediately to the OES Warning Center to obtain a Spill Control Number. This Spill Control Number will be included in the spill report forms. Category 1 spills will be reported immediately to the Regional, Monterey County Health Department and/or the Department of Fish and Game. Notifications will be made immediately, upon awareness of spill. CIWQS notifications will be made within 3 business days following the SSO and certified by the Legally Responsible Official (LRO) no later than 15 days following the SSO event.
- b. A Sewage Spill Report may be submitted immediately to the Regional Water Board via facsimile and shall include the following information:
  1. Name and address of discharger, and reporting party.
  2. Date and time of spill. Time spill stopped.
  3. Location/address of spill/manhole number if available.
  4. Volume of spill. Path of spill. Water body affected.
  5. Cause of spill, action taken to stop spill.
  6. Time cleanup began and time cleanup completed.
  7. Discussion of cleanup and any public notices posted.
  8. Number of spills in same location over last three years.
  9. Discussion of measures taken to prevent spills at this location.
  10. List of other public agencies notified.
- c. A sewage spill that is less than one thousand (1,000) gallons and does not enter a water body shall be considered a Category 2 spill. These spills will be reported to CIWQS no later than thirty (30) days following the calendar month in which the spill occurred. The Regional Water Quality Control Board Central Coast Region should also be notified in writing within thirty (30) days.

The OERP shall discuss circumstances under which the public should be notified of an SSO and establish responsibilities for posting notices or contacting the media. Potential public notification measures include the temporary signage to indicate pollution of surface water or ground water due to a SSO and notification through media outlets. The Public Works Director will be the contact person for media notification.

### 3.4 SSO Categories

1. Category 1 - All discharges of sewage resulting from a failure in the City's sanitary sewer system that:
  - A. Equal or exceed 1000 gallons, or
  - B. Result in a discharge to a drainage channel and/or surface water; or
  - C. Discharge to a storm drainpipe that was not fully captured and returned to the sanitary sewer system.
2. Category 2 – All other discharges of sewage resulting from a failure in the City's sanitary sewer system.
3. Private Lateral Sewage Discharges – Sewage discharges that are caused by blockages or other problems within a privately owned lateral.

### 3.5 SSO Reporting Timeframes

- Category 1 SSO – All SSOs that meet the above criteria for Category 1 SSOs must be reported as soon as: (1) the City has knowledge of the discharge, (2) reporting is possible, and (3) reporting can be provided without substantially impeding cleanup or other emergency measures. Initial reporting of Category 1 SSOs must be reported to the Online SSO System as soon as possible but no later than 3 business days after the City is made aware of the SSO. A final certified report must be completed through the CIWQS electronic database, within 15 calendar days of the conclusion of SSO response and remediation. Additional information may be added to the certified report, in the form of an attachment, at any time.

The above reporting requirements do not preclude other emergency notification requirements and timeframes mandated by other regulatory agencies, County Health Officers, local Director of Environmental Health, Regional and State Water Boards, Office of Emergency Services, or State law.

- Category 2 SSOs – All SSOs that meet the above criteria for Category 2 SSOs must be reported to the CIWQS electronic database within 30 days after the end of the calendar month in which the SSO occurs (e.g. all SSOs occurring in the month of January must be entered into the database by March 1st).
- Private Lateral Sewage Discharges – All sewage discharges that meet the above criteria for Private Lateral sewage discharges may be reported to the CIWQS database with the City's discretion. If a private lateral sewage discharge is recorded in the CIWQS database, the City must identify the sewage discharge as occurring and caused by a private lateral, and a responsible party (other than the City) should be identified, if known.

If there are no SSOs during a calendar month, the City will provide, within 30 days after the end of each calendar month, a statement through the CIWQS database certifying that there were no SSOs for the designated month.

In the event that the CIWQS database is not available, the City shall fax all required information to the appropriate Regional Water Quality Control Board offices in accordance with the time schedules identified above. In such event, the City must also enter all required information into the CIWQS electronic database as soon as practical.

### **3.6 Training**

The role of each person during an emergency has been established and is clear and concise. The City has pre-established responsibilities for staff members that work concurrently with the Wastewater Collection Systems and Operations staff to provide an efficient response. Any City administrative staff and Public Works Division staff that may be called upon to respond shall be required to read and sign-off on having read and understood the SSMP and SORR form.

Public Works Division staff shall be required to keep copies of the SSMP and the SORR forms in their vehicle and at the WWTP. If the emergency is during normal working hours, the Public Works Division Supervisor and his/her staff will work appropriately to handle the emergency.

The OERP shall provide SSO response and operational guidelines. The OERP shall include a collection of flow charts, forms and detailed response procedures directed at first responders and response crews. These guidelines will include procedures and forms for responded to a sewer back up in a residential or commercial area as well as procedures and forms for responding to SSOs in a public street.

These guidelines shall include flow charts to determine the source of the backup, instructions on filling out appropriate forms, tips on communicating effectively with homeowners and businesses, containment procedures, guidelines for estimating spill volume and flow, blockage clearing and area clean up for a SSO. Public Works Division staff shall have traffic control equipment in the event of a SSO. The Police Department may also be contacted to conduct crowd control, if necessary.

### **3.7 Sewer System Overflow Impact Mitigation**

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

The City shall take 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 SSOs, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the discharge.

The City Public Works Division staff shall use mats, or other suitable materials, to block the catch basin entrances to storm drains and also will use a vacuum truck to vacuum up spills and to provide wash down water where appropriate.

All SSOs are reported immediately to the Health Department. The City utilizes the County of Monterey Environmental Health Department for the monitoring water quality post-SSO. **County of Monterey Department of Health, Division of Environmental Health offices are located at 1270 Natividad Road, Room 301-B, Salinas, CA 93906; (831) 755-4505 and (831) 755-4880 Fax.** (County of Monterey Department of Health current contact information shall be included as part of



Appendix B). The City of Gonzales may provide to County Health any necessary support, equipment, or staff as requested to assist in the water quality monitoring and/or SSO mitigation.

### Element 4 - Fats, Oils and Grease (FOG) Control Program

This section of the SSMP describes the Fats, Oils and Grease (FOG) Control measures, including identification of problem areas, focused cleaning, and source control. This section fulfills the FOG Control Program requirement for both the Regional and State Water Boards.

#### 4.1 Regulatory Requirements

The requirements for the FOG Control Program element of the SSMP are summarized below:

The City will evaluate its service area to determine whether a FOG control program is needed. If the City determines that a FOG program is not needed, the City should provide justification for why it is not needed. If FOG is found to be a problem, the City should prepare and implement a FOG source control program to reduce the amount of these substances discharged to the sanitary sewer system. The FOG source control program may include the following as appropriate:

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

#### Element 4: FOG Appendix

Supporting information for Element 4 will be included as part of **Appendix C**. The Appendix shall include the following documents:

1. List of Food Services Establishments (FSE)
2. FOG inspection forms
3. Public Outreach Materials for both residential and commercial populations
4. List of High Maintenance Areas (HMAs) designated by historic or chronic FOG problems

5. List of sewer cleaning schedule and maintenance for HMAs.

#### **4.2 FOG Control Program Discussion**

The City shall develop a FOG Control Program, as an addendum to existing local municipal codes, and rules and regulations governing the sewerage system. The City shall develop a FOG Control Program with the following guidelines.

- Restaurants or any food preparation that generate grease are required to obtain a Source Control Permit.
- Several options were discussed in regards to program fees. Program fees are intended to help alleviate the burden of program costs and assist in facilitating a successful FOG Control Program. The City is in the process of developing appropriate Discharge User Fees.
- Restaurants will be inspected at a minimum of once per year. Restaurants may be inspected more frequently as determined by the City needs and/or as warranted by current stages of program compliance.
- All restaurants will be required to use Best Management Practices (BMP's) to reduce grease discharged to the sewer system (e.g.; store waste grease in barrels to haul off site, scrape remaining food off plates and into trash receptacle before washing).
- Any restaurants planning a remodel valued at \$100,000 or more will be required to include installation of a grease trap/interceptor.
- All new construction of restaurants should include installation of a grease trap/interceptor.
- Exemptions, conditional waivers, or variances will be available to restaurants that do not generate grease, do not cause related sewer blockages, and/or have limited space on their property that makes it impossible to install a grease trap/interceptor.
- Garbage grinders are prohibited in all restaurants except where specifically allowed by the City.

#### **4.3 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, that are likely or prove to have grease accumulation. The City continues to identify potential grease problem areas by tracking locations and causes of dry weather blockages and SSOs. For instance, the Wastewater Treatment staff responded to one spill/blockage incidents in 2006.

The Public Works Division staff have identified several areas that are prone to blockages. In a proactive approach, the Public Works Division has established a routine cleaning checklist which specifies areas in need of cleaning. A copy of these cleaning checklists shall be provided as part of Appendix C.

The goal of a City-wide FOG Control Program is the inspection of all food service establishments (FSEs) identified within the first year of the program, issuance of Grease Control permits to restaurants that meet the requirements as specified in the City municipal code (Chapter 10.16 Sewage Disposal).

As a preventative measure, the City continues to develop the routine cleaning schedule for the sanitary sewer system and shall add areas prone to grease build-up or blockages (also known as High Maintenance Areas (HMAs) to the list. Cleaning frequency will depend upon the history of stoppages or overflows of a sewer line, as well as areas that are prone to grease buildup.

The City's Public Works Division is pursuing the option of GIS mapping of each manhole location, and manhole reach scheduled for focused cleaning. Should this method provide feasible for the City, this data can be used in conjunction with cleaning logs, on which Public Works Division staff shall note the date and time of flushing as well as debris type and severity.

An estimated 7-12,000 linear feet of the collection system was inspected via Closed Circuit Television (CCTV) approximately ten years ago. Subsequently, and estimated fifty percent (50%) of the identified portion of the collection system, consisting of vitrified clay pipe (VCP) and brick manholes have been replaced.

The City shall budget, as part of the overall CIP budget, for the routine CCTV of the collection system. Is if the goal of the City to perform video inspection via Closed Circuit Television (CCTV) of one-fourth (1/4) of the collection system annually.

Additional information about cleaning and maintenance shall be included in Element 6: Measures and Activities.

#### **4.4 Legal Authority**

The City is researching the legality of adopting a FOG Control ordinance and has found it does have the authority to adopt and implement certain grease control regulations on public and private property. As the FOG Control Program was determined necessary, the City has considered adopting a common FOG Control regulation.

Through the Municipal Code, Chapter 10.16 Sewage Disposal, the City has legal authority to:

- Limit types of wastes discharged to public sewers
- Require installation of grease interceptors
- Require maintenance of grease interceptors, and
- Implement measures, as appropriate

Excerpt from the City's Municipal Code, Chapter 10.16.110 "Limitations on Use of Sewers" is as follows;

"B. Prohibited Discharges: Except as hereinafter provided, no person shall discharge or cause to be discharged any of the following described water or wastes to any public sewer:

1. Any liquid or vapor having a temperature higher than one hundred fifty degrees Fahrenheit (150°F).

2. Any water or waste which may contain more than one hundred (100) parts per million, by weight, of fat, oil or grease.
3. Any gasoline, benzene, naphtha, fuel oil, or other flammable or explosive liquid, solid or gas.
4. Any garbage that has not been properly shredded.
5. Any ashes, cinders, sand, mud, straw, shavings, metal, glass, rags, feathers, tar, plastics, wood, paunch manure or any solid or viscous substance capable of causing obstruction to the flow in sewers or other interference with the proper operation of the sewage works.
6. Any waters or wastes having a pH lower than 6.5 or higher than 8.5 or having any other corrosive property capable of causing damage or hazard to structures, equipment and personnel of the sewage works.
7. Any waters or wastes containing a toxic or poisonous substance in sufficient quantity to injure or interfere with any sewage treatment process, constitute a hazard to humans or animals, or create any hazard in the receiving waters of the sewage treatment plant.
8. Any waters or wastes containing suspended solids of such character and quantity that unusual attention or expense is required to handle such materials at the sewage treatment plant.
9. Any noxious or malodorous gas, liquid or substance capable of creating a public nuisance.
10. Any industrial wastes or sanitary sewage exceeding the following constituent concentration expressed in milligrams per liter:

Constituent	Concentration (mg/l)
Total dissolved solids	1,200
Sodium	200
Chloride	150
Boron	0.5
Sulfate	280
Total nitrogen	30
BOD	300
Suspended solids	350

11. Any chemical with a vapor pressure exceeding that of water at ambient temperatures.

C. Grease, Oil and Sand Interceptors:

1. Grease, oil and sand interceptors shall be provided when, in the opinion of the approving authority, they are necessary for the proper handling of liquid wastes containing grease in excessive amounts, or any flammable wastes, sand and other harmful ingredients; except that such interceptors shall not be required for private living quarters or dwellings. All interceptors shall be

of a type and capacity approved by the approving authority, and shall be located as to be readily and easily accessible for cleaning and inspection.

2. Grease and oil interceptors shall be constructed of impervious materials capable of withstanding abrupt and extreme changes in temperature. They shall be of substantial construction, watertight and equipped with easily removable covers which when bolted in place shall be gastight and watertight.

3. Where installed, all grease, oil and sand interceptors shall be maintained by the owner, at his expense, in continuously efficient operation at all times.”

While the City has the legal authority to require installation and maintenance of grease interceptors, the City has not historically inspected these facilities nor actively enforced these sections of the Municipal Code. As part of the City’s increased Source Control efforts, these inspections and enforcement shall be implemented as part of the City’s overall SSMP.

The City shall pursue the development and implementation of design standards and reporting requirements of a FOG Control Program. The City will continue to pursue the legality of FOG inspections through the current Municipal Code, Title 10, Chapter 10.16. These provisions may include the following;

- Requiring Grease Interceptors and Gravity Separating Devices. Grease, oil, and sand interceptors or gravity separating devices at user’s expense when, in the opinion of the Director of Public Works, they are necessary for the proper handling of the liquid wastes containing grease or any flammable wastes, sand or other harmful ingredients.
- All interceptors shall be sized using the Uniform Plumbing Code (UPC), current edition, as a guide.
- Interceptors must be of a capacity sufficient to provide the appropriate quality of effluent as per City Standards and shall 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.
- All interceptors and separators are required to be properly maintained to ensure compliance with city requirements.
- Requirements for the installation of a grease interceptor or trap shall be determined on a case-by-case basis by the City using the UPC as a guide.
- All car washes, vehicle service stations and garages shall be required to install a gravity separating device designed to prevent the discharge of sand, silt, oil and grease to the sewerage system.
- Requirement for the installation of a gravity separation device shall be determined on a case-by-case basis by the City using the UPC as a guide.
- If the City finds that a grease interceptor or gravity separating device installed prior to the effective date of the ordinance is incapable of adequately retaining the grease, sand or oil in the wastewater flow, the city shall notify the user, in writing, that an adequate

interceptor or gravity separating device shall be installed within a specific, reasonable time period.

#### **4.5 Identify HMAs:**

The City's Public Works Division staff continue to identify sections of the sewer collections system subject to grease blockages and establish a cleaning maintenance schedule for each section. City staff continues to compiling a list of 'hot spots', or High Maintenance Areas (HMAs), within the community. A map shall be developed detailing the specifics of each designated site. These areas of concerns will be put on an increased cleaning schedule.

#### **4.6 Source Control Measures:**

The City may develop and implement source control measures for all sources of grease and fats discharged to the sewer system. Source Control Measures may consist of the following, at a minimum:

- Distribution of the City's FOG Control pamphlets to restaurants and homeowners.
- Restaurants will be required to install grease traps and/or grease interceptors.
- Restaurants will be required to implement Best Management Practices (BMP's) such as;
  - Train kitchen staff and other employees about how they can help ensure BMPs are implemented.
  - Post "No Grease" signs above all sinks and on the front of dishwashers.
  - Use water temperatures less than 140° F in all sinks, especially the pre-rinse sink before the mechanical dishwasher.
  - Recycle waste cooking oil.
  - "Dry wipe" pots, pans, and dishware prior to dishwashing.
  - Dispose of food waste by recycling and/or solid waste removal.
  - Properly Maintain Grease Trap/Interceptors
  - Witness all grease trap or interceptor cleaning/maintenance activities to ensure the device is properly operating.
  - Clean under-the-sink grease traps weekly, or more frequently, if needed.
  - Clean grease interceptors routinely, at least monthly.
  - Keep a maintenance log.
  - Cover outdoor grease and oil storage containers.
  - Locate grease dumpsters and storage containers away from storm drain catch basins.
  - Use absorbent pads or other material in the storm drain catch basins if grease dumpsters and containers must be located nearby. (Absorbent pads may be required if the basin is within 20 feet of grease dumpsters or containers or if there are signs of grease in the catch basin at any distance).
  - Routinely clean kitchen exhaust system filters.



### Element 5 - Legal Authority

The SSMP shall include legal authority, through sewer use ordinances, service agreements or other legally binding procedures, to prevent illicit discharges into its sanitary sewer system. This section fulfills the Legal Authority requirements for both the Regional and State Water Boards.

#### 5.1 Regulatory Requirements

The City has the power to install sewers and enact regulations related thereto, including the prohibition of private sewer systems and requiring all inhabited property to be connected to City sewers. The City will demonstrate, through sanitary sewer system use ordinances, service agreements, or other legally binding procedures, that it possesses the necessary legal authority to:

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

#### Element 5: Legal Authority Appendix

Supporting information for Element 5 shall be included in **Appendix D**. The Appendix shall include the following documents:

1. City of Gonzales Municipal Code, Title 10, Chapter 10.16
2. FOG Control Program Policy
3. Addendums to existing Municipal Code

#### 5.2 Inspections and Maintenance

In an effort to control I/I, the City maintains and inspects the sewer system on a daily, weekly, monthly, semi-annual and annual basis. Listed below are the maintenance and inspection categories and when they occur:

1. On a daily basis, seven days per week, 365 days per year, City staff performs observations of sewer lift stations to ensure they are in proper working order.
2. On a daily basis City staff reviews and evaluates the performance of the pumps at the sewer lift stations. Repairs are made if any abnormalities are found.
3. On a weekly and monthly basis, City staff cleans all HMAs that are placed on a high maintenance list. Any areas shown to be of high concern are placed on this list for monthly cleaning and inspection. The City has a jetter truck which can be used to assist in this task.
4. City staff is working on a collection system cleaning schedule which shall be implemented on a weekly, monthly and quarterly basis. This cleaning schedule will include work orders which will generate the activity and provide the ability for trend tracking. This quarterly cleaning

schedule will allow City staff to flush the sewer gravity collection system and the sewer wet well at the lift stations with potable water to prevent solids buildup.

5. On a semiannual basis, City staff enters each sewer lift stations wet well to extract all debris collected at the bottom and sides of the well and around each sewer pump (i.e. grit, grease, foreign objects, etc).
6. On an as needed basis, City staff may require hydro flushes the sewer gravity collection system and the force mains. This hydro flushing in primarily intended to prevent fats, oil and grease (FOG) from clogging the sewer collection system. The hydro flushing services may be contracted out to a licensed vendor, or performed in-house with specialized equipment.
7. On an as needed basis, City staff inspects the interior of any collection line that is reported to have reduced capacity or is operating outside of normal operating parameters. This inspection may be performed with a video camera that displays a picture of the interior walls of the collection system and can pinpoint any problem areas.
  - a. It is the primary goal of City staff to upgrade lift station monitoring with a SCADA (Supervisory Control and Data Acquisition) System which would provide for daily monitoring and assurance of proper operation.

All of the semiannual and annual inspections and maintenance tasks are documented by customer, service order, electronic log, or paper copy, all of which are filed at the City Public Works Division. All staff conducting inspections and maintenance to the sewer system are trained, either through a formal or in-house program. The work of all contractors performing work on the sewer system is monitored, reviewed and inspected by the City's Public Works staff.

### **5.3 Design and Construction**

The City has developed Standards and Specifications for the Construction of Sanitary Sewers. The Standards and Design Specifications were developed in 1995 are currently in the process of being revised and updated to include recent code changes.

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, methods of construction, kinds and uses of materials, and the preparation of plans for construction, repair, or alteration of City sewer and water facilities.

The City utilizes the contracted services of a City Engineer to provide support in engineering and inspections to ensure proper installation, testing and inspection of sewer lines is completed. The licensed Professional Engineer (PE) is trained and well experienced in pipeline and lift station construction. The PE may attend regular training classes and educational seminars to remain familiar with advancements in the industry. The PE uses the Standards and Design Specifications designated by the City for the construction of all new and rehabilitated sewer related projects.

Copies of the City's most current Design and Specification Standards for Water and Sewer Construction shall be included in Appendix D.

### **5.4 Grease Control**

The City is considering development of a FOG Control Program, as an addition to existing local municipal codes and rules and regulations governing the sewer system. The FOG policy set forth

shall provide the City with the legal authority for the FOG Control Program to regulate the Food Service Establishments (FSEs), or restaurants, located within the City service area. A City-wide FOG Control Policy is in the process of development. Element 4 provides further description of the FOG Control Program.

## Element 6 - Measures and Activities

This section of the SSMP discusses the activities and control measures employed by the City in identifying problem areas, developing cleaning schedules, source control and maintenance projects for the overall improvement of the collection system. This section fulfills the Measures and Activities requirements for both the Regional and State Water Boards.

### 6.1 Regulatory Requirements

The City shall evaluate its service area to determine measures and activities taken to evaluate the overall collection system and make repairs as a preventative maintenance measure. The City shall complete the following measures and activities:

- Resources and Budget
- Outreach to Plumbers and Building Contractors
- Prioritize Preventative Maintenance
- Contingency Equipment and Replacement Inventories
- Training for Maintenance Workers
- Updating the Collection Systems Map
- Scheduling Inspections and Condition Assessment

### Element 6 - O&M Appendix

Supporting information for Element 6 shall be included in **Appendix E**. The Appendix shall include the following documents:

- Capital Improvement Budget
- 10-year CIP Budget
- Sanitary sewer cleaning schedule and Preventative Maintenance (PM) program
- Sanitary Sewer Inventory list
- Collection system mapping
- Inspection Forms for all establishments inspected as part of the City's overall Source Control Program

### 6.2 Operation and Maintenance Program

In order to provide an adequate and appropriate SSO reduction plan, the SSMP shall address the elements listed below that are appropriate and applicable to the discharger's system and identify the person or position in the organization responsible for each element.

#### 6.2.1 Collection System Map

The City shall maintain an up-to-date map of the collection system showing all gravity line segments and manholes, pumping station facilities, pressure pipes and valves and storm water conveyance facilities. The collection system map shall be included in Appendix E.

The City recognizes the link between a sewer spill and its travel in a storm drain system to the receiving waters. The City shall educate staff to understand the storm drain network and utilize it to capture a spill if it has entered the storm drain system.

The City understands that State regulations contain requirements prohibiting sewer system spills into the storm drains. The State requires the City to incorporate measures that will decrease the possibility of sewer spills.

### **6.2.2 Preventive Maintenance**

The City recognizes the importance of preventative operation and maintenance activities performed by City staff and outside contractors. Such preventative activities shall include regular collection system maintenance and frequent cleanings targeted at known problem areas. The City shall develop a Preventative Maintenance (PM) program that will provide a system of tracking work orders and assessing the success of the PM program.

The City has been proactive in developing an annual cleaning schedule of the collection system. Areas presenting a need for additional cleanings – known as “hot spots” or HMAs– are routinely inspected cleaned. The Public Works Division Supervisor oversees the Maintenance and Operations staff, provides technical support and reviews wastewater flow data and reports to ensure proper operation.

### **6.2.3 Lift Station Design**

The City of Gonzales has five (5) sewer lift stations (facilities for collecting wastewater flows from a low elevation and pumping them to a higher elevation, allowing wastewater to travel by gravity to the wastewater treatment plant). The majority of the lift stations are designed with back-up systems to reduce the likelihood of a sewer spill. Listed below are the detail and capabilities of the sewer lift stations:

1. Lift Station Design
  - a. Lift station(s) have minimum storage times between 1.5 to 2 hours.
  - b. All lift stations have an audible and/or visual alarm that will notify staff in the event of a failure and/or overflow. The City contracts with a private alarm company for emergency notification or failure of a lift station pump or related equipment.
    - i. The City is in process of pursuing lift station upgrades to include a SCADA system that monitors a variety of operations parameters including power failure, motor failure, high water level and low water level. A SCADA system would have an uninterruptible power supply battery for alarm back up. The SCADA system is connected to all lift stations as the primary mean for monitoring and alarm notifications.
  - c. All lift stations have manual back-up power which may be utilized during a power outage, required maintenance activities, or various emergency situations as required.
  - d. All lift stations have duplex pumps which can be selected to run either pump all the time or alternate between pumps. Only one pump is needed to maintain flow at the lift stations. The two pump system provides redundancy in case of pump failure. The City stocks spare motors for all pumps.

City Public Works staff are trained in lift station trouble-shooting and repair. Stand-by staff is available twenty-four (24) hours per day, seven (7) days a week. In the event of high water alarm at a lift station these employees are notified by the audible/visual alarms or via the private alarm company. If the first person called fails to acknowledge the alarm, then the next person on the list is called and this continues until the alarm is acknowledged. All trained on-call personnel can respond in thirty (30) minutes or less.

#### **6.2.4 Rehabilitation and Replacement Plan**

The City shall develop a plan to help identify and prioritize structural deficiencies and implement short-term and long-term rehabilitation actions to address each deficiency. This may include a rehabilitation plan including schedules for the entire system. The program shall include regular visual and CCTV inspection of sewer pipes and a system for assessing and ranking the condition of sewer pipes.

As routine and preventative maintenance procedures, the City shall conduct smoke testing on various sections of the collection system to determine the severity of I/I. The City may notify residents and business owners to provide necessary repairs of their private sewer laterals based upon the results of the smoke testing. The City will continue to perform routine cleaning, maintenance and CCTV inspections to detect deficiencies in the sewer system.

These routine and preventative cleaning projects will allow for the City to stay ahead of needed repairs. From a long-term standpoint, any determined repairs will be scheduled for completion in the yearly Capital Improvement Program (CIP).

The sewer lift station and pressurized sewer lines (force mains) require a more aggressive maintenance program. The lift stations have equipment that operate in short cycles throughout each hour of each day. The stations are monitored and maintained daily and because of the continuous operation, any deficiencies are readily apparent. Maintenance is on-going, as well as on an as-needed basis.

Sewer service charges and connection fees provide yearly revenue for the Capital Improvement Program. These funds are used for major maintenance and rehabilitation projects and for expansion projects. In addition to these funds, various other items in the budget are dedicated to sewer system maintenance and operation.

The CIP (Department of Sewer Enterprise) Budget shall be included in Appendix E and shall depict the sequence of recommended projects spread over the upcoming fiscal years.

#### **6.2.5 Training**

The City recognizes the importance of providing training on a regular basis for staff in collection system operations, maintenance, and monitoring to determine if contractors and their staff are appropriately trained.

The Public Works Division position descriptions require that staff obtain the necessary licensure as required. Public Works Division staff shall be required to earn and maintain a Grade I Distribution and Collection System Maintenance Certification within eighteen (18) months of hire.

Division staff and various City personnel shall attend collection system training. Training opportunities shall be provided by the California Rural Water Association (CRWA), California Water Environment Association (CWEA) and through Wastewater Operators correspondence courses. The majority of the operations staff have several years of service in the wastewater collection, treatment, and/or disposal

field. A current representation of Public Works Division staff training and certification levels shall be provided in Appendix E.

### 6.2.6 Capital Improvement Projects

The Public Works Division staff provide the majority of routine repairs, maintenance and emergency response for the City. Capital Improvement Projects (CIP's), as determined in the City's Fiscal Year Budget, are accomplished as funding permits and in accordance with need.

Table 6.0 presents the proposed Sewer Enterprise Budget and funding sources for the 2007-08 fiscal year. Accounts 6530, 6540 and 6542 provide Capital outlay funding for wastewater improvements, equipment and vehicle.

Table 6.0 – Sewer Enterprise Budget 2007-08 FY

City of Gonzales Proposed Budget FY 2007-08								
FUND 530	Sewer Enterprise	Budget FY 2006- 07	Amended Budget FY 2006- 07	Actual A/O March 31, 2007	Remaining Budget FY 06-07 Balance	Projected Balance at June 30, 2007	Proposed FY 2007- 08 Budget	Variance Original FY 06-07 / Proposed FY 07-08
6530.000	Capital Outlay – Improvements	2,385,680	2,385,680	1,819,763	566,916	2,115,000	370,067	(2,015,513)
6540.000	Capital Outlay – Equipment	240,800	240,800	0	240,800	240,800	240,800	0
6542.000	Capital Outlay – Vehicles	6,500	6,500	0	6,500	6,500	6,500	0

Tables 6.2 and 6.3 as presented below, outlines the recommended capital improvement projects, for the collection system and wastewater treatment, as identified in Chapter 4 of the Wastewater Master Plan 2001. These recommendations for improvements included those necessary for repairs and maintenance of the existing infrastructure, as well as those required to accommodate future expansion.



Table 6.1 Collection System Replacement Cost Estimate

<b>City of Gonzales, Collection System Estimate of Probable Replacement Cost</b>						
Item No.	Description	Quantity	Unit	Unit Cost	Total Cost	
<u>WEST OF HWY 101</u>						
<u>1931-1940 &amp; Recent Repairs</u>						
1	6 inch VCP	24,800	lf	\$55	\$1,364,000	
2	6 inch Force Main PVC	1,770	lf	\$50	\$88,500	
3	8 inch VCP	16,590	lf	\$70	\$1,161,300	
4	10 inch VCP	8,460	lf	\$100	\$846,000	
5	12 inch PVC	5,040	lf	\$105	\$529,200	
6	21 inch VCP Interceptor	10,800	lf	\$185	\$1,998,000	
7	Manholes	138	ea	\$2,500	\$345,000	
8	Cielo Vista Lift Station	1	ea	\$80,000	\$80,000	
Subtotal					\$6,412,000	
<u>ARROYO ESTATES (1988)</u>						
<u>CALIFORNIA BREEZE SUBDIVISION (1993)</u>						
<u>SUNRISE ESTATES (1991)</u>						
9	4 inch VCP	410	lf	\$45	\$18,450	
10	6 inch VCP	6,016	lf	\$55	\$330,880	
11	6 inch Force Main PVC	4,080	lf	\$50	\$204,000	
12	8 inch PVC	20,784	lf	\$70	\$1,454,880	
13	Manholes	88	ea	\$2,500	\$220,000	
14	Arroyo Estates Lift Station	1	ea	\$80,000	\$80,000	
15	California Breeze Lift Station	1	ea	\$80,000	\$80,000	
16	Sunrise Lift Station	1	ea	\$80,000	\$80,000	
Subtotal					\$2,468,000	
<u>CANYON CREEK (2000)</u>						
17	6 inch PVC	490	lf	\$55	\$26,950	
18	6 inch Force Main PVC	1,240	lf	\$50	\$62,000	
19	8 inch PVC	10,138	lf	\$70	\$709,660	
20	Manholes	32	ea	\$2,500	\$80,000	
21	Canyon Creek Lift Station	1	ea	\$80,000	\$80,000	
Subtotal					\$959,000	
<b>Total Estimated Construction Cost</b>					<b>\$9,839,000</b>	
			Engineering/Legal/Administrative	20%	\$1,968,000	
Subtotal					\$11,807,000	
			Contingency	30%	\$3,542,000	
<b>ENR CCI (SF) 7448</b>					<b>Total Replacement Capital Cost</b>	<b>\$15,349,000</b>

Pipeline unit costs do not include cost of pavement cutting and replacement.

Collection system improvements shall be completed incrementally by area. Treatment plant and interceptor improvements shall be triggered by increments of increasing flow.

Collection system capital cost estimates were developed using unit costs from a database of 2001 bid prices from local vendors from various municipal contracts in Monterey County. Treatment system cost estimates were developed primarily from construction cost estimating curves published by EPA for use in planning level cost estimates.

Table 6.2 Wastewater Treatment Replacement Cost Estimates

<b>City of Gonzales, Existing Wastewater Treatment System Estimate of Probable Replacement Cost</b>				
Item	Quantity	Unit	Unit Price	Cost
1 Total acreage	62	acres	\$35,000	\$2,170,000
2 Lagoons, 22 acres, excavation and grading	106,480	cu. yd.	\$20	\$2,129,600
3 Bypass basin, 1.5 acres, excavation and grading	7,260	cu. yd.	\$20	\$145,200
4 Infiltration basins, 21 acres, excavation and grading	50,820	cu. yd.	\$20	\$1,016,400
5 Headworks- screens, grinders, Parshall flume	1	ls	\$104,000	\$104,000
6 Wet wells and raw sewage pumping	1	ls	\$111,000	\$111,000
7 Aerators and wiring, 6 @ 7.5 HP ea.	1	ls	\$148,000	\$148,000
8 Misc. valves, manholes, and yard piping	1	ls	\$170,000	\$170,000
9 Control/Admin. building	1	ls	\$54,000	\$54,000
<b>Total Estimated Construction Cost</b>				<b>\$6,048,000</b>
Engineering/Legal/Admin		20%		\$1,210,000
Subtotal				\$7,258,000
Contingency		30%		\$2,177,000
ENR CCI (SF) 7448			<b>Total Replacement Capital Cost</b>	<b>\$9,435,000</b>

## Element 7 – Design Standards & Construction Specifications

### Design & Construction Overview

The City is responsible for reviewing design and construction documents to ensure that all construction projects meet the City standards. The City is responsible for updating standards for installation, rehabilitation and repair, as needed. The City retains the responsibility for inspections of construction projects to ensure City standards have been followed. This section fulfills the Design and Construction requirements for both the Regional and State Water Boards.

### 7.1 Regulatory Requirements

The City shall develop design and construction standards specific to the installation, repair and/or rehabilitation of sanitary sewer systems. These shall include:

- (a) Design and construction standards and specifications for the installation of new sanitary sewer systems, pump stations and other appurtenances; and for the rehabilitation and repair of existing sanitary sewer systems; and
- (b) Procedures and standards for inspecting and testing the installation of new sewers, pumps, and other appurtenances and for rehabilitation and repair projects.

### Element 7 – Design & Standards Appendix

Supporting information for Element 7 shall be included in **Appendix F**. The Appendix shall include the following documents:

- Design and construction standards and specifications
- Procedures for testing and inspection of the collection system

### 7.2 Design and Construction Standards

The City standards for the proper installation and inspection of sewer lines are discussed in Element 5 of this document. Additionally, the City has standardized its use of equipment in the pumping process for ease of maintenance and replacement. This includes the pumps, liquid level indicators, electrical components, valves, piping and radios. The City adopted Standard Specifications and Drawings for water and sewer improvements which can be located are Appendix F.

### 7.3 Inspection Standards

The City standard public works procedures provide that the work is not placed into service and accepted by the Public Works Director and until inspection and testing are completed. The City provides continuous inspection during the construction of sewer facilities and believes that proper installation is the key element to ensure proper operation and maximum life expectancy.

### Element 8 – Capacity Management & Assurance

The City shall prepare and implement a Capital Improvement Plan (CIP) that will provide System Hydraulic Evaluation and Capacity Assurance Plan (SHECAP) of key sanitary sewer system elements for dry weather peak flow conditions, as well as the appropriate design storm or wet weather event. This section fulfills the Capacity Management requirements for both the Regional and State Water Boards.

#### 8.1 Regulatory Requirements

The City shall develop a System Hydraulic Evaluation and Capacity Assurance Plan which will provide sanitary sewer system elements for dry weather peak flow conditions, as well as the appropriate design storm or wet weather event. The requirements for the Capacity Management element of the SSMP are summarized below.

City shall prepare a System Hydraulic Evaluation and Capacity Assurance Plan (SHECAP): The Enrollee may prepare and implement a CIP that will provide hydraulic capacity of key sanitary sewer system elements for dry weather peak flow conditions, as well as the appropriate design storm or wet weather event. At a minimum, the plan should include:

- (a) Evaluation: Actions needed to evaluate those portions of the sanitary sewer system that are experiencing or contributing to a SSO discharge caused by hydraulic deficiency. The evaluation should provide estimates of peak flows (including flows from a SSO that escape from the system) associated with conditions similar to those causing overflow events, estimates of the capacity of key system components, hydraulic deficiencies (including components of the system with limiting capacity) and the major sources that contribute to the peak flows associated with overflow events;
- (b) Design Criteria: Where design criteria do not exist or are deficient, undertake the evaluation identified in (a) above to establish appropriate design criteria; and
- (c) Capacity Enhancement Measures: The steps needed to establish a short- and long-term CIP to address identified hydraulic deficiencies, including prioritization, alternatives analysis, and schedules. The CIP may include increases in pipe size, I/I reduction programs, increases and redundancy in pumping capacity, and storage facilities. The CIP may include an implementation schedule and may identify sources of funding.
- (d) Schedule: The City may develop a schedule of completion dates for all portions of the capital improvement program developed in (a)-(c) above. This schedule may be reviewed and updated consistent with the SSMP review and update requirements as described in Section D.14 of the State-wide GWDR.

#### Element 8 – SHECAP Appendix

Supporting information for Element 8 shall be included in **Appendix G**. The Appendix shall include the following documents:

- Capital Improvement Projects Budget including funding sources
- System Hydraulic Evaluation & Capacity Assurance Study

- Inflow & Infiltration (I/I) Plan
- Program implementation schedule

## **8.2 System Hydraulic Evaluation and Capacity Assurance Plan**

The City has typically recorded minimal SSOs. In 2006, City staff responded to one (1) incident. This blockage occurred at the Housing Authority and was caused by problems with private laterals and was located on private property. The overflow reported was a Category 2 spill, less than 1,000 gallons and discharge did not reach a body of water to pose a threat to human health.

The City is considering future build-out as they identify current capacity, a hydraulic analysis of every line in the system of the collection system, and plans for increasing future capacity needs. The current system capacity is adequate for the current dry weather and wet weather peak sewer flows.

The City shall include as part of its SSMP update, a list of projects identified as necessary to increase the capacity of portions of the collection system. If no improvements are required in the short-term, long-term improvements will be planned according to build-out of the City. During the design of each project, alternative designs will be considered.

The intent of the City's Wastewater Master Plan, as drafted by Creegan & D'Angelo (C & D Consulting Engineers) in April 2001, was to help guide the City's water and wastewater infrastructure improvements over the next 20 years. The scope of the Master Plan included a flow metering and data analysis phase followed by a collection system capacity analysis and capital improvement recommendations. The report stated the estimated wastewater flow for the year 2000 was 0.46 mgd. Expansion of the City throughout currently developed areas within existing Sphere of Influence Boundary, referred to as Stage-1 growth in the Wastewater Master Plan, will result in an estimated population growth and a projected average daily wastewater flow of 1.3 mgd.

A scenario of further growth in areas currently outside the Sphere of Influent Boundary was considered in this plan and referred to as Stage-2 growth. The population for the stage was projected at 29,000, with corresponding average daily wastewater flows of approximately 2.9 mgd.

Intrinsic to the 2001 Wastewater Master plan, City staff reporting the following operations problems:

- Alta Street sewer from 7<sup>th</sup> Street to "C" Street surcharges regularly during morning and evening peaks.
- Grease deposits on the Alta Street sewer also create backups; this condition is compounded by its current surcharged conditions.
- Hydrogen Sulfide odors and carrions problems have been observed on the 5<sup>th</sup> Street overpass.
- Additional odor problems are anticipated at the force main discharge on Elliot Street when Canyon Creek development comes on-line.
- Frequent blockages occur on 1<sup>st</sup> Street in a sagging portion under the Gonzales Slough.

As a result, City staff have indicated the follow items as maintenance priorities:

- Address odor and carrion problems in Arroyo Estates and Chopping Center gravity line on 5<sup>th</sup> Street Overpass. Slip line or replace pipe as necessary.
- Repair or replace Rincon Street sewer.

- Upsize surcharged section of Alta Street sewer and intercept a portion of the upstream flow with a larger diameter line and repair or replace existing sewer.
- Repair or replace sagging section of 1<sup>st</sup> Street under Gonzales Slough.
- Install SCADA system for all five (5) lift stations.
- Provide for both propane and natural gas backup capabilities at each lift station.
- Continue replacement or relining of aged brick manholes in older sections of the system (108 manholes remaining as of 2001)

These recommendations have been incorporated into the City's CIP where appropriate. .

### **8.3 Schedule**

The City shall develop a schedule of completion date for repair and replacement projects developed as part of the City's overall CIP program and Wastewater Master Plan recommendations. Funding sources for the City's Sewer Enterprise fiscal year budget is provided in Table 6.0.

The recommended projects discussed in Element 6 and estimated replacement costs (excerpts from the 2001 Wastewater Master Plan) are provided for further review in Tables 6.1 and 6.2.

This CIP replacement schedule shall be reviewed and updated consistent with the Sewer System Management Plan, current regulations and update requirements.

Pursuant to Government Code Section 61110, adoption of operating budgets that conform to generally accepted accounting principles before September 1 of each year. The City's operating and CIP budgets outline anticipated revenue and expense for the fiscal year. The City Council adopts a preliminary budget in June and a final budget at the first regular meeting in July.

**Element 9 - Monitoring, Measurement and Program Modifications**

This section of the SSMP discusses monitoring, measurement and program modifications employed by the City. The City shall prepare and implement program modifications as appropriate to address deficiencies, or as a preventative measure for improving the overall collection system. This section fulfills the Monitoring, Measurement and Program Modification requirements for both the Regional and State Water Boards.

**9.1 Regulatory Requirements**

The City shall develop a monitoring, measurement and program modifications to maintain relevant information that can be used to establish and prioritize appropriate SSMP.

**Regulatory Requirement:**

The City should evaluate, prepare and implementing monitoring, measurement and program modifications to include the following information:

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

**Element 9 – Monitoring, Measurement & Program Modification Appendix**

Supporting information for Element 9 shall be included in **Appendix H**. The Appendix shall include the following documents:

- Preventative Maintenance (PM) Program Documents
- Public Outreach Materials
- SSO Logs and Trend Data

**9.2 Monitoring, Measurement and Modification Program**

The City shall maintain relevant information to establish and prioritize appropriate SSMP activities (such as the immediate elimination of dry weather overflows or overflows into sensitive waters, such as public drinking water supplies and their source waters, waters where swimming may occur, designated Outstanding National Resource Waters or Areas of Special Biological Significance, , waters within Federal, State, or local parks, and water containing threatened or endangered species or their habitat).



Should a SSO occur within the City, the data collected and relevant information may be documented within the log of entry. The Public Works Director shall keep an annual record of the incidents and assumed causes of the spills. This information shall be reported on a monthly basis to the Regional Board and electronically to the State through the CIWQS (California Integrated Water Quality System) database. This information shall be used to assist in planning activities, programs and policies that help eliminate future SSOs and their causes.

The SSMP shall be reviewed annually to ensure all the provisions are implemented and the effectiveness discussed at the quarterly department staff meetings. The Public Works Division staff includes the management, field crews, administrative staff, and engineering staff as required. Any issues of concern generated by these quarterly meetings will be addressed in the work order program.

The City is developing an annual cleaning schedule of its collection system to determine the current status, and/or deficiencies of the collection system. With these proactive and preventative measures in place, the City will have the ability to assess the success with reduction in SSO maintenance and repairs.

### **9.3 Updates**

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

### **9.4 Identifying trends**

The City shall identify and illustrate SSO trends including frequency, location and volume as part of the SSMP updates.

A trend of either frequency or volume could indicate a chronic problem that could be specifically identified within the collection system. Should the City identify an area prone to problems, known as “hot spots” or High Maintenance Areas (HMAs), maintenance and inspection services to these areas will be increased.

### **Element 10 – SSMP Audits**

The City shall conduct periodic internal audits, appropriate to the size of the system and the number of SSOs. This section fulfills the SSMP Audit requirements for both the Regional and State Water Boards.

#### **10.1 Regulatory Requirements**

As part of the SSMP, the City will conduct an internal audit, appropriate to the size of the system and the number of overflows, and submit a report of such audit, evaluating the SSMP and its compliance with the State Water Board General Waste Discharge Order.

At a minimum, these audits should occur every two years and a report should be prepared and kept on file. This audit shall focus on evaluating the effectiveness of the SSMP and the City's compliance with the SSMP requirements identified in this subsection (D.13) of the State-wide general WDR, including identification of any deficiencies in the SSMP and steps to correct them.

#### **Element 10 – Program Audits Appendix**

Supporting information for Element 10 shall be included in **Appendix I**. The Appendix shall include the following documents:

- Audit Committee Documentation and Review Forms
- Gap Analysis

#### **10.2 SSMP Program Audits**

The City shall perform an internal audit evaluating its SSMP and its compliance with the Waste Discharge Requirements every two (2) years following the final certification date. The City shall report the results of the audits, along with recommendations and suggested improvements, to the Regional Water Board. Updates for the City's SSMP shall be completed as warranted.

**Element 11 – Communications Program**

This section fulfills the Communications requirement for both the Regional and State Water Boards.

**11.1 Regulatory Requirements**

The City 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 City's as the program is being developed and prior to implementation.

**Element 11 - Communications Appendix**

Supporting information for Element 11 shall be included in **Appendix J**. The Appendix shall include the following documents:

- Public Notices
- Agenda and Meeting Notes
- Public Input and Suggestions

**11.2 City Communication Program**

The communication program employed by the City shall provide multiple opportunities for interested parties to provide the City with input as the SSMP and associated programs are being developed. These opportunities shall take place prior to SSMP implementation.

The Public Works Director shall provide interested parties with status updates regarding the implementation and components of the SSMP and will also consider comments made by interested parties.



*Appendices shall be included as programs are developed. A list of required documentation is provided below. These supporting documents shall be developed and, subsequently, included in the City's Sewer System Management Plan Volume II: Appendices.*

- A- ORGANIZATION;** Public Works Division staff names and contact telephone numbers (updated as needed). Organizational Charts, Chain of Command Flow Chart, Stand-by Roster.
- B- OVERFLOW EMERGENCY RESPONSE PLAN;** OERP, SSO Response and Operational Guidelines, SORR forms, Emergency Contact Information.
- C- Fats, Oils and Grease (FOG) CONTROL PROGRAM;** List of Food Services Establishments (FSEs), FOG inspection forms, Public Outreach Materials for both residential and commercial populations, List of High Maintenance Areas (HMAs), Cleaning schedule and maintenance lists.
- D- LEGAL AUTHORITY;** City's Municipal Code, FOG Control Program Policy, Addendums to existing Municipal Code, City Council Resolutions.
- E- OPERATION AND MAINTENANCE PROGRAM;** City's O& M Program for Public Works Wastewater Division, Capital Improvement Budget, Preventative Maintenance (PM) Program, Sanitary Sewer Inventory list, Collection System mapping, inspection forms for all establishments inspected as part of the City's overall Source Control Program.
- F- DESIGN SPECIFICATION & STANDARDS;** Design and Construction Standards and Specifications, Procedures for testing and inspection of the collection system.
- G- SHECAP;** Collection System maps, CIP Budget, System Hydraulic Evaluation & Capacity Assurance Study, Inflow & Infiltration Plan, Wastewater Master Plan recommendations, Program implementation schedule.
- H- MONITORING, MEAUREMENT & PROGRAM MODIFICATIONS;** Preventative Maintenance (PM) Program Documents, Public Outreach Materials, SSO Logs and Trend Data, Customer Surveys, etc.
- I- AUDITS;** Audit Committee Documentation and Review Forms, Gap Analysis
- J- COMMUNICATIONS PROGRAM;** Public Notices, Agenda & Meeting Notes, Public Input and Suggestions.

**Figures**

- 1.0 Topographic Map of the City of Gonzales
- 2.0 SSO Reporting Chain of Command
- 3.0 SSO Response Chain of Communication

**Tables**

- 2.0 SSMP Roles & Responsibilities
- 3.0 Public Works Division Contact Telephone Numbers
- 6.0 Sewer Enterprise Budget FY 2007-07
- 6.1 CIP Collection System Projects & Estimated Costs

## 6..2 CIP Wastewater Treatment Projects & Estimated Costs