



# **City of Chico Sewer System Management Plan**

**Adopted July 21, 2009**

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## List of Abbreviations

CCTV	Closed circuit television
City	City of Chico
CIP	Capital Improvement Plan
CIWQS	California Integrated Water Quality System
CSU	California State University at Chico
EMA	Emergency Management Agency (formerly Office of Emergency Services)
FOG	Fats, Oils and Grease
FSE	Food service establishment
FTE	Full Time Equivalent
FY	Fiscal Year
GIS	Geographical Information System
GPS	Global Positioning System
GWDR	General Waste Discharge Requirements
I/I	Infiltration and inflow
LRO	Legally Responsible Official
MH	Maintenance Hole
MRP	Master Reclamation Permit
NPDES	National Pollution Discharge Elimination System
O&M	Operations and Maintenance
OSHA	Occupational Safety and Health Administration
PW	Public Works
PWWF	Peak Wet Weather Flows
RWQCB	Regional Water Quality Control Board
SCADA	Supervisory Control and Data Acquisition
SOP	Standard Operating Procedure
SPA	Specific Plan Area
SSMP	Sewer System Management Plan
SSO	Sanitary Sewer Overflow
SSORP	Sanitary Sewer Overflow Response Plan
SWRCB	State Water Resources Control Board
WO	Work Order
WPCP	Water Pollution Control Plant

## Introduction

### ES-1 Background

This Sewer System Management Plan (SSMP) has been prepared in compliance with requirements of the State Water Resources Control Board (SWRCB) Order No. 2006-0003 adopted May 2, 2006 to require all public wastewater collection system agencies in California with greater than one mile of sewers to be regulated under General Waste Discharge Requirements (GWDR). The SWRCB action, which applies to the City of Chico (City), also mandates the development of an SSMP and the reporting of Sanitary Sewer Overflows (SSOs) using an electronic reporting system. This Sewer System Management Plan (SSMP) is a compendium of the policies, procedures, and activities that are included in the planning, management, operation, and maintenance of the City's sanitary sewer system.

This SSMP has been prepared by RMC Water and Environment, which entered into a contract with the City for this project in December 2008.

The structure (section numbering and nomenclature) of this SSMP follows the GWDR. The SSMP includes eleven sections, as follows:

- I. Goals
- II. Organization
- III. Legal Authority
- IV. Operation and Maintenance Program
- V. Design and Performance Provisions
- VI. Overflow Emergency Response Plan
- VII. Fats, Oils and Grease Control Program
- VIII. System Evaluation and Capacity Assurance Plan
- IX. Monitoring, Measurement, and Program Modifications
- X. SSMP Audits
- XI. Communication Plan

### ES-2 System Overview

The City's sanitary sewer system facilities include 227 miles of gravity sewers, four miles of force mains, and 12 lift pump stations. The City is not responsible for maintenance of sewer service laterals.

Construction of the collection system began in 1903. The majority of facilities were installed between the 1960s and 1980s. Pipe sizes range from 4 to 36 inches in diameter with 78 percent at 12 inches or less.

### ES-3 Definitions

#### Best Management Practices (BMP)

Refers to the procedures employed in commercial kitchens to minimize the quantity of grease that is discharged to the sanitary sewer system. Examples include scraping food scraps into a garbage can and dry wiping dishes and utensils prior to washing.

**Building Lateral**

Refers to a sewer on private property serving a specific building or property and maintained by the owner thereof. The building lateral connects to the street lateral at the property line.

**Building and Development Services Director**

Refers to the director of the City of Chico's Building and Development Services Department or his or her designee.

**California Integrated Water Quality System (CIWQS)**

Refers to the State Water Resources Control Board online electronic reporting system that is used to report SSOs, certify completion of the SSMP, and provide information on the sanitary sewer system. The electronic reporting requirement became effective on August 1, 2007 in Region 5.

**Capital Improvement Program (CIP)**

Refers to the document that identifies future capital improvements to the City's sanitary sewer system.

**City**

Refers to the City of Chico.

**Closed Circuit Television (CCTV)**

Refers to the process and equipment that is used to internally inspect the condition of gravity sewers.

**Emergency Management Agency (EMA)**

Refers to the Governor's Emergency Management Agency (Formerly the Office of Emergency Services).

**Fats, Oils, and Grease (FOG)**

Refers to fats, oils, and grease typically associated with food preparation and cooking activities that can cause blockages in the sanitary sewer system.

**Food Service Establishment (FSE)**

Refers to commercial or industrial facilities where food is handled/prepared/served that discharge to the sanitary sewer system.

**Force Main**

Refers to a pressure sewer that conveys wastewater from a lift station or pump station to a gravity sewer or other discharge point.

**Full-time Equivalent (FTE)**

Refers to the equivalent of 2,080 paid labor hours per year by a regular, temporary, or contract employee.

**General Services Director**

Refers to the director of the City of Chico's General Services Department or his or her designee.

**General Waste Discharge Requirements (GWDR)**

Refers to the State Water Resources Control Board Order No. 2006-0003, Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, dated May 2, 2006.

**Geographical Information System (GIS)**

Refers to the City's system that it uses to capture, store, analyze, and manage geospatial data associated with the City's sanitary sewer system assets.

**Global Positioning System (GPS)**

Refers to the handheld unit that is recommended to determine the longitude and latitude of sanitary sewer overflows for use in meeting CIWQS reporting requirements.

**Grease Removal Device**

Refers to grease traps and grease interceptors that are installed to remove FOG from the wastewater flow at food service establishments.

**Infiltration/Inflow (I/I)**

Refers to water that enters the sanitary sewer system from storm water and groundwater and increases the quantity of flow. Infiltration enters through defects in the sanitary sewer system after flowing through the soil. Inflow enters the sanitary sewer without flowing through the soil. Typical points of inflow are holes in maintenance hole lids and direct connections to the sanitary sewer (e.g. storm drains, area drains, and roof leaders).

**Legally Responsible Official (LRO)**

Refers to the individual who has the authority to certify reports and other actions that are submitted through CIWQS.

**Maintenance Hole (MH)**

Refers to an engineered structure that is intended to provide access to a sanitary sewer for maintenance and inspection.

**Preventative Maintenance (PM)**

Refers to maintenance activities intended to prevent failures of the sanitary sewer system facilities (e.g. cleaning, CCTV, repair).

**Pump Station**

Refers to a point in the collection system where the elevation of the wastewater is raised, using pumps, and is discharged into a nearby gravity sewer.

**Regional Water Quality Control Board (RWQCB)**

Refers to the Central Valley Regional Water Quality Control Board (Region 5).

**Sanitary Sewer Overflows (SSOs)**

Refers to the overflow or discharge of any quantity of partially treated or untreated wastewater from the sanitary sewer system at any point upstream from the wastewater treatment plant. SSOs typically are caused by blockages, pipe failure, pump station failure, or capacity limitation.

**Sewer Service Lateral**

Refers to the pipeline connecting a property to the sewer main. It includes both the building sewer and the street lateral.

**Sewer System Overflow Response Plan (SSORP)**

Refers to the written document for the response to sewer system overflows.

**Sanitary Sewer System**

Refers to the portion of the sanitary sewer facilities that are owned and operated by the City.

**Standard Operating Procedures (SOP)**

Refers to written procedures that pertain to specific activities employed in the operation and maintenance of the sanitary sewer system.

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

Refers to the California Environmental Protection Agency State Water Resources Control Board and staff responsible for protecting the State's water resources.

**Street Lateral**

Refers to the portion of the city sewer that connects the sewer main to the building lateral at the property line.

**Supervisory Control and Data Acquisition (SCADA)**

Refers to the system that is employed by the City to monitor the performance of its lift pump stations and to notify the operating staff when there is an alarm condition that requires attention.

**Work Order (WO)**

Refers to a document (paper or electronic) that is used to assign work and to record the results of the work.

## Element 1 Goals

This SSMP element formally states the goals the City has established for the management, operation and maintenance of the sanitary sewer system. These goals provide focus for City staff in the management of the City's sanitary sewer system.

***The requirements of the GWDR are:***

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

The goal of the City's SSMP is to provide a plan and schedule to properly manage, operate and maintain all parts of the sanitary sewer system.

## Element 2 Organization

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

*The requirements of the GWDR are:*

- a. The name of the responsible or authorized representative;*
- b. The names and telephone numbers for management, administrative, and maintenance positions responsible for implementing specific measures in the SSMP program. Include lines of authority as shown in an organization chart or similar document with a narrative explanation; and*
- c. The chain of communication for reporting SSOs, from receipt of a complaint or other information, including the person responsible for reporting SSOs to the State and Regional Water Board and other agencies if applicable (e.g. County Health Officer, County Environmental Health Agency, Regional Water Board, and/or State Office of Emergency Services (OES)).*

### 2.1 Organization Chart

The organization chart for the management, operation, and maintenance of the City's wastewater collection system is shown on **Figure 2-1**.

### 2.2 Authorized Representative

The City's authorized representative in all wastewater collection system matters is the General Services Director. The General Services Director is the Legally Responsible Official (LRO) and is authorized to submit and certify electronic and written spill reports to the SWRCB, the RWQCB, the Butte County Environmental Health Division, and the Governor's Emergency Management Agency (formerly the Office of Emergency Services).

The Wastewater Treatment Manager, Public Works Manager, and Underground Field Supervisor are designated to act as the Authorized Representative in the General Services Director's absence. The Wastewater Treatment Manager, Public Works Manager, and Underground Field Supervisor are authorized to submit verbal, electronic, and written spill reports to the SWRCB, the RWQCB, the Butte County Environmental Health Division, and the Governor's Emergency Management Agency (formerly the Office of Emergency Services).

### 2.3 Responsibility for SSMP Implementation

The General Services Director has overall responsibility for developing, implementing, periodically auditing, and maintaining the City's SSMP. Other City Staff responsible for developing, implementing, and maintaining specific elements of the City's SSMP, along with their job titles and contact information, are shown in **Appendix A – City Staff Contact Information**.

The General Services Director is responsible for the operation and maintenance of the City's wastewater collection system.

The Public Works Manager is responsible for the City’s response to SSO events and other wastewater collection system emergencies during business hours, and SSO events after hours, on weekends, and on holidays.

## 2.4 SSO Reporting Chain of Communication

The SSO Reporting Chain of Communication is shown in **Figure 2-2**. The SSO reporting process and responsibilities are described in detail in Element 6 – Sewer System Overflow Response Plan.

**Figure 2-1: Organization Chart for Management, Operation and Maintenance of the City’s Wastewater Collection System**

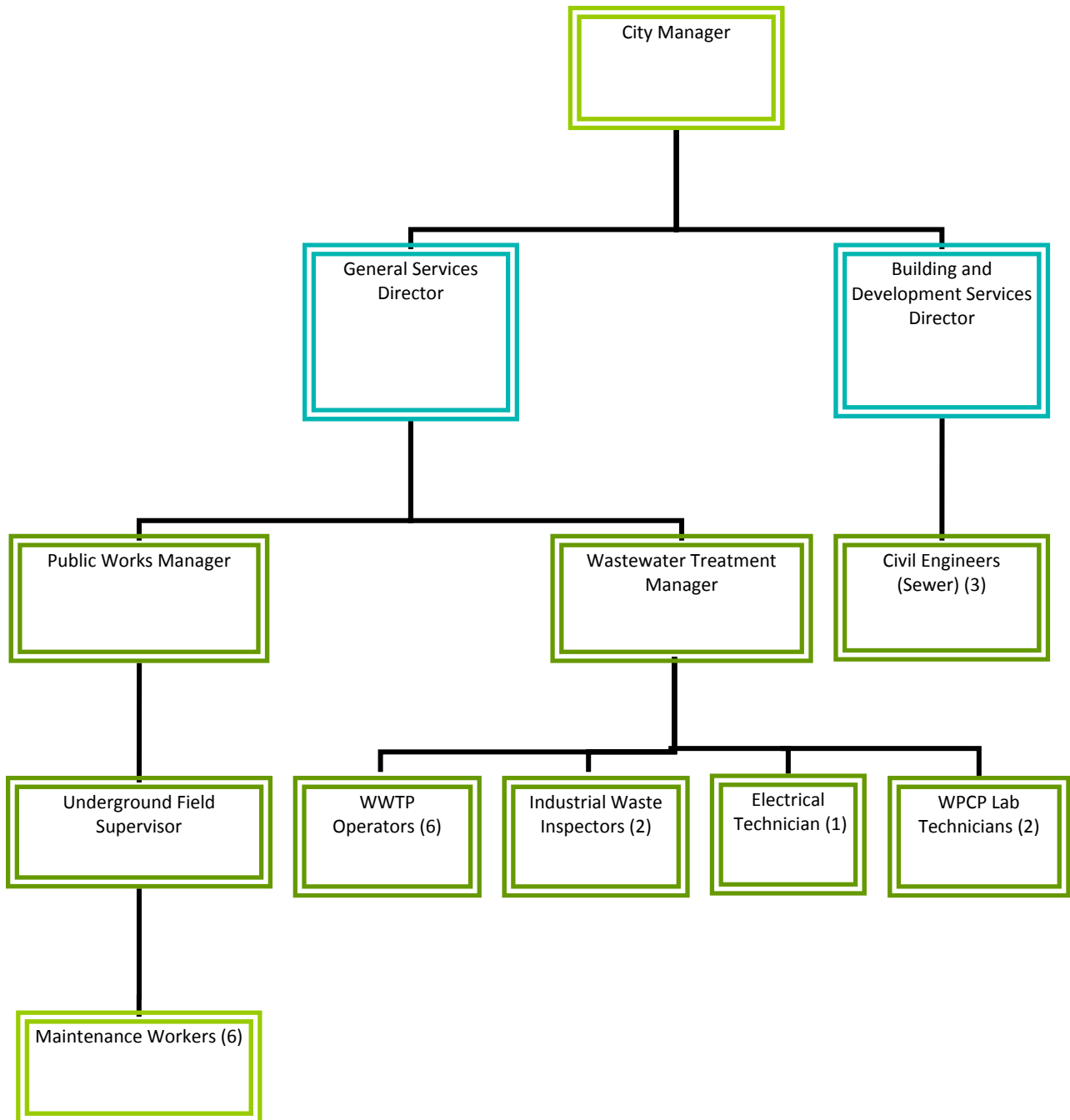
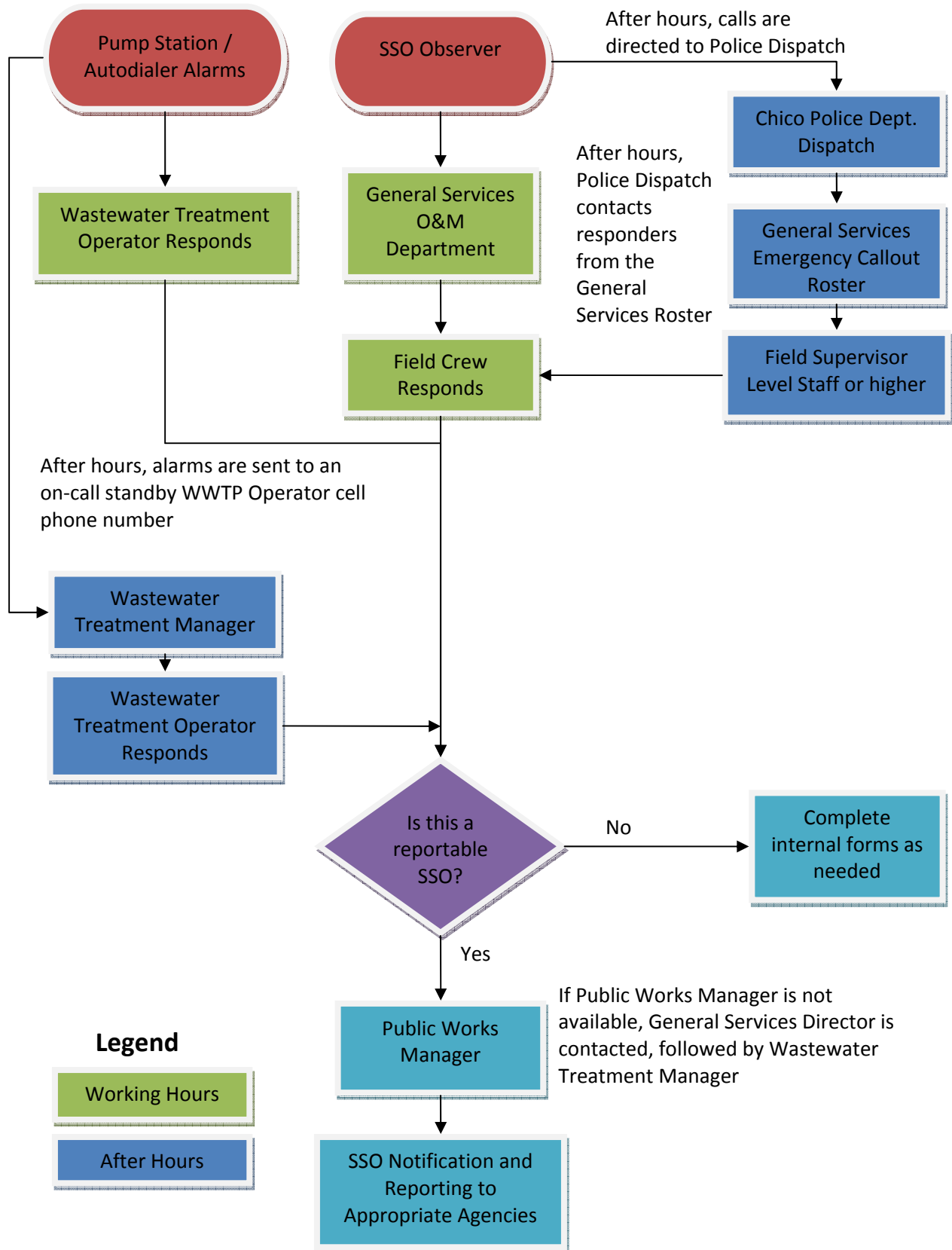


Figure 2-2: SSO Reporting Chain of Communications



## Element 3 Legal Authority

This element of the SSMP discusses the City's Legal Authority, including its Municipal Code and agreements with other agencies. This section fulfills the Legal Authority requirement for the SWRCB SSMP requirements.

*The requirements of the GWDR are:*

*Demonstrate, through collection system use ordinances, service agreements, or other legally binding procedures, that the City possesses the necessary legal authority to:*

- a. Prevent illicit discharges into its wastewater collection system (examples may include infiltration and inflow (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;*
- d. Limit the discharge of fats, oils, and grease and other debris that may cause blockages, and*
- e. Enforce any violations of its sewer ordinances.*

### 3.1 Sanitary Code

The City has a Municipal Code which is continually updated and is available on the City's website (<http://www.ci.chico.ca.us>). There are two main portions of the Municipal Code that pertain to the legal authority of the City to establish and manage a sewer system:

- Chapter 15.36 Sewer Services and Fees includes connection permits and various fees; and
- Chapter 15.40 Sewer Discharge Requirements includes discharge limitations, and violations.

#### 3.1.1 Prevention of Illicit Discharges

The following portions of the Municipal Code allow the City to prevent illicit discharges to the sewer system:

- No person shall connect to the sewer system without a connection permit (§15.36.240);
- It is unlawful for any user to "cause or permit a substance...to be discharged to the sewer system except through a sewer lateral lawfully connected to the sewer system." (§15.40.020(A)); and
- It is unlawful to discharge to the sewer system "any rainwater, stormwater, groundwater, street drainage, subsurface drainage, yard drainage..." (§15.40.020(C)(15)).

#### 3.1.2 Proper Design and Construction of Sewers and Connections

The following sections of the Municipal Code permit the City to require the proper design and construction of sewers and connections:

- Owners who connect to the sewer system must install laterals that are "in accordance with the design criteria and improvement standards for sewer laterals as well as any applicable plumbing standards now or hereafter adopted by or pursuant to this code" (§15.36.230);

- “Sewer main extensions shall be installed in accordance with the design criteria and improvement standards for sanitary sewer mains now or hereafter adopted by or pursuant to this code...” (§15.36.200).

### 3.1.3 Access and Responsibility for Laterals

The following sections of the Municipal Code define the access and responsibility for laterals in the City:

- “The owner of premises connecting to the sewer system shall be required to install sewer laterals between the waste disposal system on the premises being connected to the sewer system and the sewer main adjacent to the lot or parcel on which such premises are located.” (§15.36.230);
- “The owner of premises connected to the sewer system shall be responsible for maintaining the sewer lateral between the waste disposal system and the sewer main adjacent to the lot or parcel at the owner’s sole cost and expense” (§15.36.235).

### 3.1.4 Limit Discharges of Fats, Oils and Grease, and Debris

The following sections of the Municipal Code permit the City to limit discharges of fats, oils, and grease, and debris to the sewer system:

- It is unlawful to discharge any fats, oils, or greases of animal or vegetable origin in excess of 300 mg/l. (§15.40.020(C)(6));
- It is unlawful to discharge any solid or viscous substances which may cause obstruction to the flow such as garbage with particles greater than one-half inch in any dimension, ashes, cinders, sand, stone or marble dust, glass, etc... (§15.40.020(C)(14)); and
- At the General Services Director’s discretion, an interceptor shall be installed in a user’s building sewer for proper handling of wastewater containing grease or oil (§15.40.030(A)).

### 3.1.5 Enforcement Measures

Chapter 15.36, Article IX, of the Municipal Code permits the City to enforce the requirements set forth in the Code including:

- Violations of the Municipal Code are punishable as infractions (§15.36.270);
- The City may disconnect users for violating the provisions, including non-payment (§15.36.280);
- Violations, not including failure or refusal to pay fees, is a public nuisance such that the City may take action against an owner to abate such a nuisance (§15.36.290); and
- The City may take legal action against users to collect delinquent fees (§15.36.300).

## 3.2 Agreements with Satellite Collection Systems

There are sections of the Municipal Code that permit the City to make agreements with satellite collection systems as follows:

- The City has the ability to make agreements with other agencies owning sewerage collection systems within the unincorporated territory of the County of Butte (§15.36.030);
- The City has the ability to make agreements with certain public agencies seeking to connect premises within the sewer service area owned and/or used by them to the sewer system (§15.36.032).

The City has two satellite collection systems; California State University, Chico (CSU Chico) and Canyon Oaks. The City accepts wastewater from both collection systems but is not responsible for maintenance or emergency response for issues originating in the pipelines. Contact information for both of these systems is available in **Appendix A-1 – Satellite Collection Systems Contact Information**.

## Element 4 Operation and Maintenance Program

This element of the SSMP discusses the City's Operations and Maintenance (O&M) Program, including collection system maps, preventive maintenance, rehabilitation and replacement plan, O&M equipment, and employee training. This section fulfills the Operations and Maintenance Program requirement for the SWRCB SSMP requirements.

***The requirements of the GWDR are:***

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

### 4.1 Collection System Map

Field crews carry paper block maps that are generated from the City's Geographic Information System (GIS) database. The City has a GIS department that manages the database of information. Any errors or corrections that are noted by field crews or others are transmitted back to the GIS department for incorporation. Major new developments are added to the GIS database and then to the paper block maps after the development has been inspected and signed off on by the Engineering Division.

The City's GIS information includes:

- Maintenance holes (with asset ID number);
- Gravity sewers (with asset ID number);
- Force mains;
- Lift pump stations; and
- Storm drains.

## 4.2 Preventive Maintenance

### 4.2.1 Preventive Maintenance Activities

#### Gravity Sewers

There is one supervisor overseeing three two-person crews in the underground services division. The three crews are divided between sewer cleaning (two crews) and sewer inspection (one crew).

The City cleans all 6, 8, and 10-inch main and trunk line sewers on a rotating zone basis, with eight zones in total. The entire cleaning cycle is completed at least once every three years. Gravity sewer lines larger than 10-inches in diameter are inspected and cleaned on an as needed basis. The cleaning crews utilize vacuum jet rodder trucks for cleaning. Documentation of sewer cleaning activities is kept in hardcopy in the Maintenance Service Center Building 400 and in hardcopy in the Underground Field Supervisor's office. See **Appendix B – Sanitary Sewer Cleaning/Tracking**

The City has an ongoing chemical root control program to help control roots in the sewer system. Chemical root control is applied by zone on a 3-5 year cycle through the entire City. The City utilizes outside contractor services for the application of root control chemicals. Root control application maps that are part of the contractor's submittals are kept as the record of chemical root control activities.

The City is not responsible for installation, maintenance or repairs to the upper or lower sewer laterals (See Element 3 – Legal Authority).

#### Maintenance Holes

The City periodically inspects maintenance holes. During inspection, the sewer cleaning crews note the condition of the maintenance hole cover, frame, riser, cone, barrel, shelf and channel. The amount of infiltration and inflow, and channel flow are noted as well. The sewer cleaning crews then provide a grade for each maintenance hole on a scale of 1 to 3, 1 being the most critical. Documentation of maintenance hole inspections is kept in hardcopy in the Maintenance Service Center Building 400.

#### Force Mains

The City does not clean or inspect sewer force mains on a cyclic basis. The City is evaluating adding a force main inspection project to their Capital Improvement Plan to establish baseline conditions of existing force mains.

#### Lift Pump Stations

The City performs annual preventative maintenance on all 12 lift pump stations. Lift pump station maintenance is performed by the Wastewater Treatment Plant Operators. Each lift pump station has a checklist of preventative maintenance tasks to be performed during the annual maintenance. Hard copy reports of lift pump station maintenance are kept at the City's Water Pollution Control Plant.

#### Non-Routine Maintenance

The City tracks non-routine maintenance activities (e.g. non-emergency service calls) in an Access database.

### 4.2.2 Preventive Maintenance Scheduling and Tracking

The City schedules and tracks preventive maintenance in an Access database. Sewer pipe and pump station operational checks and repairs are recorded as paper based work orders that are logged into the database on a semi-weekly basis.

## 4.3 Rehabilitation and Replacement Plan

### 4.3.1 Repair and Replacement Program

The City includes an Annual Sanitary Sewer Repair project in the Capital Improvement Program, in addition to larger improvement projects. Lines with issues identified during regular operation and maintenance of the system (e.g. cleaning, condition assessment, etc) are added to the Annual Sewer Repair project based on priority as determined by the field crews and in coordination with other engineering department projects.

### 4.3.2 Condition Assessment

The City performs closed-circuit television (CCTV) inspection of the condition of about 10 percent (25 miles) of the 6-, 8-, and 10-inch sewer lines each year using the City's camera van. The Underground Services Inspection Crew is responsible for performing sewer line inspections. Data collected during CCTV inspection is recorded in a Flexidata system.

If an issue with a sewer line is identified during inspection, a still photo of the defect is taken. The defect is graded on a scale of 1 to 3, with 1 being most critical. Defects are added to the Annual Sanitary Sewer Repair project based on priority of the defect grade and coordination with other projects (e.g. street paving). Defect grades and still photos are stored electronically in the inspection camera van and backed up on the Underground Field Supervisor's computer.

### 4.3.3 Capital Improvement Program

The City maintains a 10-year Capital Improvement Program (CIP) that is managed by the Capital Project Services Department. The most recent CIP covers Fiscal Year 2010/11 through Fiscal Year 2020/21. The City has several funds for sewer-related projects including:

- Sewer Trunk Line Capacity (Fund 320)
- Sewer Main Installation (Fund 322)
- Sewer Lift Stations (Fund 323)
- Water Pollution Control Plant Capacity (Fund 321)

Annually, the City sets the CIP projects to be implemented in the following fiscal year based on the information in the 10-year CIP.

## 4.4 Equipment

The City maintains equipment for regular operations and maintenance of the sewer system and for emergency response. The City's Capital Improvement Program includes allocations for annual equipment and fleet replacement. **Appendix C – Equipment Inventory** includes an inventory of equipment maintained by the Underground Services Department.

## 4.5 Training

The City will commence SSMP review training for the Underground Collection System Crew and Wastewater Treatment Plant Operators on an annual basis. SSMP review training will include review of the Overflow Response Procedures. Records of employee training are kept at the Water Pollution Control Plant.

## Element 5 Design and Performance Provisions

This element of the SSMP provides a summary of the City's design and performance provisions for new and existing sewer facilities.

*The requirements of the GWDR are:*

*The City must have design and construction standards and specifications for the installation of new sewer systems, pump stations and other appurtenances; and for the rehabilitation and repair of existing sewer systems.*

*The City must have procedures and standards for inspecting and testing the installation of new sewers, pumps, and other appurtenances and for rehabilitation and repair projects.*

### 5.1 City Manual of Standards, Details and Specifications

The City has design criteria and improvement standards for sewer systems that are included in the Municipal Code Title 18R. The current version of the Municipal Code is available on the City's website (<http://www.ci.chico.ca.us>).

### 5.2 Design and Construction Standards for Sewer Systems

#### 5.2.1 Design and Construction Standards for New Sewer Systems

##### Design Standards for New Sewer Systems

Sewer system design criteria are included in Chapter 18R.08 of the Municipal Code. The City design criteria include standards for:

- Sewer mains
  - Design flow
  - Pipe Materials
  - Velocity
  - Depth to pipe
- Sewer laterals
  - Minimum size
  - Slope
  - Depth to pipe
- Maintenance holes
  - Locations
  - Spacing
  - Grade
- Flushing inlets
  - Locations
  - Distance from Maintenance holes

### **Construction Improvement Standards for New Sewer Systems**

Sewer system improvement standards are included in Chapter 18R.12 of the Municipal Code. The City improvement standards include criteria and/or plans for:

- Sewer Lines (Mains and Laterals)
  - Materials
  - Handling and Storage
  - Excavation
  - Joints
  - Maintenance hole connections
  - Backfill
  - Trench types
- Maintenance holes
  - Materials
  - Precast Concrete Requirements
  - Covers and Frames
- Flushing Inlets
  - Manufacturers
  - Location
  - Alignment
  - Covers and Frames

#### **5.2.2 Design and Construction Standards for Lift Pump Stations and Other Appurtenances**

Standard details and specifications for lift pump stations and other appurtenances are not included in the City's Municipal Code. Historically, design standards and construction specifications for lift pump stations and other appurtenances have been developed on a case-by-case basis for each specific project. Section 18R.08.060.G specifically states that pumping plants are considered by the building and development services director on an individual basis. The Engineering Division of the Building and Development Services Department has developed a "Typical Sanitary Sewer Lift Pump Station Detail" that is provided to all development proposals that may require construction of a Lift Pump Station (pumping plant). Specifications for other appurtenances are also developed as needed on a project-specific basis for any new appurtenances implemented in the City.

#### **5.2.3 Design and Construction Standards for Rehabilitation and Repair of Existing Sewer Systems**

Rehabilitation and repair of existing sewer lines are not included in the City's Municipal Code. Historically, design standards and construction specifications for rehabilitation and repair of existing sewer systems have been developed on a case-by-case basis for each specific project. Specifications for rehabilitation and repair of existing sewer systems will be developed as needed on a project-specific basis for any new rehabilitation or repair project implemented in the City.

### **5.3 Inspection and Testing of New and Rehabilitated Facilities**

Standards for testing and inspection new and rehabilitated sewers and force mains are detailed in Section 18R.12.010 of the Municipal Code. The City requires leakage tests using air pressure testing to be completed on all construction. Water testing may be used in lieu of air pressure testing if air pressure testing equipment is not available. The City also requires deflection tests to be completed for specific pipe material types (e.g. polyvinyl chloride pipe installations).

## Element 6 Sanitary Sewer Overflow Response Plan

This section of the SSMP provides a summary of the City's Sanitary Sewer Overflow Response Plan (SSORP). This section fulfills the Overflow Emergency Response Plan requirement of the SWRCB SSMP requirements.

*The requirements of the GWDR are:*

*The City shall develop and implement an overflow emergency response plan that identifies measures to protect public health and the environment. At a minimum, this plan must include the following:*

- a. Proper notification procedures so that the primary responders and regulatory agencies are informed of all SSOs in a timely manner;*
- 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 in accordance with the Master Reclamation Permit (MRP). All SSOs shall be reported in accordance with this MRP, the California Water Code, other State Law, and other applicable Regional Water Board WDR or National Pollution Discharge Elimination System (NPDES) permit requirements. The SSMP should identify 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.*

The City's SSORP is included in **Appendix D – Sanitary Sewer Overflow Response Plan**. The SSORP includes information on:

- SSO detection from various mechanisms such as the public, SCADA alarms, City staff;
- SSO response procedures including safety, initial response steps, and spill containment measures;
- Recovery and cleanup after an SSO event;
- Public notification of an SSO, as necessary;
- Water quality testing requirements after an SSO, as necessary;
- Investigation and documentation of SSO event causes and response;
- SSO reporting to City staff and to external agencies;
- Equipment necessary for overflow emergencies; and
- Training activities to prepare for overflow events.

## Element 7 Fats, Oils and Grease Control Program

This section of the SSMP discusses the City's 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 the SWRCB SSMP requirements.

*The requirements of the GWDR are:*

*The City shall 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 must provide justification for why it is not needed. If FOG is found to be a problem, the City must 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 shall include the following as appropriate:*

- a. An implementation plan and schedule for a public education outreach program that promotes proper disposal of FOG;*
- b. A plan and schedule for the disposal of FOG generated within the sanitary sewer system service area. This may include a list of acceptable disposal facilities and/or additional facilities needed to adequately dispose of FOG generated within a sanitary sewer system service area;*
- c. The legal authority to prohibit discharges to the system and identify measures to prevent SSOs and blockages caused by FOG;*
- d. Requirements to install grease removal devices (such as traps or interceptors) design standards for the 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.*

### 7.1 FOG Source Control Program

Based on historical FOG issues in the sewer system, the City has determined a FOG Control Program focused on Industrial and Commercial dischargers provides the most benefit in reducing FOG discharges to the sewer system. The City's program is supported by the City's two Industrial Waste Inspectors and the Wastewater Treatment Manager.

### 7.2 Public Education Outreach Program

The City's program focuses on Industrial, Commercial, and Food Service Establishments (FSE) dischargers. An ongoing public education outreach program has been developed and annually provides pertinent information regarding sewer system issues and proper operation to sewer system users.

### **7.3 Disposal of FOG**

Local grease haulers can dispose of grease at a variety of regional locations in the area including rendering facilities (e.g. North State Rendering, Sacramento Rendering) and wastewater treatment plants (e.g. East Bay Municipal Utility District). The City recommends that all facilities utilizing grease haulers to haul grease from their interceptors use a grease hauler registered with the State of California Department of Food and Agriculture (Inedible Kitchen Grease Transporter Registration).

### **7.4 Legal Authority to Prohibit Discharges**

The City has the legal authority to prohibit discharges of FOG to the sewer system. See Element 3 – Legal Authority for additional discussion of the City’s legal authority relating to FOG discharges.

### **7.5 Requirements to Install Grease Removal Devices**

As discussed in Element 3 – Legal Authority, the City has the right to require non-residential facilities to install a grease interceptor at the discretion of the general services director.

The City is currently evaluating implementing a revised grease interceptor ordinance that would require all food service establishments to install a grease interceptor with certain exceptions granted by the general services director depending on site or facility limitations. There are approximately 400 food service establishments in the City’s service area. Controlling grease discharges from all food service establishments should have a significant impact on the City’s ability to reduce FOG in the sewer system.

### **7.6 Authority to Inspect and Regulate Grease Producing Facilities**

The City has the legal authority to limit discharges of FOG from all users and to inspect and regulate non-residential grease producing facilities. See Element 3- Legal Authority for additional discussion of the City’s legal authority to inspect and regulate grease producing facilities.

### **7.7 Identification of Grease Problem Areas and Sewer Cleaning**

Due to the City’s frequent cleaning of all 6-, 8-, and 10-inch sewer lines (see Element 4 – Operations and Maintenance Program), there are no ‘hotspot’ cleaning lines that require more frequent cleaning than the cycle described in Element 4 – Operations and Maintenance Program.

## Element 8 System Evaluation and Capacity Assurance Plan

This section of the SSMP discusses the City's plan for maintaining adequate hydraulic capacity in the sewer system, including flow monitoring, hydraulic analysis, infiltration and inflow analysis, and capital improvements. This section fulfills the System Evaluation and Capacity Assurance Plan requirement for the SWRCB SSMP requirements.

***The requirements of the GWDR are:***

***The City must evaluate those portions of the sanitary sewer system that are experiencing or contributing to an SSO discharge caused by hydraulic deficiency. The evaluation must provide estimates of peak flows (including flows from SSOs that escape 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. Where design criteria do not exist or are deficient, the City must establish appropriate design criteria.***

***The City must establish a short- and long-term capital improvement plan (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 shall include an implementation schedule and shall identify sources of funding. The City shall develop a schedule of completion dates for all portions of the CIP. This schedule shall be reviewed and updated at least every two years.***

### 8.1 System Capacity Evaluation

The City's evaluation of the capacity of the collection system has included establishing flow information using meters, modeling hydraulic impacts of a design storm on the collection system, analyzing impacts of infiltration and inflow on the system, and setting design criteria to ensure existing and new sewers have hydraulic capacity to pass peak flows.

#### 8.1.1 Flow Monitoring

The City has a network of nine (9) flow meter sites installed in the system. Flow meters may be installed at the sites when needed and can record the depth and velocity of flows every 15 minutes. The City can access data from the flow meters through software provided by the flow meter manufacturer. An example of data collection would be for a system wide flow study.

Prior to the installation of the flow meter sites, flow metering had been performed intermittently by separate contracts with third party consultants when needed for planning or engineering purposes.

#### 8.1.2 Hydraulic Analysis

The City developed a Collection System Facilities Sanitary Sewer Master Plan Update (Master Plan) in 2003. The City has budgeted for fiscal year 2011/12 to perform an update of the Sanitary Sewer Master Plan by contracting with a consulting Engineering Service. For the Master Plan, a model of the City's collection system was developed using the Hydra hydraulic modeling software program, Version 6.1. The model of the collection system included pipes greater than 10 inches in diameter, and in some instances 8-inch pipes, representing 43% of the total system. The collection system service area was divided into 11 unique sewer basins. Both existing and future (buildout) flow scenarios were analyzed.

For the hydraulic analysis, the City used a 10-year 24-hour design storm developed from 52 years of historical rainfall data. The hydraulic capacity of the system was analyzed for the ability to handle the 10-year, 24-hour design storm.

### 8.1.3 I/I Analysis

An analysis of rainfall dependent infiltration and inflow (I/I) was performed as part of the Master Plan in 2003. Data was captured using temporary flow meters during the November 2001-March 2002 period. The flow monitoring data was used to determine peaking factors to assess relative I/I entering the collection system in each basin.

The analysis identified the top three basins in Chico affected most by I/I and recommended these basins for further study to determine if a rainfall dependent I/I reduction program was warranted. The permanent flow meter sites discussed in Section 8.1.1. above, were installed, in part, to continue the ability to monitor for increased flows that could be attributed to I/I.

### 8.1.4 Design Criteria

#### City Standards

The City standards (Title 18R of the Municipal Code – see Element 5) contains sanitary sewer design criteria for different types of zoning (Municipal Code Chapter 18R.08 Table 5) and peak flow factors for average daily flows (Municipal Code Chapter 18R.08 Table 6).

#### Master Plan

Design criteria were specifically developed for the capacity new trunk sewer projects identified in the City's Master Plan (see below). These specific design criteria for new trunk sewers included:

- Using minimum velocity of 2 feet per second during dry weather flow;
- Maximizing flow capacity in the new trunk sewer during the 10-year, 24-hour design storm;
- Accounting for I/I from new development areas at a rate of 650 gallons per acre per day (which meets the City Standard above); and
- Accounting for added I/I from the degradation of the new trunk sewers at a rate of 500 gallons per day per inch-diameter mile.

## 8.2 Capacity Assurance Plan

The basis of the City's Capacity Assurance Plan is the Master Plan developed in 2003. The Master Plan is appropriate as the basis of the Capacity Assurance Plan as it covered both existing and buildout hydraulic conditions.

The Master Plan identified a collection of projects to address existing hydraulic conditions (short term), and buildout conditions (long term). These projects are summarized in **Table 8-1**.

Since the development of the Master Plan in 2003, the City has re-evaluated each project with updated information on growth and infill, flow data, and field observations during dry and wet weather. The table shows the status for each project identified in the current Master Plan based on the re-evaluation. The Master Plan is scheduled to be updated in 2011/12 and, at that time, the City will re-evaluate each project with updated information.

The most current schedule for implementation of the capacity-related capital improvement projects is included in **Appendix E – Capacity Assurance Plan Implementation Schedule**. The implementation schedule will be updated at least every two years, with the first update occurring in July 2011.

Table 8-1: Capacity-related Capital Improvement Plan Projects

CIP Project #	Title	Reason Added	New Pipe or Repair/ Rehabilitation	Status
1	West 11 <sup>th</sup> Street Trunk Sewer	Existing conditions	Repair / Rehab	To be implemented in 2011/12
2	Parallel Pipelines at WPCP	Existing conditions	New Pipe	Completed in 2008/09 (part of WPCP 12 mgd Expansion Project)
3	Olive Street Trunk Sewer	Existing conditions	Repair / Rehab	To be implemented in 2011/12
4	Warner Street and Brice Avenue Trunk Sewer	Existing conditions	Repair / Rehab	To be implemented in 2011/12
5	Filbert Avenue Trunk Sewer	Existing conditions	Repair / Rehab	To be implemented in 2011/12
None	Northwest Trunk Sewer	Buildout conditions	New Pipe	Not implemented; growth slower than anticipated in 2003 Master Plan
None	Humboldt Road Trunk Sewer	Buildout conditions	New Pipe	Not implemented; growth slower than anticipated in 2003 Master Plan
None	Southeast Trunk Sewer	Buildout conditions	New Pipe	Not implemented; growth slower than anticipated in 2003 Master Plan
None	West 11 <sup>th</sup> Ave Trunk Sewer	Buildout conditions	New Pipe	Not implemented; growth slower than anticipated in 2003 Master Plan
None	West 8 <sup>th</sup> Ave Trunk Sewer	Buildout conditions	New Pipe	Completed
None	Nob Hill Trunk Sewer	Buildout conditions	New Pipe	Completed
None	Enlarge Junction Box	Buildout conditions	New Pipe	Not implemented; growth slower than anticipated in 2003 Master Plan
None	Cohasset Road	Buildout conditions	Repair / Rehab	Not implemented; growth slower than anticipated in 2003 Master Plan
None	E. 9 <sup>th</sup> Street	Buildout conditions	Repair / Rehab	Not implemented; growth slower than anticipated in 2003 Master Plan

CIP Project #	Title	Reason Added	New Pipe or Repair/ Rehabilitation	Status
None	Humboldt	Buildout conditions	Repair / Rehab	Not implemented; growth slower than anticipated in 2003 Master Plan
None	Filbert Avenue	Buildout conditions	Repair / Rehab	Not implemented; growth slower than anticipated in 2003 Master Plan
None	Chico Cemetery and CSUC	Buildout conditions	Repair / Rehab	Not implemented; growth slower than anticipated in 2003 Master Plan
None	California Park Lake	Buildout conditions	Repair / Rehab	Not implemented; growth slower than anticipated in 2003 Master Plan
None	Bruce Road & E. 20 <sup>th</sup> St	Buildout conditions	Repair / Rehab	Not implemented; growth slower than anticipated in 2003 Master Plan
None	E. 21 St	Buildout conditions	Repair / Rehab	Not implemented; growth slower than anticipated in 2003 Master Plan
None	Fair St	Buildout conditions	Repair / Rehab	Not implemented; growth slower than anticipated in 2003 Master Plan

## Element 9 Monitoring, Measurement, and Program Modifications

This section of the SSMP discusses the City's plan for measuring wastewater collection system performance, the baseline performance, and plans for changing SSMP activities based on future performance analyses. This section fulfills the Monitoring, Measurement and Program Modifications requirement for the SWRCB SSMP requirements.

***The requirements of the GWDR are:***

- a. Maintain relevant information that can be used to establish and prioritize appropriate SSMP activities;***
- b. Monitor the implementation and, where appropriate, measure the effectiveness of each element of the SSMP;***
- c. Assess the success of the 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.***

### 9.1 Monitoring Information

The City will maintain information that can be used in SSMP performance monitoring in various formats including:

- GIS databases;
- Overflow Field Response Forms; and
- CIWQS database.

### 9.2 Performance Measures

The indicators that the City will use to measure the performance of its wastewater collection system and the effectiveness of its SSMP are:

- Total number of SSOs (normalized as number of SSOs per 100 miles of wastewater collection system pipe length);
- Number of SSOs for each cause (roots, grease, debris, pipe failure, capacity, pump station failures, and other);
- Portion of sewage contained compared to total volume spilled; and
- Volume of spilled sewage discharged to surface water.

### 9.3 Baseline Performance

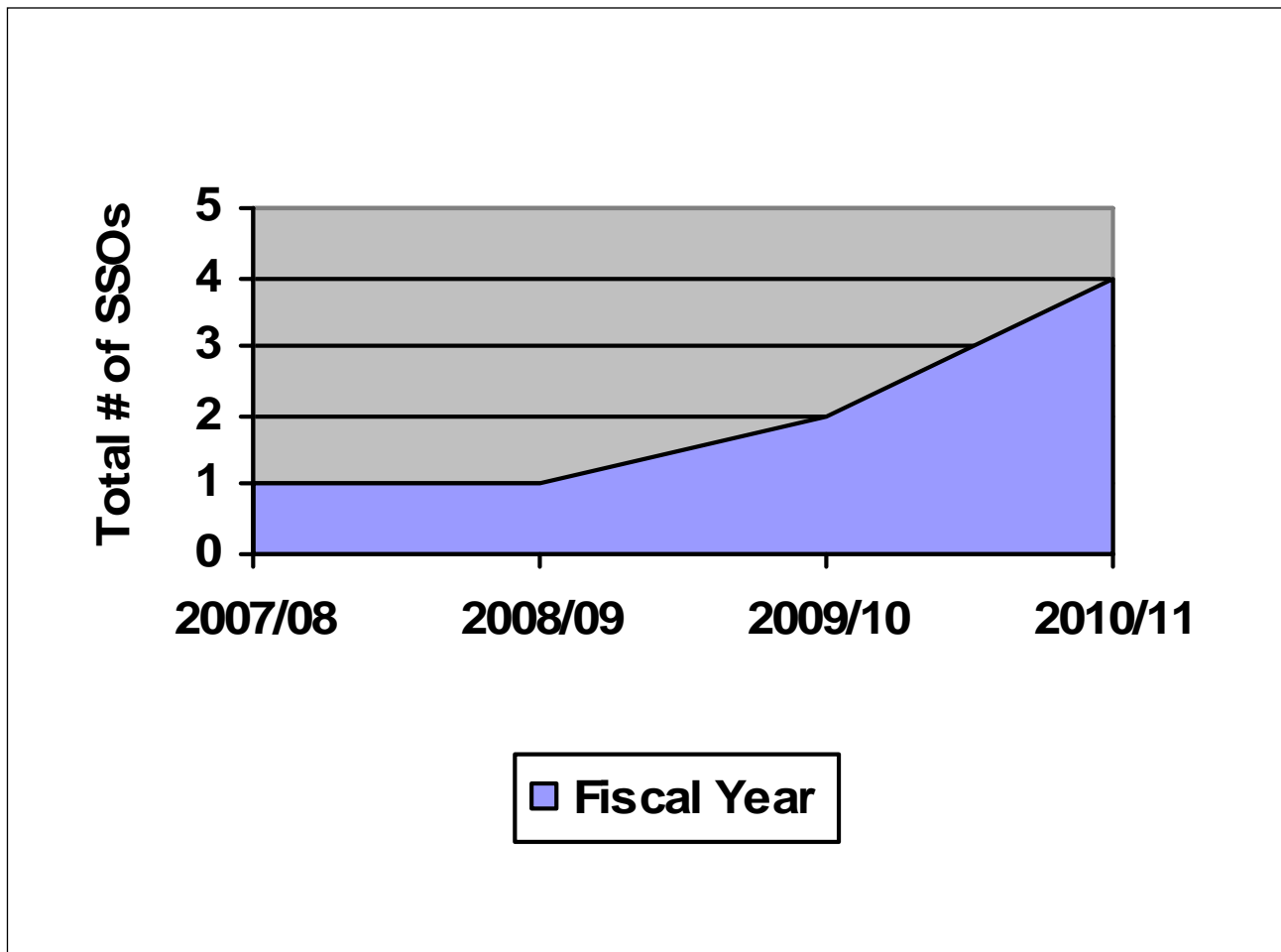
The City's baseline performance for the total number of SSOs is summarized in

**Table 9-1** and in **Figure 9-1**. The City's baseline for the number of SSOs by cause is summarized in **Table 9-2**. The City's baseline for the total volume spilled and total volume recovered is summarized in **Table 9-3**. See **Appendix F - SSO Data** for more information on date and location of SSO's.

Table 9-1: Total Number of SSOs from FY 2007/08 - FY 2010/11

Fiscal Year	SSOs from City Facilities	# SSOs per 100 miles of sewers (gravity and force mains)	# of Category Spills	
			Cat. 1 (> 1,000 gals)	Cat. 2 (< 1,000 gals)
2007/2008	1	.64	0	1
2008/2009	1	.64	0	1
2009/2010	2	0.88	0	2
2010/2011	4	1.8	0	4

Figure 9-1: Trend of SSOs per Year from FY 2007/08 - FY 2010/11



**Table 9-2: Number of SSOs by Cause from FY 2007/08 - FY 2010/11**

Cause	SSOs from City facilities
Roots	0
Grease	1
Debris	5
Pipe Failure	0
Capacity	0
Pump Station	0
Other	2

**Table 9-3: Volume Spilled and Recovered from FY 2007/08 – FY 2010/11**

Fiscal Year	Total Volume Spilled (gallons)	Total Volume Recovered (gallons)	% Recovered
2007/2008	540	540	100%
2008/2009	100	100	100%
2009/2010	900	830	92%
2010/2011	710	660	93%

## 9.4 Performance Monitoring and Program Changes

The City will evaluate the performance of its wastewater collection system annually using the performance monitoring information and measures identified in Sections 9.1 and 9.2. The City will update the data and analysis in Section 9.3 at the time of the evaluation.

The City will prioritize its actions and initiate changes to this SSMP and the related programs based on the results of the evaluation and consistent with the requirements and timing of SSMP Audits and Updated (See Element 10 SSMP Audits).

## Element 10 SSMP Audits

*The requirements of the GWDR are:*

*The City shall conduct periodic internal audits, appropriate to the size of the system and the number of SSOs. At a minimum, these audits must occur every two years and a report must be prepared and kept on file. This audit shall focus on evaluating the effectiveness of the SSMP and the City's compliance with the SSMP requirements, including identification of any deficiencies in the SSMP and steps to correct them.*

### 10.1 SSMP Audits

The City will audit its SSMP at least every two years. The audit will determine whether the SSMP:

- Meets the current requirements of the GWDR;
- Reflects the City's current practices and procedures; and
- Is being followed by the City.

The first audit was completed on July 21, 2011 and covered the previous two calendar years. The audit was conducted by a team of City staff from GSD O&M, Building and Development Services and Sewer Engineering.

The scope of the audit covered each of the sections of the SSMP. The Audit Checklist, based on the current requirements of the GWDR, was used to conduct the audit and is included in **Appendix G – Audit Checklist**. The results of the audit, including the identification of any deficiencies and the steps taken or planned to correct them, has been included in an Audit Report.

The Audit Report will be completed and filed within 90 days of the audit. Copies of the Audit Reports will be maintained by the City for five years.

### 10.2 SSMP Updates

The City will update its SSMP at least every five years. The first update will be completed on or before August 2, 2014. The City may determine the need to update the SSMP more frequently based on the results of the biennial audit and the performance of its sanitary sewer system using information from the Monitoring and Measurement Program (See Element 9). If it is determined that an update is warranted, the process to complete the update will be identified.

Consistent with the SSMP re-certification requirements, the City Staff will seek approval from the City Council for any significant changes to the SSMP. The authority for approval of minor changes (e.g. employee names, contact information, limited procedural changes) is delegated to the Public Works Manager or the Wastewater Treatment Manager.

## Element 11 Communication Plan

*The requirements of the GWDR are:*

- 1. The City shall communicate on a regular basis with the public on the development, implementation, and performance of its SSMP.*
- 2. The communication system shall provide the public the opportunity to provide input to the City as the program is developed and implemented.*
- 3. The City shall create a plan of communication with systems that are tributary and/or satellite to the City's sanitary sewer system.*

In October 2007, the City Council approved the plan and schedule to develop an SSMP for the City of Chico at a publicly noticed City Council meeting.

The SSMP was certified as final by the City Council which approved the SSMP at a publicly noticed City Council meeting on July 21, 2009.

The City maintains a section on the City's webpage ([www.ci.chico.ca.us](http://www.ci.chico.ca.us)) where SSMP information can be accessed by the public. Additionally, the City informs the public on issues that improve or enhance the performance of the wastewater collection system as an annual utility bill insert.

The City Engineering Division clarifies current design criteria and informs the public and local Engineering and Developer community of new design criteria by Design Bulletins posted via the City's website ([www.ci.chico.ca.us](http://www.ci.chico.ca.us)) and direct emails, and through a Development Engineering Quarterly Newsletter.

**Appendix A - City Staff Contact Information**

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**Appendix A-1 – Satellite  
Collection System Contact  
Information**

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# CITY OF CHICO EMPLOYEE LIST BY DEPARTMENT

## General Information

Phone (530) 896-7200 Fax (530) 895-4825

The City of Chico is in the 530 area code.

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### Airport

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Airport Maintenance	896-7652	Fax 879-2304
Automated Information Line	896-7699	
	<b>Burkland, David</b>	<b>City Manager</b>
	<b>Rucker, John</b>	<b>Assistant City Manager</b>

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### Building & Development Services

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	<b>McKinley, Fritz</b>	<b>Building &amp; Development Services Director</b>
<b>Building</b>	<b>879-6700</b>	<b>Fax 895-4726</b>

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24 Hour Building Inspection Line	879-6799	
	Edmond, Linda	Combination Inspector
	George, Nelson	Building Official
	Hassur, Jeannette	Administrative Assistant
	Kotysan, Jerry	Senior Plan Check Engineer
	Nickel, Jeff	Combination Inspector
	Olson, John	Combination Inspector
	Stanford, Richard	Combination Inspector
	Vagts, Richard	Combination Inspector

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### Engineering

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	<b>879-6900</b>	<b>Fax 895-4899</b>
	Allen, Elisa	Office Assistant
	Baker, Ron	Engineering Technician
	Burgi, Richard	Associate Civil Engineer (Sewer)
	Gillispie, Jim	Assistant Engineer
	Harrison, Sam	Administrative Assistant
	Johnson, Matt	Senior Development Engineer
	Mickelson, Brian	Senior Civil Engineer (Traffic)
	Rodriguez, Rick	Engineering Technician
	Rogers, Terrell	Engineering Technician
	Sanders, Tony	Assistant Civil Eng (Sewer/Storm Drain)
	Thompson, Matt	Senior Civil Engineer (Sewer/Storm Drain)
	West, Wyatt	Assistant Civil Engineer (Traffic)

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### GIS

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	<b>879-6900</b>	<b>Fax 895-4899</b>
	Allen, Kelly	GIS Analyst
	Pierce, Brad	GIS Analyst

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### Capital Project Services

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	<b>879-6900</b>	<b>Fax 895-4899</b>
	<b>Varga, Tom</b>	<b>Capital Project Services Director</b>
	Bettencourt, Tracy	Senior Planner

Bodnar, Tyler	Construction Inspector
Green, Lane	Associate Civil Engineer
Greenlaw, Bob	Senior Civil Engineer
Hansen, Quené	Projects Manager
Herren, Micheal	Construction Inspector
Jukkola, Jeff	Associate Civil Engineer
Lovegrove, Gary	Engineering Technician
Murray, Craig	Associate Civil Engineer
Peacock, Karen	Administrative Analyst
Snyder, Richard	Construction Inspector

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**City Attorney's Office**
**896-7600**
**Fax 895-4780**
**Barker, Lori**
**City Attorney**

Barrett, Susan

Paralegal

Rock, Alicia M.

Assistant City Attorney

Wilson, Roger

Assistant City Attorney

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**City Clerk's Office**
**896-7250**
**Fax 896-7298**
**Presson, Debbie**
**City Clerk**

Sevier, Laurie

Administrative Assistant

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**City Manager's Office**
**896-7200**
**Fax 895-4825**
**Burkland, David**
**City Manager**
**Rucker, John**
**Assistant City Manager**

Collins, Debbie

Management Analyst

Dillard, Annalisa

Administrative Assistant

Gardner, Mary

Art Projects Coordinator

Kavanaugh, Heather

Office Assistant

Kelly, Nancy

Administrative Analyst

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**Finance Office**
**879-7300**
**Fax 895-4656**

Automated Information Line 879-7399

Parking Tickets 1-800-828-3551

Licenses (Business, Dog, Bicycle) 879-7320

**Hennessy, Jennifer**
**Finance Director**

Baker, Sheri

Senior Account Clerk (A/R)

Barndollar, Jim

Account Clerk

Brown, Betty

Office Assistant

Carlson, Anna

Account Clerk

Chapot, Casey

Senior Account Clerk (A/P)

Ferguson, Tiffany

Senior Account Clerk (Payroll)

Fields, Frank

Accounting Manager

Graciano, Kimberly

Accounting Technician

Martin, Barbara

Accountant

May, Melinda	Accounting Technician
Meyer, Alicia	Financial Planning Manager
Murray, Jackie	Account Technician (Payroll)
Theissen, Lynn	Administrative Analyst
Toma, Carmen	Mail Clerk

## Fire Department

**897-3400**

**Fax 895-4931**

### Fire Training Center

Fax 895-4604

Alexander, Jesse	Fire Apparatus Engineer
Andrews, Steve	Firefighter
Bangay, Lani	Firefighter
Bartel, Bill	Fire Apparatus Engineer
Bettencourt, Matthew	Firefighter
Brose, Karen	Fire Apparatus Engineer
Brunson, Jeff	Fire Apparatus Engineer
Campbell, Ken	Fire Apparatus Engineer
Campos, Jesse	Firefighter
Carter, Keith	Division Chief (Operations)
Cauble, Jason	Firefighter
Collins, Dale	Fire Apparatus Engineer
Conry, Brian	Fire Captain
Cox, Craig	Firefighter
Doane, Rick	Fire Prevention Inspector
Dunlap, Loren	Fire Captain
Duran, Ruben	Fire Captain
Eagan, Travis	Firefighter
Eccles, Shawn	Fire Apparatus Engineer
Farrara, Ron	Fire Apparatus Engineer
Fellers, Ryan	Firefighter
Fickert, Marie	Fire Prevention Inspector
Fry, Chuck	Fire Apparatus Engineer
Gama, Vincent	Fire Apparatus Engineer
Gassiot, Jon Pierre	Fire Apparatus Engineer
Gonzalez, Ed	Fire Apparatus Engineer
Gooderham, Andy	Fire Apparatus Engineer
Googins, Brad	Fire Apparatus Engineer
Hack, Bill	Fire Captain
Hagan, Bryan	Fire Apparatus Engineer
Harrison, Steve	Fire Captain
Houtman, Peter	Fire Apparatus Engineer
Hunn, Kevin	Fire Captain
Kelso, John	Firefighter
Leung, Adrian	Fire Apparatus Engineer

Lowe, Aaron	Fire Captain
Lucanic, James	Firefighter
Main, David	Fire Captain
Maretti, John	Fire Apparatus Engineer
McHargue, Dan	Firefighter
Meier, James	Firefighter
Metroka, Wes	Firefighter
Mino, Todd	Fire Apparatus Engineer
Moncada, David	Firefighter
Montgomery, Joshua	Firefighter
Morris, Kate	Office Assistant
Munoz, Carlos	Fire Apparatus Engineer
Murphy, Mike	Fire Apparatus Engineer
Myers, Morten	Fire Marshal
Nichols, Michael	Firefighter
O'Berg, Andrew	Firefighter
Osburn, Gina	Firefighter
Pease, Michelle	Administrative Assistant (Training/Prevention)
Peloso, Dominick	Firefighter
Plottel, Zach	Fire Apparatus Engineer
Probst, John	Fire Captain
Rice, Thorin	Firefighter
Rothenberger, Mike	Firefighter
Rowe, Ethan	Firefighter
Sanfilippo, Dominic	Fire Captain
Silverman, Ray	Fire Captain
Simpson, Steve	Division Chief (Training/Prevention)
Smith, Ken	Firefighter
Stelle, Philip	Firefighter
Stewart, Dustin	Firefighter
Stoner, Don	Firefighter
Thau, Eric	Fire Captain
Velazquez, Mike	Firefighter
Watner, Mike	Fire Apparatus Engineer
Wiley, Todd	Fire Apparatus Engineer
Williamson, Philip	Fire Captain
Winter, Judy	Administrative Assistant
Wright, Robert	Firefighter
Zaring, Brandon	Firefighter
Zinko, Chris	Fire Apparatus Engineer

**General Services Department**

**896-7800**

**Fax 895-4731**

Recycling/Solid Waste Info Line 896-7220

Administration **Martinez, Ruben**

Herman, Linda

**894-4200**

Anderson, Doug

Beck, Randy

Collier, Bob

Curl, Kevin

Davis, Clark

Gustafson, Erik

Henderson, Robert

Hovey, Dave

Hudson, William

Escotto, David

Garcia, John

Gibbs, Jason

Gibson, Ed

Gonzalez, Jackie

Griffin, Paul

Jones, Pete

Koehler, Jim

Krapf, Roman

Larkins, Erwin

Lepe, Ben

Libby, Randy

Lobo, Clint

Lott, Rob

Lydon, Keith

McCurry, Matt

Minter, Rob

Munster, Greg

Nebel, Jim

Nicholas, Greg

Parks, Kim

Plumb, Jeff

Rafe, George

Reiff, Mark

Silliman, William

Slattery, Mike

Smith, Gordon

Steedman, Scott

Stephens, Randall

Tatom, Troy

Valdez, John

**General Services Director**

General Services Administrative Manager

**Fax 895-4731**

Senior Maintenance Worker

Senior Maintenance Worker

Senior Maintenance Worker

Senior Maintenance Worker

Senior Maintenance Worker

Fleet Manager

Maintenance Worker

Equipment Mechanic

Equipment Mechanic

Maintenance Worker

Senior Maintenance Worker

Field Supervisor (Underground)

Maintenance Worker

Maintenance Worker

Senior Maintenance Worker

Field Supervisor (Street Cleaning)

Field Supervisor (Airport)

Senior Equipment Mechanic

Senior Maintenance Worker

Senior Maintenance Worker

Senior Maintenance Worker

Maintenance Worker

Senior Maintenance Worker

Senior Maintenance Worker

Maintenance Worker

Maintenance Worker

Parking Meter Collection/Repair

Equipment Mechanic

Maintenance Worker

Facilities Manager

Parking Meter Collection/Repair

Field Supervisor (Building Maintenance)

Senior Maintenance Worker

Equipment Mechanic

Senior Maintenance Worker

Senior Maintenance Worker

Maintenance Worker

Equipment Mechanic

Field Supervisor (Right of Way)

Maintenance Aide

**Operations & Maintenance**

**Park Division**

Park Division Automated Info Line 896-7899

Park Rangers Line 896-7834

West, James

White, Kirby

York, Jason

**896-7800****Efseaff, Daniel**

Barge, Lisa

Beach, Troy

Bettencourt, David

Boston, James

Britton, Denice

Brown, Theresa

Erdahl, Jessica

Erven, James

Hard, Sarah

Henry, Margaret

Holt, Aaron

Johns, Lloyd

Kellogg, Mark

Lininger, Bob

Logsdon, James

Nebel, Tim

Parachou, Carmen

Phillips, Kyle

Randall, Ken

Robinson, Billy

Romain, Shane

Sheppard, Linda

Smith-Peters, Lise

Verbrugge, Andrew

Whitehead, Martin

**894-4300****Sulik, Marc**

Cameron, Lynda

Carr, James

Damron, Mike

DeFelice, Anne

Dilts, Ayrian

Elliott, Travis

Miser, Brook

Naidu, Damodara

Perez, Harley

Maintenance Worker

Public Works Manager

Equipment Mechanic

**Fax 895-4731****Park & Natural Resources Manager**

Seasonal Park Ranger

Senior Tree Maintenance Worker

Field Supervisor (Street Trees)

Tree Maintenance Worker

Urban Forester

Administrative Assistant

Senior Park Ranger

Maintenance Worker

Maintenance Worker

Maintenance Worker

Sr. Tree Maintenance Worker

Maintenance Worker

Tree Maintenance Worker

Seasonal Maintenance Worker

Senior Maintenance Worker

Senior Tree Maintenance Worker

Administrative Analyst

Maintenance Worker

Maintenance Worker

Senior Maintenance Worker

Park Ranger

Landscape Inspector

Management Analyst

Park Ranger

Field Supervisor (Park)

**Fax 895-4730****Wastewater Treatment Plant Manager**

Administrative Analyst

WWTP Operator

WWTP Operator

WWTP Operator

Industrial Waste Inspector

WWTP Operator

Electrical Technician

Senior Laboratory Technician

WWTP Operator

**Water Pollution Control Plant**

Stolp, Debbie  
Traugh, Neil  
Wold, Eric

Laboratory Technician  
Sr. Industrial Waste Inspector  
WWTP Operator

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**Housing & Neighborhood Services****879-6300****Fax 879-6399****Morgado, Sherry****Housing & Neighborhood Services Director**

Carroll, Cris

Community Development Manager

Coles, James

Housing Manager

Tillman, Shawn

Sr Planner - Neighborhood Services

Walker, Jaki

Neighborhood Services Manager

**Code Enforcement****879-6330**

Schreindl, Renee

Administrative Analyst

---

**Human Resources and Risk Mgmt****879-7900****Fax 895-4733**

Jobline 879-7999

**Campbell, Teresa****Human Resources & Risk Management Director**

Boone, Brittni

Human Resources Technician

Henry, Jessica

Management Analyst

Holinsworth, Amber

Administrative Analyst

Smith, Bryna

Administrative Analyst

---

**Information Systems****896-8400****Fax 895-4825**

Chapot, Nate

Information Systems Analyst

Dougherty, Neil

Senior Information Systems Analyst

Keene, Earl

Information Systems Analyst

Salazar, Al

Senior Information Systems Analyst

Stowe, Alan

Senior Information Systems Analyst

Tennison, Lori

Administrative Analyst

Watters, Krista

Information Systems Analyst

Westlotorn, Norm

Information Systems Technician

---

**Planning Services Department****879-6800****Fax 895-4726****Wolfe, Mark****Planning Services Director**

Cooper, Judy

Office Assistant

Fitch, Mary

Administrative Analyst

Masterson, Karen

Administrative Assistant

Morley, Jacob

Associate Planner

Redeker, Greg

Associate Planner

Sawley, Mike

Associate Planner

Spain, Angela

Assistant Planner

Summerville, Bob

Senior Planner

Thomas, Zach

Senior Planner

Vieg, Brendan

Principal Planner

Williams, Meredith

Associate Planner

<b>Police Department</b>	<b>897-4900</b>	<b>Fax 895-4929 (Admin)</b>
Emergency Calls	911 or 897-4911	
Hearing and Speech Impaired	895-4925	
Office of the Chief of Police	897-4950	Fax 895-4929
Graffiti Hotline	898-2003	
Traffic-Tow Hearings	897-4970	
Animal Control	897-4960	Butte Humane Society: 343-7917
Communications/Records	897-4900	Fax 895-4994
Dispatch	897-4900	
Detective Bureau	897-5820	Fax 895-4639
Property/Evidence	897-4930	
Special Operations/Traffic	897-4940	
Traffic Information Line	897-4970	
Youth Services	897-5820	
	<b>Maloney, Mike</b>	<b>Chief of Police</b>
	Adrian, Justin	Police Officer
	Aldridge, Billy	Police Officer
	Bailey, Dave	Police Officer
	Barrett, Lea	Police Officer
	Bartine, Kevin	Police Officer
	Barton, Brianna	Police Records Clerk
	Bass, Mark	Police Officer
	Bauer, Nick	Police Officer
	Bennett, Sue	Community Services Officer
	Bergstedt, Sheryl	Community Services Officer
	Boothe, Todd	Police Officer
	Boutwell, Dan	Community Services Officer
	Britt, Dave	Police Sergeant
	Brooks, Cathy	Administrative Assistant
	Brown, Tovi	Public Safety Dispatcher
	Caldwell, Mike	Police Officer
	Capucion, Winston	Police Officer
	Carlisle, Andrei	Police Officer
	Ceccato, Julie	Public Safety Dispatch Supervisor
	Clark, Will	Police Officer
	Cumber, Jared	Police Officer
	Dawson, Bill	Police Officer
	Deel, Darrin	Police Officer
	DeGeorge, Christina	Administrative Assistant
	Deshler, Frank	Police Officer
	DiGiordano, Mike	Community Services Officer
	Dimmitt, James	Police Officer
	Dominguez, Dave	Police Officer

Dominguez, Denise	Public Safety Dispatcher
Doss, Karrie	Public Safety Dispatcher
Duitsman, Stan	Police Detective
Durfee, Peter	Police Officer
Durkin, Charlene	Community Services Officer
Durkin, Jeff	Police Officer
Dye, Linda	Police Lieutenant
Dyke, Steven	Police Officer
Escobedo, Marcelo	Police Officer
Farrara, Debbie	Police Records Clerk
Ferreira, Tony	Police Officer
Finkbiner, Don	Police Detective
Finkbiner, Chellie	Public Safety Dispatcher
Fonseca, Dan	Police Sergeant
Frakes, Mike	Community Services Officer
Franssen, Scott	Police Sergeant
Fryar, James	Police Sergeant
Gebicke, Wendy	Public Safety Dispatcher
Glass, Robert	Police Officer
Gonzales, Jennifer	Police Lieutenant
Gonzalez, Raul	Code Enforcement Officer
Gowdy, Loren	Public Safety Dispatcher
Gregory, Dane	Police Officer
Hansen, Veronica	Public Safety Dispatcher
Harris, Scott	Police Detective
Hart, Deborah	Police Records Clerk Supervisor
Hartman, Richard	Police Officer
Hass, Kevin	Police Officer
Heimbecher, Erin	Community Services Officer
Hoffman, Mark	Police Detective
Hogue, Steve	Police Officer
Holman, Fred	Public Safety Dispatcher
Horn, Brian	Police Officer
Howard, Cheryl	Community Services Officer
Jauregui, Carlos	Police Officer
Jenkins, Regan	Police Officer
Jennelle-Maxey, Melissa	Public Safety Dispatcher
Johnsen, Travis	Police Officer
Jueckstock, Jason	Police Officer
Kaps, Jaclyn	Public Safety Dispatcher
Keeney, Greg	Police Sergeant
Kilcollins, Tony	Reserve Police Officer
Kligerman, Lori	Police Detective

Kovacs, Cameron	Police Officer
Kozak, Jeffery	Police Officer
Lara, Jose	Police Detective
Laver, George	Police Sergeant
Lazzaretto, Colleen	Police Records Clerk
Lefkowitz, Todd	Police Officer
Lopez, Todd	Police Officer
Love, Ben	Police Officer
MacPhail, Lori	Police Captain
Madden, Abigail	Police Detective
Madden, Matt	Police Sergeant
Magleby, Brian	Police Officer
Maloney, Jennifer	Public Safety Dispatcher
Marshall, Sheri	Public Safety Dispatch Supervisor
Marshall, Ed	Police Officer
McKinnon, Linda	Police Officer
McKinnon, Ted	Police Sergeant
McMinn, Chandra	Public Safety Dispatcher
Mendes, Ashley	Public Safety Dispatcher
Merrifield, Rob	Police Sergeant
Miller, Brian	Police Officer
Mitchell, Ryon	Police Officer
Moore, Terry	Police Detective
Mootz, Vickie	Public Safety Dispatch Supervisor
Moralli, Joe	Property/Evidence Manager
Murphy, Pat	Public Safety Dispatch Supervisor
Nelson, Ed	Community Services Officer
Nelson, Mike	Police Sergeant
Noriega, Anita	Public Safety Dispatcher
Nowicki, Matt	Police Detective
O'Brien, Mike	Police Lieutenant
Parrott, Caroline	Public Safety Dispatcher
Parrott, Jim	Police Detective
Pena, Omar	Police Officer
Person, Johnny	Police Officer
Pickard, Carolyn	Training Coordinator
Port, Ed	Police Officer
Porter, Ford	Police Sergeant
Prosise, Curtis	Police Officer
Prosise, Dale	Police Officer
Quan, Jim	Community Services Officer
Quigley, David	Police Officer
Raimer, Nancy	Code Enforcement Officer

Ratto, Paul	Police Detective
Reichel, Darrin	Police Officer
Richardson, Dave	Police Detective
Robertson, Trisha	Administrative Analyst
Rockwell, Wayne	Police Officer
Rodden, Mike	Police Detective
Rogers, Greg	Police Officer
Rollo, John	Code Enforcement Officer
Rouland, Jamie	Police Officer
Ruppel, Scott	Police Sergeant
Sanders, Melanie	Administrative Analyst
Sandhagen, Jobe	Police Officer
Sandoval, Cesar	Police Detective
Schmid, Joel	Police Officer
Seipert, Matt	Police Officer
Selland, Damon	Police Officer
Sheridan, Rob	Police Officer
Simpson, Neil	Police Officer
Slattery, January	Community Services Officer
Smith, Brett	Police Officer
Smith, Laura	Police Records Clerk
Stelle, Travis	Police Officer
Struthers, Jeramie	Police Officer
Taylor, Garet	Community Services Officer
Trostle, Kirk	Police Captain
Truby, Tim	Community Services Officer
Tupper, Terry	Police Officer
Upton, Lei	Public Safety Dispatcher
Varner, Kim	Police Records Clerk
Veglia, Jaime	Police Administrative Services Manager
Vosika, Bret	Administrative Analyst
Walters, Roxy	Public Safety Dispatcher
Weber, Mike	Reserve Police Officer
Wilson, Nancy	Communications/Records Manager
Wintroath, Kathy	Animal Control Supervisor
Woodward, Robert	Crime Analyst
Zuschin, Scott	Police Officer

## Satellite Collection Systems Contact Information

<b>Agency/Association</b>	<b>Contact</b>	<b>Contact Numbers</b>
California State University Chico (CSUC)	Richard Perrelli, Industrial Hygienist and Environmental Program Coordinator	898-5126
Canyon Oaks Homeowners Association	Ray Villar Hignell and Hignell	894-0404

\*\*All phone numbers are in the 530 area code unless noted.

**Appendix B - Sanitary Sewer Cleaning/Tracking**

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Sanitary Sewer Cleaning/Tracking

Sanitary Sewer Cleaning tracking for OBB

Fiscal Year 2009/10

156.6 linear miles or 826710 linear feet of 6", 8" and 10" VCP, CLAY and Concrete sewer pipes

826710

	2009						2010						Total
	July	August	Sept	Oct	Nov	Dec	Jan	Feb	March	April	May	June	
Crew 1 (Reiff) 9883	138460	148290	118335	32745	40400	33855	43880	0	49150	66650	88010	162735	922510
Crew 2 (Lott) 10064	47745	38425	44525	41310	30845	36735	30575	24505	42705	38799	36429	49975	462573
Total for month	186205	186715	162860	74055	71245	70590	74455	24505	91855	105449	124439	212710	
Cumulative total in li. Feet	186205	372920	535780	609835	681080	751670	826125	850630	942485	1047934	1172373	1385083	262.33 1385083
Percent complete	23%	45%	65%	74%	82%	91%	100%	103%	114%	127%	142%	168%	168%
Number of Sanitary sewer overflows	0	0	0	0	0	0	1	0	0	1			2
Number of Sanitary Sewer damage claims	0	0	0	0	0	0	0	0	0	0			0
Number of Sanitary sewer damage claims > \$5000	0	0	0	0	0	0	0	0	0	0			0
Number of Sanitary sewer overflows per 100 mi of sewers	0	0	0	0	0	0	0.641026	0	0	0.641026	0	0	1.282051

Inspection

Sanitary Sewer	15,261	16812	7321	9099	10750	8106	6704	11413	13448	8930	7138	18365	133,347 ss
Storm drain	0	2881	800		2148	1549	960	3761	546		3357		16,002 sd
Champion		350					500	251		400	475		0
													1,976

\* sr maint out for 3 weeks

Sanitary Sewer Cleaning/Tracking

Sanitary Sewer Cleaning tracking for OBB  
Fiscal Year 2010/11

7/12/2011

161 linear miles or 851628 linear feet of 6", 8" and 10" VCP, CLAY and Concrete sewer pipes

851628

footages updated by R. Rodriguez 1/13/2011

	2010						2011						Total
	July	August	Sept	Oct	Nov	Dec	Jan	Feb	March	April	May	June	
Crew 1 (Reiff) 9883	92085	185910	89165	85775	80485	94200	99105	138430	153550	190345	92675	134000	1435725
Crew 2 (Lott) 10064	44040	45595		62160			35295	48385	71461	70590	52180	60410	490116
Total for month	136125	231505	89165	147935	80485	94200	134400	186815	225011	260935	144855	194410	
Cumulative total in li. Feet	136125	367630	456795	604730	685215	779415	913815	1100630	1325641	1586576	1731431	1925841	364.74
Percent complete	16%	43%	54%	71%	80%	92%	107%	129%	156%	186%	203%	226%	226%
Number of Sanitary sewer overflows	1				1	1				1		0	4
Number of Sanitary Sewer damage claims	0				0	0				0		0	0
Number of Sanitary sewer damage claims > \$5000	0				0	0				0		0	0
Number of Sanitary sewer overflows per 100 mi of sewers	0.641026	0	0	0	0.641026	0.641026	0	0	0	0.641026	0	0	2.564103

Note crew supporting Leaf program in Nov/Dec

Inspection														
Sanitary Sewer	13,387	12969	10953	13994	6899	4072	11627	12894	18558	14938	7668	8773	136,732	ss
Storm drain	155	240	785	762	277	1353	180	1040	350		30		5,172	sd
													0	
Champion		2000	1890		300		0	0	650	0	0		4,840	

## **Appendix C - Equipment Inventory**

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## 670 EQUIPMENT INVENTORY

License	Dept	Vehicle	Year	VIN / S/N	Description
E340808	670	4959	1991	1GBJC34KXLE222016	CHEVY 1-TON RODDER-CHAMPION
SE433276	670	6027	1994	7027SN1021940	6-INCH PORTABLE PUMP -WEDCO
N/A	670	6347	1995	SN115919	TAYLOR-DUNN ELECTRIC UTILITY VEHICLE
E034511	670	6449	1995	1GBGC34K2SE213030	CHEVY 3/4 TON UTILITY CNG
E049390	670	7720	1997	1GCCS14X1V8155783	CHEVY S-10 PU
N/A	670	8555	1999	S/N 7AM04709	CATERPILLAR FORKLIFT
1082536	670	9196	2002	1FTNF20LX2EA37184	FORD 3/4 TON PICKUP
N/A	670	9276	2001	F01414	REAR'S FLAIL MOWER
N/A	670	9290	1999	0628005	DETROIT 1500 KW GENERATOR (WPCP-1)
N/A	670	9393	2002	P100193369	LANDA PORTABLE (SM) PRESSURE WASHER
1133526	670	9420	2003	1FVABTBV93DK34857	FREIGHTLINER/SLUDGE DUMP
1156878	670	9685	2003	1GDJG31U531174935	GMC SAVANA TV VAN
1156839	670	9855	2004	1GCCS196X48164822	CHEVY COLORADO EXT CAB (MARC)
1156835	670	9856	2004	1GCCS196048167907	CHEVY COLORADO EXT CAB (JASON)
1182435	670	9883	2004	1FVACYCS64HN27625	VAC-CON SEWER TRUCK
1194973	670	10037	2005	4HXSU08145C085392	CARSON UTILITY TRLR
N/A	670	10049	2005	ALP251476	CASE IH TRACTOR/LOADER
N/A	670	10458	2005	5524912	MULTIQUIP MODEL GA-6HEA GEN
1194947	670	10051	2005	5ASAK27475F038232	GEM ELECTRIC CART
1201573	670	10064	2005	2FZAATDC66AU28582	VAC-CON SEWER TRUCK
1234262	670	10089	2006	5ASAK27416F039989	GEM ELECTRIC CART
	670	10094	2006	4XARF68A96D034498	POLARIS 6X6 MINI JET
1249444	670	10100	2007	850-068Q-40447	TRAILER MOUNTED ELECTRIC GENERATOR
1249383	670	10107	2007	1FDWF36Y67EB06050	FORD F350 4X2 SUPERCAB UTIL/RACK
	670	10161	2007	21788389	CUMMINS GENERATOR
	670	10162	2007	52810	GUARDIAN GENERATOR
	670	10164	2007	CAT00C44AN4E00549	CATERPILLAR GENERATOR
	670	10165	2007	CAT00C44LN4E00827	CATERPILLAR GENERATOR
1341999	670	10199	2010	1FDAF5GY8AEB38445	FORD F-550 SERVICE TRUCK
	670	10354	2011	100053811100450	LANDA PRESSURE WASHER PGHW535324E
1353089	620	10204	2010	3BKBL50X0BF278398	KENWORTH VACCON

## Other Equipment Inventory (Non-vehicle)

<b>ITEM</b>	<b>SIZE</b>	<b>QUANTITY</b>	<b>SYSTEM COMPONENT</b>
IMPELLERS	various	various	PUMP STATIONS
STARTERS	various	various	PUMP STATIONS
PORTABLE PUMP	3 INCH	1	EMERGENCY BYPASS
PORTABLE PUMP	4 INCH	1	EMERGENCY BYPASS
PORTABLE PUMP	6 INCH	1	EMERGENCY BYPASS
SUBMERSIBLE PUMP	SMALL	4	EMERGENCY BYPASS
GATE VALVES	various	various	
TRACTOR WHEEL CAMERA		1	INSPECTION

**Appendix D - Sanitary Sewer Overflow Response Plan**

**See separate Sanitary Sewer Overflow Response Plan, Appendix D, on file at the City of Chico General Services Department**

**Appendix E - Capacity Assurance Plan Implementation  
Schedule**

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# Schedule of Implementation of Capacity Assurance Projects

CIP Project #	Project Title	Scheduled to Begin in:	Funding Source
<i>Example</i>	<i>Main Street Trunk Rehab</i>	<i>FY 2009/10</i>	<i>Fund 320</i>
17009	24" River Road Trunk Line	FY 2010/11	Fund 320 / 850
16016	West 11 <sup>th</sup> Street Trunk Sewer	FY 2011/12	Fund 320
50058	Olive Street Trunk Sewer	FY 2011/12	Fund 850
50059	Warner Street and Brice Avenue Trunk Sewer	FY 2011/12	Fund 320
50060	Filbert Avenue Trunk Sewer	FY 2011/12	Fund 850

## Appendix F - SSO Data

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## **Appendix G - Audit Checklist**

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## SSMP Audit Checklist

Element/Title	Requirement	SSMP Current	Comments
1. Goals	Reduce, prevent, and mitigate SSOs	✓	
2. Organization	Designate Legally Responsible Official	✓	
	Names and phone numbers for key management personnel		Updated 7/21/11
	Names and phone numbers for key administrative personnel		Updated 7/21/11
	Names and phone numbers for key maintenance personnel		Updated 7/21/11
	Chain of communication for reporting SSOs	✓	
3. Legal Authority	Prevent illicit discharges to sanitary sewer system	✓	
	Require sewers and connection be properly designed and constructed	✓	
	Ensure access for inspection, maintenance, and repairs (includes public portion of lateral)	✓	
	Limit discharge of FOG and debris that may cause blockages	✓	
	Require the installation of grease removal devices	✓	
	Ability to inspect FOG producing facilities	✓	
	Enforce violations of the City's Sanitary Code	✓	
4. O&M Program	Maintain up-to-date maps of the sanitary sewer system	✓	
	Describe routine preventive maintenance program	✓	
	Document completed preventive maintenance using system such as work orders	✓	
	Rehabilitation and replacement plan that identifies and prioritizes sanitary sewer system defects	✓	
4. O&M Program	Provide regular technical training for City sanitary sewer system staff	✓	

	Require contractors to provide training for their workers who work in the City's sanitary sewer system facilities		Confined space training requirement
	Maintain equipment inventory	✓	
	Maintain critical spare part inventory	✓	
5. Design and Performance Provisions	Design and construction standards for new sanitary sewer system facilities		Periodic updates
	Design and construction standards for repair and rehabilitation of existing sanitary sewer system facilities		Periodic updates
	Procedures for the inspection and acceptance of new sanitary sewer system facilities	✓	
	Procedures for the inspection and acceptance of repaired and rehabilitated sanitary sewer system facilities	✓	
6. Sanitary Sewer Overflow Response Plan (SSORP)	Procedures for the notification of primary responders	✓	
	Procedures for the notification of regulatory agencies	✓	
	Program to ensure appropriate response to all SSOs	✓	
	Proper reporting of all SSOs	✓	
	Procedure to ensure City staff are aware of and follow SSORP	✓	
	Procedure to ensure City staff are trained in the SSORP procedures	✓	
	Procedure to ensure contractor personnel are aware of and follow SSORP	✓	
	Procedure to ensure contractor personnel are trained in the SSORP procedures	✓	
	Procedures to address emergency operations such as traffic and crowd control	✓	
	Program to prevent the discharge of sewage to surface waters	✓	
6. SSORP	Program to minimize or correct the impacts of any SSOs that occur	✓	

	Program of accelerated monitoring to determine the impacts of any SSOs that occur		As needed
7. FOG Control Program (Note that each FOG Control Program activity should be considered, but only those appropriate for the City need to be implemented)	Public outreach program that promotes the proper disposal of FOG	✓	
	List of disposal sites for FOG generated within the City's service area	✓	
	Demonstrate that the City has allocated adequate resources for FOG control	✓	
	Identification of sanitary sewer system facilities that have FOG-related problems	✓	
	Program of preventive maintenance for sanitary sewer system facilities that have FOG-related problems	✓	
	Source control measures for sanitary sewer system facilities that have FOG-related problems	✓	
	Enforce FOG elements of the Sanitary Code through inspections of grease-producing facilities	✓	
8. System Evaluation and Capacity Assurance Plan	Identification of elements of the sanitary sewer system that experience or contribute to SSOs caused by hydraulic deficiencies		Review during Sanitary Sewer Master Plan Update (SSMPU)
	Established design criteria that provide adequate capacity		SSMPU recommendations
	Short term CIP that addressed known hydraulic deficiencies		SSMPU recommendations
	Long term CIP that addressed known hydraulic deficiencies		SSMPU recommendations
	Procedures that provide for the analysis, evaluation, and prioritization of hydraulic deficiencies		SSMPU recommendations
8. System Evaluation and Capacity Assurance Plan	The short and long term CIPs include schedules for the correction of each identified hydraulic deficiency		Approved CIP's

9. Monitoring, Measurement, and Program Modifications	Maintain relevant information to establish, evaluate, and prioritize SSMP activities	✓	
	Monitor implementation of the SSMP	✓	
	Measure, where appropriate, performance of the elements of the SSMP	✓	
	Assess success of the preventive maintenance program		Annual review
	Update SSMP program elements based on monitoring or performance		Annual review
	Identify and illustrate SSO trends		Biennial audit
10. SSMP Program Audits	Conduct periodic audits		Updated 7/21/11
	Record the results of the audit in a report		Updated 7/21/11
	Record the changes made and/or corrective actions taken		Updated 7/21/11
11. Communications Program	Communicate with the public regarding the performance of the SSMP		City website posting
	Communicate with tributary or satellite sewer systems		Annual response notification list

As required in SSMP Section 10.1, the City conducted a biennial audit on July 21, 2011. The audit determined that the SSMP:

- Meets the current requirements of the GWDR;
- Reflects the City's current practices and procedures; and
- Is being followed by the City.

As specified in SSMP Section 10.2, the authority for approval of minor changes to the SSMP is delegated to the Public Works Manager or the Wastewater Treatment Manager.

7/21/11 Overall Audit Summary:

The SSMP has been in effect for two years. The audit team felt the overall program was successful. In the two year period only six small SSO's occurred. The magnitude of them was quite small (i.e., all were Category 2) and no spill entered any waterway. These six spills totaled 1610 gallons of sewage spilled and, of that, 1490 gallons were recovered. No private property damage claims for any SSO occurred in the two year period.

*Mark Sulik*

*7/21/2011*

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Marc Sulik, Wastewater Treatment Manager

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Date

*Kirby White*

*7/21/2011*

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Kirby White, Public Works Manager

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Date