CITY OF REEDLEY


SEWER SYSTEM MANAGEMENT PLAN

UPDATE

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Prepared by:

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ABBREVIATIONS

BMP	Best Management Practices
BOD	Biochemical Oxygen Demand
CIP	Capital Improvement Plan
CFR	Code of Federal Regulations
CAD	Computer Automated Drafting
City	City of Reedley
CCTV	Closed-Circuit Television
EPA	Environmental Protection Agency
FOG	Fats, Oils and Grease
ft	Feet
FY	Fiscal Year
GAL	Gallons
GPM	Gallons per Minute
GPS	Global Positioning System
KPI	Key Performance Indicators
LF	Linear Feet
NASSCO	National Association of Sewer Service Companies
PACP	Pipeline Assessment Certification Program
PCS	Permit Compliance Specialist
PCV	Polyvinyl Chloride
psi	Pounds per Square inch
POTW	Publicly Owned Treatment Works
RMC	Reedley Municipal Code
SSMP	Sewer System Management Plan
SSO	Sewer System Overflow
SNC	Significant Noncompliance

SDR	Standard Dimension Ratio
SWRCB	State Water Resources Control Board
WDR	Waste Discharge Requirement
WWTP	Wastewater Treatment Plant

EXECUTIVE SUMMARY

The City of Reedley (City) is required to comply with the State Water Resources Control Board (SWRCB), Order No. 2006-0003 DWQ, entitled "General Waste Discharge Requirements for Sanitary Sewer Systems" (WDR). The City retained AM Consulting Engineers to update the City's Sewer System Management (SSMP) to comply with the WDR. The City's SSMP was originally certified by the SWRCB on August 2, 2009.

This SSMP is organized according to the format indicated in the WDR, with eleven (11) structured Chapters. Each of these Chapters provide essential information describing the procedures, methods, operations, and maintenance tools employed by City staff to provide required wastewater capacity and control Sanitary Sewer Overflows (SSOs). The information provided in these 11 Chapters is summarized below.

Chapter 1 – Goals: The WDR requires each participating agency develop goals to properly fund, manage, and operate and maintain all parts of the sewage collection system owned and/or operated by the City in a manner that will lead to a reduction in SSOs.

The City's goal for the SSMP is as follows:

To maintain and improve the condition of the sewer collection system, minimize inflow and infiltration cost-effectively, provide adequate capacity for future growth, and minimize the number and impact of Sanitary Sewer Overflows (SSOs).

Chapter 2 – Organization: The WDR requires an agency to designate a responsible individual for their agency. It also requires having the names and telephone numbers for the management and administrative positions responsible for implementing specific measures of the Sewer System Management Plan (SSMP) documented.

Figure 2-1 shows the Organization chart of the City staff responsible for SSMP related activities. Table 2-1 contains the names, telephone numbers, and responsibilities of City staff based on the requirements of the WDR. The City Manager serves as the Legally Responsible Official in charge of implementing the SSMP. The City Manager is assisted by the Public Works Director, the City Engineer, and the Wastewater Systems Supervisor in carrying out the day-to-day tasks required to properly implement the SSMP.

Figure 2-2 shows the chain of communication for responding to all SSOs that occur within the City's wastewater collection system, including first receipt of notification that an SSO has occurred, field response, determination of the nature of the problem, formulation of appropriate steps to contain and rectify the SSO, reporting to proper authorities, safeguarding of the public health, and investigation of the cause of the SSO to reduce the risk of repeated events.

Chapter 3 – Legal Authority: The WDR requires that each public agency have the legal authority to implement the provisions of the SSMP. Chapter 3 cites each of the sections of the Reedley Municipal Code that enable the City to:

- Prevent illicit discharges into the sanitary sewer system;
- Require proper design and construction of new and rehabilitated sewers and connections;

- Ensure access for maintenance, inspection, or repairs for all portions of lateral connections owned by the City;
- Limit the discharge of fats, oils, and grease and other debris that may cause blockages in the sanitary sewer system; and
- Enforce any violation of the City's sewer ordinances.

Chapter 4 – Operations and Maintenance: This Chapter of the SSMP discusses the City's documented performance measures and activities associated with the preventative maintenance performed on its sanitary sewer system. The following information is provided in Chapter 4:

- The City maintains a Computer Automated Drafting (CAD) atlas of the sewer collection system which includes manholes, sewer pipelines, pipe size, direction of flow, manhole invert elevations, and lift station location. Copies of this map are available from the City's Engineering department at the City Hall, on the City's website (https://reedley.ca.gov/engineering-department/technical-library/), and at the Wastewater Treatment Plant.
- The City's preventative operation and maintenance program consists of routinely scheduled cleaning of potential problem areas, along with a scheduled citywide canvassing of manholes and pipelines. Potential problem area cleaning by the city's collection system crew occurs every week. The collection crew started a citywide canvassing program to inspect and clean sewer pipelines.
- Since the 2016 SSMP Update, the City established a requirement for developers to conduct closed-circuit television (CCTV) inspections on all newly constructed sewers as part of the permitting process. The City's collection crew also performs CCTV inspection services on the existing sewer lines. In 2016, the City inspected 2.99 miles of existing sewer lines, 8 miles in 2017, 15.9 miles in 2018, 13.62 miles in 2019, 9.5 miles in 2020, and 7.4 miles in 2021. Beginning in Fiscal Year (FY) 2022-23, the City will establish a new position entitled "Senior Sewer Collections System Maintenance Worker." The individual hired for this position will be responsible for inspecting and prioritizing any issues discovered during the inspection process. The City will then prepare a CIP list for needed repairs or replacements based on this list generated.
- There are four (4) sewer lift stations located throughout the City that assist in the conveyance of wastewater to the WWTP. Two new lift stations have been constructed, Frankwood Commons and the Rancho Vista Lift Station, and the City is currently in the process of taking possession of them. The Developer is currently responsible for the maintenance and upkeep of both lift stations. All of the City's existing sewer lift stations are regularly maintained by the City's WWTP Operators.
- The City prepared an Integrated Master Plan (Master Plan) for the Potable Water, Sanitary Sewer, and Strom Drainage Systems in June of 2014. The Sanitary Sewer section identifies hydraulic capacity limitations within the collection system. Based on the findings from the

Master Plan, a Capital Improvement Plan (CIP) was developed and can be found in Chapter 6 of the Master Plan. The Master Plan can be found on the City's website.

- The City maintains an annual budget for the wastewater system. A copy of the FY 2022-23 Budget is presented in Appendix C.
- The City maintains an aggressive training program. All employees on the collection crew attend annual Confined Space Entry, Flagger Training, Traffic Control training as available in the local area. All employees of the collection crew are certified in First Aid/CPR. On the job mentoring and rotation of personnel among different crews and equipment comprises an additional level of training of the City's collection system staff. The City continues to watch for other training opportunities that will enable the crews to do their work more safely and more efficiently.
- The City owns and operates a CCTV truck to video inspect the collection system. The City also uses a Combo Sewer Truck to conduct regular maintenance on the City's manholes and pipelines. Additional equipment is inventoried in Chapter 4.

Chapter 5 – Design and Performance Provisions: Proper design and installation of sewer system pipelines and appurtenances is one of the most important aspects in maintaining a functioning, problem-free sewer system. A properly designed and installed sewer system can minimize system deficiencies that could create or contribute to future overflows and reduce operation and maintenance requirements.

The City's Engineering Division prepared Standard Specifications and Standard Plans governing all public works projects within the City limits. These standards were first adopted by the City Council in 2001 and have been updated regularly by the Engineering Division and are available through the City's website or may be purchased at the City's Public Works counter.

Chapter 6 - Spill Emergency Response Plan: All SSOs are reported on the State Water Resources Control Board (SWRCB) Sanitary Sewer Overflow eReporting Program (http://ciwqs.waterboards.ca.gov/) and are available to the general public. Chapter 6 details the City's Spill Emergency Response Plan.

Included in Chapter 6 are detailed steps taken by the City in response to every SSO. A list of agencies that must be notified of an SSO, including phone numbers, is provided in Table 6-1.

Chapter 7 – FOG Control Program: Fats, oils, and grease (FOG) are discharged to sanitary sewer systems by residential users, food handling facilities, and other commercial and industrial establishments. Commonly, FOG can cause pipe blockages leading to SSOs. The SWRCB requires each wastewater agency to develop a FOG control program as part of the SSMP. The FOG control program includes the following:

- An implementation plan and schedule for a public education outreach program that promotes proper disposal of FOG;
- A plan for the disposal of FOG generated within the sanitary sewer system service area;
- The legal authority to prohibit discharges to the system and identify measures to prevent SSOs and blockages caused by FOG;

- Requirements to install grease removal devices (such as traps or interceptors) design standards for the grease removal devices, maintenance requirements, Best Management Practices (BMPs) requirements, record keeping and reporting requirements;
- Authority to inspect grease producing facilities, enforcement authorities, and inspect and enforce the FOG ordinance;
- An identification of sewer system sections subject to FOG blockages and establish a cleaning maintenance schedule for each section; and
- Development and implementation of source control measures, for all sources of FOG discharged to the sewer system, for each sewer system section identified as a problem.

Chapter 8 – System Evaluation and Capacity Assurance Plan: Currently, the City operates its own wastewater treatment plant with and Average Daily Flow of 1.7 MGD and a Peak Wet Weather Flow of 1.9 MGD, wastewater collection system, and associated infrastructure facilities within the City limits and in some unincorporated areas. The City service area consists of four sewage lift stations and approximately 77.6 miles of sanitary sewer lines, ranging from 6 to 21 inches in diameter. The range of the sanitary sewer system age is between one and 47 years

From 2016 to 2021, the City has experienced and recorded five (5) SSOs incidents. On average, a collection system that is well maintained and operating in good condition will typically have between 1 to 4 SSO's annually per 100 miles of pipeline.

As part of the Master Plan sanitary sewer system evaluation, a hydraulic model was used to identify system capacity deficiencies. Several recommended improvements for the existing system were developed using the hydraulic model. Additional details about these recommended improvements are provided in Chapter 8.

Chapter 9 – Monitoring, Measurements, and Program Modifications: In accordance with SWRCB requirements, each wastewater collection system agency shall monitor the effectiveness of the SSMP and update and modify SSMP chapters to keep them current, accurate, and available for audit, as appropriate. The City has developed a program for tracking Key Performance Indicators (KPI) that will allow the effectiveness of the SSMP in reducing SSOs to be measured. The KPI are identified in Chapter 9.

Chapter 10 - Program Audits: The SWRCB requirements state that each wastewater collection system agency shall conduct an audit of their SSMP at least every two years. The City has developed a program to audit the SSMP every year. Details of the auditing program are provided in Chapter 10.

Chapter 11 – Communication Program: The SWRCB requires that the City communicate, on a regular basis, with the public on the development, implementation, and performance of the SSMP. The communication system shall provide the public the opportunity to provide input to the City as the program is developed and implemented.

The City will conduct public outreach and education for residents and businesses related to sanitary sewer overflows. The City will disseminate information, in meetings and/or by flyers, to land developers, consulting engineers, and plumbing contractors regarding the need and methods to reduce SSOs. Plumbers and sewer contractors will have access to all available City of Reedley plans, specifications, and standard details to ensure that projects are properly designed and built to the City Standards.

CHAPTER 1 - GOALS

The City is required to comply with the State Water Resources Control Board (SWRCB), Order No. 2006-0003 DWQ, entitled "Statewide General Waste Discharge Requirements General Order for Sanitary Sewer Systems" (WDR). This chapter describes the goals of the City of Reedley's (City) Sewer System Management Plan (SSMP) considering this regulation.

1.1. Purpose of Sewer System Management Plan

The purpose of the City's SSMP is to provide a plan and schedule to:

- Properly manage, operate, and maintain all parts of the City's sanitary sewer system.
- Reduce and prevent sanitary sewer spills.
- Contain and mitigate spills that do occur.

The City shall properly fund, manage, and operate and maintain all parts of the sewage collection system owned and/or operated by the City. City staff and/or contractors responsible for the operation and maintenance of the sewage collection system shall possess the appropriate level of knowledge, skills, and abilities, verifiable through participation in a validated program at all times.

1.2. Goals

The City's goal for the SSMP is to maintain and improve the condition of the sewer collection system, minimize inflow and infiltration cost-effectively, provide adequate capacity for future growth, and minimize the number and impact of Sanitary Sewer Overflows (SSOs).

As required by the WDR, the revised SSMP document will be approved by the City Council members prior to its compliance date and will be available to the City's Engineering and Collection System Operation and Maintenance staff.

In meeting the goals of the SSMP and complying with the WDR, the City is currently taking steps to complete the following tasks:

- Performing routine closed-circuit television (CCTV) of the entire collection system;
- Developing and maintaining a sanitary sewer model using AutoCAD;
- Developing a condition assessment program for the collection system;
- Reviewing the connection and service fees;
- Reviewing and updating the City's current design standards with regard to sanitary sewer flow projections; and
- Determining methods to enhance the efficiency and effectiveness of the City's Fats, Oils, and Grease (FOG) Program.

CHAPTER 2 - ORGANIZATION

This chapter describes the City's organization and chain of communication.

2.1. Organization

The Waste Discharge Requirement (WDR) requires an agency to designate a responsible individual for their agency. It also requires having the names and telephone numbers for the management, administrative, and maintenance positions implementing specific measures of the Sewer System Management Plan (SSMP). An organization chart, applicable to the SSMP, is required.

2.2. Organization Chart

Figure 2-1 displays the City of Reedley's updated organization chart and lists only the City departments related to the implementation of the SSMP. Table 2-1 contains the names, telephone numbers, and responsibilities of City staff members based on the requirements of the WDR.

Table 2-1 Contact Information

WDR Position Responsibility	City Title	Name	Telephone Number
City Manager	City Manager	Ms. Nicole Zieba	559-637-4200 x 212
Oversee SSMP	Public Works Director	Mr. Russ Robertson	559-637-4200 x213
City Engineer	City Engineer	Ms. Marilu Morales	559-637-4200 x221
Collection System Manager	Wastewater System Supervisor	Ms. Martha Cardoso	559-637-4200 x 256
Permit Compliance Specialist & FOG Program Administrator	Wastewater System Supervisor	Ms. Martha Cardoso	559-637-4200 x 256
Inspector & Environmental Compliance Officer	WWTP Operator II/Lab Tech	Ms. Erika Barba	559-637-4200 x 266
Design Standards	Assistant Engineer	Ms. Linda Tho	559-637-4200 x 229
Field Crew/Operators	Senior Collection System Maintenance Worker	Mr. Gerardo Gonzalez	559-637-4200 x 262
City Clerk	City Clerk	Ms. Ruthie Greenwood	559-637-4200 x 212

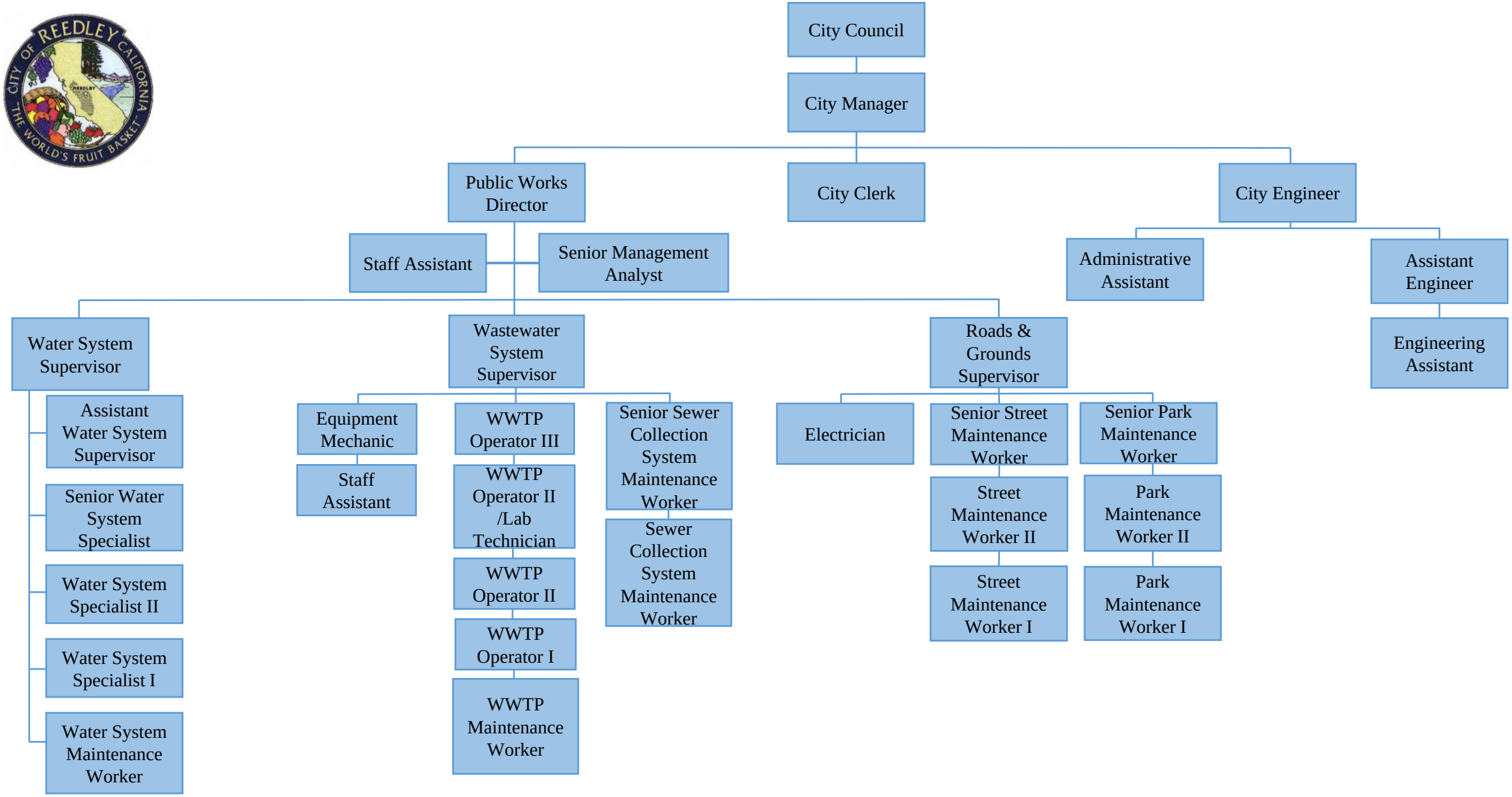


Figure 2-1 City of Reedley – Organization Chart

The following are the roles and responsibilities of the City staff for compliance with the current WDR:

City Manager – Enforces policy, plans strategy; leads staff; allocates resources, delegates responsibilities; authorizes outside contracts to perform services; serves as a departmental public information officer. The City has designated its City Manager as the General Manager for the Collection Systems.

Public Works Director – The Public Works Director oversees the water and wastewater operations and maintenance departments for the City.

City Engineer – Oversees wastewater collection system planning documents, the Capital Improvement Plan (CIP) delivery system, documents new and rehabilitated assets, and helps coordinate development and implementation of the SSMP. Ensures that new and rehabilitated assets meet agency standards

Collection System Manager (Wastewater System Supervisor) – Manages field operations and maintenance activities; provides relevant information to agency management; prepares and implements contingency plans; leads emergency response; investigates and reports SSOs; trains field crews. The City has designated its Wastewater System Supervisor as the Collection System Manager. With regards to the SSMP, the Wastewater System Supervisor is responsible for overseeing the development, implementation, and enforcement of the SSMP.

Permit Compliance Specialist (PCS) & FOG Program Administrator (Wastewater Systems Supervisor) – Provides relevant information to the management and interacts with them regularly; works closely with the permits, laws and regulations; provides support to all parts of the operation and oversees enforcement action. The City has designated its Wastewater System Supervisor as the PCS and FOG Program Administrator for the collection system.

Inspector and Environmental Compliance Officer (WWTP Operator II/Lab Tech) – Works with field crews to handle emergencies, provides verbal reports to Wastewater System Supervisor, and implements enforcement action. Designated as the inspector for the Collection Systems. Responsible for issuing Industrial permits (FOG), inspecting FOG Facilities for compliance and assists with the SSMP communication and public outreach.

Design Standards (Assistant Engineer) – Works with the City Engineer and the Wastewater System Supervisor to develop the collection system design standards. The Engineering Assistant's responsibilities include: assistance with the annual SSMP Audit Report and assistance with the SSMP communication and public outreach program.

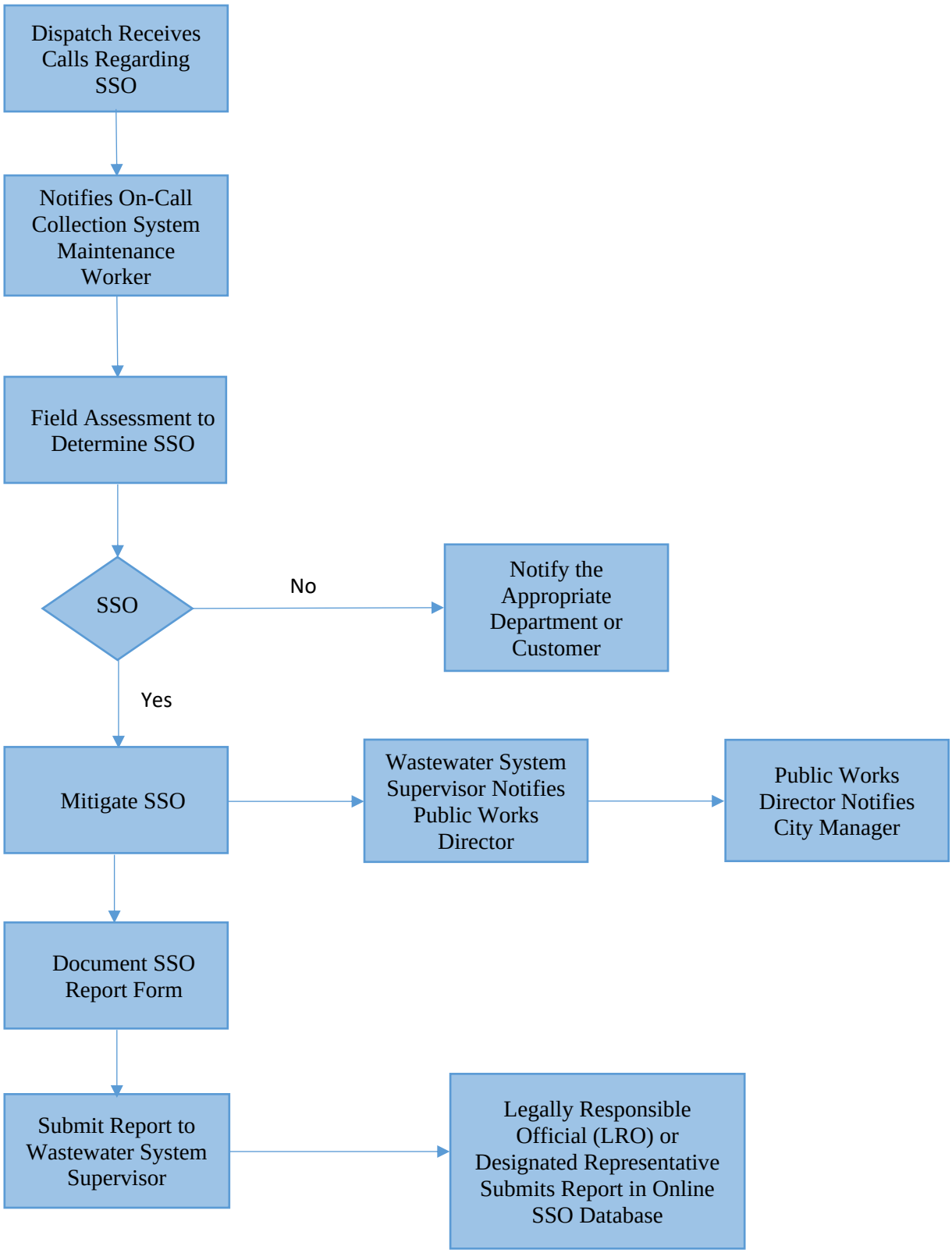
Field Crew/Operators (Senior Collection System Maintenance Worker) – Staff that conduct preventive and corrective maintenance activities; mobilize and respond to notification of stoppages and SSOs. The City has three WWTP operators who are supervised by the Wastewater System Supervisor.

City Clerk – Provides information updates to the City Council and arranges meetings. The City has a City Clerk.

2.3. Chain of Communication

Figure 2-2 displays the City's chain of communication to control and notify SSOs to the appropriate agencies.

Figure 2-2 City of Reedley SSO Response Flow Chart



CHAPTER 3 - LEGAL AUTHORITY

3.1. Requirements

This chapter describes the legal authority of the City, through sewer use ordinances, to implement the provisions of the Sewer System Management Plan (SSMP) to:

- Prevent illicit discharges into the sanitary sewer system;
- Require proper design and construction of new and rehabilitated sewers and connections;
- Ensure access for maintenance, inspection, or repairs for all portions of lateral connections owned by the City;
- Limit the discharge of fats, oils, and grease and other debris that may cause blockages in the sanitary sewer system; and
- Enforce any violation of the City's sewer ordinances.

3.2. Responsible Party

Applicable ordinances pertinent to the sanitary sewer system for the City are outlined in the Reedley Municipal Code (RMC). According to the RMC, the City's Public Works Director is responsible for administering, implementing, and enforcing the provisions outlined in the RMC which are applicable to the sewer system. The responsibilities designated to the Public Works Director in the RMC are currently being carried out by the City Public Works Director, Russ Robertson, as well as the City's Wastewater System Supervisor, Martha Cardoso. The Wastewater System Supervisor is responsible for overseeing the activities related to the sewer collection system, wastewater treatment plant, and SSMP.

3.3. Provisions

Title 8 of the RMC applies to the public works department, and includes chapters on water system regulations, private and public sewers, sewer connections, and sewer charges. Chapters 2, 3, and 4 of the RMC. Title 8 outline the specific requirements for users of the City's publicly owned treatment works (POTW) and provides the City with the authority to comply with and enforce all applicable State and Federal laws, including the Clean Water Act (33 United States Code Section 1251 et seq.) and the general pretreatment regulations (40 Code of Federal Regulations Part 403).

Chapter 2 of Title 8 of the RMC pertaining to private and public sewers and drains was amended in 2014 to comply with the Federal Environmental Protection Agency (EPA) mandate to regularly update the City's Sewer Use Ordinance to become current with periodic regulatory changes and streamlining processes. On January 26, 2012, EPA staff conducted a Pretreatment Compliance Inspection of the City, during which, it was noted that the existing Sewer Use Ordinance was not current with streamlining requirements. Therefore, the City was required to modify its control mechanisms to ensure that the industrial users had all the requirements specified in the federal regulations and to verify that the local limits were set current.

In 2013 the City conducted an evaluation of the City Local Discharge Limits, and it was determined that the existing local limits were still protective of the wastewater treatment process, biosolids quality and

effluent quality. There is no need to revise the City's local limits at that time. The City complied with the modification of the control mechanism specification with the revision and reissuance of the Guardian Industries Industrial User Permit, which ceased operation in 2014.

On July 22, 2014, the City adopted Ordinance No. 2014-003, which amends Chapter 2 of Title 8 of the RMC in order to comply with the requirement to update the City's Sewer Use Ordinance and become current with the streamlining process. The amendments addressed the City's legal authority to include the following requirements:

- 40 CFR 403.8(f)(1)(B)(3): clarification that slug control requirements must be referenced in significant industrial users (SIU) control mechanisms;
- 40 CFR 403.8(f)(2)(viii)(A-C): revisions to the significant noncompliance (SNC) definition;
- 40 CFR 403.12(g): modifications to the sampling requirements and a clarification to the requirement to report all monitoring results.

The City's engineering department is responsible for maintaining design standards and specifications for the construction and implementation of new sewer components that are referenced in the RMC. Plans and specifications for new sewers must be approved by the City Engineer, and permit fees must be paid prior to permit issuance.

An electronic copy of the entire RMC, along with the standard plans and specifications for sewer design is available through the City's website (http://www.reedley.ca.gov) or directly at http://www.sterlingcodifiers.com/codebook/index.php?book_id=564.

The following excerpts are from the RMC Title 8 and are applicable to the SSMP:

8-2-1-1: Purpose and Policy: This chapter sets forth uniform requirements for users of the POTW for the City and enables the City to comply with all applicable state and federal laws. The objectives of this chapter are:

A. To prevent the introduction of pollutants into the POTW that will interfere with its operation;
B. To prevent the introduction of pollutants into the POTW that will pass through the POTW; inadequately treated, into receiving waters or otherwise be incompatible with POTW;
C. To protect both POTW personnel who may be affected by wastewater and sludge in the course of their employment and the general public;
D. To promote reuse and recycling of industrial wastewater and sludge from the POTW;
E. To enable the City to comply with its waste discharge requirements (WDR) permit conditions, sludge use and disposal requirements, and any other federal or state laws to which the POTW is subject.

This chapter shall apply to all users of the POTW. The chapter authorizes the issuance of wastewater discharge permits; provides for monitoring, compliance, and enforcement activities; establishes administrative review procedures; and requires user reporting. (Ord. Ord. 2014-003, 7-22-2014)

8-2-4(G): Building Sewers and Connections: The size, slope, alignment, materials of construction of a building sewer and the methods to be used in excavating, placing of the pipe, jointing, testing and

backfilling the trench, shall all conform to the requirements of the building and plumbing codes and section 8-3-3 of this title or other applicable rules, and regulations of the City. In the absence of code provisions or in the amplification thereof, the materials and procedures set forth in appropriate specifications of the ASTM and WPCF Manual of Practice No. 9 shall apply.

8-2-5-1(B): Prohibited Discharge Standards: Specific Prohibitions: No user shall introduce or cause to be introduced into the POTW the following pollutants, substances or wastewater:

1. Pollutants which create a fire or explosive hazard in the POTW including, but not limited to, waste streams with a closed cup flashpoint of less than one hundred forty degrees Fahrenheit (140°F) (60°C) using the test methods specified in 40 CFR 261.21;
2. Wastewater having a pH less than 5.0, in accordance with 40 CFR 403.5, or otherwise causing corrosive structural damage to the POTW or equipment. In addition, the user must also meet the City's local limit in section 8-2-5-3 or this chapter;
3. Solid or viscous substances in amounts which will cause obstruction of the flow in the POTW resulting in interference, but in no case solids greater than one-half inch (1/2") in any dimension;
4. Pollutants, including oxygen demanding pollutants (BOD, etc.) released in a discharge at a flow rate and/or pollutant concentration which, either singly or by interaction with other pollutants, will cause interference with the POTW;
5. Wastewater having a temperature greater than one hundred fifty degrees Fahrenheit (150°F) (65°C), or which will inhibit biological activity in the POTW resulting in interference, but in no case heat in such quantities that the temperature at the introduction into the POTW treatment plant exceeds one hundred four degrees Fahrenheit (104°F) (40°C);
6. Petroleum oil, non-biodegradable cutting oil or products of mineral oil origin, in amounts that will cause interference or pass through;
7. Pollutants which result in the presence of toxic gases, vapors or fumes within the POTW in a quantity that may cause acute worker health and safety problems;
8. Trucked or hauled pollutants;
9. Noxious or malodorous liquids, gases, solids or other wastewater which, either singly or by interaction with other wastes, are sufficient to create a public nuisance or a hazard to life, or to prevent entry into the sewers for maintenance or repair;
10. Wastewater which imparts color which cannot be removed by the treatment process, such as, but not limited to, dye wastes and vegetable tannin solutions, which consequently imparts color to the treatment plant's effluent;
11. Any radioactive wastes. In the event of an accidental spill of radioactive material into any public sewer, the person responsible shall:
    a. Immediately notify the public works director; and
    b. Render such technical or other assistance to the City within its power to prevent the POTW from becoming contaminated with radioactivity.
12. Storm water, surface water, groundwater, artesian well water, roof runoff, subsurface drainage, swimming pool drainage, condensate, deionized water, noncontact cooling water and unpolluted wastewater, unless specifically authorized by the public works director;

13. Sludges, screenings or other residues from the pretreatment of industrial wastes;
14. Medical wastes, except as specifically authorized by the public works director in a wastewater discharge permit;
15. Wastewater causing, alone or in conjunction with other sources, the treatment plant's effluent to fail a toxicity test;
16. Detergents, surface active agents or other substances which may cause excessive foaming in the POTW;
17. Any dispersed biodegradable oils and fats, such as lard, tallow or vegetable oil, and any fats, oils or greases of animal origin in amounts that will cause interference or pass through the POTW;
18. Wastewater causing two (2) readings on an explosion hazard meter at the point of discharge into the POTW, or at any point in the POTW, of more than ten percent (10%) or any single reading over five percent (5%) of the lower explosive limit of the meter.

8-2-9-1: Right of Entry, Inspection and Sampling: The public works director shall have the right to enter the premises of any user to determine whether the user is complying with all requirements of this chapter and any wastewater discharge permit or order issued hereunder. Users shall allow the public works director ready access to all parts of the premises for the purposes of inspection, sampling, records examination and copying and the performance of any additional duties.

1. Where a user has security measures in force which require proper identification and clearance before entry into its premises, the user shall make necessary arrangements with its security guards so that, upon presentation of suitable identification, the public works director will be permitted to enter without delay for the purposes of performing specific responsibilities.
2. The public works director shall have the right to set up on the user's property, or require installation of, such devices as are necessary to conduct sampling and/or metering of the user's operations.
3. The public works director may require the user to install monitoring equipment as necessary. The facility's sampling and monitoring equipment shall be maintained at all times in a safe and proper operating condition by the user at its own expense. All devices used to measure wastewater flow and quality shall be calibrated to ensure their accuracy, according to the frequency required in the user's permit.
4. Any temporary or permanent obstruction to safe and easy access to the facility to be inspected and/or sampled shall be promptly removed by the user at the written or verbal request of the public works director and shall not be replaced. The cost of clearing such access shall be borne by the user.
5. Unreasonable delays in allowing the public works director access to the user's premises shall be a violation of this chapter.
6. The aforesaid officers and their authorized agents shall have the right of entry during usual business hours and at any time when, upon reasonable cause, they believe there is an immediate hazard to life, health or property, to inspect at and all buildings and premises in the performance of their duties. The aforesaid officers and their authorized agents shall have the right to take

independent samples of any discharge from any industrial user to determine compliance with this chapter. (Ord. 2014-003, 7-22-2014)

8-2-12-1: Notification of Violation: When the public works director finds that a user has violated, or continues to violate, any provision of this chapter, a wastewater discharge permit or order is issued hereunder or any other pretreatment standard or requirement, the public works director may serve upon that user a written notice of violation. Within ten (10) days of the receipt of this notice, an explanation of the violation and a plan for the satisfactory correction and prevention thereof, to include specific required actions, shall be submitted by the user to the public works director. Submission of this plan in no way relieves the user of liability for any violations occurring before or after receipt of the notice of violation. Nothing in this section shall limit the authority of the public works director to take any action, including emergency actions or any other enforcement action, without first issuing a notice of violation. (Ord. 2014-003, 7-22-2014)

8-2-12-2: Consent Orders: The public works director may enter into consent orders, assurances of voluntary compliance or other similar documents establishing an agreement with any user responsible for noncompliance. Such documents will include specific action to be taken by the user to correct the noncompliance within a time period specified by the document. Such documents shall have the same force and effect as the administrative orders issued pursuant to sections 8-2-12-4 and 8-2-12-5 of this chapter and shall be judicially enforceable. (Ord. 2014-003, 7-22-2014)

8-2-12-3: Show Cause Hearing: The public works director may order a user which has violated, or continues to violate, any provision of this chapter, a wastewater discharge permit or order issued hereunder, or any other pretreatment standard or requirement, to appear before the public works director and show cause why the proposed enforcement action should not be taken. Notice shall be served on the user specifying the time and place for the meeting, the proposed enforcement action, the reasons for such action and a request that the user show cause why the proposed enforcement action should not be taken. The notice of the meeting shall be served personally or by registered or certified mail (return receipt requested) at least fifteen (15) days prior to the hearing. Such notice may be served on any authorized representative of the user. A show cause hearing shall not be a bar against, or prerequisite for, taking any other action against the user. (Ord. 2014-003, 7-22-2014)

8-2-12-4: Compliance Orders: When the public works director finds that a user has violated, or continues to violate, any provision of this chapter, a wastewater discharge permit or order issued hereunder or any other pretreatment standard or requirement, the public works director may issue an order to the user responsible for the discharge directing that the user come into compliance within a specified time. If the user does not come into compliance within the time provided, sewer service may be discontinued unless adequate treatment facilities, devices or other related appurtenances are installed and properly operated. Compliance orders also may contain other requirements to address the noncompliance, including additional self-monitoring and management practices designed to minimize the amount of pollutants discharged to the sewer. A compliance order may not extend the deadline for compliance established for a pretreatment violation, including any continuing violation. Issuance of a compliance order shall not be a bar against, or a prerequisite for, taking any other action against the user. (Ord. 2014-003, 7-22-2014)

8-2-12-5: Cease and Desist Orders: When the public works director finds that a user has violated, or continues to violate, any provision of this chapter, a wastewater discharge permit or order issued hereunder or any other pretreatment standard or requirement, or that the user's past violations are likely to recur, the public works director may issue an order to the user directing it to cease and desist all such violations and directing the user to:

A. Immediately comply with all requirements; and
B. Take such appropriate remedial or preventative actions as may be needed to properly address a continuing or threatened violation, including halting operations and/or terminating the discharge.

Issuance of a cease and desist order shall not be a bar against, or a prerequisite for, taking any other action against the user. (Ord. 2014-003, 7-22-2014)

8-2-12-6: Administrative Fines:

A. When the public works director finds that a user has violated, or continues to violate, any provisions of this chapter, a wastewater discharge permit or order issued hereunder or any other pretreatment standard or requirement, the public works director may fine such user in an amount not to exceed:
    1. Two thousand dollars ($2,000) per day for failing or refusing to furnish technical or monitoring reports;
    2. Three thousand dollars ($3,000) per day for failing or refusing to timely comply with any compliance schedule established by the City;
    3. Five thousand dollars ($5,000) per day for discharge in violation of any wastes discharge limitation, permit condition or requirement issued, reissued or adopted by the City; and
    4. Ten dollars ($10.00) per gallon for discharges in violation of any suspension, cease and desist order or other orders prohibition issued, reissued or adopted by the City.
B. Unpaid charges, fines and penalties shall, after sixty (60) calendar days, be assessed an additional penalty of twenty-five percent (25%) of the unpaid balance, and interest shall accrue thereafter at a rate of one percent (1%) per month. A lien against the user's property will be sought for unpaid charges, fines, and penalties.
C. Users desiring to dispute such fines must file a written request for the public works director to reconsider the fine along with full payment of the fine amount within thirty (30) days of being notified of the fine. Where a request has merit, the public works director may convene a hearing on the matter. In the event the user's appeal is successful, the payment, together with any interest accruing thereto, shall be returned to the user. The public works director may add the costs of preparing administrative enforcement actions, such as notices and orders, to the fine.
D. Issuance of an administrative fine shall not be a bar against, or a prerequisite for, taking any other action against the user. (Ord. 2003-05, 10-14-2003)

8-2-12-7: Appeals: Any person affected by any decision, action or determination by the public works director, interpreting or implementing the provisions of this chapter including, without limitations, the provisions of this chapter, or any industrial wastewater discharge permit issued hereunder by the public

works director, excepting there from any decision, action or determination of the public works director to pursue either criminal penalties or civil judicial enforcement, may file with the City clerk, within ten (10) days of the date of service of such decision, action or determination, a notice of appeal to the City council appealing such decision, action or determination by the public works director. The notice of appeal shall set forth in detail all facts supporting the industrial user's appeal of the decision of the public works director. The filing of the notice of appeal shall stay all further action required under any notice of violation or cease and desist orders and accumulation of interest upon penalties thereon, pending final decision by the City council on the appeal; provided, however, that nothing stated herein shall limit the authority of the public works director to take such action or to make such directives as the public works director deems necessary to stop or prevent an ongoing or threatened violation of any of the provisions of this chapter, including actions or directives to prevent or stop threatened damage to the POTW, pass through or threatened harm to the health or safety of the public. Such action shall include, without limitation, continuing to physically block the industrial user's access to the sewer until the appeal is heard and decided by the City council. (Ord. 2014-003, 7-22-2014)

8-2-12-8: Emergency Suspensions: The public works director may immediately suspend a user's discharge, after informal notice to the user, whenever such suspension is necessary to stop an actual or threatened discharge which reasonably appears to present or cause an imminent or substantial endangerment to the health or welfare of persons. The public works director may also immediately suspend a user's discharge, after notice and opportunity to respond, that threatens to interfere with the operation of the POTW, or which presents, or may present, an endangerment to the environment.

A. Any user notified of a suspension of its discharge shall immediately stop or eliminate its contribution. In the event of a user's failure to immediately comply voluntarily with the suspension order, the public works director may take such steps as deemed necessary, including immediate severance of the sewer connection, to prevent or minimize damage to the POTW, its receiving stream or endangerment to any individuals. The public works director may allow the user to recommence its discharge when the user has demonstrated to the satisfaction of the public works director that the period of endangerment has passed, unless the termination proceedings in section 8-2-12-9 of this chapter are initiated against the user.
B. A user that is responsible, in whole or in part, for any discharge presenting imminent endangerment shall submit a detailed written statement, describing the causes of the harmful contribution and the measures taken to prevent any future occurrence, to the public works director prior to the date of any show cause or termination hearing under sections 8-2-12-4 and 8-2-12-9 of this chapter.

Nothing in this section shall be interpreted as requiring a hearing prior to any emergency suspension under this section. (Ord. 2014-003, 7-22-2014)

8-2-12-9: Termination of Discharge: In addition to the provisions in section 8-2-7-12 of this chapter, any user who violates the following conditions is subject to discharge termination:

A. Violation of wastewater discharge permits conditions;

B. Failure to accurately report the wastewater constituents and characteristics of its discharge;
C. Failure to report significant changes in operations or wastewater volume, constituents and characteristics prior to discharge;
D. Refusal of reasonable access to the user's premises for the purpose of inspection, monitoring or sampling; or
E. Violation of the pretreatment standards in sections 8-2-5-1, 8-2-5-2 and 8-2-5-3 of this chapter.

Such user will be notified of the proposed termination of its discharge and be offered an opportunity to show cause under section 8-2-12-4 of this chapter why a proposed action should not be taken. Exercise of this option by the public works director shall not be a bar to, or a prerequisite for, taking any other action against the user. (Ord. 2014-003, 7-22-2014)

8-2-13-1: Injunctive Relief: When the public works director finds that a user has violated, or continues to violate, any provision of this chapter, a wastewater discharge permit or order issued hereunder or any other pretreatment standard or requirement, the public works director may petition the Fresno County superior court for the issuance of a temporary or permanent injunction, as appropriate, which restrains or compels the specific performance of the wastewater discharge permit, order or other requirement imposed by this chapter on activities of the user. The public works director may also seek such other action as is appropriate for legal and/or equitable relief, including a requirement for the user to conduct environmental remediation. A petition for injunctive relief shall not be a bar against, or a prerequisite for, taking any other action against a user. (Ord. 2003-05, 10-14-2003)

8-13-2: Civil Penalties:

A. A user who has violated, or continues to violate, any provision of this chapter, a wastewater discharge permit or order issued hereunder or any other pretreatment standard or requirement shall be liable to the City for a maximum civil penalty of twenty-five thousand dollars ($25,000.00) per violation, per day. In the case of a monthly or other long term average discharge limit, penalties shall accrue for each day during the period of the violation.
B. The public works director may recover reasonable attorney fees, court costs and other expenses associated with enforcement activities, including sampling and monitoring expenses, and the cost of any actual damages incurred by the City.
C. In determining the amount of civil liability, the court shall take into account all relevant circumstances including, but not limited to, the extent of harm caused by the violation, the magnitude and duration of the violation, any economic benefit gained through the user's violation, corrective actions by the user, the compliance history of the user and any other factor as justice requires;
D. Remedies under this section are in addition to and do not supersede or limit any and all other remedies, civil or criminal, but to liability shall be recoverable under this section of any violation for which liability is recovered under administrative actions/remedies. (Ord. 2014-003, 7-22-2014).

8-2-13-3: Criminal Prosecution:

A. A user who willfully or negligently violates any provision of this chapter, a wastewater discharge permit or order issued hereunder or any other pretreatment standard or requirement shall, upon conviction, be guilty of a misdemeanor, punishable by fine and/or imprisonment as provided by the Penal Code regarding misdemeanors.
B. A user who willfully or negligently introduces any substance into the POTW which causes personal injury or property damage or which causes the city POTW to violate any effluent limitation or condition in a permit issued to the POTW, shall, upon conviction, be guilty of a misdemeanor and be punishable by fine and/or imprisonment as provided by the Penal Code regarding misdemeanors. This penalty shall be in addition to any other cause of action for personal injury or property damage available under state law.
C. A user who knowingly makes any false statements, representations or certifications in any application, record, report, plan or other documentation filed, or required to be maintained pursuant to this chapter, wastewater discharge permit or order issued hereunder, or who falsifies, tampers with or knowingly renders inaccurate any monitoring device or method required under this chapter shall, upon conviction, be punishable by fine and/or imprisonment as provided by the Penal Code regarding misdemeanors.
D. In the event of a second conviction, a user shall be punishable by fine and/or imprisonment as provided by the Penal Code regarding misdemeanors. (Ord. 2014-003, 7-22-2014)

8-2-13-4: Remedies Nonexclusive: The remedies provided for in this chapter are not exclusive. The public works director may take any, all or any combination of these actions against a noncompliant user. Enforcement of pretreatment violations will generally be in accordance with the City's enforcement response plan. However, the public works director may take other action against any user when the circumstances warrant. Further, the public works director is empowered to take more than one enforcement action against any noncompliant user. (Ord. 2014-003, 7-22-2014)

8-3-1: Sewer Connection: No property shall be connected to any public sewer of the City unless the owner thereof has paid a sewer connection fee. (Ord. 659, 4-6-1982)

8-3-3: Plan Required: No group of houses or buildings shall be connected to a main sewer in any public right of way or easement without first having the plan of the sewer of these houses or buildings approved by the building inspector.

Main sewers constructed by any person shall be in conformance with plans and specifications approved by the public works director and shall be in accordance with the standard plans and specifications of the City. (Ord. 659, 4-6-1982)

8-3-4: Separate Connections: Every house and building must be separately and independently connected with the main sewer. (Ord. 659, 4-6-1982)

8-3-6: Unlawful Construction: It is hereby declared to be unlawful for any person, other than employees or agents of the City, to construct any building sewer between the main sewer and the public right of way line or public easement line of the City except as provided in this chapter and any person violating any of the provisions of this chapter shall be deemed guilty of a misdemeanor. (Ord. 659, 4-6-1982)

8-3-10: Opening Manholes: It shall be unlawful for any person other than a bona fide employee of the City in line of duty to open or enter or cause to be opened or entered any manhole in any public sewer to dispose of garbage or other deleterious substances, or storm or surface waters, or for any other purpose whatsoever. (Ord. 659, 4-6-1982)

CHAPTER 4 - OPERATIONS AND MAINTENANCE

4.1. Requirements

This Chapter of the SSMP discusses the City's documented performance measures and activities associated with the preventative maintenance performed on its sanitary sewer system. This Chapter fulfills the following requirements of both the Regional Water Quality Control Board and State Water Board:

- Each wastewater collection system agency shall maintain up-to-date maps of its wastewater collection system facilities, showing all gravity line segments and manholes, pumping facilities, pressure pipes and valves, and applicable storm water pumping and piping facilities.
- Each wastewater collection system agency shall allocate adequate resources for the operation, maintenance, and repair of its collection system.
- Each wastewater collection system shall prioritize its preventative maintenance activities and establish a routine preventative operation and maintenance schedule. Describe routine preventative 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.
- Each wastewater collection system agency shall identify and prioritize structural deficiencies and implement a program of prioritized short-term and long-term actions to address them. The program should include regular visual and TV inspections of manholes and sewer pipes, and system for ranking the conditions of sewer pipes and scheduling rehabilitation. Rehabilitation and replacement should focus on sewer pipes that are at risk of collapse or prone to more frequent blockages due to pipe defects. Finally, the rehabilitation and replacement plan should include a capital improvement plan that addresses proper management and protection of the infrastructure assets. The plan shall include a time schedule for implementing the short-and long-term plans plus a schedule for developing the funds needed for the capital improvement plan.
- Each wastewater collection system agency shall provide contingency equipment to handle emergencies and spare/replacement parts intended to minimize equipment/facility downtime. Each wastewater collection system agency shall provide training on a regular basis for its staff in collection system operation, maintenance, and monitoring.
- Implement an outreach program to educate commercial entities involved in sewer construction or maintenance about the proper practices for preventing blockages in private laterals. This requirement can be met by participating in a region-wide outreach program.

4.2. Collection System Maps and Description of Existing Facilities

The sanitary sewer collection system consists of approximately 77.6 miles of sewer pipe. The predominant pipe material is clay and PVC pipe. Table 4-1 shows a breakdown of the pipe diameters and approximate total length of pipe within the City's collection system.

Table 4-1 Existing Sanitary Sewer

Diameter (in)	Gravity Sewers (ft)	Force Mains (ft)	Total	
			Length (ft)	Length (miles)
4	--	1,132	1,132	0.21
6	125,009	775	125,784	23.82
8	165,876	4,647	170,523	32.30
10	28,691	--	28,691	5.43
12	40,496	1,509	42,005	7.96
15	17,088	--	17,088	3.24
18	16,411	--	16,411	3.11
21	6,254	--	6,254	1.18
24	2,069	--	2,069	0.39
Total	**401,894**	**8,063**	**409,957**	**77.64**

Currently, the City maintains a Computer Automated Drafting (CAD) atlas of the sewer collection system which includes manholes, sewer pipelines, pipe size, direction of flow, manhole invert elevations, and lift station location. Copies of this map are available from the City's Engineering department at the City Hall, on the City's website, and at the Wastewater Treatment Plant.

4.3. Preventative Operations and Maintenance

4.3.1. Manholes and Pipelines

The City's preventative operation and maintenance program consists of routinely scheduled cleaning of potential problem areas, along with a scheduled citywide canvassing of manholes and pipelines. Potential problem areas are cleaned by the City's collection system crew occurs every week. The collection crew has identified potential problem areas throughout the city's sewer system (see Appendix A), and inspects and cleans these pipe segments, as necessary.

In addition to the weekly potential problem area cleaning, the collection crew started a citywide canvassing program. By dividing the City into sections, collection crew open every manhole and rod the lines from manhole to manhole, marking the collection system map as they complete the run. Currently the crew inspects approximately 3,500 to 5,000 linear feet per week. At this cleaning rate, the entire gravity collection system can be inspected and cleaned in a period of approximately 88 weeks. This routine inspection process has allowed the crew to locate covered manholes and expose them, raise manholes to road levels, locate and identify manholes that are presently not on the sewer plots, note any problems or potential problems for later attention, and prioritize cleaning of specific sewer segments. Appendix B is an example of the City's sewer cleaning log. Completed cleaning logs are maintained in a binder at the Wastewater Treatment Plant. The potential problem area cleaning list is revised based on the results of the routine cleaning program.

4.3.2. CCTV Inspection

The City owns and operates a closed-circuit television (CCTV) truck that is used to perform inspection on existing sewer pipelines. The City does not inspect newly constructed sewer pipelines or subdivisions. Developers are required to inspect all newly constructed sewer pipelines as part of the permitting process.

4.3.3. Lift Stations

There are currently four (4) sewer lift stations located throughout the City that assist in the conveyance of wastewater to the WWTP. Two new lift stations have been constructed, Rancho Vista and Frankwood Commons lift stations. The Rancho Vista lift station became operational on August 4, 2022, and the Frankwood Commons lift stations became operational on March 30, 2022. At this time, both lift stations are being maintained by the developer and the City is in the process of taking possession of them. Until the lift stations are acquired by the City, the Developer is responsible for the maintenance and upkeep of both lift stations.

Details of the City's sewer lift stations are outlined in Table 4-2.

Table 4-2 Existing Sanitary Sewer Lift Stations

Lift Station	No. of Pumps	Design Flow (gpm)	Design Head (ft)	Wet Well Size (gal)	Other Info
Reed Avenue	3	550	40	3,430 gallons; 3 – 48-inch dia., 12 ft – 2 inches in depth	Automatically controlled by ultrasonic level sensor
Motel Lift Station	2	150	45	3,970 gallons; 78-inch diameter, 6 ft deep	Automatically controlled by ultrasonic level sensor
Industrial Park	2	500	30	2,960 gallons; 72-inch diameter, 14 ft deep	Automatically controlled by ultrasonic level sensor
River Ridge	2	500	30	3,810 gallons; 72-inch diameter, 18 ft deep	Automatically controlled by ultrasonic level sensor
Frankwood Commons	2	455	25	4,775 gallons; 72-inch diameter, 22.58 ft deep	Automatically controlled by ultrasonic level sensor and backed up by floats.

Table 4-2 Existing Sanitary Sewer Lift Stations

Lift Station	No. of Pumps	Design Flow (gpm)	Design Head (ft)	Wet Well Size (gal)	Other Info
Rancho Vista	2	150	25	4,570 gallons; 72-inch diameter, 21.61 ft deep	Automatically controlled by ultrasonic level sensor and backed up by floats.

Lift stations are regularly maintained by the City's WWTP Operators. The following is the standard procedure for routine maintenance of the City's lift stations:

4.3.4. Lift Station Maintenance Checklist (Weekly or Greater)

Reed Ave Lift Station

1. Check Emergency Generator:
    a. Oil level
    b. Radiator water
    c. Belts
    d. Battery water and condition
    e. Heater
    f. Record run hours
    g. Clean up
    h. Unusual noises, vibrations, etc. during run time
    i. Exercise generator
2. Check Pump Operation
    a. Pump down and clean sumps
    b. Clean grate. Remove large clumps of rags, wood or other large objects (3 times per week).
    c. Exercise pump #3 with mercury float switch
    d. Check operation of all pumps. Investigate unusual noises, vibration, etc.
    e. Check for weeds, cobwebs, trash and clean as needed.
    f. Check operation of air release valves.
    g. Record run hours

Motel Lift Station

1. Check Emergency Generator:
    a. Oil level
    b. Radiator water
    c. Belts
    d. Battery condition
    e. Heater

f. Record run time
g. Clean up
h. Unusual noises, vibrations, etc. during run time
i. Exercise Generator

2. Check Pump Operation
    a. Pump down pumps
    b. Check operation of pumps. Check for unusual noise, vibration, etc.
    c. Check for weeds, cobwebs, trash and clean as needed.
    d. Check wet well for unusual objects and remove if needed.
    e. Record run hours

Industrial Park Lift Station

1. Check Emergency Generator:
    a. Oil level
    b. Radiator water
    c. Belts
    d. Battery condition
    e. Heater
    f. Record run time
    g. Clean up
    h. Unusual noises, vibrations, etc. during run time
    i. Exercise Generator
2. Check Pump Operation
    a. Pump down pumps
    b. Check operation of pumps. Check for unusual noise, vibration, etc.
    c. Check for weeds, cobwebs, trash and clean as needed.
    d. Check wet well for unusual objects and remove if needed.
    e. Record run hours

River Ridge Lift Station

1. Check Emergency Generator:
    a. Oil level
    b. Radiator water
    c. Belts
    d. Battery condition
    e. Heater
    f. Record run time
    g. Clean up
    h. Unusual noises, vibrations, etc. during run time
    i. Exercise Generator
2. Check Pump Operation

a. Pump down pumps
b. Check operation of pumps. Check for unusual noise, vibration, etc.
c. Check for weeds, cobwebs, trash and clean as needed.
d. Check wet well for unusual objects and remove if needed.
e. Record run hours

4.3.5. Rehabilitation and Replacement Plan

Repair and replacement projects are typically the result of observed deficiencies in the operation or capacity of the sanitary sewer system. The City prepared an Integrated Master Plan (Master Plan) for the Potable Water, Sanitary Sewer, and Strom Drainage Systems in June of 2014. The Sanitary Sewer section identifies hydraulic capacity limitations within the collection system.

A recommended Capital Improvement Plan (CIP) was developed based on the findings from the Master Plan capacity assessment. The CIP includes a list of all proposed public work projects, with an estimate cost for each project. Sewer collection system improvements are also included in this list. The recommended CIP can be found in section six of the Master Plan.

In 2007-2008, one-third (1/3) of the City's collection system was inspected by CCTV. The remaining two-thirds (2/3) of collection system was planned to be inspected by CCTV in the 9/10 and 10/11 fiscal years. However, the City discontinued their annual CCTV contract services shortly after the 07/08 FY. More recently, the City purchased a CCTV truck so that trained City personnel can perform CCTV inspections on the collection system. Once the entire system has been videoed, the findings will be reviewed, categorized, and prioritized. The need for rehabilitation and/or replacement will be evaluated and a timeline, based on available funding, will be established for the necessary repairs and/or replacements.

Proposed operations, maintenance, and capacity improvement projects are listed below. The projects outlined below have been identified as necessary improvements to the City's collection system, however implementation of these projects is financially constrained based on available funding. These projects will be prioritized as part of the Master Plan effort and implemented as funding becomes available.

4.3.6. FY 22-23 Highlights

4.3.6.1. O&M Upgrades

Since 2016, the City has completed approximately 57.4 miles of CCTV inspection of the sewer collection system. Conducting CCTV inspections of the sewer collection system is ongoing, and in FY 2022-23, the City established a new position entitled "Senior Sewer Collections System Maintenance Worker". The Senior Sewer Collections System Maintenance Worker is responsible for a variety of duties associated with the maintenance, servicing, cleaning, inspection, and minor repair of the sewer collection system and associated structures and facilities such as lift stations, WWTP, and servicing of storm water facilities when necessary. The Senior Sewer Collections System Maintenance Worker is responsible for inspecting and prioritizing any issues discovered during the inspection process. The City will then prepare a CIP list for needed repairs or replacements based on this list generated.

4.3.6.2. Capacity Upgrades:

Since the 2016 SSMP, the City of Reedley has completed several capital improvements projects that have increased the capacity of the sanitary sewer collection system. Table 4-2 summarizes the sewer collection system capital improvement projects that have been completed from 2016 to December 2022.

Table 4-3 Summary of Sanitary Sewer System Improvement Projects

Project Name	Construction Improvements		Construction Period
	Removed	Installed	
Reed Ave Emergency Sewer Repair	1,600 LF of 18" Clay Sewer Pipe (abandoned in place). Two (2) Sanitary Sewer Manholes (SSMH).	1,600 LF of 30" HDPE Sewer Pipe. Two (2) Epoxy Coated 48" SSMH.	2016
North Ave Reconstruction	174 LF of 8" Clay Sewer Main.	175 LF of 8" SDR35 Sewer Main. Four (4) Epoxy Coated 48" SSMH.	2017
Reconstruction on Dinuba Ave (from Southern Pacific Railroad to East Ave and East Ave from Dinuba to Lincoln Ave)	60 LF of 10” Clay Sewer Pipe (abandoned in place).	Two (2) existing Epoxy Coated 48" SSMH. Two (2) new Epoxy Coated 48" SSMH. 81 LF of 8" SDR Sewer Pipe. 50 LF of 10" Sewer Pipe.	2018
Reed Ave Reconstruction Phase 2 of 2	220 LF of 8" Sewer Main (abandoned in place). One (1) SSMH abandoned in place. 180 LF of 12" Sewer Pipe.	Three (3) 48" SSMH. 363 LF of 10" SDR Sewer Pipe. 209 LF of 12" SDR Sewer Pipe.	May 2018 to March 2019
Almond Grove Estates (Tract No. 6206)	646 LF of 18" Sewer Pipe.	646 LF of 27" of SDR Sewer Pipe. 1,780 LF of 8" SDR Sewer Pipe. Nine (9) 48-inch SSMH. 45 4" Sewer Laterals.	January 2018 to January 2021
Dopkins Cemetery Expansion	-	65 LF of 12" SDR Sewer Pipe. One (1) 48" SSMH.	January 2019 to January 2021
United Health Care Clinic	-	280 LF of 18" SDR Sewer Pipe. One (1) 4" Sewer Lateral. Four (4) 48" SSMH.	Completed in January 2020
Tract 6196 Phase 1 of 3 (Self Help)	5 LF of 8" Sewer Pipe. 1,962 LF of 12" Sewer Pipe. Eight (8) SSMH.	682 LF 8" SDR Sewer Pipe. 1,872 LF 12" SDR Sewer Pipe. 67 4" Sewer Laterals. 11 48" Epoxy Coated SSMH.	March 2020 to October 2020

Table 4-3 Summary of Sanitary Sewer System Improvement Projects

Project Name	Construction Improvements		Construction Period
	Removed	Installed	
Tract 6196 Phase 2 of 3 (DR Horton)	-	1,843 LF of 8" SDR Sewer Pipe. 760 LF of 12" SDR Sewer Pipe. 1,231 LF of 18" SDR Sewer Pipe. 46 4" Sewer Laterals. 14 48" Epoxy Coated SSMH.	November 2020 to January 2021
Monte Vista (Tract No. 5263)	-	Three (3) existing 48" Epoxy Coated SSMH. One (1) new 48" Epoxy Coated SSMH. 970 LF of 8" Sewer Pipe. 17 4" Sewer Laterals.	August 2020 to September 2021
Manning Ave Rehabilitation Phase 1 of 3	620 LF of 15” Sewer Pipe (abandoned in place).	Seven (7) existing 48" Epoxy Coated SSMH. Five (5) new 48" Epoxy Coated SSMH. 524 LF of 24" SDR Sewer Pipe. 11 LF of 21" SDR Sewer Pipe. 95 LF of 18" SDR Sewer Pipe. 10 LF of 15" SDR Sewer Pipe. 2,632 LF of 12" Sewer Line Cured-in-Place Liner.	November 2020 to January 2021
San Joaquin Valley Homes Phase 1 of 3 (Tract 6178)	-	17 48" Epoxy Coated SSMH. 3,023 LF of 15" SDR Sewer Pipe. 2,875 LF of 8" SDR Sewer Pipe. 142 LF of 8" Sewer Force Main. 33 4" Sewer Laterals. One (1) Force Main Cleanout.	February 2021 to June 2022
Century Communities Phase 1 or 2 (Tract 6229)	-	15 48" Epoxy Coated SSMH. 903 LF of 15" SDR Sewer Pipe. 4,140 LF of 8" SDR Sewer Pipe. 1,186 LF of 8" Sewer Force Main. 111 4" Sewer Laterals. Tow (2) Force Main Cleanout.	May 2021 to June 2022
Tract 6196 Phase 3 of 3 (DR Horton)	-	1,116 LF of 8" SDR Sewer Pipe. Five (5) 48" Epoxy Coated SSMH.	August 2021 to September 2022
San Joaquin Valley Homes Phase 2 of 3 (Tract 6178)	-	1,666 LF of 8" SDR Sewer Pipe. 42 4" Sewer Laterals. Five (5) 48" Epoxy Coated SSMH.	January 2022 to June 2022

4.4. Wastewater System Budget

The City maintains an annual budget for the wastewater system. A copy of the FY 2022-23 budget is presented in Appendix C.

4.5. Wastewater Crews & Training

The City has two different crews to operate and maintain the wastewater system: the Wastewater Treatment Plant Operators and the Collection System Crew. The Wastewater Treatment Plant Operators maintain the operations and maintenance activities at the Wastewater Treatment Plant (WWTP), as well as the City's sewer lift stations. The Wastewater Treatment Plant Operators consists of the Chief Wastewater Treatment Plant Operator (Wastewater Systems Supervisor), Wastewater Treatment Plant Operator III, Wastewater Treatment Plant Operators II, Wastewater Treatment Plant Operator II/Lab Technician, Wastewater Treatment Plant Operator I, and Wastewater Treatment Plant Maintenance Worker (currently vacant).

The Collection System Crew maintains the collection system by performing the routine sewer cleaning, CCTV Inspections, and maintenance programs. The Collections System Crew consists of Wastewater Systems Supervisor, Senior Sewer Collections Maintenance Worker and Sewer Collections Maintenance Workers.

All employees on the WWTP and collection crew attend annual Confined Space Entry, Flagger Training, Traffic Control training, Fire Extinguisher Training, Heat Illness Prevention, Valley Fever Awareness Training, Hazardous Waste Discharge Training, and other sewer collection training (nozzles, proper cleaning methods, ect.) and safety training programs that are available in the local area. All employees are certified in First Aid/CPR. On the job mentoring and rotation of personnel among different crews and equipment comprises an additional level of training of the City's wastewater and collection system staff.

The City owns and operates a CCTV truck that is used to inspect sewer pipelines. A member of the Collection System Crew has participated in the National Association of Sewer Service Companies Pipeline Assessment Certification Program (NASSCO-PACP). The purpose of the Program is to assist pipeline system owners with developing comprehensive databases to properly identify, plan, prioritize, manage and renovate their assets based on condition evaluation.

4.6. Equipment

The Combo Sewer Truck truck is the main piece of equipment used by the Collection System Crew for regular maintenance on the City's manholes and pipelines. In addition, the City owns the following equipment, dedicated to the operation and maintenance of the collection system:

- 6" portable pumps, used for lift station emergencies;
- All lift stations are equipped with a standby generator for power failure;
- All lift stations are equipped with an alarm system that is connected to the WWTP SCADA system for emergency alarm to WWTP operators;

- The City is under contract with a system integrator, Carollo Engineers, who is familiar with the City's SCADA and alarm system. They provide technical, software programming and troubleshooting efforts.
- The City is under contract with an electrical contractor, Telstar, who provides repair of the electrical and instrumentation systems at the lift stations and wastewater plant, when necessary.
- Hydroflush unit with rodding attachments, used to flush, clean and rod out sewer lines that are not accessible by the Combo truck.

CHAPTER 5 - DESIGN AND PERFORMANCE PROVISIONS

5.1. Requirements

Proper design and installation of sewer system pipelines and appurtenances is one of the most important aspects in maintaining a functioning, problem-free sewer system. A properly designed and installed sewer system can minimize system deficiencies that could create or contribute to future overflows and reduce operation and maintenance requirements.

In accordance with WDR 2006-0003, each wastewater collection agency shall identify minimum design and construction standards and specifications for the installation of new sewers, lift stations, force mains, and other appurtenances, and for the rehabilitation and repair of existing sewer systems. In addition, procedures, and standards for inspecting and testing the installation of new sewers, lift stations, and other appurtenances, shall be described in the SSMP.

The following Chapter describes the City's method of utilizing design and construction standards, along with a routine inspection and testing program, to ensure the quality of their sewer collection system is maintained.

5.2. Design and Construction Standards

The City's Engineering Division prepared Standard Specifications and Standard Plans governing all public works projects within the City limits. The Standard Specifications were first adopted by the City Council in 2001 and have been updated regularly by the Engineering Division, with the latest update occurring in October 2019. The Standard Specifications are available through the City's website at https://reedley.ca.gov/engineering-department/technical-library/, or may be purchased at the City's Public Works counter. Sections 1 through 9 cover of the Standard Specifications cover contractual issues, while Sections 10 through 16 cover general construction activities such as mobilization, traffic control, clearing and grubbing, earthwork, removal of existing facilities, finishing roadways, and stabilizing soils, and material specifications are provided in Sections 17 through 26. Sections 27 and 29 outlines the design and construction criteria that shall be used for new and rehabilitated sewer systems within the City's service area. Lift station design and construction requirements are included in Appendix A of the Standard Specifications. Sewer Standard Plans are included in Standard Drawing Nos. S-1 through S-10. A copy of the City's Standard Specifications Table of Contents is provided in Appendix D for reference. The sewer design specifications shown below are summarized in Sections 27 and 29 of the City's Standard Specifications.

5.2.1. Sewer Design Specifications

The City requires that all new sewer pipelines be of either extra strength class vitrified clay pipe or Standard Dimension Ratio (SDR) 35 polyvinyl chloride (PVC). Design of sewer pipes shall utilize a velocity of 2 feet per second when the pipe is flowing half full, using a Manning's "n" value of 0.011. Minimum slopes for sewer pipelines are listed in Table 5-1.

Table 5-1 Minimum Acceptable Slopes for Sewer Pipe

Pipe Diameter (inches)	Slope (percent)
6	0.35
8	0.24
10	0.18
12	0.14

Additional specifications pertain to pipeline construction, minimum cover, wyes and lateral connections, and other factors are included in Sections 27 and 29 of the City's Standard Specifications, and Standard Drawings S-1 through S-10.

5.2.2. Sewer Structures

Specifications for the construction of manholes and similar structures in the sewer system are provided in Section 29. Cast-in-place bases with pre-cast concrete risers and metal frames/covers are the City's standard.

5.2.3. Lift Station Design Specifications

Specifications for the design and construction of lift stations are included in Appendix A of the Standard Specifications. Typically, submersible lift stations in pre-cast concrete wet wells are required.

5.3. Inspection and Testing

The City requires that new construction be inspected on a regular basis during construction. The City has a full-time inspector who inspects both new construction and repairs. The inspector ensures that all construction meets the City standards and codes. All sewers constructed by outside contractors are pressure cleaned, tested, and video inspected before acceptance. In addition, a final sewer line acceptance test is required upon completion of construction.

As per Section 27.10 of the City's Standard Specifications, the sewer line acceptance test shall be a low-pressure air test under the supervision of the City Engineer. Pipes shall be tested between consecutive manholes. The testing procedure involves inserting plugs in the pipeline openings at the manhole and raising the pressure within the sewer line to a minimum value while recording the pressure drop over a specific time period. The pipe reach being tested shall be considered as having passed the test when the time recorded for the pressure to drop one (1 psi) or one-half (1/2 psi) pound per square inch is not less than the time shown for the given type and diameter in Table 5-2:

Table 5-2 Pressure Testing Specifications for New Sewer Pipe

Diameter (in)	Clay and Cement Pipe Pressure Decrease from 3.5 to 2.5 Psig Time (min)	Plastic Pipe Pressure Decrease from 3.5 to 3.0 Psig Time (min and sec)
4	2 min 0 sec	2 min 32 sec
6	2 min 45 sec	3 min 50 sec
8	3 min 45 sec	5 min 6 sec

Table 5-2 Pressure Testing Specifications for New Sewer Pipe

Diameter (in)	Clay and Cement Pipe Pressure Decrease from 3.5 to 2.5 Psig Time (min)	Plastic Pipe Pressure Decrease from 3.5 to 3.0 Psig Time (min and sec)
10	4 min 46 sec	6 min 22 sec
12	5 min 40 sec	7 min 39 sec
15	7 min 0 sec	9 min 30 sec
18	8 min 36 sec	-
21	10 min 6 sec	-
24	11 min 6 sec	-

CHAPTER 6 - SPILL EMERGENCY RESPONSE PLAN

6.1. Requirements

This chapter describes the sanitary sewer Spill Emergency Response Plan for the City. The following overflow response plan includes:

- Procedures for reporting and notifying Sanitary Sewer Overflows (SSOs);
- Implementation plan to respond to SSOs;
- Steps to prevent overflows from reaching surface waters, and to minimize or correct any adverse impact from SSOs; and
- Training program to familiarize staff with Spill Emergency Response Plan procedures

6.2. Notification

All SSOs are reported on the State of California Water Resource Control Board's Sanitary Sewer Overflow eReporting Program (http://ciwqs.waterboards.ca.gov/). The following is the latest notification and reporting requirements based on the State Water Resources Control Board Order No. WQ 2013-0058-EXEC, Adopted Amended Monitoring and Reporting Requirements for Statewide General Waste Discharge Requirements for Sanitary Sewer Systems. This report replaces the previous Monitoring and Reporting Requirements for Statewide General Waste Discharge Requirements for Sanitary Sewer Systems Order No. 2008-0002-DWQ. The notification procedures are as follows:

For any discharges of sewage that results in a discharge to a drainage channel or a surface water, the Discharger shall, as soon as possible, but not later than two (2) hours after becoming aware of the discharge, notify the State Office of Emergency Services, the local health officer or directors of environmental health with jurisdiction over affected water bodies, and the appropriate Regional Water Quality Control Board.

As soon as possible, but no later than twenty-four (24) hours after becoming aware of a discharge to a drainage channel or a surface water, the Discharger shall submit to the appropriate Regional Water Quality Control Board a certification that the State Office of Emergency Services and the local health officer or directors of environmental health with jurisdiction over the affected water bodies have been notified of the discharge.

The following table summarizes the time frame, specific agency and agency contacts required for notification of an SSO.

Table 6-1 SSO Notification and Reporting

Communication Type	Agency Being Contacted	Time Requirements	Method of Contact
Initial Notification	Office of Emergency Services	As soon as possible, but not later than 2 hours after becoming aware of the SSO	800-852-7550

Table 6-1 SSO Notification and Reporting

Communication Type	Agency Being Contacted	Time Requirements	Method of Contact
	Fresno County Health Department	As soon as possible, but not later than 2 hours after becoming aware of the SSO	559-600-5956
	Region 5 Water Board	As soon as possible, but not later than 2 hours after becoming aware of the SSO	559-445-5116
Notification	Region 5 Water Board	As soon as possible, but not later than 24 hours after becoming aware of the SSO	ciwqs@waterboards.ca.gov
State Reporting	State Water Board	Category 1 • Initial Report within 3 business days. • Final Report within 15 calendar days after response activities are completed. Category 2 • Initial Report within 3 business days. • Final Report within 15 calendar days after response activities are completed. Category 3 • Report online within 30 days after the end of the calendar month in which the SSO occurs Category 4 • Report online within 30 days after the end of the calendar month in which the SSO occurs	ciwqs@waterboards.ca.gov

6.3. Sanitary Sewer Overflow Reporting

6.3.1. SSO Categories

The State Water Resources Control Board (SWRCB) defines SSOs based on the quantity of sewage spilled and/or the location that the spill occurred. The following are the defined SSO Categories:

- Category 1 Spill – Is a spill of any volume of sewage from or caused by a sanitary sewer system regulated under this General Order that results in a discharge to:
    - A surface water, including a surface water body that contains no flow or volume of water; or
    - A drainage conveyance system that discharges to surface waters when the sewage is not fully captured and returned to the sanitary sewer system or disposed of properly; or
    - Any spill volume not recovered from a drainage conveyance system is considered a discharge to surface water, unless the drainage conveyance system discharges to a dedicated stormwater infiltration basin or facility; or
    - A spill from a City owned and/or operated lateral that discharges to a surface water.
- Category 2 Spill – Is a spill of 1,000 gallons or greater, from or caused by a sanitary sewer system regulated under the General Order that does not discharge to a surface water.
    - A spill of 1,000 gallons or greater that spills out of a lateral and is caused by a failure or blockage in the sanitary sewer system.
- Category 3 Spill – Is a spill of equal to or greater than 50 gallons and less than 1,000 gallons, from or caused by a sanitary sewer system regulated under the General Order that does not discharge to a surface water.
    - A spill of equal to or greater than 50 gallons and less than 1,000 gallons, that spills out of a lateral and is caused by a failure or blockage in the sanitary sewer system.
- Category 4 Spill – Is a spill of less than 50 gallons, from or caused by a sanitary sewer system regulated under the General Order that does not discharge to a surface water.
    - A spill of less than 50 gallons that spills out of a lateral and is caused by a failure or blockage in the sanitary sewer system.

6.3.2. SSO Reporting Timeframes

Per Order No. WQ 2022-0103-DWG, the following reporting timeframes must be adhered to for each SSO Category:

- **Category 1** – Initial reporting of Category 1 SSOs must be reported on the CIWQS Sanitary Sewer System Database within three (3) business days after the Enrollee is made aware of the SSO. Within 15 calendar days of the spill end date, the Enrollee shall submit a Certified Spill Report for Category 1 spills, to the online CIWQS Sanitary Sewer System Database.
    - For any Category 1 spill in which 50,000 gallons or greater discharged into a surface water, within 45 calendar days of the spill end date, the Enrollee shall submit a Spill Technical Report to the online CIWQS Sanitary Sewer System Database.
- **Category 2** – Within three (3) business days of the Enrollee's knowledge of a Category 2 spill, the Enrollee shall submit a Draft Spill Report to the online CIWQS Sanitary Sewer System Database.

Within 15 calendar days of the spill end date, the Enrollee shall submit a Certified Spill Report for the Category 2 spill, to the online CIWQS Sanitary Sewer System Database.

- **Category 3** – The Enrollee shall report and certify all Category 3 spills to the online CIWQS Sanitary Sewer System Database within 30 calendar days after the end of the month in which the spills occurred.
- **Category 4** – The Enrollee shall report and certify the estimated total spill volume exiting the sanitary sewer system, and the total number of all Category 4 spills to the online CIWQS Sanitary Sewer System Database, within 30 calendar days after the end of the month in which the spills occurred.
    - For all Category 4 spills and spills from its owned and/or operated laterals that are caused by a failure or blockage in the lateral and that do not discharge to a surface water, the Enrollee shall:
        - Maintain records according to Order No. WQ 2022-0103-DWG, Attachment E1, Section 4.4.
        - The Enrollee shall provide records upon request by State Water Board or Regional Water Board staff.
        - Annually upload and certify a report, in an appropriate digital format, of all recordkeeping of spills to the online CIWQS Sanitary Sewer System Database, by February 1st after the end of the calendar year in which the spills occurred.

6.3.3. Reporting Documentation

All reporting required under Order No. WQ 2022-0103-DWG must be submitted electronically to the online CIWQS Sanitary Sewer System Database (https://ciwqs.waterboards.ca.gov). Electronic reporting may solely be conducted by a Legally Responsible Official or Data Submitter(s) previously designated by the Legally Responsible Official.

6.3.3.1. Reporting Requirements for Individual Category 1 Spill Reporting

Draft Spill Report for Category 1 Spills must, at minimum, include the following items:

- Contact information: Name and telephone number of Enrollee contact person to respond to spill-specific questions;
- Spill location name;
- Date and time the Enrollee was notified of, or self-discovered, the spill;
- Operator arrival time;
- Estimated spill start date and time;
- Date and time the Enrollee notified the California Office of Emergency Services, and the assigned control number;
- Description, photographs, and GPS coordinates of the system location where the spill originated;
    - If a single spill event results in multiple appearance points, provide GPS coordinates for the appearance point closest to the failure point and describe each additional appearance point in the spill appearance point explanation field;
- Estimated total spill volume exiting the system;

- Description and photographs of the extent of the spill and spill boundaries;
- Did the spill reach a drainage conveyance system? If Yes:
    - Description of the drainage conveyance system transporting the spill;
    - Photographs of the drainage conveyance system entry location(s);
    - Estimated spill volume fully recovered from the drainage conveyance system;
    - Estimated spill volume remaining within the drainage conveyance system;
- Description and photographs of all discharge point(s) into the surface water;
- Estimated spill volume that discharged to surface waters; and
- Estimated total spill volume recovered.

Certified Spill Report for Category 1 Spills must, at minimum, include the following mandatory information in addition to all information in the Draft Spill Report:

- Description of the spill event destination(s), including GPS coordinates if available, that represent the full spread and reach of the spill;
- Spill end date and time;
- Description of how the spill volume estimations were calculated, including at a minimum:
    - The methodology, assumptions and type of data relied upon, such as supervisory control and data acquisition (SCADA) records, flow monitoring or other telemetry information used to estimate the volume of the spill discharged, and the volume of the spill recovered (if any volume of the spill was recovered), and
    - The methodology(ies), assumptions and type of data relied upon for estimations of the spill start time and the spill end time;
- Spill cause(s) (for example, root intrusion, grease deposition, etc.);
- System failure location (for example, main, lateral, lift station, etc.);
- Description of the pipe material, and estimated age of the pipe material, at the failure location;
- Description of the impact of the spill;
- Whether or not the spill was associated with a storm event;
- Description of spill response activities including description of immediate spill containment and cleanup efforts;
- Description of spill corrective action, including steps planned or taken to reduce, eliminate, and prevent reoccurrence of the spill, and a schedule of major milestones for those steps;
- Spill response completion date;
- Detailed narrative of investigation and investigation findings of cause of spill;
- Reasons for an ongoing investigation (as applicable) and the expected date of completion;
- Name and type of receiving water body(s);
- Description of the water body(s), including but not limited to:
    - Observed impacts on aquatic life,
    - Public closure, restricted public access, temporary restricted use, and/or posted health warnings due to spill,
    - Responsible entity for closing/restricting use of water body, and
    - Number of days closed/restricted as a result of the spill.

- Whether or not the spill was located within 1,000 feet of a municipal surface water intake; and
- If water quality samples were collected, identify sample locations and the parameters the water quality samples were analyzed for. If no samples were taken, Not Applicable shall be selected.

Spill Technical Report for Individual Category 1 Spill in which 50,000 gallons or greater discharged into a surface water, at minimum, must include the following information:

- Spill causes and circumstances, including at minimum:
    - Complete and detailed explanation of how and when the spill was discovered;
    - Photographs illustrating the spill origin, the extent and reach of the spill, drainage conveyance system entrance and exit, receiving water, and post-cleanup site conditions;
    - Diagram showing the spill failure point, appearance point(s), the spill flow path, and ultimate destinations;
    - Detailed description of the methodology employed, and available data used to calculate the discharge volume and, if applicable, the recovered spill volume;
    - Detailed description of the spill cause(s);
    - Description of the pipe material, and estimated age of the pipe material, at the failure location;
    - Description of the impact of the spill;
    - Copy of original field crew records used to document the spill; and
    - Historical maintenance records for the failure location.
- Enrollee's response to the spill: Chronological narrative description of all actions taken by the Enrollee to terminate the spill;
    - Explanation of how the Sewer System Management Plan Spill Emergency Response Plan was implemented to respond to and mitigate the spill; and
    - Final corrective action(s) completed and a schedule for planned corrective actions, including:
        - Local regulatory enforcement action taken against an illicit discharge in response to this spill, as applicable,
        - Identifiable system modifications, and operation and maintenance program modifications needed to prevent repeated spill occurrences, and
        - Necessary modifications to the Emergency Spill Response Plan to incorporate lessons learned in responding to and mitigating the spill.

6.3.3.2. Reporting Requirements for Individual Category 2 Spill Reporting

Draft Spill Report for Category 2 Spills must, at minimum, include the following items:

- Contact information: Name and telephone number of Enrollee contact person to respond to spill-specific questions;
- Spill location name;
- Date and time the Enrollee was notified of, or self-discovered, the spill;
- Operator arrival time;
- Estimated spill start date and time;

- Date and time the Enrollee notified the California Office of Emergency Services, and the assigned control number;
- Description, photographs, and GPS coordinates of the system location where the spill originated;
    - If a single spill event results in multiple appearance points, provide GPS coordinates for the appearance point closest to the failure point and describe each additional appearance point in the spill appearance point explanation field;
- Estimated total spill volume exiting the system;
- Description and photographs of the extent of the spill and spill boundaries;
- Did the spill reach a drainage conveyance system? If Yes:
    - Description of the drainage conveyance system transporting the spill;
    - Photographs of the drainage conveyance system entry location(s);
    - Estimated spill volume fully recovered from the drainage conveyance system;
    - Estimated spill volume remaining within the drainage conveyance system;
- Estimated total spill volume recovered.

Certified Spill Report for Category 2 Spills must, at minimum, include the following mandatory information in addition to all information in the Draft Spill Report:

- Description of the spill event destination(s), including GPS coordinates if available, that represent the full spread and reach of the spill;
- Spill end date and time;
- Description of how the spill volume estimations were calculated, including at a minimum:
    - The methodology, assumptions and type of data relied upon, such as supervisory control and data acquisition (SCADA) records, flow monitoring or other telemetry information used to estimate the volume of the spill discharged, and the volume of the spill recovered (if any volume of the spill was recovered), and
    - The methodology(ies), assumptions and type of data relied upon for estimations of the spill start time and the spill end time;
- Spill cause(s) (for example, root intrusion, grease deposition, etc.);
- System failure location (for example, main, lateral, lift station, etc.);
- Description of the pipe material, and estimated age of the pipe material, at the failure location;
- Description of the impact of the spill;
- Whether or not the spill was associated with a storm event;
- Description of spill response activities including description of immediate spill containment and cleanup efforts;
- Description of spill corrective action, including steps planned or taken to reduce, eliminate, and prevent reoccurrence of the spill, and a schedule of major milestones for those steps;
- Spill response completion date;
- Detailed narrative of investigation and investigation findings of cause of spill;
- Reasons for an ongoing investigation (as applicable) and the expected date of completion;

6.3.3.3. Monthly Certified Spill Reporting for Category 3 Spills

The monthly reporting of all Category 3 spills must include the following items for each spill:

- Contact information: Name and telephone number of Enrollee contact person to respond to spill-specific questions;
- Spill location name;
- Date and time the Enrollee was notified of, or self-discovered, the spill;
- Operator arrival time;
- Estimated spill start date and time;
- Description, photographs, and GPS coordinates where the spill originated:
    - If a single spill event results in multiple appearance points, provide GPS coordinates for the appearance point closest to the failure point and describe each additional appearance point in the spill appearance point explanation field;
- Estimated total spill volume exiting the system;
- Description and photographs of the extent of the spill and spill boundaries;
- Did the spill reach a drainage conveyance system? If Yes:
    - Description of the drainage conveyance system transporting the spill;
    - Photographs of the drainage conveyance system entry locations(s);
    - Estimated spill volume fully recovered from the drainage conveyance system; and
    - Estimated spill volume discharged to a groundwater infiltration basis or facility, if applicable.
- Estimated total spill volume recovered;
- Description of the spill event destination(s), including GPS coordinates, if available, that represent the full spread and reaches of the spill;
- Spill end date and time;
- Description of how the spill volume estimations were calculated, including, at minimum:
    - The methodology and type of data relied upon, including supervisory control and data acquisition (SCADA) records, flow monitoring or other telemetry information used to estimate the volume of the spill discharged, and the volume of the spill recovered (if any volume of the spill was recovered), and
    - The methodology and type of data relied upon to estimate the spill start time, on-going spill rate at time of arrival (if applicable), and the spill end time;
- Spill cause(s) (for example, root intrusion, grease deposition, etc.);
- System failure location (for example, main, lift station, etc.);
- Description of the pipe/infrastructure material, and estimated age of the pipe/infrastructure material, at the failure location;
- Description of the impact of the spill;
- Whether or not the spill was associated with a storm event;
- Description of spill response activities including description of immediate spill containment and cleanup efforts;

- Description of spill corrective actions, including steps planned or taken to reduce, eliminate, and prevent reoccurrence of the spill, and a schedule of the major milestones for those steps; including, at minimum:
    - Local regulatory enforcement action taken against an illicit discharge in response to this spill, as applicable, and
    - Identifiable system modifications, and operation and maintenance program modifications needed to prevent repeated spill occurrences at the same spill event location, including:
        - Adjusted schedule/method of preventive maintenance,
        - Planned rehabilitation or replacement of sanitary sewer asset,
        - Inspected, repaired asset(s), or replaced defective asset(s),
        - Capital improvements,
        - Documentation verifying immediately implemented system modifications and operating/maintenance modifications,
        - Description of spill response activities,
        - Spill response completion date, and
        - Ongoing investigation efforts, and expected completion date of investigation to determine the full cause of spill;
- Detailed narrative of investigation and investigation findings of cause of spill.

6.3.3.4. Annual Certified Spill Reporting of Category 4 and/or Lateral Spills

For all Category 4 spills and spills from its owned and/or operated laterals that are caused by a failure or blockage in the lateral and that do not discharge to a surface water, the Enrollee shall:

- Maintain records according to Order No. WQ 2022-0103-DWG, Attachment E1, Section 4.4.
- The Enrollee shall provide records upon request by State Water Board or Regional Water Board staff.
- Annually upload and certify a report, in an appropriate digital format, of all recordkeeping of spills to the online CIWQS Sanitary Sewer System Database, by February 1st after the end of the calendar year in which the spills occurred.

6.4. Monthly No-Spill Reporting Procedure

If either no spills occur during a calendar month or only Category 4, and/or Enrollee-owned and/or operated lateral spills (that do not discharge to a surface water) occur during a calendar month, the Enrollee shall certify, within 30 calendar days after the end of each calendar month, either a “No-Spill” certification statement, or a “Category 4 Spills” and/or “Non-Category 1 Lateral Spills” certification statement, in the online CIWQS Sanitary Sewer System Database, certifying that there were either no spills, or Category 4 and/or Non-Category 1 Lateral Spills that will be reported annually for the designated month.

If a spill starts in one calendar month and ends in a subsequent calendar month, and the Enrollee has no further spills of any category, in the subsequent calendar month, the Enrollee shall certify “no-spills” for the subsequent calendar month.

If the Enrollee has no spills from its systems during a calendar month, but the Enrollee voluntarily reported a spill from a private lateral or a private system, the Enrollee shall certify "no-spills" for that calendar month.

If the Enrollees has spills from its owned and/or operated laterals during a calendar month, the Enrollee shall not certify "no spills" for that calendar month.

6.5. City of Reedley Police/Fire/Ambulance

The following steps shall be taken in the event of a sewer system overflow:

1. During work hours (8am – 5pm, Monday-Friday) the City Public Works Main office number should be utilized to notify the City of a sewer overflow. After hours, individuals are instructed to call the City's Police dispatch, who will notify the on-call Stand-by Operator.

   Work Hours:

   Public Works Main Office

   559-637-4200 Option 2

   After Hours:

   Police Dispatch

   559-637-4250

2. The Wastewater System Supervisor, or on-call Stand-by Operator, will notify and assemble the Collection Crew and will provide the crew with the appropriate information and location of the overflow.
3. Once the Collection Crew arrives to the scene of the overflow, they will assess situation and look for the following:
   a. Is the problem on private property or within the publicly owned collection system?
   b. Any special conditions that need to be addressed (traffic control, personnel rescue, medical response, etc.)?
4. Locate problem that caused the spill, such as:
   a. Blockage
   b. Pipe failure
   c. Manhole failure
   d. Power failure at a lift station or wastewater treatment plant
   e. Equipment failure at a lift station or wastewater treatment plant
   f. Third-party interference
5. Once the situation has been assessed, the Collection Crew will contact the Wastewater Systems Supervisor.
6. If necessary, additional crews will be called in for support:
   a. City collection system staff
   b. City lift station operators
   c. Electricians

   d. Contractor(s)
7. Dispatch pumps and/or Combo Sewer Truck if needed
8. Locate affected waterway (if any), i.e. creek or river
9. Assign a crew to dam waterway, i.e. sandbags, if waterway can be dammed, or to isolate and contain the overflow
10. Assign a crew to clear problem, i.e. plugged main
    a. For overflows caused by pipe or manhole failure, call in construction crew or contractor
    b. For equipment failure, call in electrician, mechanic, or contractor as needed. Arrange for temporary pumps, portable generator, or other backup equipment as required
11. Assign crew to post/barricade "Sewer Spill" signs to warn general public to keep out
    a. If raw sewage signs are not available, direct crews to use the backside of other signs. Use thick, black marker to write "Caution: May be contaminated by raw sewage"
12. Once the situation is under control, but no later than 2 hours after becoming aware of the SSO, start the Initial Notification Procedures for the appropriate State and Regional agencies (Table 5-1).
13. Fill out Sanitary Sewer Overflow report (Appendix D). Turn in completed form to Supervisor.
14. In case of fish kill, contact the California Department of Fish and Wildlife
    a. Call 916-445-0411 (California Fish and Wildlife Main Phone). Give information from SSO report; Warden will respond to scene.
15. Determine whether particular agencies contacted may want cleanup conducted in a certain way. If so, obtain equipment and personnel required to effect cleanup.
16. Check progress and monitor crew's efforts. Ensure that the directions of any agencies are being followed. Do your crews require more personnel and equipment? Are there special conditions that make additional crews or equipment necessary, such as for traffic control?
17. Take pictures of all affected areas, posted warnings, and signs and note their locations.
18. Once clean-up has been completed, follow up with appropriate 24-hour notification and reporting procedures according to appropriate SSO category, outlined above in Table 6-1.
19. Once the situation is under control and reporting started the Public Works Director will be notified.

6.6. Clean Up Response & Warning Sign Posting

6.6.1. Dry Weather Conditions:

- Warning Signs: Signs warning the public of a sewage release should be posted in the affected area. Signs should include, at a minimum, the wording of "Raw Sewage." These signs can be obtained at the wastewater treatment plant. If a sign needs to be posted immediately and one is not readily available, a sign can be hand written and posted until it can be replaced.
- Warning Sign Removal: Warning signs should remain posted until County Health or Regional Board staff authorizes their removal, or until receiving water sample results indicate background levels (levels as determined by upstream samples) have been attained.
- Sewage Flow Containment: All sewage flows should be contained and diverted to the nearest sanitary sewer or removed by Combo Sewer Truck.

- Sewage Solids Cleanup: After the flows have been stopped and repairs made, rake and/or vactor up any sewage solids.
- Cleanup Flushing: The affected area should be flushed with clean water. All flush water and any disinfectants should be contained and subsequently pumped to the nearest sanitary sewer or removed by Combo Sewer Truck. Disinfectants may be used so long as runoff does not occur that may cause toxicity to fish and wildlife.
- Receiving Water Sampling: If the spill or overflow volume is greater than 50,000 gallons, sampling should be conducted both upstream and downstream of the point where sewage has entered the receiving water. Samples should be analyzed for Fecal Coliform, Dissolved Oxygen and Ammonia Nitrogen.

6.6.2. Wet Weather Conditions:

The response cleanup and warning sign posting procedures given above for Dry Weather Conditions should be followed, except that steps 5 and 6 (Flushing and Sampling) may be omitted if storm waters are high and sampling is impractical.

6.7. Sewer Intrusion into a Private Residence

The City of Reedley will take reasonable measures to ensure the habitability of a residence or business should there be an intrusion of sanitary sewage into the building caused by a blockage of a City-owned sanitary sewer main. The following is an overview of the procedures to be utilized by the City in the event of an overflow that occurs on a private residence:

1. Operating Procedure (Response) – Upon notification of a sanitary sewer main blockage with an accompanying back-up onto private property, the City Dispatch will prepare a Work Order on iWorqs and call out the respective personnel as follows:
    a. If the Collection System Crew is on duty, it will be dispatched immediately to the event site and will take appropriate measures to identify whether the cause of the blockage is within the publicly-owned sewer system or within the privately-owned building lateral. If the blockage is determined to be in the sewer main, then the crew will remove the blockage from the City's main.
    b. If the Collection Crew is not available, the City Dispatcher will notify the on-call Stand-by Operator. The responsible Stand-by Operator will make the necessary calls to assemble the Collection Crew and have the crew respond with appropriate equipment to the work site.
2. Operating Procedure (Clean up) – If it is determined, upon assessment of the situation, that the SSO was caused by a blockage of the City's sewer main and not the private residence lateral, and the SSO presents a health or safety threat to the inhabitants of the residence, as determined by the City Public Works Director, a contracted clean-up and restoration company (Serv-Pro) will be called out to clean the area where the SSO occurred. The City will not be responsible for clean-up of an SSO that occurs due to the blockage of a private sewer lateral pipeline.

6.8. Training

The City's Collection Crew staff is trained on the Spill Emergency Response Plan through an informal mentoring program, typically performed by senior staff members as new employees are hired onto the crew. Formal training includes safety videos and annual Confined Space Entry, Flagger Training, Traffic Control, and crew members must be certified in First Aid/CPR.

CHAPTER 7 - FATS, OILS, AND GREASE (FOG) CONTROL PROGRAM

7.1. Requirements

Fats, oils, and grease (FOG) are discharged to sanitary sewer systems by residential users, food handling facilities, and other commercial and industrial establishments. Commonly, FOG can cause pipe blockages leading to sanitary sewer overflows (SSO). The State Water Resources Control Board (SWRCB) requires each wastewater collection system agency to evaluate its service area to determine whether a FOG control program is needed to reduce the risk of SSO. If so, a FOG control program shall be developed as part of the SSMP. The FOG control program shall include the following:

- An implementation plan and schedule for a public education outreach program that promotes proper disposal of FOG;
- A plan 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;
- The legal authority to prohibit discharges to the system and identify measures to prevent SSOs and blockages caused by FOG;
- Requirements to install grease removal devices (such as traps or interceptors) design standards for the grease removal devices, maintenance requirements, Best Management Practices (BMPs) requirements, record keeping and reporting requirements;
- Authority to inspect grease producing facilities, enforcement authorities, and whether the City of Reedley has sufficient staff to inspect and enforce the FOG ordinance;
- An identification of sewer system sections subject to FOG blockages and establish a cleaning maintenance schedule for each section; and
- Development and implementation of source control measures, for all sources of FOG discharged to the sewer system, for each sewer system section identified as a problem.

The City has determined that a FOG control program would be beneficial. This Chapter of the SSMP outlines the City's procedure for minimizing and monitoring FOG in their collection system, fulfilling the requirements of both the SWRCB and the Regional Water Board.

7.2. Public Outreach

The City has several existing public outreach programs that serve as opportunities to incorporate awareness of the SSMP and FOG. Specific programs, such as the Water Quality and Conservation Education, the Environmental Issues Workshop, and the Solid Waste and Recycling Education program provide the public with important information on how the residents of Reedley can do their part in maintaining quality in the City's water resources and waste disposal facilities. Descriptions of these programs are included in Sections 3.5, 3.7 and 3.10 of the City's Storm Water Management Plan (SWMP).

In addition to these public outreach programs, the City has obtained a brochure entitled "Fat Free Sewers" from the Water Environment Federation. This brochure was sent to the residents of Reedley upon

inception of the FOG program, and is also included in every industrial discharge permit application package. The brochure is available at the City Hall, and is included in Appendix F.

A link to the documents describing the FOG program will be available on the City's website, along with links to FOG informational sites and an email address to allow the public to provide input on the development, implementation, and performance of the City's SSMP.

7.3. FOG Disposal

The City maintains a list of local firms engaged in the cleaning of grease interceptors and grease traps in Reedley and disposal of the waste product. This list, which currently includes the ten firms shown in the table below, is provided to food handling facilities for their use.

Table 7-1 Grease Hauler and Grease Trap Services Providers

Company	Address	Phone Number
All Valley Environmental	P.O. Box 416 Kerman, CA 93630	559-846-9393
Amerigaurd Maintenance Services	P.O. Box 12486 Fresno, CA 93776	1-800-347-7876
Baker Commodities, Inc.	P.O. Box 1286 Hanford, CA 93230	559-528-0271
Baker Commodities, Inc.	P.O. Box 416 Kerman, CA 93630	559-846-9393
Biotane	3677 E. Conejo Ave Selma, CA 93662	1-877-424-6826
ET Services	P.O. Box 608 Clovis, CA 93613	559-297-7782
MJ Waste	1162 N. Reed Ave Reedley, CA 93654	559-638-5199
Golden Valley Pumping Co.	1771 W. Gettysburg Ave, Fresno, CA 93722	559-846-9607
Right Way Pumpling Tech	2425 N. Pima Fresno, CA 93722	1-888-590-9800
Steam Cleaners, Inc.	2655 S. East Ave Fresno, CA 93706	559-666-2456

7.4. Legal Authority

The City has the responsibility to minimize the amount of FOG that enters the sanitary and storm sewer systems from residential, commercial, and industrial sources. Section 8-2-5-4 of the City of Reedley Municipal Code (RMC) outlines the requirements for grease, oil and sand interceptors within the City's sewer system and is summarized in Chapter 3, Legal Authority.

7.5. Design & Construction Standards

Design and construction of sand and grease interceptors are outlined in the City's standard drawing S-10. In addition, sample plans are disseminated in the industrial discharge permit application package, and copies are available at the City Hall. The City's standard design for grease interceptors is based on Department of Health requirements. A copy of the City's interceptor standard is shown in Appendix G.

7.6. Inspection and Staffing

As a part of routine maintenance cleaning, the City's operation and maintenance crews regularly inspect the mainline sewers for signs of excessive grease discharge and buildup. Where noted, inspections are conducted to identify the source of the discharge and the facility owner is notified that an illicit discharge is suspected. A subsequent follow-up inspection is conducted by the City's Wastewater System Supervisor or WWTP Operator II/Lab Technician to verify that the condition leading to the illicit discharge has been rectified.

7.7. Identification and Sewer Cleaning

The City's operations and maintenance program includes routine cleaning of pipes that are known to have problems due to FOG. These problem areas, known to the City as potential problem areas, are inspected weekly and cleaned as necessary. A map of the potential problem areas is presented in Chapter 4, Operations and Maintenance.

In addition to the weekly inspections of potential problem areas, the City's collection crew has been canvassing the City's collection system by section to locate, inspect, and clean each manhole and pipeline within the system. With the purchase of a new CCTV truck, the City personnel will continue to inspect the City's collection system. Documentation of crew's findings will be maintained in a sewer log at the Wastewater Treatment Plant and will be used, in conjunction with the results of the City's CCTV efforts, to develop the City's sewer rehabilitation and replacement plan.

7.8. Source Control

7.8.1. Industrial Systems

The City's Wastewater Treatment Plant serves many industrial facilities. To monitor and enforce the discharges from these industrial facilities, the City has implemented an Industrial Pretreatment Program (IPP). The IPP was developed in 2003 and provides documentation on the policies and procedures the City utilizes to ensure that the quality of wastewater meets the standards set forth in the Reedley Municipal Code and those required by the SWRCB and RWQCB.

Included in the City's IPP is an Enforcement Response Plan (ERP) and Monitoring Program. The ERP contains detailed procedures identifying how the City of Reedley will investigate and respond to instances of industrial user non-compliance. Informal and formal enforcement actions in the ERP enable the city staff to respond to non-compliance with the level of severity appropriate for the violation. Procedures for industrial users to respond to, appeal, and/or explain violations are also contained within the ERP.

The Monitoring Program includes monitoring requirements for the City of Reedley Waste Water Treatment Plant (WWTP) and for industrial monitoring. The WWTP operators monitor the influent, effluent, and sludge, as well as the discharges from all significant industrial users (SIUs). Industries are required to self-monitor their discharges for all pollutants included in the local limits on a monthly basis. SIUs are also required to submit a self-monitoring report every six months.

7.8.2. Food Service & Residential

As part of the Industrial Pretreatment Program, the City requires that all new food service businesses apply for a permit before being allowed to connect to the City's sewer system. The permit process includes an application fee of $80, which must be paid within 30 days of obtaining a business license.

The application process for a FOG permit includes the following steps:

1. Complete permit application form (see Appendix F).
2. Provide a schematic of all indoor and outdoor plumbing systems, including grease interceptors or traps, facility sewer connections, sinks, floor drains, dishwashers, and restrooms.
3. Provide a grease interceptor/trap maintenance plan that specifies the frequency of grease removal, inspection procedures, and methods to repair non-operational equipment.
4. Include a signed copy of Yellow Grease recovery and grease interceptor/trap maintenance contracts.
5. Mail completed application, along with additional information to the City's FOG Program Administrator:

   Attn: FOG Program Administrator

   City of Reedley

   Public Works Department

   1733 Ninth Street

   Reedley, CA 93654

   (559) 637-4200

Prior to operation, the business must also schedule an inspection with the City's Building Official to ensure that all plumbing systems and grease interceptors have been installed and function properly. Per RMC Section 8-2-5-4, "Where installed, all grease, oil and sand interceptors shall be maintained by the owner, at his expense, in continuously efficient operation at all times."

FOG permit holders are required to maintain a monthly log of their grease interceptor maintenance plan, which is used to document frequency of grease removal and plumbing inspection procedures. Prior to issuance of a FOG permit renewal, the City's Wastewater Systems Supervisor or Environmental Compliance Officer inspects the permit holder's plumbing system and maintenance logs to ensure compliance with the City's permit requirements.

CHAPTER 8 - SYSTEM EVALUATION AND CAPACITY ASSURANCE PLAN

8.1. Requirements

The requirements for the System Evaluation and Capacity Assurance Plan (SECAP) section of the SSMP are as follows:

- Each wastewater collection system agency shall establish a process to assess the current and future capacity requirements for the collection system facilities.
- Each wastewater collection system agency shall prepare and implement a capital improvement plan to provide hydraulic capacity of key sewer system elements under peak flow conditions.

The City of Reedley prepared an Integrated Master Plan in June 2014. Section 4 of the Master Plan describes the City's sanitary sewer collection system. Section 4 of the Master Plan includes an inventory of existing system components, provides information on existing and projected wastewater flows, evaluates the existing capacity under both dry and wet weather conditions, determines future capacity, and identifies related system deficiencies and improvement priorities, based on anticipated population growth.

The following sections of this SSMP describe the City's current procedure for evaluating their sewer system to ensure adequate capacity for proper function of their sewer system facilities.

8.2. Service Area

The service area of the Reedley collection system is essentially the incorporated limits of the City. A Wastewater Treatment Plant Master Plan (WWTPMP) was completed for the City in September 2006. According to the WWTPMP, the City's population was expected to grow at a rate of four percent annually through the year 2030, with a proposed build out population of 60,310. Growth rates prior to 2006 had been much lower than four percent, most likely due to a moratorium that was imposed to allow the City time to complete the Reedley Specific Plan. In their 2013 update of the General Plan 2030, the City revised growth rate projections and build out population. By analyzing past growth trends, in comparison to the State Department of Finance projections for growth in the San Joaquin Valley, an average annual growth rate of 3 percent is used to project population growth until 2030. According to the General Plan, the build out would result in approximately 21,142 new residents, with a total 2030 population of 47,369.

8.3. WWTP Flows

A summary of the 1995-2021 historical wastewater treatment plant flows is provided in Table 8-1. Due to computer error, plant flows for the years of 2005 and 2006 could not be recovered.

Table 8-1 Historical WWTP Flows

Year	AAD Flow (MGD)	MMAD Flow (MGD)
1995	1.67	1.88

Table 8-1 Historical WWTP Flows

Year	AAD Flow (MGD)	MMAD Flow (MGD)
1996	1.87	2.36
1997	2.12	2.45
1998	2.25	2.41
1999	2.33	2.71
2000	2.45	2.69
2001	2.38	2.52
2002	2.39	2.78
2003	2.39	2.91
2004	2.32	2.47
2005	Not Available	Not Available
2006	Not Available	Not Available
2007	2.31	2.44
2008	2.26	2.36
2009	2.22	2.38
2010	2.05	2.22
2011	1.77	1.93
2012	1.79	1.96
2013	1.79	1.88
2014	1.75	1.79
2015	1.68	1.74
2016	1.71	1.83
2017	1.75	1.83
2018	1.71	1.82
2019	1.73	1.79
2020	1.75	1.84
2021	1.76	1.84

Note:
ADD = Annual Average Daily
MMAD = Maximum Month Average Day
MGD = Million Gallons per Day

The Sanitary Sewer System section of the Integrated Master Plan projects future wastewater flows based on the City's potable water demand projections, which were estimated using land use projections form the City's General Plan 2030. Based on the growth forecast in the General Plan 2030, total flows entering the sanitary sewer system are projected to grow from approximately 2.5 mgd under existing conditions, to approximately 8.2 mgd at the buildout of Phase 2, which consist of the build out of the City's SOI. Similarly, peak wet weather flow (PWWF) is projected to grow from approximately 7.6 mgd to over 24.7 mgd in Phase 2.

8.4. Sanitary Sewer Evaluation

As part of the Master Plan sanitary sewer system evaluation, a hydraulic model was used to identify system capacity deficiencies during peak wet weather flow for both existing and future conditions. The model was also used to evaluate improvements that could address key system deficiencies. The hydraulic model development and recommended system improvements are described in the following sections.

8.4.1. Model Development

The hydraulic model was developed using the Innovyze's InfoSWMM version 9.0 hydraulic modeling platform (model). InfoSWMM uses the US EPA's SWMM V5 simulation engine, which is considered a fully dynamic (as opposed to steady state) engine that can account for various complex hydraulic phenomena in the sanitary sewer system, such as surcharging and backwater effects in gravity mains.

The model was loaded with annual average dry weather flow and calibrated against the flow data observed in early spring of 2008. The calibration focused primarily on matching the observed peak dry weather flow (PDWF) and observed hydrograph volume and secondarily on matching the observed hydrograph shape and the time of the peak.

8.4.2. System Evaluation

The existing system was evaluated under PWWF conditions to analyze the current capacity of the system. PWWF conditions were simulated by loading PWWF flows to the sanitary sewer system in the InfoSWMM model and running the scenario in steady state. PWWF was estimated by using a peaking factor based on the AAF. When the City's WWTP was designed, a peaking factor of 2.5 was selected based on an analysis of historical flow influent to the treatment plant. Peak flow in the sanitary sewer system is generally decreased as it moves through the system, downstream to the WWTP. Thus, it is common to see a higher peaking factor used for a sewer system analysis than for the downstream WWTP. For the Integrated Master Plan, the PWWF in the sewer system was estimated by using a peaking factor of 3.0 times the AAF. The resulting flows loaded into the model are shown in Table 8-2 for each scenario, respectively. Phase 1 refers to the period between from 2014 to approximately 2020; Phase 2 refers to the period from 2020 through the build out of the City's SOI.

Table 8-2 Modeled Flows by Scenario

Flow Scenario	Peaking Factor	Existing (MGD)	Phase 1 (MGD)	Phase 2 (MGD)
AAF	1	2.55	3.16	8.21
PWWF	3	7.65	9.48	24.63

8.4.3. Recommended Improvements

Recommended improvements to the existing system were developed using the following guiding principles and considerations:

- Upsize sanitary sewer system pipelines in the existing system to address the existing and Phase 1 capacity issues while achieving the design criteria (d/D >= 0.75),

- In a second round of upgrades, upsize pipelines in the existing system to address Phase 2 capacity issues while achieving the design criteria (d/D >= 0.75). This second round of upgrades for Phase 2 is provided because the additional capacity associated with the larger, build out flows may not be needed for many years, and the cost of the additional capacity may not be recoverable for a long time.
- Size new pipelines for the design criteria (d/D >= 0.75).
- Where possible, route new flows, particularly for Phase 2, around the existing system to avoid significant capacity issues.
- Avoid the creation of new lift stations where possible to minimize associated O&M labor and power requirements. As a result of these criteria, the new pipeline network for Phase 2 was oriented to avoid the Alta Irrigation District (AID) canal system, where possible.
- Where new lift stations are required, provide a standby pump such that the lift station can pump the design flow with the largest pump out of service.

According to the Integrated Master Plan, approximately 26,000 linear feet of pipeline are recommended to improve the existing system and an additional 11,000 linear feet are needed to accommodate the additional flows from Phase 1. These improvements are largely restricted to existing truck mains to improve the system capacity and enable gravity flow to the City's WWTP without backwater effects, surcharging, and SSOs.

As a result of the system evaluation, upgrades to the Reed Avenue pipeline were carefully considered. A significant stretch of the existing trunk main in Reed Avenue, the portion from Manning Avenue southward to 11th Street, is deep, with depths up to 12 feet below the ground surface. This depth makes typical open cut construction more difficult. In addition to the depth, the slope of the alignment in the lower segments is relatively flat, resulting in backwater effects and, under Phase 2 flow conditions, significant surcharging in the manholes. As a result of the existing conditions in the Reed Avenue trunk line, realignment is needed to adjust the slope. In addition, the pipe diameters need to be increased as well.

With the additional flow being routed down Reed Avenue, the diversion structure at the intersection of Reed Avenue and 11th Street must be adjusted so that the additional flow is routed away from the existing Reed Avenue Lift Station to avoid a significant capacity upgrade for that facility. Instead, flow should be routed to the Kings River Crossing at the Olson Avenue Bridge, as the capacity of this crossing will need to be increased due to the new flows from the east. In this manner, only one of the river crossings will need an upgrade. While this additional capacity in the existing Olson Avenue crossing could be provided by upsizing the existing pipeline, it may be desirable to add a new crossing to provide redundancy in the event one of the pipelines needs to be taken out of service for maintenance.

On the east side of the City, wastewater will be collected in Zumwalt Avenue and conveyed southward to Lilac Avenue and westward toward Reed Avenue where it will be conveyed north to the Kings River Crossing at the Olson Avenue Bridge. A new lift station is required to serve this new alignment where it crosses the existing AID canal near Buttonwillow Avenue. A gravity flow option was also considered for

the canal crossing; however, that would have resulted in a significant drop in the HGL and a lift station would have been required downstream to cross the Kings River or to enter the WWTP.

On the west side of the Kings River, once development begins and the new trunk main is constructed near Kings River Road, flows from the existing Hotel/Edgewater Lift Station can be redirected, such that the existing river crossing can be eliminated.

For the Existing system, priority for improvements should be given to downstream bottlenecks that result in backwater effects in the upstream pipelines. For these areas, improvements should be prioritized from downstream to upstream.

8.5. CCTV Video Results

As described in Chapter 4, the City owns and operates a CCTV truck that is used to preform inspection on existing sewer pipelines. Results from the CCTV effort will provide additional information to help produce capacity-related CIP's. Updates to the City's CIP program will be included in the SSMP, as information becomes available.

8.6. Historical Performance of the Collection System

The findings of the hydraulic modeling and inspections both indicate that the City does not have specific reaches of hydraulic restriction. This finding is consistent with the historical performance of the collection system. Very few sanitary sewer overflows (SSOs) have occurred in the City of Reedley, and when SSOs have occurred they have been determined to be associated with equipment failure, pipeline failure, grease accumulation, root growth, or other physical causes.

The City has experienced no capacity limitations within the system since 2009. With CCTV inspections, the City may come across some issue when inspecting the City in the immediate future. The need for rehabilitation or replacement will be evaluated and a timeline for necessary repairs and/or replacements will be established, based on available funding.

CHAPTER 9 - MONITORING, MEASUREMENTS AND PROGRAM MODIFICATIONS

9.1. Requirements

In accordance with SWRCB requirements, each wastewater collection system agency shall monitor the effectiveness of the SSMP and update and modify SSMP Chapters to keep them current, accurate, and available for audit, as appropriate. The following describes the City's procedure for monitoring the effectiveness of the SSMP and the procedures used to minimize Sanitary Sewer Overflows.

9.2. Monitoring

The City already tracks some Key Performance Indicators (KPI) through cleaning logs and annual reports. Their current tracking mechanisms include:

- The number, cause, and location of blockages
- The number, cause, location and volume of SSOs
- Number and reason for customer complaints, and
- Length of pipe cleaned and type of debris found.

The City plans to continue tracking each of these KPI. Tracking logs and report records for the sewer collection system are maintained at the City's WWTP.

In order to monitor the effectiveness of the SSMP, the City has selected a procedure whereby specific parameters are documented and compared on an annual basis. These parameters will provide quantitative, focused results that indicate the overall success of the SSMP, or conversely, the underlying problems that may then be further investigated. Table 9-1 lists each SSMP chapter, the overall purpose of the SSMP chapter, and the specific parameters that the City plans to track that will help in evaluating the effectiveness of the SSMP. The City will track each of these parameters, the results of which will be included in the KPI Checklist in Appendix H.

Table 9-1 SSMP Monitoring Parameters

SSMP Chapter	Summary of Chapter Purpose	KPI
1.0 Goals	Establish priorities of City and provide focus for City Staff.	• As part of Chapter 10 – Program Audits, reconsider Goals and evaluate potential changes.
2.0 Organization	Document organization of City staff and chain of communication for SSO response.	• As part of Chapter 10 – Program Audits, update Organization Chart as staff changes or reorganizations occur.
3.0 Legal Authority	Ensure the City has sufficient legal authority to properly maintain the system.	• None needed

Table 9-1 SSMP Monitoring Parameters

SSMP Chapter	Summary of Chapter Purpose	KPI
4.0 Operations and Maintenance Plan	Minimize blockages and SSOs by properly maintaining the system and keeping the system in good condition.	• Total number and volume of SSOs. • Number of repeat SSOs (same location as any previous SSO, regardless of year of occurrence). • Total number of mainline blockages. • Causes of blockages and time since last cleaning. • Number of lift station failures. • Causes of failures. • Number of pipe failures. • Causes of failures. • Length of pipe CCTV'd 3-yr backlog for rehabilitation and repair projects
5.0 Design & Construction Standards	Ensure new facilities are properly designed and constructed.	• None needed
6.0 Spill Emergency Response Plan	Provide timely and effective response to SSO emergencies and comply with regulatory reporting requirements.	• Average and maximum response time. • Percent of total overflow volume contained or returned to sewer.
7.0 Fats, Oil, and Grease Control	Minimize blockages and overflows due to FOG.	• Number of blockages due to FOG. • Number of overflows due to FOG (linked to SSO Identification Number). • Number of FOG producing facilities inspected. • Percent of FOG producing facilities found to be in compliance.

Table 9-1 SSMP Monitoring Parameters

SSMP Chapter	Summary of Chapter Purpose	KPI
8.0 Capacity Management	Minimize SSOs due to insufficient capacity by evaluating the system capacity and implementing necessary projects.	• Number of SSOs due to capacity limitations or wet weather (linked to SSO Identification Number). • Date of completion of most recent capacity evaluation. • 3-year backlog for capacity improvement projects.
9.0 Monitoring, Measurement, and Program Modifications	Evaluate effectiveness of SSMP, keep SSMP up-to-date, and identify necessary changes.	• As part of Chapter 10 – Program Audits, evaluate tracking of KPI and effectiveness in determining effectiveness of SSMP.
10.0 Program Audits	Formally identify SSMP effectiveness, limitations, and necessary changes on an annual basis.	• Date of completion of last annual audit.
11.0 Communication Plan	Communicate with the public and satellite agencies.	• Number of contacts initiated by the public. Percentage of positive comments.

The City will use the KPI listed in the above Table 9-1 to assist in completion of the annual SSMP program audit described in Chapter 10. The City will also continue to track additional information, such as customer complaints and length of pipe cleaned, to assist in evaluation of the SSMP effectiveness.

9.3. SSMP Modifications

The SSMP will be updated periodically to maintain current information. The City will review the success and/or necessary improvements of the SSMP as part of the annual SSMP program audit. The City will update critical information, such as contact numbers and the SSO response chain of communication, as needed. A comprehensive SSMP update will occur every 5 years, as required by the SWRCB.

CHAPTER 10 - PROGRAM AUDITS

10.1. Requirements

State Water Resources Control Board (SWRCB) requirements state that each wastewater collection system agency shall conduct periodic audits of their SSMP, with a minimum frequency of bi-annually. The periodic audits shall be at a level of detail commensurate with the size of the Enrollee and the number of SSOs experienced and shall identify any deficiencies in the current SSMP and describe the steps required to correct those deficiencies (if applicable). The program audit shall cover the period from the previous program audit to the current date. The Enrollee shall prepare a written report to be kept on file. The report must be made available to employees of the Regional Water Quality Control Board in the event of an investigation.

10.2. Audits

The City's Wastewater System Supervisor will lead the audit of the SSMP on an annual basis. Calendar year 2016 was the first year audited.

Each of the major sections of the SSMP will be addressed during the audit. An audit checklist, provided as Appendix I, shows the categories to be evaluated. Where results of the evaluation indicate deficiencies, corrective measures will be developed. The results of the audit will be included in an Annual Audit Report. A hardcopy of the Annual Audit Report will be printed and filed in the Wastewater System Supervisor's office.

10.3. SSMP Updates

The City will determine the need to update its SSMP based on the results of the program audit and the performance of its wastewater collection system. The overall measurement of program effectiveness will be a reduction in the frequency and volume of SSOs since the previous audit period. Corrective measures will be developed for all Program deficiencies identified, and the corrective actions, including a schedule for implementation of changes, will be documented in the Annual Audit Report. The full SSMP will be updated every five (5) years, at a minimum, in accordance with the requirements of WDR 2006-0003.

CHAPTER 11 - COMMUNICATION PROGRAM

11.1. Requirements

The State Water Resources Control Board requires that the City communicate, on a regular basis, with the public on the development, implementation, and performance of the SSMP. The communication system shall provide the public the opportunity to provide input to the City as the program is developed and implemented.

This section of the SSMP outlines the process involved in communicating with interested members of the public regarding development, implementation, and performance of this plan.

11.2. Communication During Development

City staff announced that it was developing an SSMP at the June 9, 2009 City Council Meeting. Public comments on the development of the SSMP were accepted on July 14, 2009.

11.3. Communicating Sewer System Performance

As the SSMP document is completed, the SSMP website will provide a link to the finished document for the public to download, access and review. Information on the City's periodic SSMP audits will also be posted on the website as they become available.

The City reports SSOs electronically to the California Integrated Water Quality System (CIWQS). The electronic SSO data, as well as information regarding regulatory actions, is available to everyone at https://ciwqs.waterboards.ca.gov

The City plans on utilizing several different strategies to determine the best avenue for public outreach and education for their customers. The City is in the process of developing advertising material such as posters, flyers and/or brochures that will be used to communicate the proper use and maintenance of residential and commercial sewer lines. The following is a brief description of some of the communication methods the city is contemplating:

11.3.1. Residential Communication

The City will conduct public outreach and education for residents and businesses related to sanitary sewer overflows. Residential education will include targeted information material on proper grease disposal which describes the negative impacts of discharging fats, oils and grease into the sanitary sewer system. This would be done at community events and through utility bill inserts mailings.

11.3.2. Land developers, Consulting Engineers, and Contractors

The City will disseminate information, in meetings and/or by flyers, to land developers, consulting engineers, and plumbing contractors regarding the need and methods to reduce SSOs. The City will communicate and solicit input regarding the SSMP requirements with emphasis on design and construction practices that reduce sewer overflows.

With regards to the Capital Improvement Program, engineering consultants and contractors may be consulted. Potential topics of interest may include design standards, capital program, consulting, and contracting opportunities

The City will disseminate information, in meetings and/or by flyers, to land developers, consulting engineers, and plumbing contractors regarding the need and methods to reduce SSOs. The City will communicate and solicit input regarding the SSMP requirements with emphasis on design and construction practices that reduce sewer overflows.

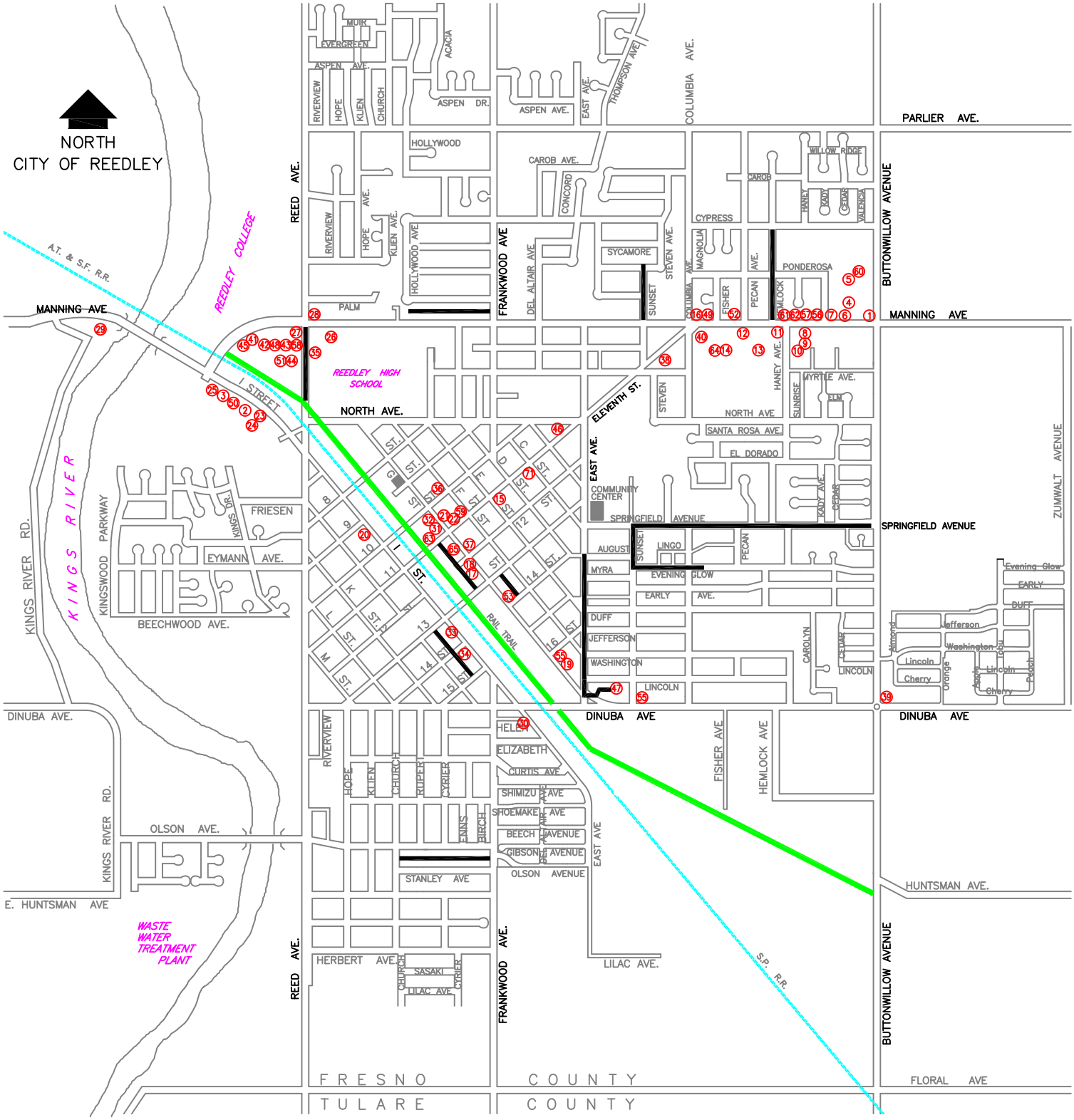
With regards to the Capital Improvement Program, engineering consultants and contractors may be consulted. Potential topics of interest may include design standards, capital program, consulting, and contracting opportunities.

11.3.3. Plumbers and Building Contractors

Plumbers and sewer contractors will have access to all available City of Reedley plans, specifications, and standard details to ensure that projects are properly designed and built to the City Standards.

APPENDIX A

POTENTIAL PROBLEM AREAS



1. TACO BELL
2. UNITED MARKET
3. THE HONEY PEARL CAFE
4. SUN CHINA
5. PIRATE PIZZA
6. EL RINCON
7. MARISCOS TARASCO
8. CITY DONUT/SANDWICH
9. SUBWAY
10. LA MICH. CARNICERIA
11. SUPER BURGER
12. ME 'N EDS
13. SANSEI JAPANESE
14. COSTA DORADA
15. FOSTER'S FREEZE
16. LITTLE CAESARS PIZZA
17. EL MONTES
18. UNCLE HARRY'S
19. LAS ESPUELAS
20. VALLEY FOODS SUPERMARKET
21. MAINSTREET CAFE
22. WILLIE'S CAFE
23. DOMINO'S #7760
24. SUBWAY #2
25. JACK IN THE BOX
26. JUANITO'S
27. McDONALD'S
28. KFC/GAL-CO FOODS
29. THE WAKE HOUSE
30. TAQUERIA MARI
31. VALENTINO'S
32. DRUNK DONKEY
33. BODEGA BOYS, LLC
34. ORTEGA'S TAQUERIA
35. CARL'S JR
36. ESPIGA'S MEXICAN
37. McCALL RDLY SANDWICH
38. PAPA MURPHY'S PIZZA
39. THE OAKS QUICK MART
40. MANNING CHINESE BUFFET
41. PORT OF SUBS
42. LOS GRULLENSES, INC.
43. CHINA GARDEN EXPRESS
44. PIZZA PLANET
45. STARBUCKS
46. DONUTS TO GO
47. JIMENEZ CARNICERIA
48. YOI JAPANESE
49. 1 STOP/MEDINAS TACOS
50. BASKIN ROBBINS
51. KABOB CITY
52. CITY MARKET
53. EL NOPAL BAKERY
54. EL PUEBLO FOOD/JN TAQUERIA
55. FAMILY MARKET
56. HEALTHY FAMILY
57. J MARKET
58. JAMBA JUICE
59. PASTELERIA PLAZA
60. SAVE MART
61. SUPER SAVE MARKET
62. EL MUNDO DE SABOR
63. TO BETTER HEALTH
64. TOWN & COUNTRY
65. TOMANNI BISTRO

SEWER POTENTIAL PROBLEM AREAS

Revised: 2022
X:\AutoCAD\DIAGRAMS\SewerProblemAreas

APPENDIX B

EXAMPLE CLEANOUT LOG

CITY OF REEDLEY
WASTEWATER TREATMENT PLANT
COLLECTION SYSTEM MAINTENANCE
SEWER MONITORING LOG

Date	Map Quadrant	Start MH #	End MH #	Distance (Ft.)	Service Performed			Inspection					Comments
					Jetting	Vactoring	Video	Grease	Roots	Cracks	Sags	Collapsed	

CITY OF REEDLEY
COLLECTION SYSTEM MAINTENANCE
STORM DRAIN CEPTOR
CLEAN-OUT LOG

Date: _____

Site	Type of Material Found	Amount of Material Found
Cottage Commons Subdivision		
Reedley College		
Hawthorne Heights Subdivision		
Quiring Subdivision		
East Manning Avenue Bridge		
West Manning Avenue Bridge		

CITY OF REEDLEY
COLLECTION SYSTEM MAINTENANCE
STORM DRAIN PUMP STATION
CLEAN-OUT LOG

Date: _____

Site	Type of Material Found	Amount of Material Found
Camacho Park		
Duff Avenue		
Grant School		

APPENDIX C

FY 2022-23 BUDGET

City of Reedley
FY 2022-23 Operation & Maintenance Budget

Expenditure	Amount
Salary	
Collection Crew	$168,870.00
Lab Personnel	$63,095.00
Supervisor	$96,235.00
Uniforms	$6,500.00
Special Supplies	$1,200.00
Tools	$5,000.00
Safety Tools	$4,000.00
Sewer Line/Collection Repair	$45,000.00
Capital Improvement Sewer Repairs	$3,655,850.00
TOTAL	**$4,045,750.00**

APPENDIX D

STANDARD SPECIFICATION TOC

CITY OF REEDLEY

ENGINEERING DEPARTMENT

STANDARD SPECIFICATIONS

October, 2019

Copies of this book may be purchased for $10.00 each
Please make check payable to:

CITY OF REEDLEY
ENGINEERING DEPARTMENT
1733 NINTH STREET
REEDLEY, CA 93654

TABLE OF CONTENTS

APPENDIX E

SAMPLE SSO REPORT FORMS

CITY OF REEDLEY
WASTEWATER SYSTEMS
CALL-OUT REPORT

Name of Employee: _____

Date: _____ Time: _____ Called-Out By Who: _____

Address or location of event: _____

Description of Problem:

_____

_____

_____

_____

Was someone called-out to assist you, if so who? _____

Did this call-out result in a Sanitary Sewer Overflow (SSO)? _____

How long did spillage occur? _____ How many gallons spilt? _____

What steps were taken to resolve the issue? _____

_____

Was a supervisor informed? _____ Date: _____ Time: _____

Were the proper authorities informed, if so who and at what numbers? _____

_____

Was the problem resolved? _____

Do any follow-up steps need to be followed? _____

_____

_____

Report submitted by: _____ Date: _____

CITY OF REEDLEY

Public Works Department

SEWER OVERFLOW REPORT

FOR OFFICE USE

DATE: _____ CALL RECEIVED: _____AM/PM

RECEIVED BY: _____ CALLER'S NAME: _____

CALLER'S PHONE NO.:_____

CALLER'S ADDRESS:_____

LOCATION OF OVERFLOW: _____CROSS ST:_____

TIME & NAMES OF CREW MEMBERS DISPATCHED: _____

DESCRIPTION OF COMPLAINT: _____

_____

FIELD REPORT (FOR RESPONSE CREW USE)

TIME ARRIVED AT SITE:_____ CREW:_____

TIME OVERFLOW STARTED:_____ TIME OVERFLOW STOPPED:_____

OVERFLOW DURATION:_____ MINUTES OVERFLOW FLOW:_____ GAL/MIN

U/S MH # _____ D/S MH # _____

SIZE OF LINE:_____ LENGTH OF LINE:_____

FINDINGS: _____

(COMPLETE REMAINDER OF FORM IF AN OVERFLOW HAS OCCURRED)

DESCRIBE CAUSE OF OVERFLOW:

_____

_____

DESCRIBE CLEANUP METHOD

_____

_____

DESCRIBE HOW OVERFLOW QUANTITY WAS CALCULATED:

_____

RECEIVING WATERS: YES ☐ NO ☐ LOCATION: _____

TYPE OF PROBLEM: _____

PICTURES TAKEN: YES ☐ NO ☐

SAMPLES TAKEN BY: _____ LOCATION OF SAMPLES: _____

_____

DESCRIBE PROPERTY DAMAGE AND AFFECTED AREA: _____

This form is a guidance document only. Each agency can develop a site specific form. This form may be used as a template to start from.

SIGNS POSTED: YES ☐ NO ☐ BARRICADED: YES ☐ NO NOTIFY NEIGHBORS: YES ☐ NO ☐

REGULATORY AGENCIES NOTIFIED:

OES	YES ☐ NO ☐	DATE/TIME _____	SPILL # _____
RWQCB	YES ☐ NO ☐	DATE/TIME _____	
COUNTY HEALTH	YES ☐ NO ☐	DATE/TIME _____	
OTHER _____	YES ☐ NO ☐	DATE/TIME _____	

CONTACTS/DETAILS: _____

FOLLOWUP MEASURES:

_____

_____

WORK ORDER NO: _____

FREQUENCY OF EXISTING PM PROGRAM: _____

LAST DATE PM PERFORMED: _____

RECOMMENDATIONS ON HOW TO ELIMINATE FUTURE PROBLEMS: _____

_____

_____

REPORT COMPLETED BY: _____ DATE: _____

SKETCH OF AREA: (Include manholes, intersections, location of stoppage, etc.)

APPENDIX F

INDUSTRIAL DISCHARGE PERMIT APPLICATION

City of Reedley
Public Works Department
1733 Ninth Street
Reedley, CA 93654
(559) 637-4200
FAX 637-2139

Dear Food Service Facility:

Welcome to the City of Reedley and thank you for the interest in establishing your food establishment in our community. On October 14, 2003, the City adopted Sewer Ordinance No. 2003-05 establishing an Industrial Pretreatment Program of which the Fats, Oil & Grease Program (FOG Program) falls under. This program permits all food facilities within the City and it's intent is to assist establishments as yours to comply with State, Federal and Local regulations in respects to the handling and disposal of all fats, oils and greases. A pamphlet titled *"Fat Free Sewers"* has been enclosed for more information on the importance of said program.

As part of the permitting process, you are required to complete and submit the enclosed Food Service Facility Permit Application along with all required information and pay the initial application and inspection fee of $80 (eighty dollars) within 30 days of obtaining your business license. Upon receiving payment you will be issued a FOG Permit. You will be contacted at a later date to set up an inspection of your facility to verify that everything is in order.

Again, on behalf of the City of Reedley and it's staff may I welcome you and let you know that we look forward to working with you. If you have any questions while completing your application or have any other concerns, please contact my office at (559) 637-4209 or feel free to e-mail me at martha.cardoso@reedley.com.

Sincerely,

Martha S. Cardoso
City of Reedley
Laboratory Director

CITY OF REEDLEY
FOOD SERVICE FACILITY
PERMIT APPLICATION INSTRUCTIONS

1. Complete the attached permit application. Attach additional sheets as needed.

2. Provide a schematic drawing of all indoor and outdoor plumbing systems, including grease interceptors or traps, facility sewer connections, sinks, floor drains, dishwashers, restrooms, etc. A very simple drawing is permitted, no architectual plans.

3. Provide a grease interceptor/trap maintenance plan that specifies the frequency of grease removal, inspection procedures, and methods to repair non-operational equipment.

4. Include a signed copy of your Yellow Grease recovery and your grease interceptor/trap maintenance contracts.

5. Mail the completed application and additional information requested to:

City of Reedley
FOG Program c/o Martha Cardoso
1733 9th Street
Reedley, CA 93654

CITY OF REEDLEY
FOOD SERVICE FACILITY
GREASE INTERCEPTOR/GREASE TRAP PERMIT APPLICATION

Establishment Information

Name of Establishment _____

Address _____

Phone No. _____ Fax No. _____

Website Address _____ E-mail _____

Authorized Representative Information

Name of Authorized Representative _____

Phone No. _____ Fax No. _____

Cell No. _____ E-mail _____

Owner Information

Name of Owner _____

Address _____

City _____ State _____ ZIP _____

Phone No. _____ Fax No. _____

Website Address _____ E-mail _____

Type of Food Service Facility (check one)

[ ] Fast Food [ ] Restaurant [ ] School Cafeteria

[ ] Food Preparation [ ] Take-out Facility [ ] Meat Processor

[ ] Other Cafeteria [ ] Other, specify _____

Location Information

Size of Location _____ Available Seating _____

Shift Information

Work Days	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Hours of Operation							
Shifts/Day							
Employees/Shift 1							
Employees/Shift 2							
Employees/Shift 3							

Equipment Information

List all major equipment used for food preparation at your facility (i.e. grills, fryers, dishwashers, sinks, etc.). Attach additional sheets as necessary.

Type	Size/Specification

Grease Interceptor/Trap Information

Location	Size (gallons)	Type (circle one)	**Service Frequency**
		Interceptor/Trap	
		Interceptor/Trap	
		Interceptor/Trap	
		Interceptor/Trap	
		Interceptor/Trap	

Grease Interceptor/Trap Hauler Information

(Will need to provide copy of service contract)

Name of Hauler _____

Address _____

City _____ State _____ Zip _____

Phone No. _____ Fax No. _____

Website Address _____ E-mail _____

Grease Disposal Information

Describe how used grease (yellow grease) is disposed of _____

_____

If facility uses an outside source, complete the following *(Will need to provide copy of service contract)*:

Name of Hauler _____

Address _____

City _____ State _____ Zip _____

Phone No. _____ Fax No. _____

Website Address _____ E-mail _____

Confidential Business Information

Information and data on a user obtained from reports, questionnaires, permit applications, permits, monitoring programs and inspections shall be available to the public or other governmental agency without restriction unless the user specifically requests and is able to demonstrate to the satisfaction of the City that the release of such information would divulge information, processes or methods of production that are entitled to protection as trade secrets of the user. When requested by the person furnishing a report, the portions of the report which might disclose trade secrets or secret processes shall not be made available for inspection by the public, but shall be made available upon request to governmental agencies. Information accepted by the Public Works Director as confidential shall not be transmitted to the general public by the Public Works Director until and unless a ten-day notification is given to the user. In order for the information to be considered confidential, the following criteria must be met:

- A separate sheet with the requested information shall be submitted for each question that you are asserting as confidential.
- The submittal shall be clearly marked as confidential.
- Submit with the application a separate statement for each question that you are requesting confidentiality indicating the reasons that you are asserting the information as confidential.

You will be notified if the Public Works Director does not feel that the information requested meets the criteria for confidentiality.

Authorized Representative Statement

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

Name (Printed) _____ Title _____

Signature _____ Date _____

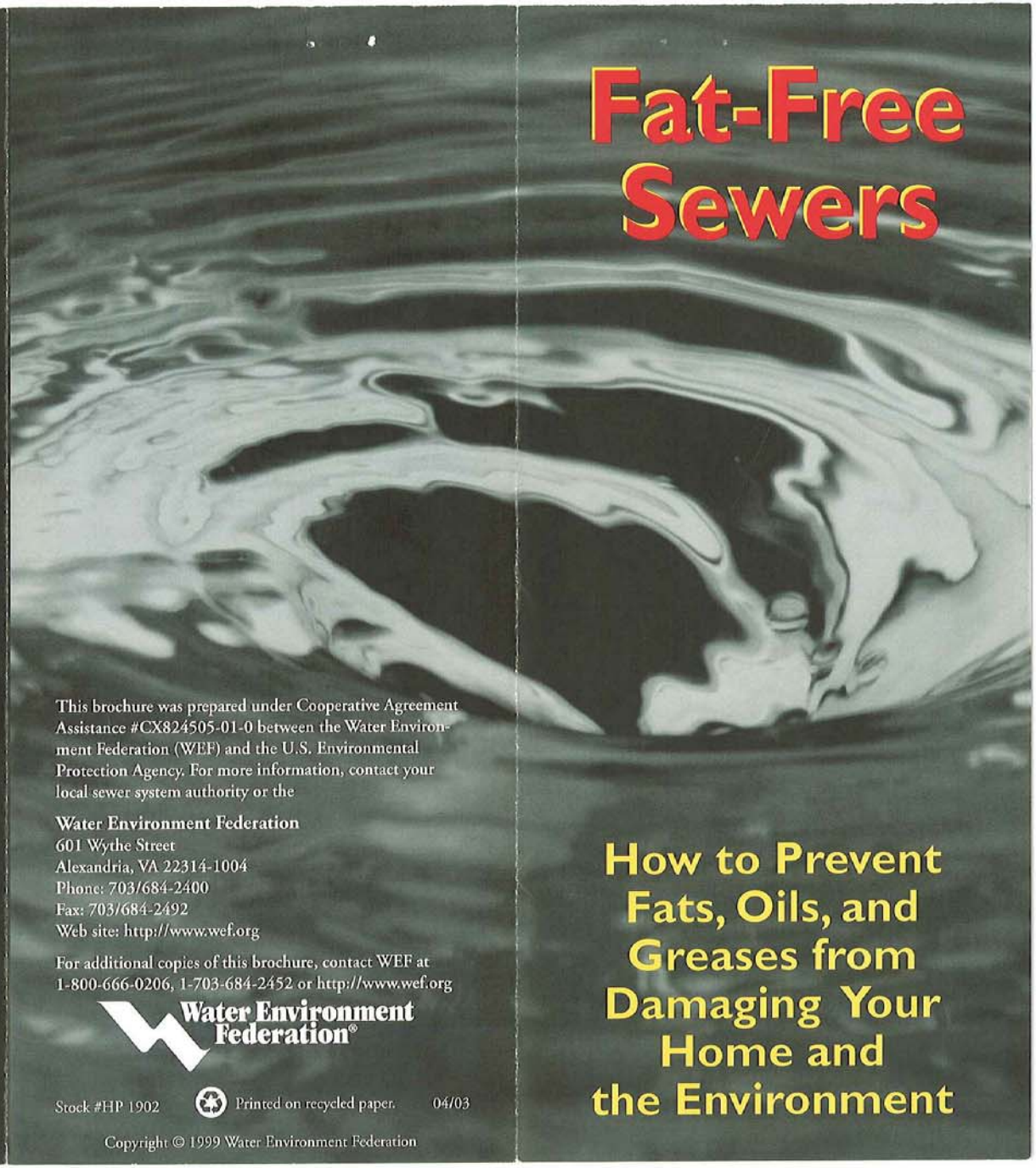
What Restaurant and Building Owners Need to Know About Grease Traps or Interceptors

Restaurants, large buildings, such as apartment complexes; and other commercial establishments may have grease traps or interceptors that keep grease out of the sewer system. For a grease trap or interceptor to work correctly, it must be properly

1. **Designed (sized and manufactured to handle the amount that is expected),**
2. **Installed (level, vented, etc.), and**
3. **Maintained (cleaned and serviced on a frequent basis).**

Solids should never be put into grease traps or interceptors. Routine, often daily, maintenance of grease traps and interceptors is needed to ensure that they properly reduce or prevent blockages.

Be cautious of chemicals and additives (including soaps and detergents) that claim to dissolve grease. Some of these additives simply pass grease down pipes where it can clog the sewer lines in another area.



This brochure was prepared under Cooperative Agreement Assistance #CX824505-01-0 between the Water Environment Federation (WEF) and the U.S. Environmental Protection Agency. For more information, contact your local sewer system authority or the

Water Environment Federation
601 Wythe Street
Alexandria, VA 22314-1004
Phone: 703/684-2400
Fax: 703/684-2492
Web site: http://www.wef.org

For additional copies of this brochure, contact WEF at 1-800-666-0206, 1-703-684-2452 or http://www.wef.org

Water Environment Federation®

Stock #HP 1902 Printed on recycled paper. 04/03

Fat-Free Sewers

How to Prevent Fats, Oils, and Greases from Damaging Your Home and the Environment

Fats, Oils, and Greases aren't just bad for your arteries and your waistline; they're bad for sewers, too.

Sewer overflows and backups can cause health hazards, damage home interiors, and threaten the environment. An increasingly common cause of overflows is sewer pipes blocked by grease. Grease gets into the sewer from household drains as well as from poorly maintained grease traps in restaurants and other businesses.

Where does the grease come from?

Most of us know grease as the byproduct of cooking. Grease is found in such things as:

- Meat fats
- Lard
- Cooking oil
- Shortening
- Butter and margarine
- Food scraps
- Baking goods
- Sauces
- Dairy products

Too often, grease is washed into the plumbing system, usually through the kitchen sink. Grease sticks to the insides of sewer pipes (both on your property and in the streets). Over time, the grease can build up and block the entire pipe.

Home garbage disposals do not keep grease out of the plumbing system. These units only shred solid material into smaller pieces and do not prevent grease from going down the drain.

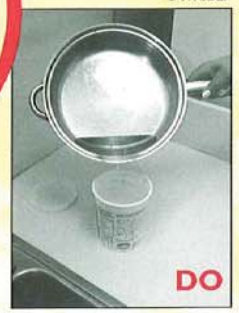
Commercial additives, including detergents, that claim to dissolve grease may pass grease down the line and cause problems in other areas.

© James L. Graham, Jr., P.E.

The results can be:

- Raw sewage overflowing in your home or your neighbor's home;
- An expensive and unpleasant cleanup that often must be paid for by **you, the homeowner;**
- Raw sewage overflowing into parks, yards, and streets;
- Potential contact with disease-causing organisms; and
- An increase in operation and maintenance costs for local sewer departments, which causes higher sewer bills for customers.

© NYCDEP



What we can do to help

The easiest way to solve the grease problem and help prevent overflows of raw sewage is to keep this material out of the sewer system in the first place.

There are several ways to do this.

1) Never pour grease down sink drains or into toilets.
2) Scrape grease and food scraps from trays, plates, pots, pans, utensils, and grills and cooking surfaces into a can or the trash for disposal (or recycling where available).
3) Do not put grease down garbage disposals. Put baskets/strainers in sink drains to catch food scraps and other solids, and empty the drain baskets/strainers into the trash for disposal.
4) Speak with your friends and neighbors about the problem of grease in the sewer system and how to keep it out. Call your local sewer system authority if you have any questions.

APPENDIX G

GREASE INTERCEPTOR STANDARD DRAWING

NOTES:

1. THE SIZE AND DETAILS OF ALL INTERCEPTORS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CALIFORNIA PLUMBING CODE, CURRENT EDITION. HEREINAFTER REFERRED TO AS CPC. ALL INTERCEPTORS SHALL BE SEALED AND WATER TIGHT.

2. INTERCEPTORS SHALL BE CONSTRUCTED AND VENTED IN ACCORDANCE WITH THE SPECIFICATIONS SET FORTH IN THE CPC.

3. THE LOCATION OF THE INTERCEPTOR SHALL BE APPROVED BY BOTH THE PUBLIC WORKS DEPARTMENT AND ENGINEERING DEPARTMENT PRIOR TO CONSTRUCTION.

4. ALL CAST IN PLACE OR PRECAST INTERCEPTOR UNITS SHALL BE APPROVED BY BOTH THE PUBLIC WORKS DEPARTMENT AND ENGINEERING DEPARTMENT PRIOR TO CONSTRUCTION.

5. THE OWNER SHALL BE RESPONSIBLE FOR PROVIDING ALL DOCUMENTATION & TESTING TO CERTIFY THAT THE INTERCEPTORS AND WASTE STREAMS MEETS THE REQUIREMENTS OF ALL CURRENT REGULATIONS AND BOTH THE PUBLIC WORKS DEPARTMENT AND ENGINEERING DEPARTMENT REQUIREMENTS.

6. PRE-CAST INTERCEPTORS SHALL BE LABELED WITH THE MANUFACTURERS NAME, MODEL NUMBER AND SHALL HAVE AN I.A.P.M.O. CERTIFICATION MARK.

7. ALL CONCRETE FOR CAST-IN-PLACE INTERCEPTORS SHALL BE CLASS 2 CONCRETE IN ACCORDANCE WITH THE CITY OF REEDLEY STANDARD SPECIFICATIONS.

8. CAST IRON FRAMES MAY BE CAST INTO THE INTERCEPTOR LID.

9. ALL INTERCEPTORS SHALL BE ACCESSIBLE TO BOTH THE PUBLIC WORKS DEPARTMENT AND ENGINEERING DEPARTMENT FOR TESTING AT ANY TIME.

10. DOCUMENTS MUST BE SUBMITTED ANNUALLY TO THE PUBLIC WORKS DEPARTMENT AT

    CITY OF REEDLEY
    PUBLIC WORKS DEPARTMENT
    REEDLEY, CA 93654
    559-637-4200

11. INTERCEPTOR FOR FATS, ORGANICS, AND GAS PERMIT IS REQUIRED BY PUBLIC WORKS DEPARTMENT.

	SCALE: NOT TO SCALE	OUTSIDE COMMERCIAL & INDUSTRIAL SAND, SILT, GREASE, OIL & GARBAGE INTERCEPTORS	*CITY OF REEDLEY*
	REVISED: MAR. 2020		S-10
	REF. STD. DWG.:		

APPENDIX H

KEY PERFORMANCE INDICATOR CHECKLIST

City of Reedley
SSMP Key Performance Indicators

	2022	2023	2024	2025	2026	2027
Total number and volume of SSO's						
Number of repeat SSO's (same location as any previous SSO, regardless of year of occurrence)						
Total number of mainline blockages						
Number of pump station failures						
Cause of pump station failure						
Number of pipe failures						
Cause of pipe failures						
Length of pipe CCTV'd						
Percentage of total overflow volume contained or returned to sewer						
Number of blockages due to FOG						
Number of overflows due to FOG						
Number of FOG producing facilities inspected						
Percent of FOG producing facilities found to be in compliance						
Number of SSOs due to capacity limitations or wet weather						
Date of completion of most recent capacity evaluation						