Sewer System Management Plan

Prepared for:

City of Woodland
WDID# 5SSO10903

Community Development Department
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Acronyms and Abbreviations

ARB	Automotive related business
BMP	Best management practices
CCTV	Closed-circuit television
CIP	Capital improvement project
CIPP	Cured-in-place pipe
City	City of Woodland
CIWQS	California Integrated Water Quality System
CMMS	Computerized maintenance management system
CWEA	California Water Environment Association
DPW	City of Woodland Department of Public Works
FOG	Fats, oils, and grease
FSE	Food service establishment
General Order	California State Water Resources Control Board Order WQ 2022-0103-DWQ Statewide Waste Discharge Requirements General Order for Sanitary Sewer Systems
GIS	Geographical Information System
GWDR	General Waste Discharge Requirements
HVVC	High velocity vacuum cleaner
I&I	Inflow and infiltration
IPP	Industrial Pretreatment Program
ISAC	Information Systems Assistance Center
KPI	Key performance indicator
LRO	Legally responsible official
MACP	Manhole Assessment and Certification Program
MGD	Unit, million gallons per day
MPFP	Major Projects Financing Plan
NASSCO	National Association of Sewer Service Companies
O&M	Operation and maintenance
PACP	Pipeline Assessment Certification Program
PPP	Pollution Prevention Program
PUE	Public utility easement
SECAP	System Evaluation and Capacity Assurance Plan
SERP	Spill Emergency Response Plan
SIU	Significant industrial user
SSMP	Sewer System Management Plan
SSO	Sanitary sewer overflow
SSS	Sanitary sewer system
SWRCB	California State Water Resources Control Board
WDRs	Waste discharge requirements
WPCF	City of Woodland Water Pollution Control Facility

1 Sewer System Management Plan Goal and Introduction

This Sewer System Management Plan (SSMP) has been prepared for the City of Woodland (City; WDID# 5SSO10903) in accordance with the requirements of California State Water Resources Control Board (SWRCB) Order WQ 2022-0103-DWQ Statewide Waste Discharge Requirements (WDRs) General Order for Sanitary Sewer Systems (General Order), adopted December 6, 2022, and effective June 5, 2023.

The General Order consists of general WDRs that prohibit the discharge of untreated wastewater which may reach waters of the United States or cause a public nuisance, as defined in California Water Code Section 13050(m). The General Order requires that all publicly owned wastewater collection system enrollees prepare a written SSMP to assist in the proper operation, management, maintenance, and funding of the sanitary sewer system to ensure spills are prevented to the maximum extent practicable, effectively reduced, properly contained, and adequately mitigated.

1.1 Regulatory Context

The Plan Introduction section must provide a general description of the local sewer system management program and discuss Plan implementation and updates.

– General Order Attachment D Section 1.1

The goal of the SSMP is to provide a plan and schedule to properly manage, operate, and maintain all parts of the sanitary sewer system, reduce infiltration, minimize the frequency and impact of spills, and identify team members responsible for implementing, evaluating, and updating the SSMP. This SSMP is intended to help the City Department of Public Works (DPW) meet its goals and achieve its mission, as described in the DPW mission statement provided in **Appendix 1-A**.

Periodic updating of the SSMP is performed by City staff or by consultants to the City. These updates are typically triggered by annual auditing of the SSMP, which helps to identify deficiencies or ineffective aspects of the SSMP. This SSMP updating process helps to ensure the City's goals of the SSMP are continuously met.

1.2 SSMP Update Schedule

The Plan Introduction section must include a schedule for the Enrollee to update the Plan, including the schedule for conducting internal audits. The schedule must include milestones for incorporation of activities addressing prevention of sewer spills.

– General Order Attachment D Section 1.2

The General Order requires periodic updates and audits to the SSMP as specified in Attachment D of the General Order. DPW has developed a plan and schedule to update and audit their SSMP in accordance with the General Order requirements. **Table 1-1** below shows a summary of the SSMP update and audit schedule. In general, DPW performs ongoing updates to the SSMP on an as-needed basis, such that the document is continually effective at preventing sewer spills.

Schedules for specific activities relating to sewer system inspection, maintenance and corrective actions are provided in their respective sections of this SSMP.

Table 1-1. SSMP update and audit schedule.

Task/Item	Due Date
SSMP Updates	
SSMP Update	August 2, 2025
SSMP Update	August 2, 2031
SSMP Update	August 2, 2037
SSMP Audits	
Audit Period August 2, 2024 – August 1, 2027	February 1, 2028
Audit Period August 2, 2027 – August 1, 2030	February 1, 2031
Audit Period August 2, 2030 – August 1, 2033	February 1, 2034
Audit Period August 2, 2033 – August 1, 2036	February 1, 2037

1.3 Sewer System Asset Overview

The Agency Sewer System Management Plan must have an Introduction section to provide a description of the Agency-owned assets and service area including but not limited to:

- *Location, including county(ies).*
- *Service area boundary (see specific requirements contained in Specifications 5.14 and Attachment E1, requiring an electronic Sanitary Sewer System Service Area Boundary Map submitted to CIWQS).*
- *Population and community served.*
- *System size, including total length in miles, length of gravity mainlines, length of pressurized (force) mains, and number of pump stations and siphons.*
- *Structures diverting stormwater to the sewer system.*
- *Data management systems.*
- *Sewer system ownership and operation responsibilities between Enrollee and private entities for upper and lower sewer laterals.*
- *Estimated number or percent of residential, commercial, and industrial service connections.*
- *Unique service boundary conditions and challenge(s).*
- *Reference to the Enrollee's up to-date map of its sanitary sewer system, as required in section 4.1 (Updated Map of Sanitary Sewer System) of this Attachment.*

– General Order Attachment D Section 1.3

The City is located in Yolo County and has a population of approximately 61,032 (2020 census data). The City owns approximately 300 miles of sanitary sewer piping including approximately 17,550 lateral connections. Of these connections, approximately 94% are residential, 6% are commercial, and 0.2% are industrial. The average lateral is 26.5 feet in length, which translates

to approximately 88 miles of sanitary sewer laterals within the sewer collection system. The collection system consists of approximately 207 miles of gravity mains and 2 miles of force mains, and conveys an average of 5 million gallons per day (MGD) of sewage to the City's Water Pollution Control Facility (WPCF). The wastewater collection system includes three (3) lift stations. The Spring Lake and Gibson Ranch lift stations serve developments in the southern part of the City, and one lift station delivers flow into the headworks of the WPCF. A map of the City's service area is provided in **Appendix 1-B.**

2 Organization

The Plan must identify organizational staffing responsible and integral for implementing the local Sewer System Management Plan through an organizational chart of other similar narrative documentation that includes:

- *The name of the Legally Responsible Official as required in section 5.1 (Designation of a Legally Responsible Official) of this General Order.*
- *The position titles, telephone numbers, and email addresses for management, administrative, and maintenance positions responsible for implementing specific Sewer System Management Plan elements.*
- *Organizational lines of authority.*
- *Chain of communication for reporting spills from receipt of complaint or other information, including the person responsible for reporting spills to the State and Regional Water Boards and other agencies, as applicable. (For example, county health officer, county environmental health agency, and State Office of Emergency Services).*

– General Order Attachment D Section 2

The City has designated their internal position of Chief Collection Systems Operator as the legally responsible official (LRO). This position oversees the entire wastewater collection system and staff and possesses the appropriate authority to make managerial decisions regarding the operation of the sanitary sewer system. The position titles, names, telephone numbers, and email addresses for City staff with designated roles in the City's submittal of information to the California Integrated Water Quality System (CIWQS) Sanitary Sewer System Database are shown in **Table 2-1**.

Table 2-1. City of Woodland staff General Order CIWQS designations.

Name	Position	General Order CIWQS Designation	Phone	Email
Eric Medrano	Chief Collections System Operator	Primary LRO	(530) 661-5881	Eric.Medrano@cityofwoodland.gov
Craig Locke	Director of Public Works	Secondary (backup) LRO	(530) 661-5899	Craig.Locke@cityofwoodland.gov
Tim Busch	Principal Utilities Civil Engineer	Secondary (backup) LRO	(530) 661-5963	Tim.Busch@cityofwoodland.gov
Matt Cohen	Associate Engineer	Data Submitter	(530) 661-5973	Matt.Cohen@cityofwoodland.gov
Kevin Eagle	Senior Utilities Maintenance Worker	Data Submitter	(530) 661-5894	Kevin.Eagle@cityofwoodland.gov

A chart showing the organizational lines of authority can be found in **Appendix 2-A**. The chain of communication in the event of a spill is detailed in **Section 6** as a part of the Spill Emergency Response Plan (SERP)**.**

Table 2-2. City of Woodland SSMP staff roles and contact information.

Name	Position	SSMP Implementation Role	Phone	Email
Eric Medrano	Chief Collection System Operator	Oversee entire sewer collection system and SSMP implementation	(530) 661-5881	Eric.Medrano@cityofwoodland.gov
Kevin Eagle	Senior Utilities Maintenance Worker	SSMP implementation	(530) 661-5894	Kevin.Eagle@cityofwoodland.gov
Matt Cohen	Associate Engineer	SSMP reporting (updates and audits)	(530) 661-5973	Matt.Cohen@cityofwoodland.gov

3 Legal Authority

The Agency Sewer System Management Plan must include copies or an electronic link to the Enrollee's current sewer system use ordinances, service agreements and/or other legally binding procedures to demonstrate the Enrollee possesses the necessary legal authority.

- *Prevent illicit discharges into its sanitary sewer system from inflow and infiltration (I&I); unauthorized stormwater; chemical dumping; unauthorized debris; roots; fats, oils, and grease; and trash, including rags and other debris that may cause blockages.*
- *Collaborate with storm sewer agencies to coordinate emergency spill responses, ensure access to storm sewer systems during spill events, and prevent unintentional cross connections of sanitary sewer infrastructure to storm sewer infrastructure.*
- *Require that sewer system components and connections be properly designed and constructed.*
- *Ensure access for maintenance, inspection, and/or repairs for portions of the service lateral owned and/or operated by the Enrollee.*
- *Enforce violation(s) of ordinances, service agreements, or other legally binding procedures.*
- *Obtain easement accessibility agreements for locations requiring sewer system operations and maintenance, as applicable.*

– General Order Attachment D Section 3

The authority of the City of Woodland to control its wastewater collection and treatment system is described in the City's Municipal Code, which can be found on the City's website (https://www.cityofwoodland.gov/681/Municipal-Code). The Municipal Code defines properties which must connect to the sewer system, requires permits and fees for connection, limits discharges into the system, requires standards for construction of new system components, ensures access to City employees to properly maintain any system component, and prescribes enforcement measures for violations. The Municipal Code provides the basis upon which the City can effectively manage and maintain its system. Specific municipal code sections and their applicability to the SSMP requirements are described in this section.

- Municipal Code Sections 13.12.020 and 8.04.250 - provide the City with the legal authority to prevent illicit discharges to land and water by requiring connection to the City collection system for any disposal of sewage, with the exception of approved septic systems described in Municipal Code Section 13.12.030.
- Municipal Code Section 13.12.040 - prohibits any connections to or modifications of the public sewer collection system without an authorized permit from the City and the payment of any applicable fees.
- Municipal Code Section 8.04.260 - requires Categorical and Significant industrial users (CIUs and SIUs) to obtain industrial wastewater discharge permits from the City before discharging any industrial wastewater to the collection system. This section of the Code also provides the City with the discretion to require any user that is not considered to be a

CIU or SIU that may discharge a pollutant of concern to obtain a pollution prevention permit before discharging wastewater to the collection system. The contents of industrial wastewater and pollution prevention permits are described in Code Sections 8.04.290 and 8.04.300 respectively. The City has the legal authority to create its own framework to govern the permit program because permits are issued at the discretion of the City Pretreatment Program Director per Section 8.04.260. The permit program consists of the City-established Industrial Pretreatment Program (IPP) and Pollution Prevention Program (PPP) (see **Appendix 3-A**). These documents were created in compliance with EPA regulation 40 CFR Part 403.

- Municipal Code Section 13.12.100 - requires the payment of a connection charge, the amount of which is decided by a connection-specific City Council resolution, when a connection to the collection system is made from a new property. Sections 13.12.110 and 8.04.210 require the payment of monthly service fees for connection to the collection system as decided by City Council resolution. Fees may be determined by user-type, by volume according to potable water usage, or by other special considerations. Section 13.12.110 allows the City to require the installation of a sewage meter on any connection if the City desires. Section 8.04.220 also allows the City to impose fees to cover the cost of administrating programs such as enforcement, industrial pretreatment, permit processing, and monitoring.
- Municipal Code Section 8.04.080 - specifically prohibits discharge of the following: chlorine demand, corrosive substances, dilution water, discoloration, flammable or explosive substances, insecticides, medical wastes, noxious substances, excessive BOD, slug discharges, substances causing a public nuisance, radioactive wastes, solids or viscous matter, storm water, cooling water, sulfides, excessively hot or cold water, toxic substances, hauled matter, petroleum, or otherwise unsuitable wastes. Section 13.12.080 specifically prohibits the connection of any drainage features to the public sewer system, including roof downspouts, foundation drains, or any other sources of surface or groundwater drainage.
- Municipal Code Section 8.04.120 - presents a list of maximum allowable concentration limits for specific pollutants discharged by industrial users, with the reservation that more strict federal regulations supersede those presented in the Municipal Code, such as those present in the Federal Pretreatment Standard 40 CFR Chapter adopted by Code Section 8.04.100. Section 8.04.160 requires all industrial users to pre-treat wastewater to the established standards at the user's expense and to submit detailed plans on the treatment process for review and acceptance. The City identifies industrial users that have the potential to discharge wastewater with pollutant concentrations in excess of the maximum allowable limits through its Industrial User Survey, which is conducted in conjunction with the business license and building permitting process. Section 8.04.150 forbids dilution of wastewater as a substitute for pre-treatment. Section 8.04.230 allows the City to enter into special contracts with industrial users producing wastewaters of "unusual strength" to treat the water under specified conditions and at special costs. Sections 8.04.380 and 8.04.400 require industrial users to submit baseline monitoring reports identifying industrial and pre-treatment processes, wastewater flow rates, pollution concentrations, and applicable environmental permits. Section 8.04.410 requires industrial users to submit reports describing future actions to ensure compliance, and

8.04.420 requires semi-annual submission of the results of self-monitoring. Sections 8.04.430 through 8.04.450 also require the submission of reports regarding changes in discharge or pre-treatment processes, episodic discharges, and discharges of hazardous wastes.

- Municipal Code Section 8.04.080 - lists fats, oils, and grease as prohibited substances that may not be disposed of in the sewer collection system by any user. Section 8.04.120 sets the maximum allowable concentration of total oil and grease at 159 mg/l. Municipal Code Section 8.04.090 allows the City to require any user to install an interceptor or trap on that property's building sewer in order to trap grease, oil, flammable substances, grit, or other harmful substances. This Section requires submission of plans to the City Engineer prior to installation, and that all records of cleaning, waste removal (by a licensed waste hauler), inspection, repairs, and cost are kept and made available to the City Engineer for review. Interceptors, traps, or other pretreatment devices operated by categorical or Significant Industrial Users (SIUs) are permitted under the IPP and any other interceptors or traps are permitted under the PPP.
- Municipal Code Section 13.12.080 - The City's Public Works Director oversees both the wastewater collection and storm drainage systems, and thereby possesses the necessary legal authority to collaborate with storm sewer agencies to coordinate emergency spill responses, ensure access to storm sewer systems during spill events, and prevent unintentional cross connections of sanitary sewer infrastructure to storm sewer infrastructure. All sewer connections are required to be made in accordance with City design and construction specifications and are to be tested for full compliance with City requirements. Adherence to City requirements is reviewed by the City before final acceptance of the work.
- Municipal Code Section 13.12.060 - requires the submission of plans, profiles, and specifications with applications for permits to connect to the collection system to be reviewed and accepted by the City Engineer. Section 13.12.080 requires the proper design and construction of new sewer system components according to the City Standard Specifications and Details, and the Uniform Plumbing Code. This section requires testing and inspection of system components by the City, including private laterals, and the submission of as-built drawings before the acceptance of any work. This section places the responsibility for maintaining sewer laterals from the property line to the building on the property owner. During the plan check process, the City may require specific sizing of collection system facilities consistent with the latest version of the Sewer System Master Plan. If the Master Plan requires a developer to install facilities that are sized to serve future developments or will otherwise provide an increased level of service to existing customers, the City will contribute funds towards the project per the Major Projects Financing Plan (MPFP). The MPFP is a framework for determining the "fair share" that the City will contribute towards collection system infrastructure required to be installed by developers.
- Municipal Code Section 13.12.080 - includes a provision requiring at minimum a 10 foot wide easement for components of the sewer system located outside the public right-of-way. This easement allows for access by public employees to construct and maintain those portions of the system. Section 13.12.050 limits work on the sewer system to the owner of private property doing their own house sewer work on their private property.

- City Municipal Code Sections 13.04.120 and 13.04.130 - discuss penalties for non-payment of sewer utility bills and methods of enforcing collection of delinquent payment. Section 13.04.180 allows for criminal prosecution for any tampering or vandalism of the public sewer system. Section 13.12.120 places the responsibilities for all other enforcement actions aside from fee collections on the City Engineer. This section allows the Engineer to issue warnings to users in violation of the Code and disconnect those users if they do not promptly rectify illegal discharges. The Engineer also reserves the right to disconnect any users in the event of an emergency during which disconnection is necessary to prevent the WPCF from violating its NPDES permit. The section also allows charges to be issued by the Engineer to any user whose waste discharges cause damage to the collection system, public property, or the environment. Fines for illegal discharges are confined to a range of $100-$10,000 dollars per day.
- City Municipal Code Section 8.04.540 - requires the City to annually publish in the newspaper a list of significant industrial non-compliant dischargers as a measure to deter illegal discharges. Section 8.04.550 requires that any user who is issued a violation warning must submit to the City a technical report explaining the violation and describing a plan to prevent further similar discharges within 30 days. Additionally, the City may require any user who has caused a significant violation to attend a “show cause” hearing to describe why a specific enforcement action should not be carried out. Section 8.04.560 allows the City to issue cease-and-desist orders that require the user to halt all activities causing an illegal discharge. Section 8.04.570 prohibits the continued habitation of any building which has suspended sanitary sewer service, and allows the City Attorney to seek compensation for damages caused by illegal discharges.
- City Municipal Code Section 16.20.080 – requires all new subdivisions to incorporate a public utility easement, unless waived by the Community Development Director.

4 Operation and Maintenance Program

The Plan must include the items listed below that are appropriate and applicable to the Enrollee's system.

– General Order Attachment D Section 4

This SSMP section describes various aspects of the City's operation and maintenance program, which plays a vital role in meeting the City's goals outlined in section 1 of the SSMP. The City's approach to implementing an effective O&M program is to plan strategic observation of the entire collection system and streamline the transfer of field data into GIS, CMMS, and ITPipes Web that will facilitate proper record keeping and informed scheduling and funding decisions regarding preventative maintenance and repair activities. This section fulfills the requirements of GWDR SSMP mandatory element iv.

4.1 Updated Map of Sanitary Sewer System

An up-to-date map(s) of the sanitary sewer system, and procedures for maintaining and providing State and Regional Water Board staff access to the map(s). The map(s) must show gravity line segments and manholes, pumping facilities, pressure pipes and valves, and applicable stormwater conveyance facilities within the sewer system service area boundaries.

– General Order Attachment D Section 4.1

The City of Woodland currently possesses maps of the sewer collection system on three media (hard copy, AutoCAD, and GIS). Accurate system maps are essential to effectively manage the sewer collection system. Knowledge of the location of assets and the information associated with those assets is key to activities such as routine preventative maintenance, capital improvement planning, and rehabilitation/replacement design. It is important that system maps geographically represent assets as well as contain the necessary data for those assets. The City's hard copy and electronic system maps contain the following information:

- Sewer Manholes (identification tag, size, rim elevation, invert elevation, install date)
- Sewer Gravity Piping (identification tag, size, material, length, downstream & upstream invert elevations, slope, install date)
- Lift stations (identification tag)
- Force Mains (identification tag, size, material, length)
- Valves (identification tag, type, size)
- Geographical features (street names, waterways, parcels)
- Storm Drain Inlets (identification tag, size, rim elevation)
- Storm Drain Manholes (identification tag, size, rim elevation, invert elevation, install date)
- Storm Drain Gravity Piping (identification tag, size, material, length, downstream & upstream invert elevations, slope, install date)
- Storm Drain Outlets (receiving waterway)

GIS maps are maintained by the GIS Analyst in the IT Division under the Administrative Services Department. Hard copy and AutoCAD maps are maintained by the Utilities Engineering and Utilities Maintenance divisions under the Community Development Department and Public Works Department respectively. Changes to the collection system maps occur for the following reasons:

- New development
- Completion of capital projects
- Rehabilitation or replacement work
- Revisions based on field inspection

It is important that these changes are quickly and efficiently incorporated into the system maps. The following sections outline the general process by which updates to centrally available maps are made.

4.1.1 New Development / Capital Improvement Project / Rehabilitation & Replacement Project Map Updates

To assist in keeping maps as current as possible, the City requires that surveyors or engineers submit electronic as-built drawings of new development or capital improvement projects under City Municipal Code Section 16.64.050.

All engineering plans for site / civil improvements are reviewed by the City Engineering Department. The City's Engineering Standards (accessible at https://www.cityofwoodland.gov/543/Engineering-Standards) define the process for approval of improvement plans. This process requires the submittal of improvement plans and/or a final map before approval for construction, and the submittal of both contractor's and engineer's record drawings before final inspection, acceptance, or issuance of a certificate of occupancy. The record drawing files are sent from the Engineering Department to the Engineering Technician in the Utilities Engineering Division of the Engineering Department. The Engineering and GIS Technician are responsible for updating the City's GIS system and associated maps according to the process outlined in **Appendix 4-A**.

In the event that civil improvement plans are not required to be submitted for a simple asset rehabilitation project (i.e., CIPP lining), the Principal Utilities Civil Engineer will email the Information Systems Assistance Center (ISAC) with the project information for the GIS Tech to execute the steps outlined above.

4.1.2 Field Revisions of Master Sewer Collection System Mapping

Electronic versions of the sewer collection system GIS map are available to City staff through the City computer network. Field staff have access to electronic versions of the City maps that they can view and edit in the field based on field inspections. Field edits to GIS maps are performed using GPS devices to adjust spatial locations, which are then transferred to the City CMMS software to provide immediate updates to the City GIS system. Sewer asset attribute information can be updated immediately in the CMMS alone and no longer requires a special GPS device.

4.2 Preventative Operation and Maintenance Activities

A scheduling system and a data collection system for preventive operation and maintenance activities conducted by staff and contractors. The scheduling system must include:

- *Inspection and maintenance activities;*
- *Higher-frequency inspections and maintenance of known problem areas including areas with tree root problems;*
- *Regular visual and closed-circuit television (CCTV) inspections of manholes and sewer pipes.*

The data collection system must document the data from system inspection and maintenance activities, including system areas/components prone to root-intrusion potentially resulting in system backup and/or failure.

– General Order Attachment D Section 4.2

The City has a robust inspection and maintenance system to ensure the sewer collection system is reliable and regulatorily compliant. The following sections detail the City's sewer collection system inspection, maintenance, and repair program.

4.2.1 Inspection and Maintenance Activities

4.2.1.1 Video Inspection of Sewer Lines

A specialized video camera is passed through the pipes to identify problems (cracks, breaks, roots, etc.) and to develop planned, proactive schedules for maintenance. The City's goal is to video inspect approximately 16.7% of the sewer collection system (excluding laterals) annually, such that the entire sewer collection system is inspected every 6 years. Pipes that have experienced spills, are known to be structurally deficient, or are known to suffer from consistent buildup of debris may be scheduled for CCTV inspection at shorter intervals, as deemed necessary by the City. Some high-priority pipes are also visually inspected on a weekly basis. These inspections are documented on the Weekly Sewer Main Inspection List Form provided in **Appendix 4-B**. CCTV inspections of infrastructure serving new developments are performed during final project inspection and during the final warranty inspection. Protocols for CCTV inspection are documented in the City's Engineering Standards.

The City's Video Inspection Program includes a schedule that divides the collection system into a grid system. The City has a running schedule that details which grids will be inspected each year, and creates a specific weekly segment inspection schedule at the beginning of each year. Currently, the City owns a van equipped with the ITPipes inspection software system. ITPipes can be configured to produce inspection reports using NASSCO PACP methods. The City transfers reports produced by the CCTV crew every week using ITPipes Mobile into the City's CMMS and ITPipes Web database. All City staff involved with the CCTV inspection process are NASSCO trained and certified.

4.2.1.2 High-Velocity Cleaning of Lines

Pipelines are flushed to remove obstructions, maintain flow capacity, and prevent blockages. The work requires specialized equipment to clean the line back to a manhole and then vacuum the debris out. System capacity issues, odors, and blockages are likely to occur, and vectors can be drawn to the area if lines are not cleaned. The City's goal is to clean the entire sewer collection system (excluding laterals) every 5 years. The actual frequency of cleaning for each pipe will depend on CCTV inspection observations and spill/emergency event data, with priority pipes receiving more frequent cleanings. Maintenance crews currently have a weekly sewer main cleaning list (see **Appendix 4-C**) and a quarterly cleaning list (see **Appendix 4-D**) for priority pipelines subject to debris accumulation or blockages.

Typically, any pipeline that experiences a spill or blockage is placed on the quarterly cleaning list. Pipelines may also be placed on either the weekly or quarterly cleaning lists at the discretion of the Senior Utilities Maintenance Worker based on field observations reported by Utility Maintenance Workers or work order data. Pipes may be removed from cleaning lists by the Senior Utilities Maintenance Worker if Utility Maintenance Workers observe minimal debris being removed from the lines during consecutive cleanings over the period of one year.

4.2.1.3 Dye Testing

Dye testing is performed in the event that CCTV inspection cannot pinpoint sources of identified inflow and infiltration (I&I) into the sewer collection system or to verify connections to the sewer collection system. Dye testing involves introducing a non-toxic dye to a water source that is suspected to be connected to the sanitary sewer collection system. The downstream manhole in the collection system is monitored for dye presence. If the dye is observed in the downstream manhole, it indicates a connection to the system. In the event that an unwanted connection or infiltration of the system is identified, the City's code enforcement department would be notified.

4.2.1.4 Root Control

Tree roots growing into the main lines and blocking the wastewater flow are removed via mechanical methods (e.g., rodding). Problem areas are identified by CCTV inspection and the frequency of root removal for each pipe is set based on observations made during inspections, the occurrence of blockages due to root buildup, or contractor recommendations.

4.2.1.5 Manhole Inspection and Repair

Manholes are visually assessed in conjunction with periodical preventative maintenance. Minor structural deficiencies are repaired by Utility Maintenance Workers, and large problems are addressed by nomination to the City CIP list. Manhole repairs may also be included and scheduled in the operation and maintenance budget for any given year. Typically, manhole repairs will be completed during rehabilitation or replacement of adjacent pipelines.

4.2.1.6 Clean-out Program

A City clean-out installation program was implemented in 1996 in response to problems of sewage backing up in homes and businesses. Since 1990, all newly constructed homes are

required to have a cleanout. Sewer lateral clean-outs on homes older than 1990 are installed on an as-needed basis on the City's lateral and are only constructed on a public utility easement (PUE) or City property to promote future access. Clean-outs are routinely installed in conjunction with street overlay and reconstruction projects.

4.2.1.7 Sewer Lift Station Inspection and Maintenance

The City's two sanitary sewer lift stations (Gibson Ranch and Spring Lake) are continuously monitored by the WPCF SCADA system. Alarm set points are set up in the event a station malfunctions or a power failure occurs. The SCADA will call the on-call WPCF Operator to respond to the alarm condition. On a daily basis the WPCF Operators inspect the lift station pumps and control panels, and in the case of Spring Lake lift station, inspect the back-up generator as well. The Gibson Ranch lift station is served by a portable generator in the event of a sustained power failure.

The City Electrical Department conducts lift station inspections quarterly and performs preventative maintenance annually. The submersible pumps are inspected semi-annually and repaired as called out in the O&M manuals. The Spring Lake lift station O&M manuals are stored on-site and at the WPCF. The Gibson Ranch lift station O&M manuals are stored at the WPCF. The Gibson Ranch lift station has one pump on bench stock. In the event of a pump failure the failed pump can be removed and the new pump put in its place the same day. The pumps can be rebuilt when needed and only need to be replaced when there is a catastrophic failure. The Gibson Ranch lift station pumps were replaced in 2007. The Spring Lake lift station was brought online in December 2005, and its pumps were replaced most recently in 2024.

Lift station maintenance work is documented in the CMMS to track past maintenance and scheduled preventative maintenance work. Also, logbooks are kept on-site and signed by the WPCF Operator during the daily inspections. An example lift station maintenance log is included in **Appendix 4-E**.

4.2.2 Repair/Replacement Activities

4.2.2.1 Sewer Main Line Repairs/Replacements

Sewer main line repairs and replacements are done in response to video inspection and emergency call data. Video inspection results are reviewed by the Chief Collection System Operator, Senior Utility Maintenance Worker, and the Utility Maintenance Worker III/IV. A list of rehabilitation and replacement projects are developed by the Principal Utilities Civil Engineer. This list is incorporated into the City's internal planning documents. The structural condition, location, and accessibility of the pipe determine whether assets are repaired in place or replaced completely. Marginal asset repairs in areas that are ready for street reconstruction or slurry-sealing are commonly performed in advance of these projects if possible. The City uses GIS information available from other City departments to coordinate sewer repairs and replacements with other City infrastructure projects where feasible.

4.2.2.2 Sewer Lateral Repairs

The City owns the lower sewer lateral from the property line to the mainline in the public right-of-way. The customer owns the upper sewer lateral from the building to the property line.

Laterals are inspected in conjunction with street overlay projects and preventative maintenance duties. Any laterals that are either found to be structurally deficient or are constructed of Orangeburg are removed and replaced with current City standards during re-construction of the street or O&M repairs. Repairs of laterals are also performed in response to emergency calls.

The City developed a program that started cured-in-place pipe (CIPP) lining laterals at risk of root intrusion instead of foaming laterals, a quarterly preventative maintenance task for staff to negate root intrusion but did not have a lasting impact compared with CIPP lining, reducing lateral spills in the City.

4.2.3 Maintenance Management

All preventative maintenance activities are scheduled with asset-specific frequencies determined by condition assessment data from CCTV inspections or historical field data. Regular sewer cleaning and CCTV work is scheduled manually during annual updates to the City's written cleaning and CCTV programs, in order to maintain the City's goal of a 5-year cleaning and 6-year CCTV inspection cycle. A PM scheduler within CMMS has been established to meet the needs of O&M staff to maintain a PM program.

Utility Maintenance Workers use the following strategy to schedule and document preventative maintenance work:

1. Maintain annual scheduling spreadsheets for regular preventative maintenance activities.
2. When preventative maintenance work is performed, the affected assets are documented in work orders. Work orders are closed when the preventative maintenance is complete.
3. As field work is performed and observations are made, manually add or remove assets from regularly scheduled maintenance spreadsheets, as necessary.
4. Quarterly, review the scheduling spreadsheets to determine areas where more focus may be required to complete scheduled work.
5. Annually, run a report in the CMMS database to identify locations that have experienced repeat spills.

The CMMS is also used to document all un-planned service calls and spill responses. In addition, all CCTV inspection report data can be accessed via the CMMS database and the City's GIS portal.

4.3 Training

In-house and external training provided on a regular basis for sanitary sewer system operations and maintenance staff and contractors. The training must cover:

- *The requirements of this General Order;*
- *The Enrollee's Spill Emergency Response Plan procedures and practice drills;*
- *Skilled estimation of spill volume for field operators; and*
- *Electronic CIWQS reporting procedures for staff submitting data.*

– General Order Attachment D Section 4.3

The City is committed to ensuring all sewer collection system workers, whether City staff or third-party contractors, are knowledgeable of the regulatory requirements associated with the sewer collection system, and are adequately trained to perform work on the sewer collection system. The following sections describe training activities that are implemented by the City.

4.3.1 City Staff Training and Certification

4.3.1.1 General Order and SERP Training

All sewer collection system workers undergo annual refresher training on the requirements of the General Order, the City's SERP, and other trainings pertinent to sewer collection system work, including spill volume estimation. Training is performed in-person and all sewer collections system staff are required to attend and complete a sign-in sheet to document training attendance. Staff who are not present for the training are provided with a separate training session. New sewer collection system staff are trained in the General Order requirements as part of their onboarding process.

Spill Emergency Response Plan trainings are as described in the SERP provided in Appendix 6-A.

4.3.1.2 CIWQS Training

Staff working in the City's CIWQS portal are provided training when they begin work in CIWQS. Additionally, staff are given additional trainings in CIWQS procedures on an as-needed basis and are provided with copies of training materials to use as a reference when performing CIWQS duties.

4.3.1.3 City Employee Certification

The City requires current CWEA certification of all staff involved with the operation and maintenance of the sewer collection system. Required levels of certification are identified within the job descriptions of each position. The City requires staff to regularly attain continuing education units or contact hours to maintain certification. The Public Works Department tracks the certification of all employees. The requirements and certifications held for each position are included in **Appendix 4-F**.

The Public Works Department uses a training management software (TMS) produced by Vector Solutions to document employee training and ensure staff meet training requirements. The TMS provides the utility the following functionality:

- Meets ISO9001/2000 requirements.
- Ability to produce employee training records on demand.
- Ability to generate "Training Needed" reports by Employee, by Specification, and by Department.
- Ability to maintain and print Job Profiles with training requirements.
- Ability to View, Print or Email any Report.

- Manages revisional training and annual certification training.

The TMS software is managed by the Administrative Clerks, who are in charge of inputting training data for all employees. The database stores information including training topics, training administrators, dates, and number of hours. The Administrative Clerks use this information to prepare training reports for each employee to distribute as reminders if any training is required per the schedules established in the TMS software to maintain certifications. An example TMS employee training history log is included in **Attachment 4-G**.

4.3.2 Contractor Training

The City is responsible for the quality of work performed on the sewer collection system. Because the quality of work must be at a consistent and high level, contractors who perform work on the system must be as equally trained as City staff. This applies to contractors who perform routine maintenance, rehabilitate or replace portions of the system, or construct new facilities or assets, among other work. Under Municipal Code Section 13.12.050, contractors are required to hold a professional contractor's license issued by the State of California.

Training requirements for contractors are specifically defined within the standard City contract documents for public works projects. Section E of the standard contract documents, entitled "Legal Relations and Responsibility" includes contractor training requirements. Additionally, contractors who perform work on the sewer collection system, including plumbers, are provided copies of the City of Woodland Standard Details and Construction Specifications of the Engineering Standards (current edition at the time of bidding) and are trained to report spills to City staff, implement spill containment measures, and secure the site in the event of a spill.

4.4 Equipment Inventory

An inventory of sewer system equipment, including the identification of critical replacement and spare parts.

– General Order Attachment D Section 4.4

4.4.1 Sewer Collection System Infrastructure Inventory

The City maintains an active inventory of sewer collection system equipment to promote prompt repairs for any failing equipment. Replacement parts to make point repairs for force main, gravity pipeline, and manhole repairs are stored at the City's Corporation Yard. An active equipment and replacement parts inventory list is maintained so City staff can easily determine if parts are available for repair work or to identify if parts need to be purchased (either for a point repair or inventory restock). The City keeps some replacement parts for lift stations in stock to make routine and emergency repairs. Each lift station has redundant pumping capacity and the Gibson Ranch lift station has a replacement pump on bench stock. Replacement parts for lift stations are kept at the WPCF. Equipment and inventory lists have been developed separately for pipeline/manholes repairs and lift station repairs.

With regard to replacement parts, the City maintains stock of items that may reasonably be expected to fail at a time interval that is significantly less than the service life of the parent equipment or asset. It is neither economical nor necessary for the City to keep replacement parts for every component of every asset owned by the City. The City verifies stocked quantities of all

equipment and replacement parts on the pipeline, manhole, and lift station lists every 3 months, and orders additional stock as needed.

The City has developed a system for determining if a part is "critical," according to the following criteria:

- Complete asset failure will result if the equipment or replacement part is not available (i.e., pipeline / manhole cannot be effectively repaired, or lift station could go out of service).
- The equipment or part cannot be purchased and obtained in less than 2 hours at all times.
- The asset(s) that the equipment or replacement part is used to repair do not have a backup that can easily be put into service if a failure occurs.

If a piece of equipment or replacement part meets all of the above requirements, it is considered a "critical" replacement part because its failure will result in a situation where the restoration of service in an emergency situation would not be expedient. Particular attention is paid to stocked quantities of "critical parts," and critical parts are typically re-ordered as they are used.

4.4.2 Maintenance Fleet Equipment

The fleet equipment inventory includes items such as trucks, vactor equipment, backhoes, and pumps. Fleet Services staff currently uses the FASTER Asset Solutions fleet management system to schedule and document maintenance, repairs, component specification details, and cost data for these vehicles and equipment. The designated code "SSMP" is used to identify equipment managed by FASTER that is used to operate and maintain sewer collection system infrastructure.

The City has an equipment maintenance parts inventory that is tracked by the Equipment Services Clerk through the Fleet Software System. All fleet equipment and replacement parts are stored at the City's Corporation Yard. The inventory is automatically managed through minimum/maximum order quantities based on a set preventive maintenance schedule which is also tracked through the FASTER fleet software system. If and when replacement parts show a trend of failure, those parts are considered "critical replacement parts" and become a standard stocked item in order to prevent anticipated equipment failure and minimize downtime.

4.4.3 Third-Party Equipment

The City has also identified suppliers for equipment either not stocked by the City, or as a backup supplier for existing critical units which may be needed during emergency situations that may occur during all hours. The City has established contact with the following equipment provider that is available 24 hours a day in the case of an emergency:

- Bypass pumping – Rain For Rent, Woodland Office, 390 West Kentucky, (530)-662-1024

In addition, the City has agreements with local government fleets in the City of Davis,

(contact is David Cattaneo, (530) 757-5653), and Yolo County (contact is Ed Medina, (530) 979-4478), to borrow equipment as available and necessary.

5 Design and Performance Provisions

The Plan must include the following items as appropriate and applicable to the Enrollee's system:

– General Order Attachment D Section 5

This SSMP section summarizes the content of the City's current design and construction standards and specifications with respect to sewer collection system infrastructure. The City standards are in place to ensure that all construction is performed in a manner known to the City to produce high quality and uniform results. The maintenance and enforcement of the City standards will ensure the maximum lifecycle for sewer collection system infrastructure and that maintenance crews can efficiently perform O&M or repair activities on similar system-wide components. The standards enforce acceptance criteria for new construction which helps to ensure that no sub-standard components are introduced to the system that will negatively affect future performance. This section fulfills the requirements of the General Order SSMP element 5.

5.1 Updated Design Criteria and Construction Standards and Specifications

Updated design criteria, and construction standards and specifications, for the construction, installation, repair, and rehabilitation of existing and proposed system infrastructure components, including but not limited to pipelines, pump stations, and other system appurtenances. If existing design criteria and construction standards are deficient to address the necessary component-specific hydraulic capacity as specified in section 8 (System Evaluation, Capacity Assurance and Capital Improvements) of this Attachment, the procedures must include component-specific evaluation of the design criteria.

– General Order Attachment D Section 5.1

The City maintains an extensive Standard Specifications and Details manual (accessible at https://www.cityofwoodland.gov/543/Engineering-Standards), most recently updated in 2021. This manual includes engineering design standards, standard construction detail drawings, standard materials and construction methods, and inspection methods for all sewer collection system components.

5.1.1 Updating Procedure for City Standards and Specifications

A major review and update to the City Standards and Specifications is typically completed every 5 years. The latest update to the standards was completed in 2021. The latest version of the Standards and Specifications is circulated to all public works employees involved in the implementation or development of the SSMP, and a period of time is set within which employees may make mark-ups and redlines to the standards and submit their changes to the City Engineer. The City Engineer reviews the changes and produces the final version, which must be approved by the City Council before adoption. Minor updates to the standards are made upon request of relevant City employees, and also must be approved by City Council before adoption.

5.2 Procedures and Standards

Procedures, and standards for the inspection and testing of newly constructed, newly installed, repaired, and rehabilitated system pipelines, pumps, and other equipment and appurtenances.

– General Order Attachment D Section 5.2

The City's Standard Specifications and Details manual describes construction, inspection, and acceptance tests and criteria for new sanitary sewer infrastructure components. CCTV inspections, acceptance tests, factory tests, and field tests are detailed in the manual. Any new work must undergo the testing requirements described in the manual before final acceptance by the City.

6 Spill Emergency Response Plan

The Plan must include an up to date Spill Emergency Response Plan to ensure prompt detection and response to spills to reduce spill volumes and collect information for prevention of future spills. The Spill Emergency Response Plan must include procedures to:

- *Notify primary responders, appropriate local officials, and appropriate regulatory agencies of a spill in a timely manner;*
- *Notify other potentially affected entities (for example, health agencies, water suppliers, etc.) of spills that potentially affect public health or reach waters of the State;*
- *Comply with the notification, monitoring and reporting requirements of this General Order, State law and regulations, and applicable Regional Water Board Orders;*
- *Ensure that appropriate staff and contractors implement the Spill Emergency Response Plan and are appropriately trained;*
- *Address emergency system operations, traffic control and other necessary response activities;*
- *Contain a spill and prevent/minimize discharge to waters of the State or any drainage conveyance system;*
- *Minimize and remediate public health impacts and adverse impacts on beneficial uses of waters of the State;*
- *Remove sewage from the drainage conveyance system;*
- *Clean the spill area and drainage conveyance system in a manner that does not inadvertently impact beneficial uses in the receiving waters;*
- *Implement technologies, practices, equipment, and interagency coordination to expedite spill containment and recovery;*
- *Implement pre-planned coordination and collaboration with storm drain agencies and other utility agencies/departments prior, during, and after a spill event;*
- *Conduct post-spill assessments of spill response activities;*
- *Document and report spill events as required in this General Order; and*
- *Annually, review and assess effectiveness of the Spill Emergency Response Plan, and update the Plan as needed.*

– General Order Attachment D Section 6

The City prepared an updated Spill Emergency Response Plan (SERP) in 2023 in accordance with the General Order requirements. This SERP is provided in **Appendix 6-A**. A spill notification decision tree is provided in **Appendix 6-B**.

7 Sewer Pipe Blockage Control Program

The Sewer System Management Plan must include procedures for the evaluation of the Enrollee's service area to determine whether a sewer pipe blockage control program is needed to control fats, oils, grease, rags and debris. If the Enrollee determines that a program is not needed, the Enrollee shall provide justification in its Plan for why a program is not needed.

The procedures must include, at minimum:

- *An implementation plan and schedule for a public education and outreach program that promotes proper disposal of pipe-blocking substances;*
- *A plan and schedule for the disposal of pipe-blocking substances generated within the sanitary sewer system service area. This may include a list of acceptable disposal facilities and/or additional facilities needed to adequately dispose of substances generated within a sanitary sewer system service area;*
- *The legal authority to prohibit discharges to the system and identify measures to prevent spills and blockages;*
- *Requirements to install grease removal devices (such as traps or interceptors), design standards for the removal devices, maintenance requirements, best management practices requirements, recordkeeping and reporting requirements;*
- *Authority to inspect grease producing facilities, enforcement authorities, and whether the Enrollee has sufficient staff to inspect and enforce the fats, oils, and grease ordinance;*
- *An identification of sanitary sewer system sections subject to fats, oils, and grease blockages and establishment of a cleaning schedule for each section; and*
- *Implementation of source control measures for all sources of fats, oils, and grease reaching the sanitary sewer system for each section identified above.*

– General Order Attachment D Section 7

The accumulation of fats, oils, and grease (FOG) and other pipe-blocking substances within the City's sewer collection system has historically been a cause of problems such as spills. The City determined that a FOG control program is necessary and established a program under the direction of the Environmental Compliance Specialist. The City's FOG control program is detailed in this section.

7.1 Public Education and Outreach Program

The FOG control public education and outreach program aims to educate, inform, and encourage the public to properly handle and dispose of FOG and other pipe-block substances. An integral component of a successful FOG program is a public education and outreach program effectively targeted at the largest contributors of FOG to the collection system. Sources of FOG are identified within the City sewer collection system through periodic surveys. These sources are categorized into industrial/commercial sources, which include food service establishments (FSEs) and automotive related businesses (ARBs), and residential sources. The public education

and outreach activities associated with these FOG sources are described in the subsequent sections.

7.1.1 Industrial / Commercial FOG Disposal Education

As part of its Industrial Pretreatment Program (IPP), the City has a business outreach program that, like the IPP in general, is focused on significant industrial users (SIUs) and does not address the minor contributors such as small businesses, FSEs, and residential users. The outreach program for FSEs and ARBs is handled primarily through the annual visits made during inspections conducted under the City's Pollution Prevention Program. During these visits, permit requirements, including best management practices (BMPs), are reviewed and informational materials (e.g., laminated flyers) are distributed (see **Appendix 7-A**).

7.1.2 Residential FOG Disposal Education

General education of residential users for the proper disposal of FOG and other pipe-blocking substances is conducted at large public events. Every year, the Pollution Prevention Program sponsors informational tables at events such as:

- The Honey Festival on Main Street, held in May
- The Senior Community Resource Fair at the Woodland Community Center

Additionally, general educational ads or press releases are run in the newspaper, on television, distributed in utility bill inserts, on social media platforms, and on the City's website. Large scale public outreach is typically conducted during the holiday season when grease production is the highest. Example flyers, ads, activity descriptions, and other materials used during these public outreach activities are documented and filed appropriately as they occur. Public outreach efforts are documented as work orders using the CMMS. In addition, the City has developed a Pollution Prevention Program web page which describes oil and grease disposal best management practices for residential users.

In addition to general public education, targeted public education is conducted at select locations that have been identified by sewer collections system staff as potential heavy FOG sources based on the problem pipes list. The Environmental Compliance Inspector typically makes contact with the owner of the homes or apartment complexes and distributes notices that describe the problems being encountered by sewer collections system staff, the potential for continued improper disposal of FOG materials to cause sewer blockage and backup into residences, and methods and options for proper disposal. Other materials that may be distributed during these visits include:

- Grease scraping tools
- Door hangers and flyers
- Potholders
- Reusable shopping bags

For large multi-family areas, the Environmental Compliance Inspector typically asks the property managers to distribute the materials to their tenants. The Environmental Compliance Inspector may make repeat efforts to distribute information or even request a public presentation

if sewer collection system staff continue to report problems with FOG buildup in downstream sewer lines.

7.2 FOG Disposal

Ensuring proper FOG disposal is key to preventing it from entering the sanitary sewer collection system. The City requires that food service establishments regularly clean grease traps and interceptors and properly dispose of the grease per their PPP permit. The BMPs outlined in each PPP permit outline the frequency for the cleanings and refer the permit holder to contractors that provide professional grease trap or interceptor cleaning services. Currently the City has not officially licensed or certified a group of contractors to perform cleaning and grease removal.

The BMPs also give recommendations for the proper disposal of the collected grease and outline the procedures to follow if grease should accidentally be disposed of improperly. This information is provided to businesses as a resource to help ensure proper disposal of FOG. Residents are also instructed on the proper disposal of household grease through various public outreach efforts previously described.

7.3 Legal Authority

The City's municipal code gives the City the legal authority to prohibit FOG discharges. This legal authority is primarily covered by Section 8.04, Wastewater Discharge and Treatment, of the City municipal code. Particularly relevant City municipal code sections are listed below.

- Section 8.04.080 – General discharge prohibitions
- Section 8.04.090 – Interceptors required
    - This section includes design and construction standards for interceptors.
- Section 8.04, Article 5 – Reporting and Sampling Requirements
- Section 8.04.510 – Inspection and sampling
    - Gives the City the legal authority to inspect facilities
- Section 8.04, Article 6 – Enforcement and Penalties

Additional information and requirements associated with FOG discharges are included in the City's IPP and PPP, which allow the City to exhibit additional legal authorities and oversight to SIUs and businesses that have been identified as major FOG discharges. Example BMPs for FOG producing facilities are included in **Appendix 7-B**.

7.4 FOG-Related Sewer Collection System Inspections and Cleanings

Based on spill records, CCTV surveys, inspection and maintenance records of grease removal devices, and institutional knowledge of employees, the City has identified a list and map of known areas in the sewer collection system that are subject to blockages. Sections of the system that have had or are prone to FOG-related problems are identified on the regularly scheduled pipeline cleaning list. The City also maintains a GIS map of the regularly scheduled cleaning routes with symbolized layers for pipes that are cleaned at various frequencies, and are subject to documented FOG buildup. This list and cleaning schedule, as well as the GIS map reside on the

City server so that it is accessible to relevant City staff, since multiple departments collaborate to track and minimize FOG-related problems. The list and map of hot spots contains the following pertinent information:

- Upstream manhole identification tag
- Downstream manhole identification tag
- Asset Information (pipe size, pipe material, pipe install date)
- Comments (cause of blockage, identified as FOG if applicable)

The City prescribes the following maintenance activities for hot spots in an effort to minimize the risk of spills in those areas:

- Weekly Sewer Main Visual Inspections – The City maintains a list of troublesome sewer mains that are visually inspected every week to ensure blockages are not imminent. The list has fields that contain the location, manhole numbers, comments, and a checkbox for when the inspection is completed.
- Weekly & Quarterly Sewer Main Flushing - The City maintains a list of problematic sewer mains that are to be flushed every week to clear FOG and debris that may cause blockages. There is also a list for mains that are flushed quarterly which experience consistent blockages but at a lesser rate than the lines on the weekly flushing list. Both lists contain fields for a description of the location, manhole numbers, comments, and a checkbox to indicate the flushing has been completed.
- CCTV Inspection - Apart from the regularly scheduled inspections previously described, the City inspects sewer mains immediately following spills to determine the cause of the blockage. Correctly identifying the cause is essential to allow continuous updating of the weekly and quarterly sewer cleaning routes.

The availability of GIS data for PPP permit holders and priority inspection and cleaning routes helps to increase the amount of data that is shared between the Environmental Compliance and Sewer and Storm Drain divisions. Additionally, this GIS map is updated every 6 months with any changes to the cleaning/inspection routes or new PPP permit holder information.

7.5 Source Control Measures

The City's primary means of FOG source control is through the means already discussed in this section (i.e., public outreach and education, wastewater discharge codes and requirements, and the IPP and PPP).

Additionally, the City has implemented post-inspection procedures to ensure any FOG sources are efficiently and adequately addressed. During an inspection, the Environmental Compliance Inspector fills out a standard inspection form summarizing the results of all grease trap or grease interceptor inspections. As part of completion of the form, the inspector must identify if there is reason to believe that any identified deficiencies of the pretreatment device are causing or may have caused in the past an excessive discharge of fats, oils, or grease to the sewer collection system. If this inspector believes this to be the case, the inspection report must be forwarded by email to the Utilities Maintenance Division. Sewer collection system maintenance staff can then

conduct a follow-up investigation as a preventative measure to identify if FOG buildup has occurred downstream.

Further, the Utilities Maintenance Division staff have an “Inspection Request Form” which can be forwarded by email to the Environmental Compliance Inspector(s). This form is used if Utilities Maintenance staff identify, via routine inspection and maintenance, pipe segments that are severely impaired by FOG blockage and feel that commercial or industrial dischargers may not be complying with their discharge permits. The Utilities Maintenance staff may describe the location and type of blockage, and list PPP permit holders that are upstream according to GIS maps. Once the Environmental Compliance Inspector receives the request and conducts an inspection, they will forward the completed inspection form back to the Utilities Maintenance staff who submitted the request so that they can see the results of the inspections and know if any corrective or enforcement actions were taken. This communication protocol helps to identify sources of excessive FOG discharges so that they may be controlled before they have the potential to cause spills. Additionally, Utilities Maintenance staff will place problem area pipelines on appropriate regular flushing schedules depending on the severity of the problem encountered. Pipelines will also be added to the appropriate flushing schedule GIS layer for easy visual identification.

8 System Evaluation, Capacity Assurance, and Capital Improvements

The Plan must include procedures and activities for:

- *Routine evaluation and assessment of system conditions;*
- *Capacity assessment and design criteria;*
- *Prioritization of corrective actions; and*
- *A capital improvement plan.*

– General Order Attachment D Section 8

This section of the SSMP describes the ongoing use of the City's hydraulic model of the sewer collection system to identify assets that will not have the capacity to convey design flows during peak dry and wet weather flows now and in the future under ultimate buildout of the City's General Plan land use designations. The City has used the hydraulic model in the past to identify CIPs in the latest Wastewater Collection System Master Plan (2000), and continues to update the model with the completion of new developments and new capital projects to identify any future capacity issues. The hydraulic model was updated in April 2019 as part of the General Plan Scenario Wastewater Hydraulic Review. The City also constructed a major upgrade to the WPCF primarily to improve solids handling capacity. The Wastewater Collection System Master Plan no longer needs to be updated due to routine CCTV inspections and hydraulic model updates.

8.1 System Evaluation and Condition Assessment

The Plan must include procedures to:

- *Evaluate the sanitary sewer system assets utilizing the best practices and technologies available;*
- *Identify and justify the amount (percentage) of its system for its condition to be assessed each year;*
- *Prioritize the condition assessment of system areas that:*
    - *Hold a high level of environmental consequences if vulnerable to collapse, failure, blockage, capacity issues, or other system deficiencies;*
    - *Are located in or within the vicinity of surface waters, steep terrain, high groundwater elevations, and environmentally sensitive areas;*
    - *Are within the vicinity of a receiving water with a bacterial-related impairment on the most current Clean Water Act section 303(d) List;*
- *Assess the system conditions using visual observations, video surveillance and/or other comparable system inspection methods;*
- *Utilize observations/evidence of system conditions that may contribute to exiting of sewage from the system which can reasonably be expected to discharge into a water of the State;*

- *Maintain documents and recordkeeping of system evaluation and condition assessment inspections and activities; and*
- *Identify system assets vulnerable to direct and indirect impacts of climate change, including but not limited to: sea level rise; flooding and/or erosion due to increased storm volumes, frequency, and/or intensity; wildfires; and increased power disruptions.*

– General Order Attachment D Section 8.1

Through the inspection procedures and recordkeeping identified previously in this SSMP, the City is able to identify problem areas in the sewer collection system and determine if the system conditions are worsening and in need of repair/replacement. These assessments are facilitated by the use of the ITPipes software, which tracks maintenance and repair records, allowing the City to easily identify areas of the sewer collection system that are in worsening condition. Specific condition assessment protocols for pipeline and manholes are described further in the following sections.

8.1.1 Pipeline Condition Assessment Protocol

The City uses the ITPipes Web software and CCTV inspection reports to determine which pipes have a high risk of failure in the sewer collection system. Assets that pose the greatest risk of failure to the City are those that are considered most likely to fail in the near future and will result in the costliest response. The condition of a pipe is assessed by looking at the number of defects the pipe has, as well as the grade-level of the defects as determined during the CCTV inspections. Assets are considered more likely to fail in the near future and costlier to respond to as the number of defects increase and the grade-level of the defects are higher. Assets with the highest risk of failure are given the highest priority in terms of preventative maintenance or rehabilitation/replacement activities. Defect grades (1-5) are calculated for each asset based on CCTV condition assessment results using NASSCO PACP methodology. Every observation made during a CCTV inspection using NASSCO PACP methodology is classified as a structural, O&M, or miscellaneous observation. Additionally, every structural or O&M observation code is associated with a 1-5 “grade”, with a grade 1 observation representing less severe defect types and a grade 5 observation representing the most severe defect types. For each CCTV inspection, a database of all recorded structural and O&M defects and the associated grades of each observation is generated.

Pipes that are in deteriorated structural condition (e.g., cracks, corrosion, or collapse) and/or have O&M-related defects (e.g., FOG buildup or root intrusion) are more likely to experience a structural or service failure that results in a spill, and therefore present a higher risk to the City. These pipes that present a higher risk to the City will be prioritized for preventative maintenance or rehabilitation/replacement activities.

8.1.2 Manhole Condition Assessment Protocol

The City completes manhole inspections on an 8-year cycle in conjunction with CCTV inspection. Utility Maintenance staff document manhole condition assessment using the standard ITPipes manhole inspection form which employs NASSCO Manhole Assessment and Certification Program (MACP) methodology. The data captured in ITPipes can be stored in the CMMS database and linked to manhole assets in GIS. Typically, unless severe manhole condition issues are identified, manhole repairs are either conducted as needed internally by City

crews or scheduled for repair as part of pipeline rehabilitation or replacement projects. Corroded manholes, flat bottom (no channelization) manholes and brick manholes are priorities for repair. In the case that significant manhole repairs are required based on condition assessment results apart from pipeline projects, a capital improvement project is generated and prioritized based on MACP condition rankings and case-specific issues with pipeline projects using the risk of failure prioritization process.

8.2 Capacity Assessment and Design Criteria

The Plan must include procedures to identify system components that are experiencing or contributing to spills caused by hydraulic deficiency and/or limited capacity, including procedures to identify the appropriate hydraulic capacity of key system elements for:

- *Dry-weather peak flow conditions that cause or contributes to spill events;*
- *The appropriate design storm(s) or wet weather events that causes or contributes to spill events;*
- *The capacity of key system components; and*
- *Identify the major sources that contribute to the peak flows associated with sewer spills.*

The capacity assessment must consider:

- *Data from existing system condition assessments, system inspections, system audits, spill history, and other available information;*
- *Capacity of flood-prone systems subject to increased infiltration and inflow, under normal local and regional storm conditions;*
- *Capacity of systems subject to increased infiltration and inflow due to larger and/or higher-intensity storm events as a result of climate change;*
- *Increases of erosive forces in canyons and streams near underground and above-ground system components due to larger and/or higher-intensity storm events;*
- *Capacity of major system elements to accommodate dry weather peak flow conditions, and updated design storm and wet weather events; and*
- *Necessary redundancy in pumping and storage capacities.*

– General Order Attachment D Section 8.2

8.2.1 Sewer System Hydraulic Models and Analysis

The Utilities Engineering Division Associate Civil Engineer is responsible for the use of the sewer collection system hydraulic model. The original model was a System Analysis Module (SAM) developed by CH2MHill in 1986 that was created to model dry and wet weather peak flows based on existing City zoning and the City General Plan land uses at the time. The most recent hydraulic model update models the present-day system based on existing land uses and also models the system at buildout (year 2035), which is based on the City's 2035 General Plan, adopted by Resolution No. 6836 on May 16, 2017, as wells as projected future land uses and population. The updated hydraulic model identified pipes that will surcharge under peak dry and wet weather flows for existing conditions and ultimate buildout (2035) scenarios.

The City enlisted consulting services for development of a General Plan Scenario Wastewater Hydraulic Review in 2018. The consulting services provided included:

- Use of the City's sewer system GIS data to compile an ArcGIS based hydraulic model using Innovyze InfoSewer.
- Identification of gaps in City GIS data (missing pipes, manholes, elevation data, etc.) where field data needs to be collected, or assumptions can be made to allow the hydraulic model to run.
- Review of all available land use data.
- Refinement of existing and future build-out land use GIS map layers following data review and analysis of aerial photography.
- Dry weather flow monitoring at Kentucky, Gibson, and Beamer Street trunk sewers to quantify existing dry weather flows.
- Development of sewer generation rates for all utilized land use designations, and calibration with dry weather flow monitoring.
- Compilation of a dry weather hydraulic model in InfoSewer to locate any areas of hydraulic deficiency under existing conditions and future development scenarios.
- Development and implementation of a system-wide flow monitoring program to develop wet weather flow parameters.
- Compilation of a wet weather hydraulic model in InfoSewer to locate any areas of hydraulic deficiency under existing conditions and future development scenarios.
- A General Plan update including recommended capital projects associated with the various hydraulic model scenarios consistent with the City's desired level of service and to prevent spills.

8.2.1.1 Implementation of General Plan Scenario Wastewater Hydraulic Review Recommendations

The General Plan Wastewater Hydraulic Review did not identify any significant capacity issues of concern (e.g., surcharging resulting in spills) for the existing sewer collection system infrastructure, and does not recommend the upsizing of any pipes in the sewer collection system to meet 2035 buildout capacity requirements, including the main trunk sewers (Kentucky, Beamer, and Gibson) that convey wastewater to the WPCF. A future update to the Wastewater Collection System Master Plan will include the recommended improvements from the General Plan Wastewater Hydraulic Review. However, the Master Plan notes that surcharging occurs in 2035 peak wet weather conditions in the East Street, Kentucky, and Gibson trunk lines in the current sewer collection system configuration. The report finds that the contributing area (downtown) for the East Street trunk line is mostly built out, and that the peak wet weather surcharging that occurs both now and during the 2035 model year is acceptable. It should be noted that the Wastewater Collection System Master Plan was last updated prior to water conservation efforts across California and a doubling of the City's water rates. These factors have contributed to a reduction in water usage within the City, which has had a similar effect on

sewer flows. The City has also done extensive work to reduce I&I to the sewer collection system, resulting in a reduction in peak wet weather flows.

The Wastewater Collection System Master Plan recommends that future areas of development in the northeast portion of the City have sewer service which connects into the Beamer trunk (shown to have some level of excess capacity) instead of the Kentucky trunk, and that future areas of development in the southern portion of the City have sewer service that connects directly to the WPCF through a newly constructed trunk line instead of connecting into the Gibson trunk line. These recommendations were made to prevent further surcharging of the existing Gibson and Kentucky trunk lines, minimize the possibility of a capacity-related spill, and help the City avoid having to upsize the Gibson and Kentucky trunk lines.

The General Plan Wastewater Hydraulic Review included flow monitoring that was successful in capturing data during dry periods to accurately calculate groundwater infiltration from each designated sub-basin of the sewer collection system. Rainfall inflow was determined by comparing historical flow monitoring data at the WPCF versus recorded rain events, and a system wide I&I versus rainfall relationship was determined. For the purposes of hydraulic modeling, system wide rainfall inflow was evenly distributed to all manholes throughout the system.

8.2.1.2 Ongoing Sewer System Hydraulic Model Updates and Use

Although the sewer collection system has never experienced a capacity related spill, the City endeavors to maintain an up-to-date system capacity model to ensure that future changes including alterations of sewer collection system infrastructure, the addition of new developments, and land use changes approved in specific plans and General Plan updates are accounted for. The sewer collection system hydraulic model is updated on an as-needed basis to accommodate these changes and identify their effect on the sewer collection system.

8.2.1.3 Flow Monitoring

The City has implemented periodic flow monitoring of the sewer collection system as follows:

- System wide flow monitoring is conducted every 5-10 years, or in conjunction with any Master Plan update with the purpose of quantifying and tracking I&I over time and identifying areas of excessive I&I
- Permanent wet weather flow monitoring is monitored on the City's main sewer trunk lines upstream of the WPCF
- Targeted flow monitoring is conducted as-needed for the following purposes:
    - evaluate the effectiveness of rehabilitation/replacement projects in reducing I/I (using before and after flow monitoring)
    - monitor and confirm additional sewer flows contributed by new developments, residential densification projects, or changes to existing commercial/industrial uses
    - monitor "trigger points" at which flows in assets targeted for a future capacity-related CIPs according to the Master Plan reach the limit where implementation of the project is required due to additional upstream flow contributions

8.3 Prioritization of Corrective Action

The findings of the condition assessments and capacity assessments must be used to prioritize corrective actions. Prioritization must consider the severity of the consequences of potential spills.

– General Order Attachment D Section 8.3

As previously discussed, the City utilizes an asset condition grading system to establish priority for corrective actions. The assets with higher condition grades are given higher priority for repair/replacement than those with lower condition grades. Additionally, the City's FOG control program is able to identify areas of the sewer collection system that are prone to blockages, which, when combined with condition grades issued via inspection reports, are then given a higher priority due to the potential for a spill if corrective actions are not taken. Further, CIPs are developed based on asset condition and capacity to prioritize those assets in greater need of repair/replacement.

8.4 Capital Improvement Plan

The capital improvement plan must include the following items:

- *Project schedules including completion dates for all portions of the capital improvement program;*
- *Internal and external project funding sources for each project; and*
- *Joint coordination between operation and maintenance staff, and engineering staff/consultants during planning, design, and construction of capital improvement projects; and Interagency coordination with other impacted utility agencies.*

– General Order Attachment D Section 8.4

The City integrates capacity driven capital improvement projects into a comprehensive capital improvement plan which includes condition driven projects that are prioritized based on the rating system described previously in this SSMP. Pipelines that are determined to cause a spill or "unacceptable" levels of surcharging during existing dry or peak wet weather conditions according to the hydraulic model are scheduled for improvement within the most rapid timeframe possible, regardless of the risk of failure rating assigned as part of the condition assessment process. Capacity-related spills are capable of causing large and possibly repetitive spills if not addressed quickly. Any necessary capacity-related improvements that are identified by wastewater hydraulic model updates under existing conditions will be integrated immediately into the short-term capital improvement plan. The timeline for improvements associated with near-term (5-10 years) or full build-out capacity issues is determined based on the pace of development in the areas which are contributing future flows to the asset in question. Improvements associated with near-term and full-build out projects are tentatively scheduled within the capital improvement plan, and project timelines are adjusted as changes to project schedules occur. A map showing the City's sewer collection system capital improvement projects and their associated timelines is provided in **Appendix 8-A**.

8.4.1 CIP Fund Development

The Chief Collection System Operator and Principal Utilities Civil Engineer also incorporate capacity deficiency driven projects (identified by the hydraulic model) into the capital improvement plan. Typically, the timeline for construction of sewer system improvements associated with development is coordinated with the construction schedule for associated development projects, and funding is tied to development impact fees. Any improvements identified by the sewer collection system hydraulic model that are required under existing peak wet weather conditions to prevent capacity related spills are addressed immediately on a rapid timeline regardless of the overall risk of failure determined by defects shown by the ITPipes Web software.

Major lift station repairs and improvements are typically included in the capital improvement plan on timelines according to lift station O&M manual recommendations or WPCF Superintendent recommendations regarding equipment condition and service life. Lift stations are not included in the quantitative defect rating prioritization process and are repaired solely based on WPCF Superintendent recommendation.

The Chief Collection System Operator and the Principal Utilities Civil Engineer annually submit a list of capital improvement projects, project descriptions, and cost estimates to the City Manager, Financial Services Manager, City Engineer, and Director of Public Works, who make up the Capital Projects Committee. Projects are reviewed, and if approved, they are incorporated into the overall City capital improvement plan. The City capital improvement plan is updated annually and lists projects ten years ahead. Each year, the Chief Collection System Operator also submits an operation and maintenance budget, which estimates the funding required to support staffing levels and retain the equipment necessary to perform regularly scheduled maintenance activities. The O&M budget also projects O&M costs ten years ahead based on knowledge of infrastructure expansions identified by the sewer collection system hydraulic model.

Funding for the sewer collection system comes from the sewer enterprise fund (fund 220), which is primarily funded by sewer connection rates. Funds are allocated to support O&M activities and CIPs. Planning level cost estimates for both O&M activities and rehabilitation/replacement projects can be done by comparing bids on similar past projects and determining unit costs for the required rehabilitation/replacement. The unit costs can then be applied to the specifics of the project being planned. The Chief Collection System Operator or Principal Utilities Civil Engineer calculate the projected costs of performing increased frequency O&M activities on at-risk assets that are scheduled for repair or replacement in the future, and incorporates those costs in the overall consideration of project scheduling with respect to budgeting constraints. The Chief Collection System Operator and Principal Utilities Civil Engineer evaluate and estimate available funding, and strategically schedule project bundles so as to best coordinate with funding projections.

The latest rate study, produced in 2021, took into consideration a detailed list of necessary rehabilitation and replacement projects identified by the Chief Collection System Operator and Principal Utilities Civil Engineer, including the O&M budget for repair/replacement of sewer infrastructure by City staff.

9 Monitoring, Measurement, and Program Modifications

The Plan must include an Adaptive Management section that addresses Plan-implementation effectiveness and the steps for necessary Plan improvement, including:

- *Maintaining relevant information, including audit findings, to establish and prioritize appropriate Plan activities;*
- *Monitoring the implementation and measuring the effectiveness of each Plan Element;*
- *Assessing the success of the preventive operation and maintenance activities;*
- *Updating Plan procedures and activities, as appropriate, based on results of monitoring and performance evaluations; and*
- *Identifying and illustrating spill trends, including spill frequency, locations and estimated volumes.*

– General Order Attachment D Section 9

The City has established key performance indicators (KPIs) that are routinely monitored to evaluate utility performance against quantifiable goals. The City has established performance indicators for 24 specific areas, and assigned a specific employee the task of periodically comparing actual utility activities in each area to the benchmarks established within the KPI to rate performance and make recommendations to improve performance. The staff responsible for each indicator is an employee that would naturally be involved with the collection or use of the data required for the KPI before this monitoring program was established, to ensure efficiency in data collection and tracking. The 24 KPI categories are listed below:

- Audits
- CCTV
- CMMS & GIS
- Codes & Ordinances
- Communication Program
- Employee Recognition
- FOG Control
- HVVC
- Mapping
- O&M Budget
- Preventative Maintenance Effectiveness
- Preventative Maintenance Frequencies
- Rehabilitation and Replacement Funds
- Rehabilitation and Replacement Program
- Replacement Parts
- Root Treatment
- SECAP
- Service Requests
- Spill Mitigation
- Spill Prevention
- Spill Response
- Staffing
- Standards Update
- Training

Each KPI category contains performance metrics through which the effectiveness of the City's SSS and SSMP are evaluated. Each KPI is tracked to document specific statistics throughout the year, and ensure that adequate data is being collected to evaluate performance. The data tracked by each KPI is listed on the performance indicator summary table. Much of the data analyzed by the KPIs is tracked within the City's CMMS, CCTV, or GIS databases and requires the production of reports to extract specific data that can be analyzed. Each year, the Associate

Engineer will prepare all of the reports that are required and make them available to the staff responsible for each KPI, who will then use the data to complete a KPI tracking sheet. Each KPI tracking sheet describes the method of data collection for each data indicator.

Annually, staff responsible for a KPI must rate each separate goal for the KPI according to the rating scale established for that goal. The staff record the date that the evaluation was completed on the tracking sheet. As part of the KPI evaluation process, staff make program modification recommendations, which are intended to increase future ratings to at least "acceptable" levels for goals that are below that rating.

The success of the preventative maintenance program is assessed by the evaluation of the following KPIs:

- CCTV Inspection
- GIS/CMMS
- FOG Control Program
- HVVC Activities
- Preventative Maintenance Activities
- Preventative Maintenance Effectiveness
- Spill Mitigation
- Spill Prevention
- Spill Response

All KPI tracking sheets are filed centrally, and reviewed every year as part of the SSMP auditing process by the Chief Collection System Operator. It is during this review process that potential updates to program elements are identified based on the recommendations identified in the KPI tracking sheets and the judgment of the Chief Collection System Operator. Updates to the SSMP will be made under direction of the Chief Collection System Operator on an as-needed basis, or at a minimum of every 6 years.

9.1 Spill Trending

All spill report forms are centrally filed. The staff responsible for the Spill Prevention KPI maintains a spreadsheet which totals annual spills by category (1, 2, 3, and 4) and displays a running bar graph of the historical number of spills per year. Each bar on the bar graph is labeled with the total spill volume for each spill category per year. The staff member also reviews the Spill Event layer within the CMMS that displays the spill locations based on spill work orders. The spill work order includes pertinent information regarding the spill, such as the spill category, volume, cause of spill, and spill volume recovered. This data is analyzed geographically concurrently with other City GIS data to determine if any geographical trends in spills are occurring, and to help identify any geographical or physical factors that may be contributing to those trends. This data is annually reviewed by the Utility Maintenance Division to help drive changes to inspection and maintenance activity frequencies.

10 Internal Audits

The Plan shall include internal audit procedures, appropriate to the size and performance of the system, for the Enrollee to comply with section 5.4 (Sewer System Management Plan Audits) of this General Order.

– General Order Attachment D Section 10

Periodic self-assessment of the City's SSMP is necessary to evaluate the effectiveness of the plan and related activities. Internal audits are an opportunity to review performance and establish changes to SSMP elements that will assist in more effectively meeting the goals of the SSMP. The Associate Engineer, or designee, typically performs annual SSMP audits. These annual audits are then combined into a singular document for the audit time period required by the General Order (3 years). Conducting the internal audits allows the Associate Engineer to assess the program as a whole, determine necessary modifications to the SSMP, and apply those modifications. Further, conducting audits annually, as opposed to tri-annually, allows for identification of any sewer collection system challenges or ineffective aspects of the SSMP to be identified and resolved in an expeditious manner, such that greater challenges do not develop.

The internal audits are focused on meeting the goals of the SSMP. This provides consistency in the efforts of the City in meeting the objectives of the regulatory requirements. Performance relative to these goals is assessed using KPIs previously described. This provides the auditor with sufficient knowledge of the performance of the Utility Maintenance Division in executing SSMP programs, and the effectiveness of those programs. Obtaining this view of the SSMP program allows the auditor to properly evaluate the SSMP's effectiveness.

As the scope and activities of the SSMP evolve over time, the text of the SSMP is modified as needed to reflect those changes. However, at a minimum, the SSMP is updated once every 6 years. An example sanitary sewer management plan audit change log is supplied as **Appendix 10-A**.

11 Communication Program

The Plan must include procedures for the Enrollee to communicate with:

- *The public for:*
  - *Spills and discharges resulting in closures of public areas, or that enter a source of drinking water, and*
  - *The development, implementation, and update of its Plan, including opportunities for public input to Plan implementation and updates.*
- *Owners/operators of systems that connect into the Enrollee's system, including satellite systems, for:*
  - *System operation, maintenance, and capital improvement-related activities.*

– General Order Attachment D Section 11

11.1 Public Communication

This section of the SSMP outlines the elements of the City's plan of communication with the public on spills and the development, implementation, and performance of the SSMP. Communication between the City and various public stakeholders ensures that programs and activities will be both implemented and augmented on an ongoing basis so as to provide a maximum benefit and level of service to stakeholders. The dissemination of information regarding the SSMP and the solicitation of public comment will ensure that potential disputes between the City and various stakeholders are recognized in advance of the implementation of programs or activities affecting stakeholders. Thus, the communication program helps the City and stakeholders to create solutions to disputes and implement SSMP programs with minimal delay and conflict.

11.1.1 Spill Notification

Public notification of spills is handled through the Yolo County Communications office, who will perform notification of the general public on the City's behalf. The City conducts spill reporting as described in the SERP.

11.1.2 SSMP Development, Implementation, and Update Notification

The Management Analyst and IT Technician have been designated by the City as the individuals responsible for coordinating the implementation and operation of the SSMP public communication program. The City website is the most prevalent communication tool used by the City. The City will create a link to the SSMP on the Public Works Department page. This link will feature sub-links to the issues and topics outlined in the communication program schedule, including the SSMP and SSMP Audits.

11.2 Owner/Operator Communications

Any disruptions to operation of the sewer collection system for inspection, maintenance, or capital improvement-related activities are communicated to owners/operators of connected

systems through the Chief Collections System Operator or designee. Communication is typically performed via phone and letter/email informing the owner/operator of the extent of activities being performed and what they can expect while the activities are performed. For Capital Improvement Projects, the project managers (Associate Engineer, Senior Associate Engineer, or contractor project manager) are responsible for public communication. For inspection and maintenance work, the Public Works Management Analyst is primarily responsible for communication with the public.

11.2.1 Satellite Facility Communications

The City does not have any satellite facilities; however, if such a facility exists, the Chief Collection System Operator will contact the utility manager of the facility to make them aware that the facility requires a separate SSMP. The Chief Collection Systems Operator will provide the potential satellite facility with information about the SSMP process, including the purpose of the document, the location of basic information, and how to submit an NOI for coverage under the General Order so that the facilities prepare their own SSMP.

The Chief Collection Systems Operator may create a sewage acceptance or service agreement with the satellite facility, if an agreement or contract is not already in place. The agreement will outline the mutual expectations regarding maintenance, operation, and management procedures specific to the SSMPs used by both the City and the satellite facility and the agreement may establish specific discharge requirements for the satellite facility.

As part of the satellite facility's SSMP or service agreement with the City, a plan of communication between the City and satellite facility will be put into place. The communication plan will consist of the following activities:

- Inclusion of City Public Works contact information in the satellite facility's spill chain of communication so the City is aware of any spills.
- Inclusion in the satellite facility's System Evaluation and Capacity Assurance Plan (SECAP) section of a required review of proposed sewer collection system improvements or expansions by the City's Utilities Engineering Division.
- Annual meeting between the City's Chief Collection System Operator and satellite facility utility manager(s) to review performance indicator tracking results, share strategies for improving performance, or coordinate O&M or FOG control activities.
- The City will keep on-hand the latest version of the satellite facility's SSMP, and the satellite facility will keep a copy of the latest City SSMP. Both agencies will send updated copies when updates occur through the auditing process.

Appendix 1-A

Department of Public Works Mission Statement

CITY OF WOODLAND CALIFORNIA

300 FIRST STREET | WOODLAND, CA 95695 530-661-5962 | CITYOFWOODLAND.GOV

Mission Statement

The mission of the City of Woodland Public Works Department with respect to the wastewater collection system is to protect public health and the environment by providing safe, reliable, and efficient wastewater collection services at a minimum cost to the community of Woodland.

Goals

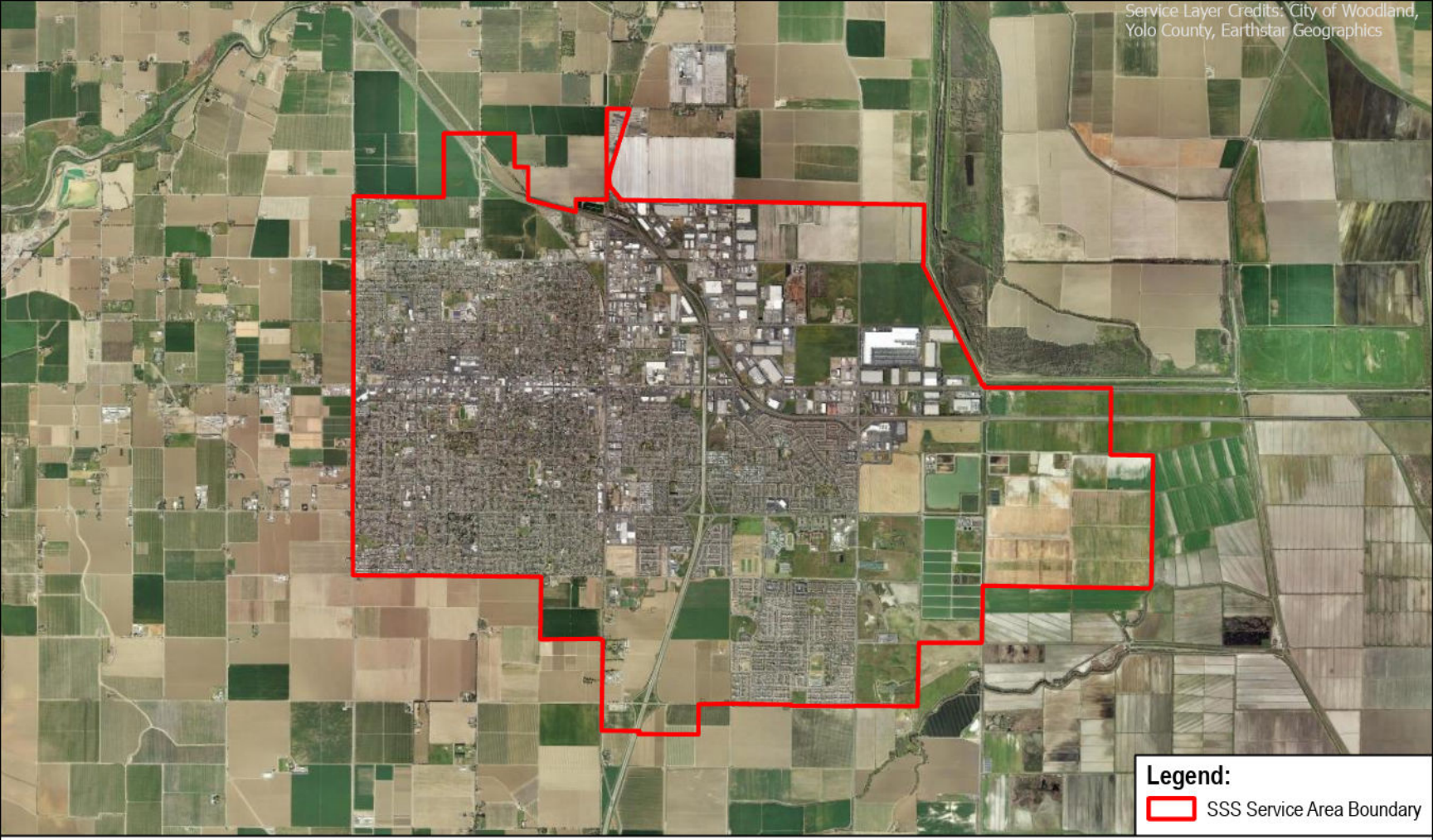
To support this mission, the City of Woodland has established the following goals for its Wastewater Collection System:

1. **Prevent Spills and Mitigate Spill Impacts:**
   Keep the wastewater collection system flowing safely underground to the Water Pollution Control Facility and ensure that only rainwater and approved exceptions go through the stormwater infrastructure. Minimize the occurrence and impacts of SSOs and spills through proactive maintenance, effective operation, and rapid emergency response.
2. **Regulatory Compliance:**
   Maintain full compliance with the Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, including timely reporting, documentation, and implementation of all required SSMP elements.
3. **Asset Management:**
   Implement and maintain an asset management system to assess, prioritize, and plan the maintenance, rehabilitation, and replacement of collection system infrastructure based on condition, risk, and performance data.
4. **Capacity Assurance:**
   Evaluate and ensure that the sewer system has sufficient capacity to convey peak wastewater flows without causing SSOs, particularly during wet weather conditions.
5. **Maintenance and Inspection:**
   Conduct regular, systematic inspection and cleaning of the wastewater collection system to prevent blockages and ensure proper function.
6. **Public and Employee Safety:**
   Protect the health and safety of the public and City personnel with safe practices, appropriate training, and compliance with safety regulations.
7. **Environmental Stewardship:**
   Protect water quality and sensitive environmental resources by preventing untreated wastewater discharges to surface waters, land, and groundwater.
8. **Public Communication and Outreach:**
   Engage the community through outreach and education to promote awareness of proper sewer use and to reduce improper discharges such as fats, oils, and grease (FOG) or non-flushable items.

9. **Emergency Response Preparedness:**
   Maintain and regularly update emergency response plans to ensure timely and effective responses to system failures, spills, or other incidents affecting system performance.
10. **Continuous Improvement:**
    Use performance metrics, audits, and periodic SSMP evaluations to improve program effectiveness, identify opportunities for enhancement, and ensure that goals are being met.

Appendix 1-B

SSS Service Area Boundary Map



SSS Service Area Boundary Map

Sewer System Management Plan
City of Woodland

N

0.00 0.50 1.00 2.00 3.00 4.00

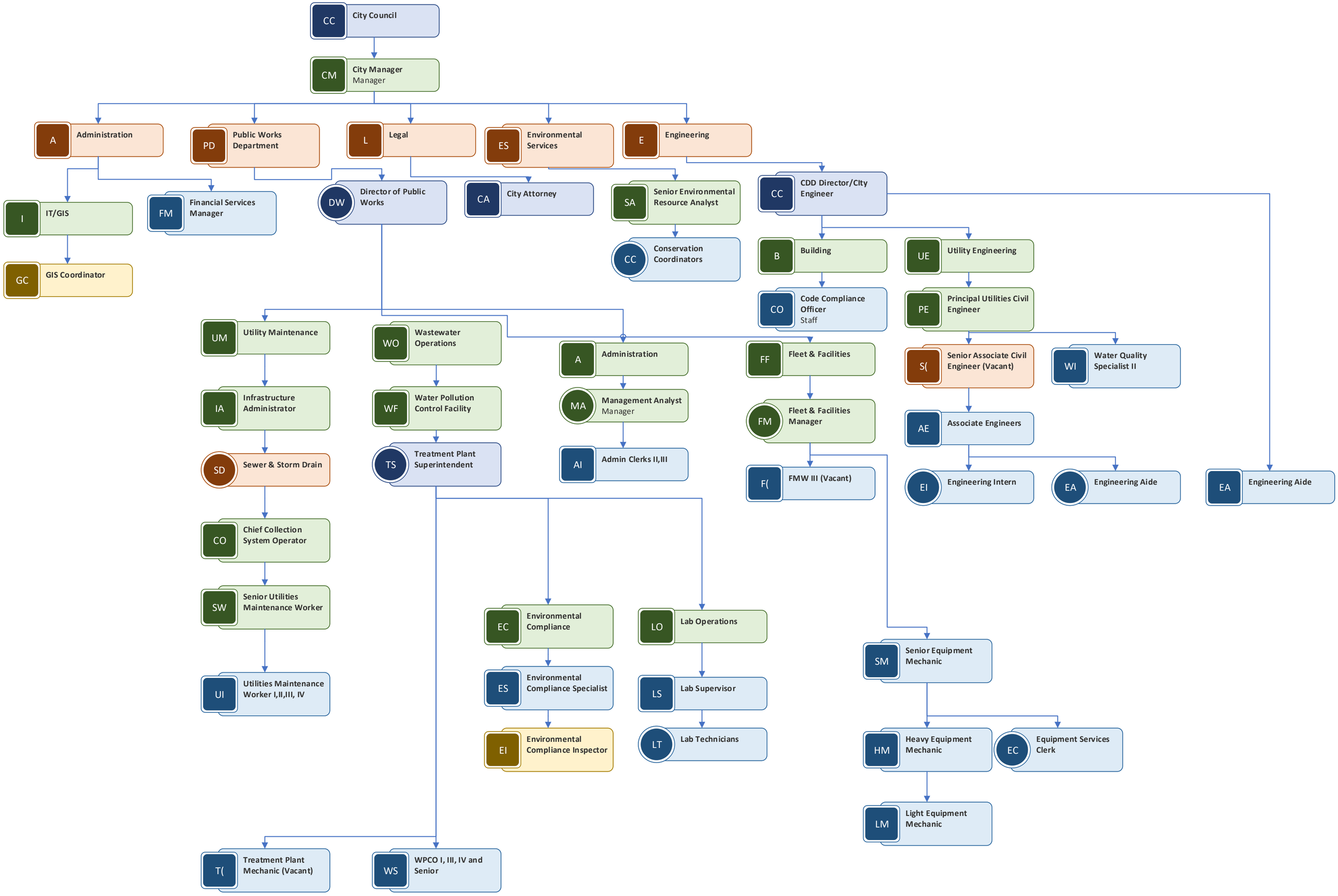
Miles

ROBERTSON - BRYAN, INC.
Solutions for Progress

March 24, 2025

Appendix 2-A

Organizational Lines of Authority


CC
City Council
CM
City Manager
Manager
A
Administration
PD
Public Works Department
L
Legal
ES
Environmental Services
E
Engineering
I
IT/GIS
GC
GIS Coordinator
FM
Financial Services Manager
DW
Director of Public Works
CA
City Attorney
SA
Senior Environmental Resource Analyst
CC
Conservation Coordinators
CC
CDD Director/CIty Engineer
B
Building
CO
Code Compliance Officer
Staff
UE
Utility Engineering
PE
Principal Utilities Civil Engineer
S(
Senior Associate Civil Engineer (Vacant)
WI
Water Quality Specialist II
AE
Associate Engineers
EI
Engineering Intern
EA
Engineering Aide
EA
Engineering Aide
UM
Utility Maintenance
IA
Infrastructure Administrator
SD
Sewer & Storm Drain
CO
Chief Collection System Operator
SW
Senior Utilities Maintenance Worker
UI
Utilities Maintenance Worker I,II,III, IV
WO
Wastewater Operations
WF
Water Pollution Control Facility
TS
Treatment Plant Superintendent
T(
Treatment Plant Mechanic (Vacant)
WS
WPCO I, III, IV and Senior
A
Administration
MA
Management Analyst
Manager
AI
Admin Clerks II,III
EC
Environmental Compliance
ES
Environmental Compliance Specialist
EI
Environmental Compliance Inspector
LO
Lab Operations
LS
Lab Supervisor
LT
Lab Technicians
FF
Fleet & Facilities
FM
Fleet & Facilities Manager
F(
FMW III (Vacant)
SM
Senior Equipment Mechanic
HM
Heavy Equipment Mechanic
EC
Equipment Services Clerk
LM
Light Equipment Mechanic

Appendix 3-A

Pollution Prevention Program Framework

CITY OF WOODLAND
POLLUTION PREVENTION PROGRAM FRAMEWORK

2020

Summary
In 2006, the State issued the Statewide General Waste Discharge Requirements (WDR) for Sanitary Sewer Agencies which required the City of Woodland (City) to submit a Sanitary Sewer Management Plan (SSMP). One important component of the SSMP is a FOG Control Program. The City implements the control of fats, oils and grease through a Pollution Prevention Program, which is a component of our Industrial Pretreatment Program. In addition to the permitting and inspection activities outlined below, PPP activities also include public outreach events such as *From the Pan to the Can* which stresses the importance of keeping residential cooking oil and grease from going down the drain, the annual *Holiday Cooking Oil Recycling Event* which encourages FOG recycling, *Think Before You Flush* which educates residents on items not to flush, and *Only Rain Down the Storm Drain*.

The Pollution Prevention Program focuses on commercial and industrial dischargers that are not regulated under the City's Industrial Pretreatment Program (IPP) but whose wastewater discharges are of concern to the City. PPP regulated businesses are divided into three major groups: Businesses of Concern (BOCs), Food Service Businesses (FSBs), and Automotive Related Businesses (ARBs).

Businesses of Concern (BOCs)

Background
Businesses of Concern are commercial businesses that have the potential to cause problems for the WPCF or the collection system. The IPP also uses this classification to permit and monitor businesses because of complaints or chronic collection system maintenance problems. There are 21 businesses of concern currently permitted in the PPP. See Table 1, below.

Current BOC Permits and Permit Conditions
Each PPP permit issued contains both General and Special Permit Conditions. General Permit Conditions require the discharger (permit holder) to comply with provisions of the Code of the City of Woodland, Chapter 8.04, Section 8.04.080, General Discharge Prohibitions. This section prohibits discharges that could interfere with the operation or performance of the WPCF or could cause the WPCF to be in violation of its NPDES Permit. Section 8.04.080 also lists specific wastewater discharges and practices that are prohibited. An inspection by PPP staff is required at least once a year. Special Permit Conditions tailored to each BOC identify specific actions that the BOC must make to comply with Chapter 8.04 requirements and when more frequent inspections by PPP staff are required. Special Permit Conditions for permitted BOCs are presented in Table 2.

City of Woodland
Pollution Prevention Program Framework
2020

Table 1: Businesses of Concern Permitted Under the Pollution Prevention Program as of 2/2020

Permit Number	Business Name and Street Address	Nature of Business	Reasons for Inclusion in PPP
P001	**Target Distribution Center** 2050 E. Beamer Street	Warehousing and transferring merchandise	Wastewater from truck washing, container washing, and forklift battery washing.
P004	**Prime Conduit** 1776 E. Beamer Street	Manufactures polyvinyl chloride conduit	Flow and pH values of process wastewater.
P005	**Rite Aid Distribution Center** 1755 E. Beamer Street	Warehousing and transferring merchandise	Wastewater from truck washing and container washing.
P006	**Woodland Healthcare** 1325 Cottonwood Street	115 bed hospital and surgical center	Flow. Discharges approximately 11,000 gallons per day.
P007	**Pacific Coast Producers** 1376 Lemen Avenue	Tomato processing and canning	Potential for the discharge of high BOD process wastewater to the sanitary sewer.
P009	**Walgreen's Distribution Center** 2370 E. Main Street	Warehousing and transferring merchandise	Wastewater from truck washing and container washing.
P010	**Interpac Technologies** 260 N. Pioneer Avenue	Culinary oil packaging and distribution	Potential for the discharge of culinary oils to the sanitary sewer.
P011	**Cache Creek Foods** 411 N. Pioneer Avenue	Tree nut product manufacturing and packaging	Potential for the discharge of cooking oils used in the manufacturing process to the sanitary sewer.
P012	**La Tourangelle Inc.** 1253 Commerce Avenue	Culinary oil packaging and distribution	Potential for the discharge of culinary oils to the sanitary sewer.
P013	**Bunge Milling Inc. dba Pacific International Rice Mills** 845 Kentucky Avenue	Rice processing	Potential for the discharge of rice washing process to the sanitary sewer.
P014	**Yolo County Fairgrounds** 1125 East Street	Fairgrounds/Exhibits	Potential for the discharge of animal wastes to the sanitary sewer.

City of Woodland
Pollution Prevention Program
2020

P015	**Hygieia Biological Lab** 1253 Commerce Avenue	Animal Biologics research, development and manufacturing	Potential for the discharge of biologics/pharmaceuticals.
P016	**Boundary Bend Olives** 455 Harter Avenue	Olive Oil Manufacturing	Potential for discharge of oil and olive byproducts.
P017	**American Intl Manufacturing** 1230 Fortna Avenue	Metal Fabrication	Operates a water jet/mineral media cutting system. Waste from instrument is discharged to the sanitary sewer after pretreatment.
P018	**Western Foods** 420 N Pioneer Avenue	Rice Milling	Potential for discharge of rice to storm system.
P019	**Watts Water Technologies** 1485 Tanforan Avenue	Manufacture of valves and fittings.	Flow. Discharges approx. 933 gallons per day.
P020	**San Francisco Spice Co** 1640 Tide Court	Manufacturing of dry foods	Wastewater from equipment washing.
P021	**PGP International** 351 Hanson Way	Manufacturing of grain based ingredients	Discharge of water from process equipment washing.
P023	**Pure Nature Foods** 700 Santa Anita Drive	Manufacturing of dry foods	Wastewater from equipment washing.
P024	**Epic Bros Enterprises** 1230 Harter Avenue	Cannabis Infused Drinks	Potential for discharge of low pH wastewater.
P025	**ProTERP Manufacturing** 1230 Harter Avenue	Volatile extraction of cannabis products.	Potential for discharge of volatile extraction of cannabis products.

Table 2: Special Permit Conditions for Businesses of Concern

Permitted Business Name	Special Permit Conditions
Target Distribution Center	Wastewater from forklift battery washing is discharged to a lime pit for pH neutralization and to an oil and sand separator before final discharge to sanitary sewer The lime pit for pH neutralization is to be maintained pursuant to manufacturer's specifications and the oil and sand interceptor shall be properly maintained. Annual inspection.
Prime Conduit	Permittee is required to monitor flow and pH values on a weekly basis. Inspections occur annually. Annual inspection.
Rite Aid Distribution Center	Requires that all truck and container washing take place on the contained wash pad only. The wastewater is discharged to an oil and sand separator. Prohibits discharge of wash water to storm drain. Requires pre-treatment of all drainage from truck washing area before discharge to sewer. Requires record keeping on operation and maintenance of wash water pretreatment system. Annual inspection
Woodland Healthcare	Inspection annually for changes in operations.
Pacific Coast Producers	During canning season, process wastewater is trucked to drying ponds for land disposal. However, the cannery does maintain a connection the City sewer. This connection is valved off and used only in emergencies. The permit prohibits discharge from the waste separator to City sewer through the connection pipe, except with City permission. Annual inspection.
Walgreen's Distribution Center	Requires that all truck and container washing take place on the contained wash pad only. The wastewater is discharged to an oil and sand separator. Prohibits discharge of wash water to storm drain. Requires pre-treatment of all drainage from truck washing area before discharge to sewer. Requires record keeping on operation and maintenance of wash water pretreatment system. Annual inspection
Interpac Technologies	Requires sewer waste management device (Myers grinder pump) be maintained and cleaned sufficiently such that it operates properly at all times. Follow Best Management Practices for spill cleanup, container cleaning, and storm drain protection. Annual inspection.
Cache Creeks Foods	Requires sewer pretreatment equipment (two hydromechanical grease traps) be maintained and cleaned sufficiently such that they operate properly at all times. Follow Best Management Practices for spill cleanup, container cleaning, and storm drain protection. Annual inspection.

City of Woodland
Pollution Prevention Program
2020

Hygieia Biological Lab	Follow Best Management Practices to prevent discharge of product and raw materials into sanitary sewer system. Annual inspection.
Boundary Bend Olives	Follow Best Management Practices for spill cleanup and storm drain protection. Annual inspection.
American Intl Manufacturing	Requires pretreatment via oil & sand separator to remove mineral cutting media (ground garnet) from waste water. Annual inspection.
Western Foods	Follow Best Management Practices for spill cleanup and storm drain protection. Annual inspection.
Watts Water Technologies	Follow Best Management Practices for spill cleanup and storm drain protection. Annual inspection
San Francisco Spice Co	Follow Best Management Practices to prevent discharge of product and raw materials into sanitary sewer system. Annual inspection.
PGP International	Maintain pretreatment equipment, monitor pH daily, and follow Best Management Practices. Annual inspection.
Pure Nature Foods	Maintain Gravity Grease Interceptor and follow Best Management Practices to prevent discharge of product and raw materials into sanitary sewer system. Annual inspection.
Epic Bros Enterprises	Follow Best Management Practices for spill prevention and cleanup. Annual Inspection.
ProTERP Manufacturing	Follow Best Management Practices for spill prevention and cleanup. Annual Inspection.
La Tourangelle Inc.	Requires sewer pretreatment equipment (one hydromechanical grease traps) be maintained and cleaned sufficiently such that they operate properly at all times. Follow Best Management Practices for spill cleanup, container cleaning, and storm drain protection. Annual inspection.
Bunge Milling Inc. dba Pacific International Rice Mills	Requires proper sanitization of sewer waste management device (Amerivap dry steam vapor sanitizing machine) be maintained and cleaned sufficiently such that it operates properly at all times. Follow Best Management Practices for spill cleanup, container cleaning, and storm drain protection. Annual inspection.
Yolo County Fairgrounds	Prohibits the discharge of animal waste to the City's sewer system and requires daily cleaning when animals are present. Animal waste has to be removed and deposited in appropriate containers. The City monitors that the plugs are in place at the seven (7) locations that have been identified as illicit connections to the City's storm system. Additionally, prohibits the discharge of cooking fats, oils, and grease to the City's sewer system from the exhibit hall kitchens. Several inspections performed during events, especially during the County Fair. Annual inspection.

Food Service Businesses

Background

The intention of permitting FSBs is to reduce the amount of fats, oil and grease (FOG) entering the sanitary sewer system from food preparation and clean-up. Certain sections of sanitary sewer have historically required frequent cleaning due to solidified oil and grease blockages. FSBs in these problem areas are now permitted by the PPP and have installed pretreatment devices. The resulting reduction in FOG has led to a decrease in oil and grease related problems, such as sanitary sewer overflows, fouling of the WPCF head works, and measurable oil & grease in WPCF effluent. At many FSBs, oil and grease that was once poured down sanitary drains is now recycled or disposed of as solid waste. Through the implementation of this program awareness of oil and grease sources and the proper handling of this waste has increased among FSB owners/managers and City staff as well.

FSB Permit Requirements

FSBs permitted under the PPP are required to comply with City's Wastewater Discharge Ordinance and Special Permit Conditions which include but are not limited to the following: Best Management Practices, accurate record keeping of oil and grease recycling and disposal and if appropriate, installation of pretreatment devices to remove oil and grease from food service wastewater discharges. Permit conditions also require PPP staff to inspect FSBs regularly with an objective of yearly inspections. Permits are renewed every five years at a minimum.

- BMPs include, but are not limited to, proper handling of FOG, spill prevention and spill cleanup.

- Pretreatment devices required are either oil and grease traps or hydro-mechanical grease interceptors. The type of device required depends on the type of food served and the food service volume (amount of food prepared and/or served per day).

- Pretreatment devices are required to be properly maintained and records of all waste hauled off site are retained on site for review by the PPP.

FSB Permit Status
There are over 185 permitted FSBs currently operating in the City of Woodland. All are inspected regularly with a target of yearly inspections.

Automotive related Businesses
Background
The intention of permitting ARBs is to reduce or eliminate the introduction of solvents, oils and other hazardous waste fluids related to automotive repair and service to the sanitary sewer system, to lessen the potential to cause interference, upset, or pass-through at the City's WPCF and to enhance the safety of WPCF personnel by reducing the discharge of hazardous materials to the treatment system. ARBs that discharge to the City's sanitary sewer must be connected to an oil/sand separator; those that are not must not have floor drains (except those in restrooms) connected to the sanitary sewer. PPP staff also works with ARBs to educate them on proper storage and management of hazardous wastes.

ARB Permit Requirements
ARBs permitted under the PPP are required to comply with City's pretreatment ordinance and Special Permit Conditions which include but are not limited to the following: Best Management Practices, keeping accurate records of the operation and maintenance of oil/sand separators and if appropriate, installation of pretreatment devices. The permit holder is required to plug all floor drains connected directly to the sanitary sewer except for those located in restrooms. Permit conditions also require PPP staff to inspect the ARB at least once a year; permits are renewed every five years.

- BMPs include but are not limited to the proper handling and disposal of hazardous waste; and chemical use, spill prevention and spill cleanup.

- Pretreatment devices are required to be properly maintained and records of all waste hauled off site are retained on site for review by the PPP.

ARB Permit Status
There are over 46 permitted ARBs currently operating in the City of Woodland. All are inspected regularly with a target of yearly inspections.

City of Woodland
Pollution Prevention Program Framework
2020

PUBLIC OUTREACH

- Since 2009, the Pollution Prevention Program has been a sponsor of Hometown Green, a radio campaign on KUIC, 95.3 FM. KUIC airs daily outreach/educational spots promoting environmentally friendly activities such as: green waste minimization, storm water pollution prevention and best management practices for reducing the discharge of household fats, oils and grease (FOG).

- The PPP holds multiple "on location" radio promotion events with KUIC 95.3 FM during which KUIC airs live pollution prevention messages onsite at the City's Water Pollution Control Facility.

- The PPP distributed its "Pan to the Can" FOG brochures, FOG can lids, potholders, pan scrapers and water bottles, "Wipes Clog Pipes" pens and reusable grocery bags at several community events such as the City of Woodland Senior Resource Fair, Douglas Jr High Career Fair and the City of Woodland Honey Festival.

- The PPP assisted City of Woodland Environmental Services staff at public outreach events such as Woodland's Senior Resource Fair at the Woodland Community Center and the Honey Festival held on Main St. Handouts and information stressing pollution prevention were distributed. Public outreach is a continuous and ongoing effort.

- The PPP continues to hold its annual holiday cooking oil and grease recycling event in an effort to keep cooking oil and grease out of the City's sanitary sewer system. Since the first event in 2010, the PPP has maintained a permanent cooking oil collection site. In 2018, the PPP collected approximately 133 gallons of cooking oil and grease from Woodland community members. Event outreach was provided via promotional flyers (English/Spanish) and a promotional banner (English/Spanish) at the entrance to the City's Wastewater Pollution Control Facility, and social media posts.

- In 2015 & 2019, the PPP distributed approximately 5,000 "FOG" and "Think Before You Flush" flyers to apartment complex's within the City of Woodland.

- The PPP promotes pollution prevention on social media sites, including Facebook and Instagram.

- The PPP utilized the City's web site to advertise and promote Pollution Prevention activities and outreach.

PROGRAM EFFECTIVENESS

PPP effectiveness is demonstrated by the following:

- Frequent inspection of ARBs and FSBs increased awareness of the PPP and ensured that all pretreatment devices are being properly maintained. For example, over 600 PPP inspections were conducted in 2018.

- An updated BMP information sheet was distributed to ARBs and FSBs to ensure good housekeeping practices are in place.

- PPP permits issued to food service businesses help reduce the oil and grease discharged to the City's sanitary sewer system and the WPCF. Permitting of FSBs is an ongoing process.

- PPP permits issued to automotive related businesses help reduce the discharge of automotive related waste to the City's sanitary sewer system and WPCF. Permitting of ARBs is an ongoing process.

- Continued to monitor collection system crew work orders to determine trouble areas (grease buildup) in the sanitary sewer system, this information is useful in tracking the effectiveness of our FOG control program.

City of Woodland
Pollution Prevention Program Framework
2020

For additional information concerning the City of Woodland Pollution Prevention Program, please contact:

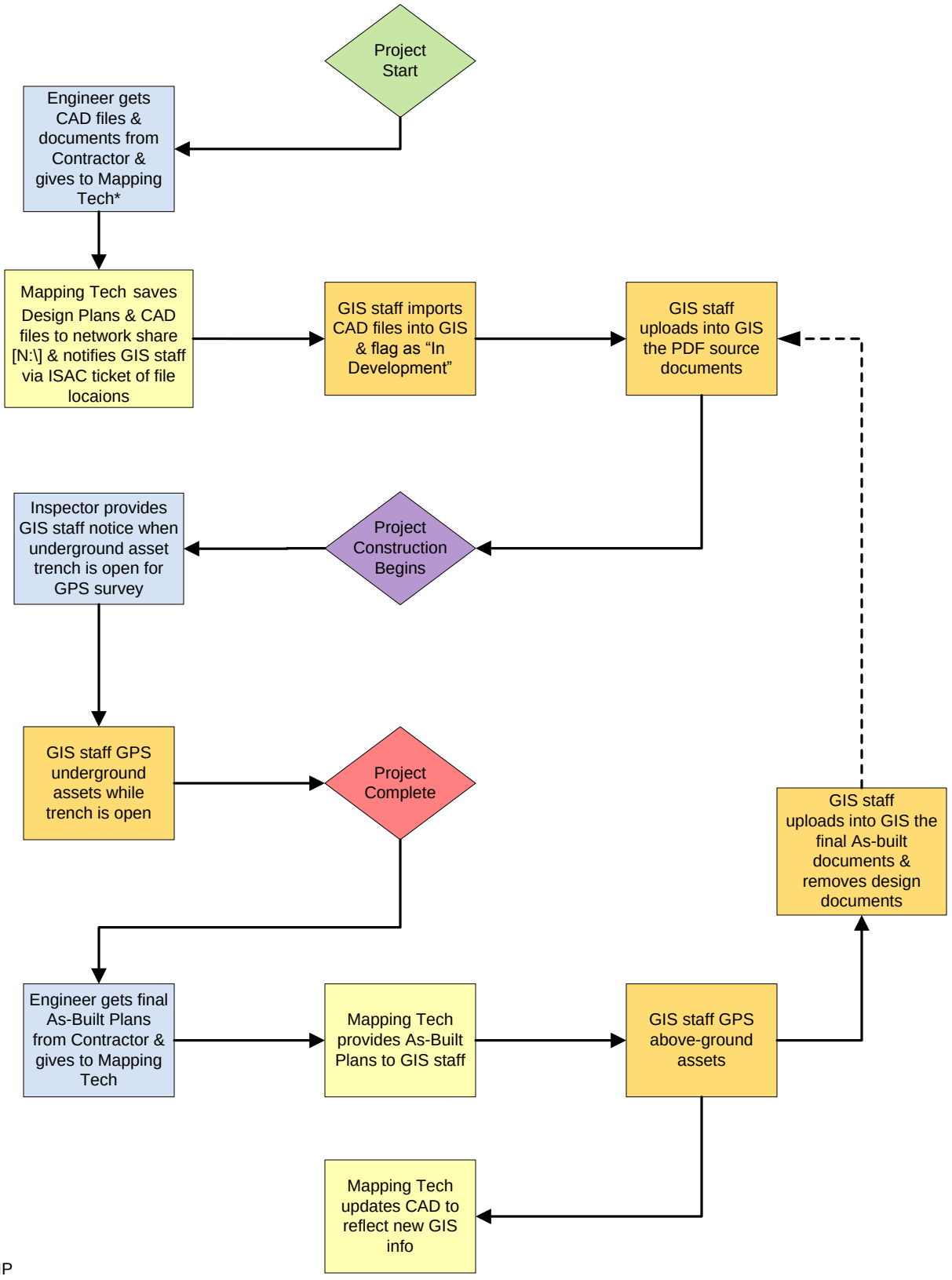
Shane Carlsen
Treatment Plant Superintendent
City of Woodland
Wastewater Operations Division
42929 County Road 24
Woodland, CA 95776

530-661-2054
shane.carlsen@cityofwoodland.org

Appendix 4-A

GIS Map Update Process

CAD / GIS Workflow



* at award for CIP
OR
at plan signature for Development

Appendix 4-B

Weekly Sewer Inspection List

Inspection Date: _____ Inspected By: _____

WEEKLY SEWER MAIN INSPECTION LIST

Check Box If Inspected	NORTHSIDE LOCATIONS	MANHOLE NUMBERS	COMMENTS

1.		Mid-block on Fortna Avenue			SMH936		Flows east	
Time		Depth	Oxygen	L.E.L.	H^2S		CO	Initials
AM	**PM**	**Ft.**	**%**	**%**	**ppm**		**ppm**	
2.		Mid-block on Commerce Avenue			SMH982		Flows east	
Time		Depth	Oxygen	L.E.L.	H^2S		CO	Initials
AM	**PM**	**Ft.**	**%**	**%**	**ppm**		**ppm**	
3.		Matmor Road at Cannery Road			SMH979		Flows north	
Time		Depth	Oxygen	L.E.L.	H^2S		CO	Initials
AM	**PM**	**Ft.**	**%**	**%**	**ppm**		**ppm**	
4.		Donnelly Circle			SMH2099			
Time		Depth	Oxygen	L.E.L.	H^2S		CO	Initials
AM	**PM**	**Ft.**	**%**	**%**	**ppm**		**ppm**	
5.		Case Place			SMH974		Top of the line-flows east	
Time		Depth	Oxygen	L.E.L.	H^2S		CO	Initials
AM	**PM**	**Ft.**	**%**	**%**	**ppm**		**ppm**	
6.		Pioneer Avenue at Case Place			SMH884		Flows north	
Time		Depth	Oxygen	L.E.L.	H^2S		CO	Initials
AM	**PM**	**Ft.**	**%**	**%**	**ppm**		**ppm**	
7.		Alley, E Street to A Street			SMH1010 - A		Flows west	
Time		Depth	Oxygen	L.E.L.	H^2S		CO	Initials
AM	**PM**	**Ft.**	**%**	**%**	**ppm**		**ppm**	
		Alley, E Street to A Street			SMH1009 - B			
Time		Depth	Oxygen	L.E.L.	H^2S		CO	Initials
AM	**PM**	**Ft.**	**%**	**%**	**ppm**		**ppm**	
		Alley, E Street to A Street			SMH1008 - C			
Time		Depth	Oxygen	L.E.L.	H^2S		CO	Initials
AM	**PM**	**Ft.**	**%**	**%**	**ppm**		**ppm**	

Inspection Date: _____ Inspected By: _____

WEEKLY SEWER MAIN INSPECTION LIST

Check Box If Inspected	NORTHSIDE LOCATIONS	MANHOLE NUMBERS	COMMENTS

8.		Wayfarer Center alley between Fourth Street and Fifth Street			SMH2152		Top of the line – flows east	
Time		Depth	Oxygen	L.E.L.	H^2S		CO	Initials
AM	**PM**	**Ft.**	**%**	**%**	**ppm**		**ppm**	
9.		Fifth Street at North Street			SMH621		Flows north	
Time		Depth	Oxygen	L.E.L.	H^2S		CO	Initials
AM	**PM**	**Ft.**	**%**	**%**	**ppm**		**ppm**	
10.		Fifth Street at Grafton Street			SMH613		Flows north & west	
Time		Depth	Oxygen	L.E.L.	H^2S		CO	Initials
AM	**PM**	**Ft.**	**%**	**%**	**ppm**		**ppm**	
11.		Elliot & Walnut			SMH598			
Time		Depth	Oxygen	L.E.L.	H^2S		CO	Initials
AM	**PM**	**Ft.**	**%**	**%**	**ppm**		**ppm**	
12.		Mid-block on Sutter Street			SMH743		Flows south	
Time		Depth	Oxygen	L.E.L.	H^2S		CO	Initials
AM	**PM**	**Ft.**	**%**	**%**	**ppm**		**ppm**	
13.		Bliss Avenue at Keystone Avenue			SMH754		Flows south	
Time		Depth	Oxygen	L.E.L.	H^2S		CO	Initials
AM	**PM**	**Ft.**	**%**	**%**	**ppm**		**ppm**	
14.		Keystone Avenue at Pershing Avenue			SMH752		Top of the line – flows south	
Time		Depth	Oxygen	L.E.L.	H^2S		CO	Initials
AM	**PM**	**Ft.**	**%**	**%**	**ppm**		**ppm**	
15.		Second Street at Clover Street			SMH631		Flows east	
Time		Depth	Oxygen	L.E.L.	H^2S		CO	Initials
AM	**PM**	**Ft.**	**%**	**%**	**ppm**		**ppm**	

Inspection Date: _____ Inspected By: _____

WEEKLY SEWER MAIN INSPECTION LIST

Check Box If Inspected	NORTHSIDE LOCATIONS	MANHOLE NUMBERS	COMMENTS

16.		Alley behind the Kraft Brothers			SMH638		Flows east	
Time		Depth	Oxygen	L.E.L.	H^2S		CO	Initials
AM	**PM**	**Ft.**	**%**	**%**	**ppm**		**ppm**	
17.		Elliot Street at Elm Street (3 manholes)			SMH595		Flows east	
Time		Depth	Oxygen	L.E.L.	H^2S		CO	Initials
AM	**PM**	**Ft.**	**%**	**%**	**ppm**		**ppm**	
		Elliot Street at Elm Street (3 manholes)			SMH596		Flows east	
Time		Depth	Oxygen	L.E.L.	H^2S		CO	Initials
AM	**PM**	**Ft.**	**%**	**%**	**ppm**		**ppm**	
		Elliot Street at Elm Street (3 manholes)			SMH597		Flows east	
Time		Depth	Oxygen	L.E.L.	H^2S		CO	Initials
AM	**PM**	**Ft.**	**%**	**%**	**ppm**		**ppm**	
18.		North Street at Cleveland Street			SMH605		Flows east	
Time		Depth	Oxygen	L.E.L.	H^2S		CO	Initials
AM	**PM**	**Ft.**	**%**	**%**	**ppm**		**ppm**	
19.		Purity Plaza			SMH_02376		Flows west	
Time		Depth	Oxygen	L.E.L.	H^2S		CO	Initials
AM	**PM**	**Ft.**	**%**	**%**	**ppm**		**ppm**	
20.		California Street at West Elliot Street			SMH1425		Flows east	
Time		Depth	Oxygen	L.E.L.	H^2S		CO	Initials
AM	**PM**	**Ft.**	**%**	**%**	**ppm**		**ppm**	
21.		Coral Drive at Verde Place			SMH1509		Flows east	
Time		Depth	Oxygen	L.E.L.	H^2S		CO	Initials
AM	**PM**	**Ft.**	**%**	**%**	**ppm**		**ppm**	
22.		Modoc Place			SMH1517		Flows south	
Time		Depth	Oxygen	L.E.L.	H^2S		CO	Initials
AM	**PM**	**Ft.**	**%**	**%**	**ppm**		**ppm**	

Inspection Date: _____ Inspected By: _____

WEEKLY SEWER MAIN INSPECTION LIST

Check Box If Inspected	NORTHSIDE LOCATIONS	MANHOLE NUMBERS	COMMENTS

23.		Inyo Place				SMH1541	Flows south	
Time		Depth	Oxygen	L.E.L.	H^2S	CO	Initials	
AM	**PM**	**Ft.**	**%**	**%**	**ppm**	**ppm**		
24.		Cottonwood ST at Antelope ST				SMH1465	Flows north	
Time		Depth	Oxygen	L.E.L.	H^2S	CO	Initials	
AM	**PM**	**Ft.**	**%**	**%**	**ppm**	**ppm**		
25.		Mariposa Street at Stone Way				SMH1437	Flows south	
Time		Depth	Oxygen	L.E.L.	H^2S	CO	Initials	
AM	**PM**	**Ft.**	**%**	**%**	**ppm**	**ppm**		
26.		West Woodland Avenue at Nevada Street				SMH1398	Flows east	
Time		Depth	Oxygen	L.E.L.	H^2S	CO	Initials	
AM	**PM**	**Ft.**	**%**	**%**	**ppm**	**ppm**		
27.		West Woodland Avenue at Maryland Street				SMH1395	Flows east	
Time		Depth	Oxygen	L.E.L.	H^2S	CO	Initials	
AM	**PM**	**Ft.**	**%**	**%**	**ppm**	**ppm**		
28.								
Time		Depth	Oxygen	L.E.L.	H^2S	CO	Initials	
AM	**PM**	**Ft.**	**%**	**%**	**ppm**	**ppm**		
29								
Time		Depth	Oxygen	L.E.L.	H^2S	CO	Initials	
AM	**PM**	**Ft.**	**%**	**%**	**ppm**	**ppm**		
30.								
Time		Depth	Oxygen	L.E.L.	H^2S	CO	Initials	
AM	**PM**	**Ft.**	**%**	**%**	**ppm**	**ppm**		

Inspection Date: _____ Inspected By: _____

WEEKLY SEWER MAIN INSPECTION LIST

Check Box If Inspected	NORTHSIDE LOCATIONS	MANHOLE NUMBERS	COMMENTS

Have you been trained in the operation of the **Tetra CROWCON** Personal Multigas Monitor atmosphere reading meter: Yes ☐ No ☐

* Note: If you have not been trained in the use of a personal multigas monitor you are not authorized to perform activities that require the use of one*

Bump Test Passed: Yes ☐ No ☐ Signed: _____

Note: If bump test did not pass, **Tag it Out of Service**. Unit will need to be turned into our electrical staff for repairs.

Inspection Date: _____ Inspected By: _____

WEEKLY SEWER MAIN INSPECTION LIST
SOUTHSIDE LOCATIONS

1.		Community Ln. between Main St. and W. Lincoln Ave.				SMH679	flows north
Time		Depth	Oxygen	L.E.L.	H^2S	CO	Initials
AM	**PM**	**Ft.**	**%**	**%**	**ppm**	**ppm**	
2.		Community Ln. at W. Cross St.				SMH547	flows both ways, top of the line
Time		Depth	Oxygen	L.E.L.	H^2S	CO	Initials
AM	**PM**	**Ft.**	**%**	**%**	**ppm**	**ppm**	
3.		Cottonwood St. at Elizabeth Way and Fairchild Ct. (2 Manholes)				SMH787	both flow south
Time		Depth	Oxygen	L.E.L.	H^2S	CO	Initials
AM	**PM**	**Ft.**	**%**	**%**	**ppm**	**ppm**	
		Cottonwood St. at Elizabeth Way and Fairchild Ct. (2 Manholes)				SMH199	both flow south
Time		Depth	Oxygen	L.E.L.	H^2S	CO	Initials
AM	**PM**	**Ft.**	**%**	**%**	**ppm**	**ppm**	
4.		Cottonwood St. and W. El Dorado Dr.				SMH83	flows north
Time		Depth	Oxygen	L.E.L.	H^2S	CO	Initials
AM	**PM**	**Ft.**	**%**	**%**	**ppm**	**ppm**	
5.		W. El Dorado Dr. at El Paseo Dr.				SMH144	flows north
Time		Depth	Oxygen	L.E.L.	H^2S	CO	Initials
AM	**PM**	**Ft.**	**%**	**%**	**ppm**	**ppm**	
6.		McKinley Ave. at Cypress Dr.				SMH1595	flows north
Time		Depth	Oxygen	L.E.L.	H^2S	CO	Initials
AM	**PM**	**Ft.**	**%**	**%**	**ppm**	**ppm**	
7.		Placer Dr. at Norden Way and Auburn Way (2 Manholes)				SMH1301	both flow east
Time		Depth	Oxygen	L.E.L.	H^2S	CO	Initials
AM	**PM**	**Ft.**	**%**	**%**	**ppm**	**ppm**	

Inspection Date: _____ Inspected By: _____

WEEKLY SEWER MAIN INSPECTION LIST
SOUTHSIDE LOCATIONS

		Placer Dr. at Norden Way and Auburn Way (2 Manholes)				SMH1287	both flow east
Time		Depth	Oxygen	L.E.L.	H^2S	CO	Initials
AM	**PM**	**Ft.**	**%**	**%**	**ppm**	**ppm**	
8.		Donner Way at Archer Dr.				SMH1328	flows east
Time		Depth	Oxygen	L.E.L.	H^2S	CO	Initials
AM	**PM**	**Ft.**	**%**	**%**	**ppm**	**ppm**	
9.		Sixth St. at Donner Way				SMH1327	flows north
Time		Depth	Oxygen	L.E.L.	H^2S	CO	Initials
AM	**PM**	**Ft.**	**%**	**%**	**ppm**	**ppm**	
10.		Sixth St. at Archer Dr.				SMH1262	flows north
Time		Depth	Oxygen	L.E.L.	H^2S	CO	Initials
AM	**PM**	**Ft.**	**%**	**%**	**ppm**	**ppm**	
11.		Easement at Homewood Dr.				SMH295	flows north
Time		Depth	Oxygen	L.E.L.	H^2S	CO	Initials
AM	**PM**	**Ft.**	**%**	**%**	**ppm**	**ppm**	
12.		Fourth St. at Cottage Dr.				SMH331	top of the line flows 3 ways
Time		Depth	Oxygen	L.E.L.	H^2S	CO	Initials
AM	**PM**	**Ft.**	**%**	**%**	**ppm**	**ppm**	
13.		Fourth St. at Marshall Ave.				SMH324	flows north
Time		Depth	Oxygen	L.E.L.	H^2S	CO	Initials
AM	**PM**	**Ft.**	**%**	**%**	**ppm**	**ppm**	
14.		Fourth St. between Pendegast St. and Cross St.				SMH710	flows north
Time		Depth	Oxygen	L.E.L.	H^2S	CO	Initials
AM	**PM**	**Ft.**	**%**	**%**	**ppm**	**ppm**	
15.		Fourth St. between Cross St. and Oak St.				SMH479	flows north
Time		Depth	Oxygen	L.E.L.	H^2S	CO	Initials
AM	**PM**	**Ft.**	**%**	**%**	**ppm**	**ppm**	

Inspection Date: _____ Inspected By: _____

WEEKLY SEWER MAIN INSPECTION LIST
SOUTHSIDE LOCATIONS

16.		Fourth St. at Lincoln Ave.				SMH483	flows north
Time		Depth	Oxygen	L.E.L.	H^2S	CO	Initials
AM	**PM**	**Ft.**	**%**	**%**	**ppm**	**ppm**	
17.		Fourth St. at Dog Gone Alley				SMH497	flows north
Time		Depth	Oxygen	L.E.L.	H^2S	CO	Initials
AM	**PM**	**Ft.**	**%**	**%**	**ppm**	**ppm**	
18.		Dog Gone Alley between Third St. and Second St.				SMH555	top of the line flows east
Time		Depth	Oxygen	L.E.L.	H^2S	CO	Initials
AM	**PM**	**Ft.**	**%**	**%**	**ppm**	**ppm**	
19.		Dog Gone Alley between First St. and College St.				SMH522	flows west
Time		Depth	Oxygen	L.E.L.	H^2S	CO	Initials
AM	**PM**	**Ft.**	**%**	**%**	**ppm**	**ppm**	
20.		Dog Gone Alley between College St. and Elm St.				SMH525	flows east
Time		Depth	Oxygen	L.E.L.	H^2S	CO	Initials
AM	**PM**	**Ft.**	**%**	**%**	**ppm**	**ppm**	
21.		Alley Intersection at Martin Way				SMH527	flows south
Time		Depth	Oxygen	L.E.L.	H^2S	CO	Initials
AM	**PM**	**Ft.**	**%**	**%**	**ppm**	**ppm**	
22.		Dog Gone Alley between Elm St. and Walnut St.				SMH531	flows west
Time		Depth	Oxygen	L.E.L.	H^2S	CO	Initials
AM	**PM**	**Ft.**	**%**	**%**	**ppm**	**ppm**	
23.		Walnut Street between Lincoln Avenue and Main Street at alley				SMH673	flows east
Time		Depth	Oxygen	L.E.L.	H^2S	CO	Initials
AM	**PM**	**Ft.**	**%**	**%**	**ppm**	**ppm**	

Inspection Date: _____ Inspected By: _____

WEEKLY SEWER MAIN INSPECTION LIST
SOUTHSIDE LOCATIONS

24.		Lincoln Ave. between Walnut St. and Cleveland St.				SMH510	flows east
Time		Depth	Oxygen	L.E.L.	H^2S	CO	Initials
AM	**PM**	**Ft.**	**%**	**%**	**ppm**	**ppm**	
25.		Easement behind Ruby Tuesday's				SMH2164	flows east
Time		Depth	Oxygen	L.E.L.	H^2S	CO	Initials
AM	**PM**	**Ft.**	**%**	**%**	**ppm**	**ppm**	
26.		Saunders Way Easement				SMH512	flows south
Time		Depth	Oxygen	L.E.L.	H^2S	CO	Initials
AM	**PM**	**Ft.**	**%**	**%**	**ppm**	**ppm**	
27.		Cleveland St. at Oak Ave.				SMH447	flows north
Time		Depth	Oxygen	L.E.L.	H^2S	CO	Initials
AM	**PM**	**Ft.**	**%**	**%**	**ppm**	**ppm**	
28.		Park Ave. at McKinley Ave.				SMH451	3-way flow north,east,south
Time		Depth	Oxygen	L.E.L.	H^2S	CO	Initials
AM	**PM**	**Ft.**	**%**	**%**	**ppm**	**ppm**	
29.		Oak Ave. at West St,				SMH452	flows east
Time		Depth	Oxygen	L.E.L.	H^2S	CO	Initials
AM	**PM**	**Ft.**	**%**	**%**	**ppm**	**ppm**	
30.		Buena Tierra Dr. at Jimeno Ln.				SMH247	flows east
Time		Depth	Oxygen	L.E.L.	H^2S	CO	Initials
AM	**PM**	**Ft.**	**%**	**%**	**ppm**	**ppm**	
31.		Casa Linda Dr. at Cleveland St.				SMH238	flows north & east
Time		Depth	Oxygen	L.E.L.	H^2S	CO	Initials
AM	**PM**	**Ft.**	**%**	**%**	**ppm**	**ppm**	
32.		Elm St. at Maedell Way				SMH234	flows north
Time		Depth	Oxygen	L.E.L.	H^2S	CO	Initials
AM	**PM**	**Ft.**	**%**	**%**	**ppm**	**ppm**	

Inspection Date: _____ Inspected By: _____

WEEKLY SEWER MAIN INSPECTION LIST
SOUTHSIDE LOCATIONS

33.		Lawson Ln. between College St. and Elm St.				SMH287	flows south
Time		Depth	Oxygen	L.E.L.	H^2S	CO	Initials
AM	**PM**	**Ft.**	**%**	**%**	**ppm**	**ppm**	
34.		Bartlett Ave. between Second St. and Third St.				SMH263	flows south
Time		Depth	Oxygen	L.E.L.	H^2S	CO	Initials
AM	**PM**	**Ft.**	**%**	**%**	**ppm**	**ppm**	
35.		Pendegast St. between Second St. and Third St.				SMH253	flows south
Time		Depth	Oxygen	L.E.L.	H^2S	CO	Initials
AM	**PM**	**Ft.**	**%**	**%**	**ppm**	**ppm**	
36.		First St. between Craig Ave. and Cross St. (5" line)				SMH2169	flows north
Time		Depth	Oxygen	L.E.L.	H^2S	CO	Initials
AM	**PM**	**Ft.**	**%**	**%**	**ppm**	**ppm**	
37.		Cross St. between First St. and Second St.				SMH319	flows east
Time		Depth	Oxygen	L.E.L.	H^2S	CO	Initials
AM	**PM**	**Ft.**	**%**	**%**	**ppm**	**ppm**	
38.		Depot St. between Johnston St. and East St.				SMH1156	flows west
Time		Depth	Oxygen	L.E.L.	H^2S	CO	Initials
AM	**PM**	**Ft.**	**%**	**%**	**ppm**	**ppm**	
39.		Alice St. between Johnston St. and East St.				SMH1166	flows west
Time		Depth	Oxygen	L.E.L.	H^2S	CO	Initials
AM	**PM**	**Ft.**	**%**	**%**	**ppm**	**ppm**	
40.		Collette Way at Denise Dr.				SMH1185	flows south
Time		Depth	Oxygen	L.E.L.	H^2S	CO	Initials
AM	**PM**	**Ft.**	**%**	**%**	**ppm**	**ppm**	
41.		555 Matmor Road				SMH1061	flows south
Time		Depth	Oxygen	L.E.L.	H^2S	CO	Initials
AM	**PM**	**Ft.**	**%**	**%**	**ppm**	**ppm**	

Inspection Date: _____ Inspected By: _____

WEEKLY SEWER MAIN INSPECTION LIST
SOUTHSIDE LOCATIONS

42.		1180 Matmor Road				SMH1230	flows south
Time		Depth	Oxygen	L.E.L.	H^2S	CO	Initials
AM	**PM**	**Ft.**	**%**	**%**	**ppm**	**ppm**	
43.		Washington Dr. at Adams Ct.				SMH1234	flows north
Time		Depth	Oxygen	L.E.L.	H^2S	CO	Initials
AM	**PM**	**Ft.**	**%**	**%**	**ppm**	**ppm**	
44.		Matmor Rd. at Tyler Dr.				SMH1247	flows north
Time		Depth	Oxygen	L.E.L.	H^2S	CO	Initials
AM	**PM**	**Ft.**	**%**	**%**	**ppm**	**ppm**	
45.		Huston Circle				SMH1925	flows south
Time		Depth	Oxygen	L.E.L.	H^2S	CO	Initials
AM	**PM**	**Ft.**	**%**	**%**	**ppm**	**ppm**	
46.		East Gum Ave. at Joyce Ct.				SMH1811	flows east
Time		Depth	Oxygen	L.E.L.	H^2S	CO	Initials
AM	**PM**	**Ft.**	**%**	**%**	**ppm**	**ppm**	
47.		Taco Bell on Pioneer Ave.				SMH 1689	Flows west
Time		Depth	Oxygen	L.E.L.	H^2S	CO	Initials
AM	**PM**	**Ft.**	**%**	**%**	**ppm**	**ppm**	
48.		McDonald's on East Main Street				SMH2200	flows east
Time		Depth	Oxygen	L.E.L.	H^2S	CO	Initials
AM	**PM**	**Ft.**	**%**	**%**	**ppm**	**ppm**	

Have you been trained in the operation of the **Tetra CROWCON** Personal Multigas Monitor atmosphere reading meter: Yes ☐ No ☐

* Note: If you have not been trained in the use of a personal multigas monitor you are not authorized to perform activities that require the use of one*

Bump Test Passed: Yes ☐ No ☐ Signed: _____

Note: If bump test did not pass, **Tag it Out of Service**. Unit will need to be turned into our electrical staff for repairs.

Appendix 4-C

Weekly Sewer Main Flush List

Inspection Date: _____ Inspected By: _____

WEEKLY SEWER MAIN FLUSH LIST

	LOCATIONS	Manhole Numbers	COMMENTS
1.	MSC	SMH_02989	FLOWS EAST
2.	Commerce Ave	SMH 984	FLOWS EAST
3.	Alley off Railroad (between Elliot & Clover)	SCO_04488	FLOWS SOUTH
4.	Alley between First ST and Second ST south of Clover ST	SCO_ 16089	FLOWS SOUTH
5.	Alley between College ST and First ST south of Clover ST	SCO_ 00731	FLOWS SOUTH
6.	Elliot St @ Locust St	SMH 597	FLOWS EAST
7.	Elliot St. & Walnut	SMH 598	FLOWS EAST
8.	Barnard ST (Denny's)	SMH _02669	FLOWS WEST
9.	120 N. Cottonwood St. (SCO on SW corner of N. Cottonwood and W. Woodland Ave.)	SCO_ 14916	FLOWS NORTH
10	SCO @ New Clinic SW corner of Cottonwood & Beamer St	SCO_15210	FLOWS EAST
11	Verde Pl. (Off of Coral Dr.)	SMH 1509	FLOWS NORTH
12	Modoc PL. (off of Chestnut St.)	SMH 1517	FLOWS SOUTH
13	Inyo Pl	SMH 1541	FLOWS SOUTH
14	845 Del Oro St	SMH 63	FLOWS EAST
15	W. El Dorado @ El Paseo	SMH 144	FLOWS NORTH

Inspection Date: _____ Inspected By: _____

WEEKLY SEWER MAIN FLUSH LIST

	LOCATIONS	Manhole Numbers	COMMENTS
16	Sixth St. @ Donner Way	SMH 1327	FLOWS NORTH
17	Homewood Dr.	SMH 295	FLOWS NORTH EAST
18	Fourth St. at Cottage Dr.	SMH331	FLOWS NORTH
19	Fourth St. @ Marshall Ave (West MH)	SMH_02578	FLOWS NORTH
20	Third ST. between Cross St. & Bartlett Ave. (South MH Only)	SMH 261	FLOWS SOUTH
21	Laurel ST. between Second St. and College St. (2 Manholes)	SMH 722	FLOWS EAST
22	Laurel ST. between Second St. and College St. (2 Manholes)	SMH 721	FLOWS SOUTH
23	Alley east of Lions Club (South MH)	SMH 527	FLOWS SOUTH
24	Dog Gone Alley east of Post 77	SMH_03128	FLOWS NORTH
25	Dog gone Alley between College St. and Elm St.	SMH 525	FLOWS EAST
26	Martin Way.	SCO_ 00059	FLOWS SOUTH
27	Original Pete's SCO in parking lot	SCO_16110	FLOWS SOUTH
28	Cleveland St. at Oak Ave.	SMH 447	FLOWS NORTH

Inspection Date: _____ Inspected By: _____

WEEKLY SEWER MAIN FLUSH LIST

	LOCATIONS	Manhole Numbers	COMMENTS
29	Oak Ave. at Youngmark's Nursery	SMH 452	FLOWS EAST
30	421 Pendegast St.	SCO_ 04455	FLOWS SOUTH
31	449 Pendegast ST	SCO_10598	FLOWS SOUTH
32	Lawson Ln.	SMH 287	FLOWS SOUTH
33	Pendegast & Second St.	SMH 254	FLOWS NORTH
34	Pendegast between Second & Third	SMH_02577	FLOWS SOUTH
35	Fourth St. @ Pendegast (NE MH)	SMH 317	FLOWS NORTH
36	Fifth St. at Pendegast St. (football clean-out)	SCO_ 00040	FLOWS SOUTH
37	Pendegast St. at Pacific St.	SMH 307	FLOWS SOUTH
38	Denise Dr. @ Colette Way.	SMH 1185	FLOWS SOUTH
39	Case Place.	SMH 974	FLOWS EAST
40	Hanson Way Easement	SMH 1768	FLOWS SOUTH

Have you been trained in the operation of the MSA Multigas Detector: Yes ☐ No ☐

Appendix 4-D

Quarterly Cleaning Route

City of Woodland
Quarterly Cleaning, North Side Locations

Work Order#:_____ **Date Started:**_____ **Date Finished:**_____

Modoc Pl. from Chestnut St. to Cul de Sac (Grease) **Size: 8”**

1. Chestnut St. (SMH1519) to Cul de Sac (SMH1517) ID: SGM1560 Length: 405 ft.

West St. through Purity Plaza Easement (2 Runs, Grease) **Size: 8”**

1. Purity Plaza (SMH_02376) to Easement (SMH2124) ID: SGM1983 Length: 520 ft.

2. West St. (SMH1667) to Purity Plaza (SMH_02376) ID: SGM1983 Length: 250 ft.

Dead Cat Alley from Elm St. to Walnut St. (Low Pressure) **Size: 8”**

1. Elm St. (SMH1672) to Walnut St. (SMH1670) ID: SGM3061 Length: 550 ft.

Elm St. from North St. to Court St. (Grease) **Size: 6”**

1. North St. (SMH645) to Court St. (SMH1403) ID: SGM3583 Length: 400 ft.

Plug lateral on 203 Elm St when this line is cleaned.

Elliot St. from Locust St. to College St. (4 Runs, Flat Bottoms, Grease) **Size: 6”**

1. Elm St. West (SMH596) to Locust St. (SMH597) ID: SGM2286 Length: 215 ft.

2. Elm St. East (SMH595) to Elm St. West (SMH596) ID: SGM2285 Length: 105 ft.

3. College St. (SMH563) to Elm St. East (SMH595) ID: SGM2283 Length: 350 ft.

Plug lateral on 147 Elm St when this line is cleaned.

Clover St. from College St. to Fourth St. (4 Runs, Grease, Bellies) **Size: 8”**

1. First St. (SMH634) to College St. (SMH_02373) ID: SGM2119 Length: 450 ft.

2. Second St. (SMH631) to First St. (SMH634) ID: SGM2120 Length: 370 ft.

3. Third St. (SMH630) to Second St. (SMH631) ID: SGM2118 Length: 335 ft.

4. Fourth St. (SMH627) to Third St. (SMH630) ID: SGM2857 Length: 415 ft.

Fourth St. from Dead Cat Alley to Main St. (Flat Bottom, Grease) **Size: 10”**

1. Dead Cat Alley (SMH1177) to Main St. (SMH1178) ID: SGM3553 Length: 250 ft.

Hope Ln. from Fifth St. to Top of Line (Bellies, Grease) **Size: 6”**

1. Fifth St. (SMH2151) to Top of Line (SMH2152)	ID: SGM3445	Length: 430 ft.

Fifth St. from Hope Ln. to Beamer St. (7 Runs, Grease all the way)		**Size: 6”**
1. North St. East (SMH623) to Hope Ln. (SMH2151)	ID: SGM3448	Length: 200 ft.
2. North St. West (SMH624) to North St. East (SMH623)	ID: SGM3451	Length: 70 ft.
3. Mid-Block (SMH621) to North St. West (SMH624)	ID: SGM2389	Length: 220 ft.
4. Elliot St. (SMH219) to Mid-Block (SMH621)	ID: SGM2385	Length: 210 ft.
5. Clover St. (SMH616) to Elliot St. (SMH619)	ID: SGM2517	Length: 490 ft.
6. Grafton St. (SMH613) to Clover St. (SMH616)	ID: SGM2107	Length: 440 ft.
7. Beamer St. (SMH996) to Grafton St. (SMH613)	ID: SGM2106	Length: 410 ft.

Bliss Ave. from Beamer St. to Keystone Ave. (Flat)		**Size: 8”**
1. Beamer St. (SMH_02368) to Keystone Ave. (SMH754)	ID: SGM2512	Length: 685 ft.

Pioneer Ave. from Case Pl. to Main St. (Grease)		**Size: 8”**
1. Case Pl. (SMH884) to Main St. (SMH2292)	ID: SGM3745	Length: 300 ft.

Muir St. (Grease)		**Size: 8”**
1. N. Cottonwood (SMH1362) TO Mid-Block (SMH1357)	ID: SGM2864	Length: 399ft.
2. Mid-Block (SMH1357) TO Mariposa St. (SMH1356)	ID: SGM2838	Length: 404ft

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Mariposa St. (Grease)		**Size: 8”**
1. Glacier St. (SMH1431) To Utah Ave. (SMH1358)	ID: SGM2841	Length: 306ft.
2. Utah Ave.(SMH1358) ToSchuler Ranch Dr.(SMH1359)	ID: SGM3404	Length: 174ft.
3. Schuler Ranch Dr.(SMH1359) To Muir St.(SMH1356)	ID: SGM3405	Length: 197ft.
4. Muir St. (SMH1356) TO W. Kentucky Ave.(SMH1350)	ID: SGM2839	Length: 432ft.

Comments **Do not run east on Clover SGM2123 from SMH615 without plugging the lateral at 101 5th St. Failure to do so could result in disciplinary action…**

City of Woodland
Quarterly Cleaning, South Side Locations

Work Order #:_____ **Date Started:**_____ **Date Finished:**_____

Cottonwood St. from W. Cross St. to Fairchild Ct. (7 Manholes, Grease)		**Size: 8"**
1. Elizabeth Way (SMH787) to W. Cross St. (SMH688)	ID: SGM3072	Length: 405 ft.
2. Mid-Block (SMH786) to Elizabeth Way (SMH787)	ID: SGM1788	Length: 250 ft.
3. Southwood Dr. (SMH163) to Mid-Block (SMH786)	ID: SGM1787	Length: 420 ft.
4. Maple Way (SMH166) to Southwood Dr. (SMH163)	ID: SGM3318	Length: 395 ft.
5. Boxwood Rd. (SMH184) to Maple Way (SMH166)	ID: SGM1765	Length: 385 ft.
6. Acacia Way (SMH195) to Boxwood Rd. (SMH184)	ID: SGM3228	Length: 275 ft.
7. Fairchild Ct. (SMH199) to Acacia Way (SMH195)	ID: SGM1781	Length: 335 ft.

Cottonwood St. from Glenwood Pl. to Lewis Ave. (Sag in main, Grease)		**Size: 8"**
1. Glenwood Pl. (SMH1650) to Lewis Ave. (SMH82)	ID: SGM3163	Length: 425 ft.

Lincoln Ave. from West St. to McKinley Ave. (2 Manholes, Grease)		**Size: 8"**
1. Mid-Block (SMH514) to West St. (SMH358)	ID: SGM3601	Length: 220 ft.
2. McKinely Ave. (SMH515) to Mid-Block (SMH514)	ID: SGM3579	Length: 440 ft.

Saunders Way Easement (Run west toward building, Low Pressure, Pop CO)		**Size: 6"**
1. Easement (SMH512) to Clean Out (SCO293)	ID: SGM1202	Length: 140 ft.

Saunders Way from Oak St. to Easement		**Size: 6"**
1. Oak St. (SMH448) to Easement (SMH512)	ID: SGM1636	Length: 175 ft.

Oak St. from Cleveland St. to Saunders Way (Low Pressure, Pop CO's)		**Size: 6"**
1. Cleveland St. (SMH447) to Saunder's Way (SMH448)	ID: SGM1641	Length: 190 ft.

Cleveland St. from Mid-Block to Oak St. (Manhole is North of Oak St.)		**Size: 6"**
1. Mid-Block (SMH508) to Oak St. (SMH447)	ID: SGM1218	Length: 335 ft.

Cleveland St. from Mid-Block to Easement (Manhole is North of Lincoln Ave.) **Size: 6”**

1. Mid-Block (SMH674) to Easement Clean Out (SCO221) ID: SGM2396 Length: 140 ft.

Dog Gone Alley from College St. to Dead End (Between Bush St. and Main St.) **Size: 6”**

1. College St. (SMH1523) to Dead End (SMH1522) ID: SGM3557 Length: 300 ft.

Dog Gone Alley from Second Street to First Street **Size: 8”**

1. First St. (SMH557) to Alley (SMH671) ID: SGM3494 Length: 208ft.

Third St. from Pendegast St. to Marshall Ave. (2 Manholes, Grease and Grit) **Size: 6”**

1. Bartlett Ave. (SMH262) to Mid-Block (SMH261) ID: SGM2439 Length: 220 ft.

Put a plug in 819 Third St prior to cleaning

2. Marshall Ave. (SMH264) to Bartlett Ave (SMH262) ID: SGM2440 Length: 440 ft.

Marshall Ave. from Fourth St. to Third St. (Grease, sag in the main) **Size: 8”**

1. Fourth St. (SMH02578) to Third St. (SMH265) ID: SGM1678 Length: 330 ft.

2. Fourth St. (SMH324) to Third St. (SMH264) ID: SGM1687 Length: 328 ft.

Fourth St. from Marshall Ave. to Lincoln Ave. (8 Manholes, Grease all the way.) **Size: 8”**

1. Gum Ave. (SMH323) to Marshall Ave. (SMH324) ID: SGM1680 Length: 165 ft.

2. Mid-Block (SMH321) to Gum Ave. (SMH323) ID: SGM1675 Length: 360 ft.

3. Pendegast St. (SMH317) to Mid-Block (SMH321) ID: SGM1169 Length: 320 ft.

4. Mid-Block (SMH710) to Pendegast St. (SMH317) ID: SGM1671 Length: 340 ft.

5. Cross St. (SMH705) to Mid-Block (SMH710) ID: SGM1670 Length: 330 ft.

6a. Mid-Block (SMH479) to Cross St. (SMH705) ID: SGM3764 Length: 415 ft.

6b. Mid-Block (SMH479) to Cross St. (SMH706) ID: SGM1668 Length: 415 ft.

7. Oak Ave. (SMH471) to Mid-Block (SMH479) ID: SGM1012 Length: 335 ft.

8. Lincoln Ave. (SMH483) to Oak Ave. (SMH469) ID: SGM1666 Length: ?

Fourth St. from Lincoln Ave. to Main St. (3 Manholes, Low Pressure, Pop CO’s) **Size: 10”**

1. Mid-Block (SMH_02372) to Lincoln Ave. (SMH483) ID: SGM2799 Length: 310 ft.

2. Dog Gone Alley (SMH2797) to Mid-Block (SMH_02372)	ID: SGM2797	Length: 220 ft.
3. Main St. (1178) to Dog Gone Alley (SMH2797)	ID: SGM2793	Length: 150 ft.

Fifth St. from Gum Ave. to Pendegast St.		**Size: 8”**
1. Gum Ave. (SMH315) to Pendegast St. (SMH312)	ID: SGM1686	Length: 670 ft.
Low Pressure-Run at 1500psi or below.		

Kate Ln. from Gum Ave to Clearwater Way (Large Amounts of Grit)		**Size: 10”**
1. Gum Ave. (SMH1100) to Clearwater Way (SMH1095)	ID: SGM2881	Length: 250 ft.

Matmor Rd. from Gibson Rd. to 1180 Matmor Rd. (Requires Traffic Control)		**Size: 8”**
1. Gibson Rd. (SMH820) to 1180 Matmor Rd. (SMH1230)	ID: SGM2866	Length: 330 ft.

Matmor Rd., Pairie School Park Easement (2 Runs, Manhole in Sidewalk)		**Size: 10”**
1. Matmor Rd. (SMH813) to Stetson St. (SMH1221)	ID: SGM2873	Length: 360 ft.
2. Matmor Rd. (SMH813) to Gum Ave. (SMH1222)	ID: SGM2872	Length: 270 ft.

Bourn Dr. and Gillette Dr.		**Size: 6”**
1. SMH1719 TO SCO in Ivy	ID: SGM1001	Length: 48ft.

Branigan Ave. and Farnham Ave to Leake Cir		**Size: 8’’**
1. SMH (1932) to SMH (1936)	**ID: SGM_04263**	Length: 546ft.
2. SMH 1931 to SMH 1932	**ID: SGM1346**	Length 162 ft.

Gateway (West of Costco north treatment plant)		**Size 15"**
1. SMH 0225 to SMH02551	**ID: SGM04237**	Length 131ft
2. SMH2017 to SMH0225	**ID: SGM1898**	Length 16ft

Crachiolies	**SMH 1154**	**Size 6"**
Open both clean outs	**SGM 3313**	**length 250 ft**

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Appendix 4-E

Example Sewer Lift Station Maintenance Log

Spring Lake Pump Station Daily Log							Dec-25			
			Flow and Power Totals				Pump Hour Readings			
Initials	Date	Time	This Month's MGALS A	Yesterday' s MGALS A	This Month's MGALS B	Yesterday' s MGALS B	Pump 1 Hours Total/Daily	Pump 2 Hours Total/Daily	Pump #2 VFD	Pump #1 VFD
	12/1/2025									
	12/2/2025									
	12/3/2025									
	12/4/2025									
	12/5/2025									
	12/6/2025									
	12/7/2025									
	12/8/2025									
	12/9/2025									
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	12/28/2025									
	12/29/2025									
	12/30/2025									
	12/31/2025									

Appendix 4-F

Collection System Employee Certification Requirements

Collection System Employee License and Certificate Requisites

UTILITIES MAINTENANCE WORKER I/II

Water Production/Distribution /Wastewater Collections/Stormwater assignments-

Both assignments require possession of a Grade I Water Distribution Operator certificate issued by the California Department of Health Services prior to permanent appointment. Grade I Wastewater Collections System Maintenance certificate issued by California Water Environment Association is desirable.

Both assignments require possession of a valid California Driver's License. Class B permit and DMV Medical Certification are required within three months of hire. Must obtain a valid Class B driver's license, Completion of Work Zone Safety certification issued by the International Municipal Signal Association, First Aid and CPR Certifications, Competent Person Certification and Confined Space Certification prior to permanent appointment.

UTILITIES MAINTENANCE WORKER III/IV

Water Production/Distribution assignment – Requires possession of a Grade II Water Distribution Operator certificate and possession of a Grade I Wastewater Collections System Maintenance certificate issued by California Water Environment Association. Requires possession of a Grade III Water Distribution Operator certificate issued by the California Department of Health Services prior to permanent appointment. Grade I Water Treatment certificate is desirable.

Wastewater Collections/Stormwater assignment – Requires possession of a Grade II Wastewater Collections System Operator certificate issued by the California Department of Health Services and possession of a Grade I Water Distribution Operator certificate. Requires possession of a Grade III Wastewater Collections System Maintenance certificate issued by the California Water Environment Association prior to permanent appointment. Grade I Water Treatment certificate is desirable.

Both assignments require possession of a valid Class B California Driver's License with Tank and Air Brake Endorsements. Must possess a valid Class A driver's license within six months of hire. Confined Space Certification, Competent Person Certification, valid First Aid and CPR certifications, acquire or possess Forklift Certification and a Work Zone Safety certificate from the International Municipal Signal Association prior to permanent appointment.

SENIOR UTILITIES MAINTENANCE WORKER

Sanitary Sewer and Storm Drainage Systems- Required upon hire, possession of a current California Water Environment Association (CWEA), C-3 Collections certificate; valid Class B California Driver's License with a Tank and Air Brake Endorsement. Required prior to permanent appointment (completion of probation): possession of a valid Class A California driver's license; Hazardous Waste Operations and Emergency Response (HAZWOPER) training certificate or equivalent (level of training dependent on Departmental need); First Aid, and CPR certifications. A California Department of Public Health, Water Distribution Operator, Grade 3 certificate is highly desirable.

CHIEF COLLECTION SYSTEMS OPERATOR

Water Production/Distribution assignment – requires possession of a Grade IV Water Distribution Operator certificate issued by the California Department of Public Health and a Grade I Wastewater Collections System Maintenance certificate issued by California Water Environment Association. Cross Connection Control Specialist certificate and a Grade I Water Treatment certificate is desirable.

Wastewater Collections/Stormwater assignment – requires possession of a Grade I Water Distribution Operator certificate and a Grade III Wastewater Collections System Maintenance certificate issued by California Water Environment Association. Grade IV Wastewater Collection System Operator certificate is required within 24 months of hire. Grade I Water Treatment certificate is desirable.

Both assignments require possession of a valid California Class B Driver's License. Confined Space Certification, Competent Person Certification, and valid First Aid and CPR certifications are required prior to permanent appointment.

Appendix 4-G

Example TMS Employee Training History Log

Add Credential | View Inactive Credentials

CREDENTIAL	NUMBER	DAYS UNTIL EXPIRATION	START DATE	EXPIRATION DATE	ACTIONS
Backflow Prevention Assembly Tester	188868	148	Oct 27, 2022	Oct 31, 2025	
Backhoe & Mini Excavator Operations	20210621RS-COW-1602	-349	Jun 21, 2021	Jun 21, 2024	
Competent Person	LT20240312-63	645	Mar 12, 2024	Mar 12, 2027	
Confined Space		118	Oct 1, 2024	Oct 1, 2025	
CPR/First Aid	18748	117	Sep 26, 2023	Sep 30, 2025	
Cross Connection Control Specialist	03580	268	Feb 29, 2024	Feb 28, 2026	
DMV Pull Notice Due		-1017	Aug 23, 2021	Aug 23, 2022	
Drivers License	F4383205	73	Jun 30, 2021	Aug 17, 2025	
FEMA ICS-100: Introduction to Incident Command System			Mar 18, 2021		
FEMA IS-700: National Incident Management System (NIMS), An Introduction			Mar 18, 2021		
Forklift Certification		876	Oct 29, 2024	Oct 29, 2027	
Medical Expiration Date	F4383205	147	Oct 23, 2024	Oct 30, 2025	
Water Distribution Grade D3		116	Sep 29, 2022	Sep 29, 2025	
Work Zone Safety Certification	WZ-20220411-205	967	Jan 28, 2025	Jan 28, 2028	

Appendix 6-A

Spill Emergency Response Plan

Spill Emergency Response Plan

Table of Contents

CITY OF WOODLAND CALIFORNIA

Spill Emergency Response Plan

Purpose and Goals

The purpose of this Spill Emergency Response Plan (SERP) is to define procedures for the Public Works Department to follow in response to sanitary sewer spills to ensure that all regulatory requirements are met. The procedures defined herein should be followed to make certain that appropriate regulatory agencies and other potentially affected entities such as local health agencies, State / Regional Water Boards, or water suppliers are notified in a timely manner when a spill occurs. The procedures provide steps to follow when a spill does occur and outlines measures to be taken on how to contain, correct, and initiate cleanup of the spill in order to minimize any adverse impact on the environment resulting from the spill. This document includes a program and schedule for distribution to and appropriate training of all agencies and staff involved in spill response procedures.

Goals and Objectives:

- Protect public health and safety
- Prevent adverse impacts to the environment
- Achieve timely response to reports of all potential spills, with a 30-minute response time during normal working hours and a 45-minute response time after normal working hours
- Ensure established and effective action is taken when responding to spills

Approved by:

Craig Locke Director of Public Works		Signature	6/2/2023 Date
Eric Medrano Chief Collections System Operator	Eric Medrano	Signature	6/1/2023 Date
Shane Carlsen Treatment Plant Superintendent		Signature	6-2-2023 Date
Angela Clemons Environmental Compliance Inspector		Signature	7/17/25 Date

Distribution

The most up-to-date copies of this SERP should be kept at the following locations:

- Water Pollution Control Facility
- Chief Collection Systems Operator's Office
- Principal Utilities Civil Engineer's Office
- MSC – Municipal Services Center
- Sewer Utility Stand-by Vehicle
- City Police Department
- City Fire Department
- Yolo County Emergency Dispatch Center

Acronym and Term Definitions

CDFG – California Department of Fish and Game

CIWQS – California Integrated Water Quality System SSO online data base

Drainage Conveyance System: a publicly- or privately-owned separate storm sewer system, including but not limited to drainage canals, channels, pipelines, pump stations, detention basins, infiltration basins/facilities, or other facilities constructed to transport stormwater and non-stormwater flows.

LRO – Legally Responsible Officer

MRP – Monitoring and Reporting Program No. 2006-0003-DWQ and as amended by Order No. WQ 2008-0002-EXEC and Order No. 2022-0103-DWQ

MSC – Municipal Service Center

RWQCB – Regional Water Quality Control Board

Spill – a discharge of sewage from any portion of a sanitary sewer system due to a sanitary sewer system overflow, operational failure, and/or infrastructure failure. Exfiltration of sewage is not considered to be a spill under Order No. 2022-0103-DWQ if the exfiltrated sewage remains in the subsurface and does not reach a surface water of the State.

SSO – Sanitary Sewer Overflow

SWRCB – State Water Resources Control Board

WPCF – Water Pollution Control Facility

Online CIWQS Database – Online spill reporting system that is hosted, controlled, and maintained by the State Water Resources Control Board. The web address for this site is: https://ciwqs.waterboards.ca.gov/

Surface Water - A surface water is any "waters of the United States," including all water that are or could be used for such purposes as recreation, fishing, swimming, agriculture, industry, etc. Lakes, streams, tidal water, estuaries, and other waters that flow on the surface of the land are included, even if they flow only part of the year. Wetlands are also included.

Sanitary Sewer Overflow (SSO) – a sanitary sewer overflow is any overflow, spill, release, discharge, or diversion of untreated or partially treated wastewater from a sanitary sewer system. SSOs include:

A. Overflows or releases of untreated or partially treated wastewater that reach waters of the United States.
B. Overflows or releases of untreated or partially treated wastewater that does not reach waters of the United States.
C. Wastewater backups into buildings and on private property that are caused by flow blockages within the publicly owned portion of a sanitary sewer system.

According to the MRP established by the SWRCB, spills are classified into four categories defined by the following:

Category 1

A spill of any volume of sewage from or caused by a sanitary sewer system that results in a discharge to:

A. A surface water, including a surface water body that contains no flow or volume of water; or
B. 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.

Any spill volume not recovered from a drainage conveyance system is considered a discharge to surface water, unless the drainage conveyance system discharges to a dedicated stormwater infiltration basin or facility.

A spill from an Enrollee-owned and/or operated lateral that discharges to a surface water is a Category 1 spill; the City shall report all Category 1 spills per section 3.1 of Attachment E1 (Notification, Monitoring, Reporting, and Recordkeeping Requirements) of Order No. 2022-0103-DWQ.

Category 2

A spill of 1,000 gallons or greater, from or caused by the sanitary sewer system that does not discharge to a surface water, including 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

A spill of equal to or greater than 50 gallons and less than 1,000 gallons, from or caused by the sanitary sewer system that does not discharge to a surface water, including 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

A spill of less than 50 gallons, from or caused by the sanitary sewer system that does not discharge to a surface water, including 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.

Private Lateral Sewage Discharges

Sewage discharges that are caused by blockages or other problems within a privately owned lateral and less than 1,000 gallons.

Spill Response Procedures

The following response procedures were developed by the Public Works Department to facilitate the containment, clean-up, and reporting of spills. These procedures are to be followed to ensure that all regulatory agencies and appropriate City personnel are notified of the spill within the specified timeframes per the MRP, and that the Public Works Department provides a response appropriate to each specific spill event. Personnel identified in parenthesis denote the key staff person(s) for each task.

I. Spill Detection Methods:
   A. Lift station alarm (WPCF Plant Operator)
   B. WPCF alarm (WPCF Plant Operator)

C. Utility Maintenance Crew observation
D. Phone calls
   i. During working hours – MSC front desk: 530-661-5962
   ii. After working hours – Yolo County Communications (911) or 530-666-8920.
   iii. On-call Staff is checked in with County Communications at the beginning of the shift

II. Spill Chain of Communication (All Spill Responders)

A. The initial observer (Sewer Maintenance Crew) or receiver of a spill call (MSC front desk or Yolo County Dispatcher) should use a standard Spill Report Form (see Appendix 1) and attempt to collect the following information:
   - Time and date call is received
   - Specific location of spill
   - Description of the problem
   - Time possible spill was noticed by observer
   - Observer/ caller's name and phone number
   - Observations made (e.g. odor, duration, estimated volume, damage)
   - Other relevant information that will enable the responding investigators and crews, if required to quickly locate, assess, and stop the overflow.

B. Once a spill has been reported, the spill should be communicated according to the Spill Reporting Chain of Communication, included in Appendix 3. The Chief Collection Systems Operator or On-Call Crew will dispatch resources to the site of a spill as deemed necessary based on the initial incident report information available.

III. Initial Investigation Response (Sewer Utility Supervisor / On-Call Personnel)

The Chief Collection Systems Operator or On-Call Personnel must perform a quick investigation of the overflow upon arrival, which includes:

A. Make note of time of arrival.
B. Isolate the scene with cones and caution tape.
C. Perform spill flow estimation (use Appendix 4: Spill Flow Estimation Procedures).
D. Briefly take pictures of the spill and surrounding areas to document the extent of the overflow and damages.
E. Decide if the spill constitutes a Category 1, Category 2, Category 3, Category 4 or Private Lateral spill.
F. Determine if additional spill response resources are needed, and call them if in if necessary (per Spill Reporting Chain of Communication).
G. The Chief Collection Systems Operator or On-Call Personnel report the incident to both internal City contacts as well as external agencies as required by the

MRP. The spill will be reported as described in the "Spill Reporting Timeframes" section of this document, and as noted on the Spill Reporting Chain of Communication.

H. Initial 2-hour reporting (by phone, as required by Order No. WQ 2022-0103-DWQ) to the State OES (800) 852-7550, RWQCB (916) 464-3291 and Yolo County Health Department (530) 666-8646, as required for spills estimated to be 1,000 gallons or greater to a waters of the State. On-Call Maintenance crews should call if the Chief Collection Systems Operator is not immediately available to report the incident within 2 hours of knowledge of the spill.

I. The Maintenance Crew should focus on containing the spill and stopping the cause of the spill prior to filling out a detailed Spill Report Form or "24-Hour Certification of 2-Hour Notification" Form. The information for these report forms may be gathered once the spill has been appropriately mitigated as described below.

IV. Traffic Control / Hazardous Materials (Sewer Utility Supervisor)

If spill cleanup assistance and/or additional traffic control is needed to protect the public or City employees while containment and cleanup of the spill is ongoing, appropriate entities listed in Call Group 3 should be contacted to assist.

A. For Traffic and crowd control contact the City of Woodland Police Department.

B. If the spill is toxic and/or an injury occurs, contact the city of Woodland Fire Department and the Yolo County Health Department if necessary. The Yolo County Health Department is capable of dispatching their Hazardous Materials Emergency Response Team to the scene.

C. If the Yolo County Hazardous Materials Emergency Response Team is not capable of responding adequately to the scene, the Chief Collection Systems Operator or On-Call Crew may contact other response agencies.

V. Contain Spill (Utility Maintenance Workers)

When Utility Maintenance Workers arrive on the scene of a spill, the first step is always for Workers to put on the proper safety equipment such as eye protection, gloves, a hard hat, etc. If a hazardous substance is clearly involved in the spill, identified by the smell of gas or other toxic / flammable substance, the Fire Department, Police Department, County Health Department, or Standby Emergency Response Contractor should be contacted to handle clean-up. If no hazardous materials are present at the spill site, the Utility Maintenance Worker may proceed with the following:

A. Procedure for containing overland spills

i. If the spill has not yet reached a catch basin or storm drain inlet, place rubber mats over or sandbags in front of any that are nearby to prevent future infiltration into the storm drain system.

ii. Dig a trench or build a dirt berm to channel sewage into the nearest downstream maintenance hole if sewage is flowing.
iii. If it is not possible to divert flow to a maintenance hole, consider plugging the outlet from a nearby storm drain catch basin and diverting the flow into the sump for temporary storage and later removal.
iv. If possible, use a Vac-Con truck to remove flowing or standing sewage.

B. Procedure for containing overflow in a building
   i. Advise the property owner to obtain the services of a certified clean-up contractor to assist with containment and restoration of the area. The City does not provide these services.
   ii. Make the customer aware that if the backup is determined to have occurred due to blockage of the lateral on the customer's property, cleanup is at the customer's expense. If the blockage is determined to have occurred within the publicly owned portion of the lateral or within the main service line, the customer may file a claim which will result in payment of damages by the City.

C. Procedure for contain overflow that reaches a storm drain
   i. Determine visually or through the use of the City mapping system the outfall point of the affected area in the storm drain system and plug all outfalls.
   ii. If drainage ditches or channels are conveying sewage, block them with berms or sand bags if necessary to prevent further migration of sewage downstream.

D. Required containment equipment
   i. See Appendix 5: Spill Response Equipment List

VI. Locate the Cause of Overflow (Utility Maintenance Workers)

A. Locate the cause of the overflow
   i. Sewer main
      a. Check flow in maintenance holes.
      b. Blockage should be between maintenance hole with sluggish flow and maintenance hole with very little or no flow.
   ii. Service sewer lateral
      a. Check flow in cleanout. If cleanout does not have flow, stoppage is located on private property and is not the City’s responsibility.
      b. If there is no existing cleanout, notify property owner to call a plumber to clear the stoppage and run the service line from the house to the main line.

c. Be sure to collect data required for Private Lateral SSOs on the Spill Report Form so that the even may be reported using CIWQS, if desired by the Chief Collection Systems Operator.
d. Contact the Environmental Compliance Division to inspect the property if necessary (use appropriate inspection request form).

iii. Pump station
a. Check alarm system for indication of problem. Many alarms are telemetered by the SCADA system to the WPCF.
b. Call a WPCF Operator to the pump station for a visual inspection of the facility.
c. If power failure has occurred, determine if pump station has an emergency generator and if emergency generator is operating.
d. Check flow meters and pressure gauges to determine if pumps are operating within normal ranges.

B. Correct the problem (Utility Maintenance Worker / WPCF Operators)
i. Within sewer main
a. If necessary, set up bypass pumping. Measure the distance from the upstream maintenance hole where flow is backing up to the nearest downstream maintenance hole where flow is clear to determine the length of pipe needed. Use a gravity flow slide calculator to estimate the flow rate in the blocked pipeline based on the estimate of the pipe size, slope, and 100% full flow. The gravity flow rate may also be available from printed maps on the City's hydraulic model results.
b. If appropriate bypass pumping equipment is not available at the MSC, the appropriate equipment rental agency (Rain for Rent or other) should be contacted to provide the necessary equipment.
c. Clear line from dry maintenance hole, if possible, with high pressure cleaning or rodding equipment according to City standard operating procedures (HVVC Best Practices).
d. Determine cause of blockage if possible during cleaning.

ii. Within lateral service line
a. Maintenance Worker to determine cause and location of blockage through visual inspection if possible.
b. Initiate CCTV inspection of service lateral if necessary using lateral TV camera to determine the cause and location of the blockage. This may not be possible depending on conditions at the cleanout, if one exists.
c. Clear the blockage if it has occurred within the publicly owned portion of the lateral.

d. If a plumber is required to clear blockages in the privately owned portion of the lateral, Utility Maintenance Worker will follow up with the plumber to determine the cause of the blockage and append that data to the Spill Report Form.

iii. At pump station

a. If pump station does not have power, connect portable emergency generator. Electricians are needed to connect a portable emergency generator to the pump station if an electric plug connection is not provided.
b. Check fuel for emergency generator.
c. If a pump is not operating, have an Electrician troubleshoot the pump.
d. Set up bypass pumping if necessary. If appropriate bypass pumping equipment is not available at MSC, the appropriate equipment rental agency (Rain for Rent or other) should be contacted to provide the necessary equipment.
e. If the pump cannot be repaired in place, have an Electrician and Maintenance Worker remove the malfunctioning pump and install one at the available backup pumps.
f. Have the Utility Maintenance Crew investigate the force main for possible damage or blockage.
g. Refer to the emergency response plan provided by the pump station contractor / engineer to respond to other specific problems, which is available on-site at each pump station.
h. Make other repairs as necessary.

VII. Clean-Up (Utility Maintenance Workers)

A. Storm drain clean-up
   i. Pump out wastewater and take to WPCF.
   ii. Remove debris.
   iii. Wash concrete thoroughly with pressure washer and contain wash water.
   iv. Pump out wash water, clean contaminated storm lines (through use of Vac-Con or other means) and take to WPCF.
   v. Remove all plugs / dams used to contain flow.

B. Street clean-up
   i. Remove debris.
   ii. Wash pavement and contain wash water.
   iii. Remove wastewater to WPCF.

C. Natural habitat / surface waters

i. For minor spills in natural habitat that is not considered a surface water: remove debris, rinse the area thoroughly and contain wash water. If sewage has thoroughly penetrated the soil, determine on a case-by-case basis if excavation and disposal of the soil as sludge is necessary. Coordinate with the WPCF Treatment Plant Superintendent as needed.

ii. If deemed necessary by the City spill response team, the Yolo County Health Department Hazardous Materials Response Team or Standby Emergency Response Contractor will be called in to clean up extensive contamination of surface waters or other natural habitats.

D. Private property clean-up

i. The property owner is to hire a specialized clean-up contractor to mitigate damage. Payment is to be made by the City for blockages in the publicly owned portion of the sewer collection system and the property owner is to make payment for private lateral blockages.

ii. The Environmental Compliance Inspector is to monitor progress and close-out the clean-up procedures if the spill occurred from a business that has a Pollution Prevention Permit (PPP). If the spill resulted from a private property that is not PPP holder, a Code Enforcement Officer will monitor progress of close-out and clean-up procedures.

VIII. Final Investigation (Chief Collection Systems Operator)

Once the spill has been isolated and the cause has been mitigated, the supervisor (Chief Collection Systems Operator or Senior Utilities Maintenance Worker) must perform a final investigation to determine if additional reporting is required.

A. Estimate final overflow volume.

B. Use a CCTV camera to inspect the pipeline segment in which the blockage occurred. A CCTV inspection should be conducted even if the probable cause of the spill has been determined during spill mitigation activities, such as during hydroflushing to clear the blockage.

C. Work with the Yolo County Health Department to determine if health warnings must be posted.

D. If necessary, work with the Yolo County Hazardous Materials Emergency Response Team, Standby Emergency Response Contractor, Environmental Resource Analyst, and WPCF Laboratory Analyst to determine the locations and continued future schedules of water samples that should be collected to determine the impact of a spill that has affected a waterway, or to confirm the discontinuation of any posted health warnings.

E. If an estimated 1,000 gallons or greater spill enters a body of water, samples must be taken from 3 locations: the drainage conveyance system holding the spill before the flow discharges into the receiving water (DCS-001), the point of

discharge where sewage enters the receiving water (outfall channel, RSW-001), and a point downstream of the point of sewage discharge where the material is fully mixed with the receiving water (near the West Levee, RSW-001D), in accordance with the established "Spill Surface Water Sampling Procedures" (see Appendix 6). It is not possible to collect an upstream sample in the receiving water (RSW-001U) because all municipal drainage conveyance systems discharge into the same point of the outfall channel, which forms the beginning of the channel.

F. The MRP requires the following be recorded for all samples taken:
    i. The date, exact place, and time of sampling measurements.
    ii. The individual(s) who performed the sampling or measurements.

G. If a spill enters a body of water, the Chief Collection Systems Operator or On-Call Crew should ensure that the "2-Hour Notification of Spill Reaching a Surface Water" Form (See Appendix 2) is filled out and sent to the RWQCB within 24-hours of the event being reported.

IX. Reporting (Chief Collection Systems Operator / Data Submitter)

All Category 1, 2, and 3 spills must be reported regardless of volume. Monthly certified spill reporting (summarizing number of spills and total spill volume) must be completed for Category 4 spills. It is at the Chief Collection Systems Operator's discretion to report Private Lateral Spills.

A. The LRO (Chief Collection Systems Operator) is responsible for the collection of all the mandatory information to be included in online reports according to the SWRCB established MRP. The Chief Collection Systems Operator should completely fill out the Spill Report Form (see Appendix 1) at the scene of the event to ensure all of the necessary data is accurately collected. If the Chief Collection Systems Operator is not available when the spill has been mitigated and it is time to thoroughly document the event, the Spill Report Form can be completed by On-Call Personnel.

B. The completed Spill Report Form shall be kept on file. The Spill Report Form shall be reviewed and submitted to the Chief Collection Systems Operator.

C. The Chief Collection Systems Operator must review the report, complete and certify the final online report through the CIWQS system as described in the "Spill Reporting Timeframes" section of this document.

X. Special Circumstances (Chief Collection Systems Operator / On-Call Crew)

A. After hours, weekend, and holiday response
    i. At least one Maintenance Worker is on-call and available 24 hours per day, 365 days per year to initiate the Spill Reporting Chain of Communication and direct the spill response activities.

B. Heavy traffic

i. City Police will respond to any spill that affects street travel and will implement a proper traffic control plan to prevent public exposure to sewage and protect the safety of the spill responders.

C. Spills near schools, hospitals, etc.
   i. The Chief Collection Systems Operator or On-Call Crew will immediately contact school principals, hospital directors, and other public facility administrators by phone if a spill poses a threat to exposure and properly isolate the spill area from public contact.

D. Major repairs required
   i. Circumstances may arise when the City of Woodland could benefit from the support of private-sector construction assistance. This may be true in the case of large diameter pipes buried to depths requiring shoring and dewatering should excavation be required. If a pipeline failure requiring excavation for repair has occurred, the Chief Collection Systems Operator or Senior Utilities Maintenance Worker will contact Underground Service Alert (USA) as soon as possible to begin the process of utility location so that repairs may be made rapidly. The Chief Collection Systems Operator or Principal Utilities Civil Engineer will initiate the process of implementing a strategy to repair the damaged pipeline, which may include contacting engineering consultants and contractors.

Spill Reporting Timeframes

The Public Works Department has developed the following procedures for the reporting of spills. These procedures are to ensure that all regulatory agencies and City departments are notified within the timeframes specified in the MRP and that all regulatory requirements are met when reporting spills. These spill reporting steps should be followed by the Chief Collection Systems Operator, Senior Utilities Maintenance Worker, or On-Call Crew immediately upon notice of a spill event.

A. Spill Category 1
   i. First responder contacts Call Group 2 as soon as possible after arriving on the scene and assessing the situation, within 30 minutes of arrival.
   ii. Call selected departments in Call Group 3 as needed within 1 hour of arrival.
   iii. If the spill is estimated to be 1,000 gallons or greater and has impacted waters of the United States, the City is required to report the spill to Cal OES. The spill shall also be reported to the RWQCB and Yolo County Health Department (Call Group 1) within 2 hours of the initial report of incident by telephone, voicemail, or by fax.

iv. If the spill is estimated to be 1,000 gallons or greater and impacts any body of water, the City shall report the spill to the CDFG within 2 hours. The Chief Collection Systems Operator will make the decision to contact any affected downstream water suppliers based on an assessment of the spill with respect to wells or spills to surface waters with intake points downstream (Call Group 3). This notification will also be made with 2 hours.
v. The Chief Collection Systems Operator or Senior Utilities Maintenance Worker (if Chief Collection Systems Operator is not immediately available) must fax the "24-Hour Certification of 2-Hour Notification" Form to the RWQCB, or may use the CIWQS system to certify to the RWQCB that the State OES and Local Health Department were contacted within the required 2-hour window. This certification must be submitted within 24 hours of the spill occurrence.
vi. The draft spill report must be made through the CIWQS system as soon as possible but no later than 3 business days after being made aware of the spill.
vii. The certified report must be completed through the CIWQS system within 15 calendar days of conclusion of the spill event.
viii. If 50,000 gallons or more is estimated to have been discharged to surface water, a technical report shall be submitted within 45 calendar days after the spill end date.
ix. Submit laboratory analysis results when available. Laboratory results shall be included in the Spill Technical Report on CIWQS. Certified spill reports submitted to regulatory agencies may need to be updated with laboratory analysis results.

B. Spill Category 2
   i. First responder contacts Call Group 2 as soon as possible after arriving on the scene and assessing the situation, within 30 minutes of arrival.
   ii. The Yolo County Health Department should be contacted for cleanup instructions.
   iii. The draft spill report must be submitted to the CIWQS system within 3 business days of Woodland staff knowledge of the spill and the certified spill report must be submitted to CIWQS within 15 days of the spill end date.
C. Spill Category 3
   i. First responder contacts Call Group 2 as needed after arriving on the scene and assessing the situation.
   ii. Submit certified report within 30 calendar days of the end of the month in which the spill occurred.
D. Spill Category 4
   i. First responder contacts Call Group 2 as needed after arriving on the scene and assessing the situation.

ii. Certify monthly the estimated total spill volume exiting the sanitary sewer system and the total number of all Category 4 spills into CIWQS within 30 days after the end of the calendar month in which the spills occurred.

iii. Annually upload and certify a report, in an appropriate digital format, of all recordkeeping of spills to CIWQS by February 1st after the after the end of each calendar year in which the spills occurred.

E. Private Lateral Spills

i. Reporting may be made to CIWQS based upon the Chief Collection Systems Operator's discretion. If a spill is reported through CIWQS, the spill must be identified as caused by a private property owner and the responsible party must be identified.

F. "No Spill" Reporting

i. If there are no spills during the calendar month, a report is submitted within 30 days after the end of the calendar month as a statement through the CIWQS system certifying that there were no spills during the designated month.

Spill Emergency Response Plan

Group Telephone Guide

Group 1: Contacts for Category 1 Spills

Office of Emergency Services (OES)……1-800-852-7550
or 916-845-8911

Regional Water Quality Contract Board
Phone……916-464-4822
or 916-464-3291
Fax……916-406-4645

Yolo County Health Department……530-666-8646

If spill impacts any local stream / waterway call:

State of California Department of Fish and Game……916-862-1110 (Monday – Friday)
……916-358-1312 (After Hours 24/7 Dispatch)

If spill reaches the storm drain call:

Environmental Resource Analyst……530-661-2057
Local Government Officials (City Council)……530-661-5806
Water Pollution Control Facility Lab……530-661-2053

Group 2: Contacts for Category 2 Spills

1st Utilities Maintenance Supervisor……530-379-8216
2nd Senior Utilities Maintenance Worker……530-405-6874
Director of Public Works……916-919-3082
WPCF Superintendent (For Pump Station Failures)……530-908-4309
Environmental Compliance Inspector……530-661-2057
……or 530-661-2058

Group 3: As-Needed Contacts

Yolo County Communications……530-666-8920
Woodland Fire Department……530-661-5860
Woodland Police Department……530-661-2411
Additional By-Pass Pumping (Contractor)
Rain for Rent……530-662-1024
United Rentals (Generators, Heavy Construction Equipment)……530-669-3270
Conway Ranch (downstream agricultural water user)……530-662-6200 X101
……mobile 530-308-0681
Clean Harbors Environmental Services……916-302-6265
Underground Service Alert (USA)……811

Spill Response Procedures Training

The Department of Public Works will ensure that all staff involved in the spill response procedures are properly trained by conducting the following training, which will be included as part of the regular weekly tailgate discussions and monthly training meetings:

A. Minimum annual spill mitigation training / review for Utility Maintenance Workers including field review and demonstrations of:
    i. Spill diversion using berms and ditches
    ii. Storm sewer covering and plugging procedures
    iii. Vacuum truck usage
    iv. Rinsing, rinse containment, and disinfection procedures for spill cleanup
    v. Hydraulic cleaning methods (hydro-jet, rodding, etc.)
    vi. CCTV inspection of plugged pipes
    vii. Location of spill response supplies
    viii. Rodding of customer laterals
    ix. Customer service techniques
    x. Safety measures, including identification of hazardous materials
    xi. Conduct bypass setups at lift stations and between maintenance holes
B. Minimum annual joint meeting or conference call with Police Department, Fire Department, and Yolo County Health Department to review communication and response procedures including spill cleanup, traffic / crowd control, and hazardous materials handling.
    i. Meeting minutes are to be kept and distributed to all meeting attendees within 1 week of meeting.

SERP Performance Review

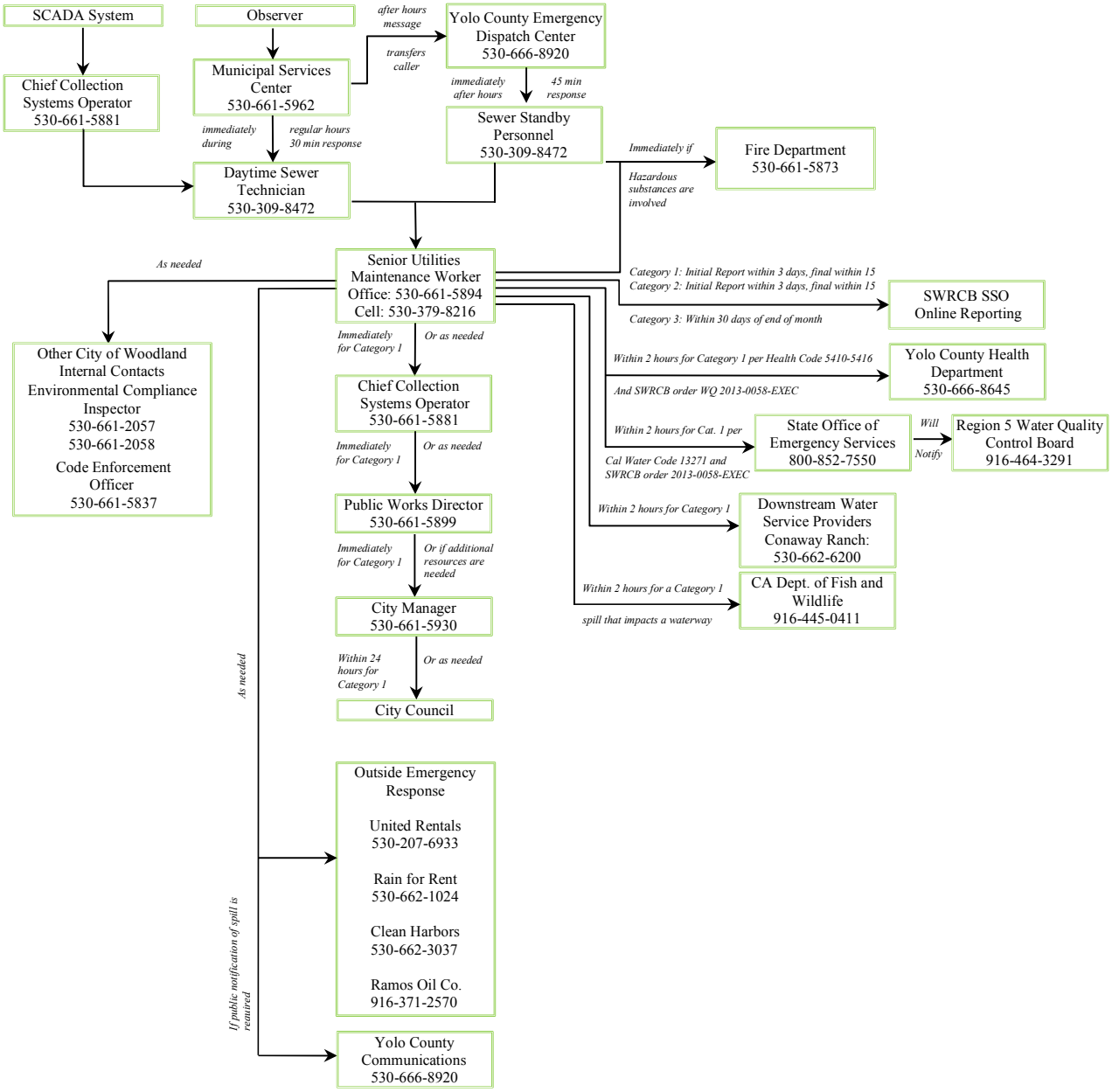
A. Within one month after every Category 1 Spill, the Chief Collection Systems Operator, Public Works Director, and Maintenance Workers shall hold a review meeting to discuss the lessons learned from the response efforts. Additionally, any necessary new preventative maintenance strategies that should be employed to prevent a spill from occurring in the same location due to similar causes should be discussed and documented. Any preventative maintenance strategies agreed upon should be incorporated into regular maintenance schedules. A list of meeting notes will be created and filed.
B. The Chief Collection Systems Operator shall document on each Spill Report Form the response times of key responders such as Utility Maintenance, Fire, Police, and County Health Workers and present the results at the next spill review meeting for discussion.

C. Annually, the Chief Collection Systems Operator will collect and review the filed spill response review notes and consider making changes or updates to the SERP to be distributed and introduced each year at the next Maintenance Worker and Police / Fire / Health Department SERP procedure review meetings.

Appendix 6-B

Spill Notification Decision Tree

City of Woodland Sanitary Sewer Overflow Reporting Chain of Communication



Appendix 7-A

FOG Outreach Materials

THINK BEFORE YOU FLUSH

Piense antes de tocar el botón del retrete

Avoid sewer backups & overflows by keeping trash out of the toilet!

¡Aleje los siguientes elementos de su inodoro para evitar acumulaciones de aguas residuales!

Maxi pads & tampons/ applicators

Tampones, toallitas femeninas y envoltorios

Dental floss & whitening strips

Hilo dental

Baby & cleaning wipes

Toallitas para bebé y el rostro y Toallitas húmedas

Cotton swabs & hair

Hisopos y almohadillas para maquillaje y cabello

Kitty litter & condoms

Sepiolita y Condones y sus envoltorios

Bandages & OTC medications

Apósitos y protectores de adhesivos y Medicamentos recetados y de venta libre

Flush only Toilet Paper. Put trash in the trash can!

Deseche por el retrete ÚNICAMENTE papel higiénico. Coloque la basura en el cesto para la basura.

DID YOU KNOW?

"Flushable" wipes are NOT flushable. They are THE #1 cause of sewer backups in our system.

City of Woodland

Environmental Compliance

www.cityofwoodland.org

What's F.O.G?

FATS, OILS AND GREASE ARE COMMON TO:

Meats and Fish

Butter

Cooking oils

Mayonnaise

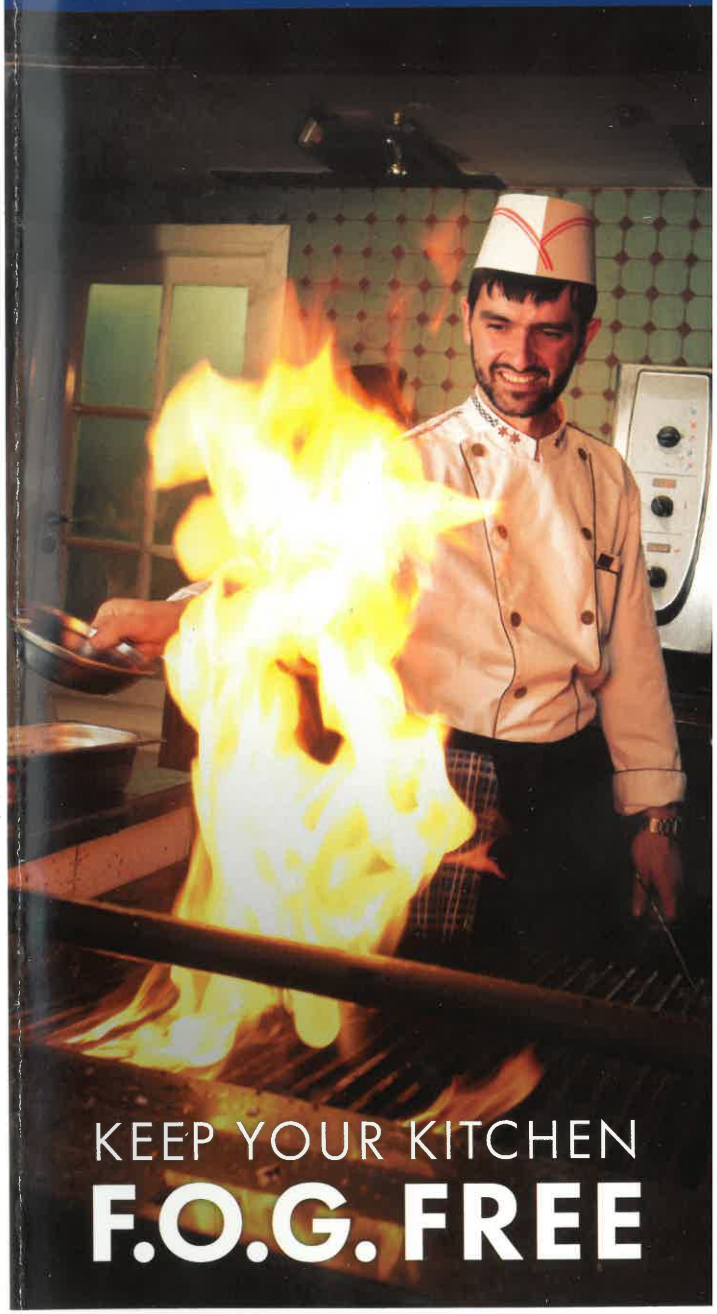
Gravies

Sauces and food scraps

City of Woodland

Environmental Compliance
42929 County Road 24,
Woodland, CA 95776

BUSINESS CUSTOMERS

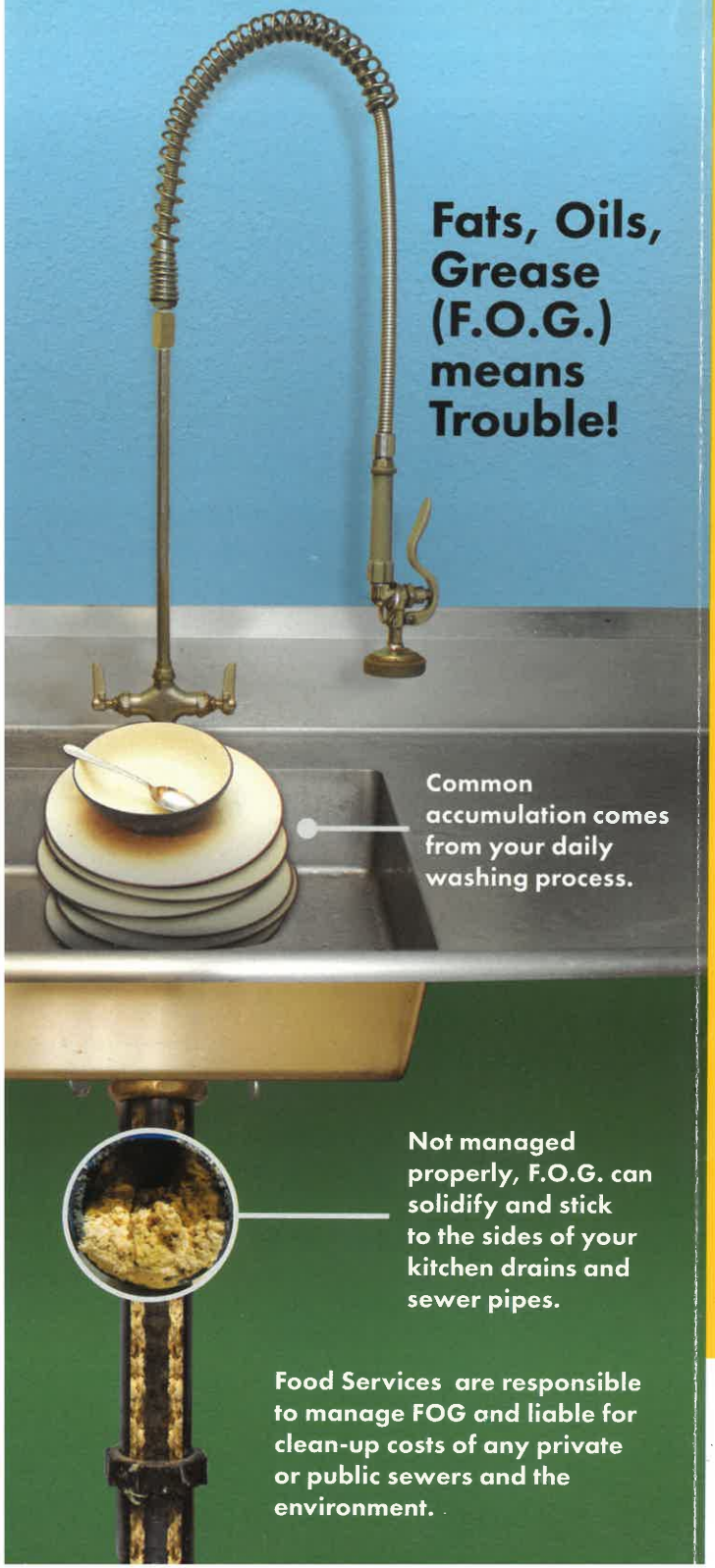


KEEP YOUR KITCHEN

F.O.G. FREE

City of Woodland

Environmental Compliance



Fats, Oils, Grease (F.O.G.) means Trouble!

Common accumulation comes from your daily washing process.

Not managed properly, F.O.G. can solidify and stick to the sides of your kitchen drains and sewer pipes.

Food Services are responsible to manage FOG and liable for clean-up costs of any private or public sewers and the environment.

BEST MANAGEMENT PRACTICES FOR F.O.G. FREE KITCHENS

Prevention

- Install a grease Interceptor or trap to separate fats, oils, grease to prevent them from entering the sanitary sewer.
- Contact a licensed grease trap waste removal company.

Businesses Responsibility for Maintenance

- Property and Business Owners are required to have their interceptors or traps inspected and cleaned on a regular schedule.
- Contact a licensed plumber if repairs are needed.
- Submit your cleaning records to the **City of Woodland Environmental Compliance Division**

When Should I Clean My Interceptor or Trap?

- When the thickness of F.O.G. and solids are greater than 25% of tank capacity.
- Inspect your interceptor or trap after cleaning by staff or a preferred pumper.

Maintain a FOG LOG

- Request a cleaning log from the Environmental Compliance Division 530-661-2057 or 530-661-2058.

Spill Kits

- Maintain a spill kit to clean spills inside or outside your business.

Educate Employees

- Place the poster on the wall and use for employee training.
- Remind Employees on a regular basis how to properly dispose of food waste, fats, oils & grease.
- Keep garbage enclosures and grease recycle bins clean. This will prevent waste and debris from interfering with storm drains.

City of Woodland

Environmental Compliance
42929 County Road 24, Woodland, CA 95776

IT'S TIME TO FIGHT F.O.G

Help keep Fats, Oils & Grease from clogging the sewer pipes!

THE RIGHT WAY

CORRECTO

Wipe dishes, pots, pans and cooking equipment before rinsing or washing.

Limpie con papel los platos, ollas, sartenes y equipo de cocina antes de enjuagarlos o lavarlos.

Put food waste into food compost container or trash.

Coloque los restos de comida en contenedores para reciclar alimentos o en la basura.

THE WRONG WAY

INCORRECTO

Do not pour cooking residue into the drain.

No arroje por el desagüe los residuos de alimentos cocinados.

Do not put food waste down the drain.

No arroje los desperdicios de alimentos por el desagüe.

Collect waste oil and store in Tallow Bin for recycling. Clean up spills immediately.

Junte el aceite usado y guárdelo para reciclar. Limpie los derrames inmediatamente.

Wash floor mats in a utility sink.

Lave los tapetes en un lavabo de servicio.

Keep screens in all drains to catch food waste.

Coloque coladores en todos los desagües para retener los desperdicios.

Do not pour cooking oil into the drain.

No vierta aceite de cocina directamente en el desagüe.

Do not wash floor mats outside.

No lave los tapetes en el exterior.

Do not remove screens from drains.

No quite los coladores de los desagües.

Appendix 7-B

FOG BMP Materials

CITY OF WOODLAND
ENVIRONMENTAL COMPLIANCE

How to properly maintain your grease trap.

Regular cleaning and inspection of your grease trap is required per your Wastewater Discharge Permit.

1) Prior to cleaning, let ice melt into the sink connected to the device. This will cause the grease to congeal, and will make cleaning easier.

2) Line a bucket or wastebasket with a sturdy plastic or compostable bag.

3) Scrape down the interior with a putty knife or spatula to remove any solids that may have collected on the sides.

4) Completely remove all grease floating on top and solids from the bottom of the trap. You can use a designated Kitchen strainer to eliminate most of the liquids and collect only the grease and solids.

5) Place all grease and solids into your lined bucket or wastebasket. Tie top of bag tightly as to prevent any of the debris from leaking out the top.

6) Food grade grease and solids from grease traps can be disposed of in two ways:
   1) Tied up bags can be disposed of in your garbage receptacle or;
   2) If you have an organics bin, your food grade grease and solids can be placed in a BPI (Compostable) garbage bag and placed in your organics bin, **preferred method**.
   Every effort should be made to ensure that the contents do not leak out of the bag

7) Replace trap lid, record your cleaning on your grease trap log and send it to us at the end of each month.

8) Have a certified plumber clean your grease trap and sewer lateral at least annually. Ask for a written report on the condition of the device.

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THANK YOU

CITY OF WOODLAND
ENVIRONMENTAL COMPLIANCE

Cómo mantener adecuadamente su dispositivo de grasa.

Se requiere una limpieza e inspección periódica de su dispositivo de grasa según su Permiso de descarga de aguas residuales.

1) Antes de limpiar, deje que hielo se derrita en el fregadero que esta conectado al dispositivo. Esto hará que la grasa se congele y facilitará la limpieza.

2) Cubra un balde o un bote de basura con una bolsa de plástico resistente o

3) Raspe el interior con una espátula para eliminar los sólidos que puedan haberse acumulado en los lados.

4) Elimine completamente toda la grasa que flota en la parte superior y los sólidos del fondo de el dispositivo. Puede usar un colador de cocina para eliminar la mayoría de los líquidos y recolectar solo la grasa y los sólidos.

5) Coloque toda la grasa y los sólidos en su balde o bote de basura. Ate la parte superior de la bolsa firmemente para evitar que los contenidos se filtren por la parte superior.

6) La grasa y los sólidos de su dispositivo de grasa se pueden eliminar de dos formas:
   1) Las bolsas atadas se pueden desechar en su contenedor de basura o;
   2) Si tiene un contenedor de orgánicos, la grasa y los sólidos se pueden colocar en una bolsa de basura BPI (compostable) y colocarse en su contenedor de orgánicos. Este es el **método preferido**.

   ** Se debe hacer todo lo posible para garantizar que el contenido no se salga de la bolsa **

7) Reemplace la tapadera de el dispositivo. Anote su limpieza en su registro del despositivo de grasa y envíenoslo al final de cada mes.

8) Contrate un plomero certificado para que limpie su dispositivo de grasa y el lateral de la alcantarilla al menos una vez al año. Solicite un informe escrito sobre el estado del dispositivo.

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GRACIAS

Appendix 8-A

Sewer Collection System Project Map and Timelines

CITY OF WOODLAND CALIFORNIA

Sewer Project Plan

ProjectYear,RepairType

- 2026,full main lining (9)
- 2026,open cut (10)
- 2026,spot liner (3)
- 2027,full main lining (12)
- 2027,open cut (10)
- 2027,spot liner (4)
- 2028,full main lining (11)
- 2028,open cut (10)
- 2028,spot liner (4)
- 2029,full main lining (14)
- 2029,open cut (6)
- 2029,spot liner (12)
- 2030,full main lining (5)
- 2030,spot liner (9)
- 2031,full main lining (3)
- 2031,spot liner (4)
- 2031,top hat (1)

N

S

0 500 1,000 2,000 Feet

Appendix 10-A

SSMP Audit Change Log

City of Woodland
Sewer System Management Plan
Audit Change Log

Date	SSMP Element/ Section	Description of Change/Revision Made	Change Authorized By: