



2022



SEWER SYSTEM MANAGEMENT PLAN





CONTENTS

Introduction	1-A
1.0 Goals	1-1
1.1 Requirement.....	1-1
1.2 Responsible Person.....	1-1
1.3 Compliance	1-1
2.0 Organization	2-1
2.1 Authorized Representative.....	2-1
2.2 Organizational Chart.....	2-1
2.3 Spill Reporting Chain of Communication.....	2-11
3.0 Legal Authority.....	3-1
3.1 Authority to Prevent Illicit Discharges	3-1
3.2 Authority to Properly Design and Construct Sewers.....	3-3
3.3 Authority to Ensure Access.....	3-3
3.4 Authority to Limit FOG.....	3-4
3.5 Authority to Enforce Any Violation.....	3-5
4.0 Operation and Maintenance Program.....	4-1
4.1 Maintain an Up-To-Date System Map	4-1
4.2 Routine Preventative O&M Activities.....	4-2
4.3 Prioritization Program	4-4
4.4 Training	4-4
4.5 Identify Equipment and Critical Replacement Parts.....	4-5
5.0 Design and Performance Provisions	5-1
5.1 Design and Construction Standards and Specifications	5-1
6.0 Sanitary Sewer Overflow Emergency Response Plan (OERP)	6-3
6.1 Purpose.....	6-3
6.2 Policy.....	6-3
6.3 Definitions as used in this OERP	6-3
6.4 Regulatory Requirements for OERP Element of SSMP	6-6
6.5 Goals	6-7
6.6 Proper Notification Procedures.....	6-7
6.7 Appropriate Spill Response Procedures	6-8
6.8 Prompt Notification and Reporting	6-10
6.9 Prompt Notification and Reporting	6-10
6.10 OERP Distribution and Training	6-14
6.11 Emergency Operations	6-16
6.12 Containment/Prevention and/or Minimization/Correction of Spills	6-16



7.0	FOG Control Program	7-1
7.1	What is FOG?	7-1
7.2	FOG Public Education Outreach Program.....	7-1
7.3	FOG Disposal.....	7-2
7.4	Legal Authority	7-2
7.5	Grease Removal Devices.....	7-3
7.6	Inspection	7-6
7.7	Identification of Potential FOG Blockages.....	7-6
7.8	Source Control Measures	7-7
8.0	System Evaluation and Capacity Assurance Plan	8-1
8.1	Identify Hydraulic Deficiencies	8-1
8.2	Establish Appropriate Design Criteria.....	8-2
8.3	Capacity Enhancement Measures	8-2
8.4	Schedule for Planned Enhancements.....	8-3
9.0	Monitoring, Measurement, and Program Modifications	9-1
9.1	Maintain Relevant Information	9-1
9.2	Measure Effectiveness.....	9-1
9.3	Assess Preventative Maintenance Program	9-2
9.4	Update SSMP	9-2
9.5	SSO Trends.....	9-3
10.0	SSMP Program Audit	10-1
10.1	SSMP Program Audits	10-1
11.0	Communication Program	11-1
11.1	Plan of Communication with the Public	11-1

List of Tables

Table 2-1: Responsible Persons List.....	2-4
Table 2-2 Element Description and Responsible Party	2-4
Table 2-2: Chain of Communication	2-13
Table 6-1: spill Category Descriptions.....	6-5
Table 6-2: Regulator Required Notifications.....	6-12



List of Figures

Figure 2-1: City of Beaumont Organizational Chart.....	2-2
Figure 2-2: Chain of Communication	2-13

List of Key Performance Indicators (KPIs)

KPI 1.1	1-1
KPI 1.2	1-1
KPI 1.3	1-1
KPI 1.4	1-2
KPI 2.1	2-13
KPI 2.2	2-13
KPI 3.1	3-5
KPI 4.1	4-6
KPI 4.2	4-6
KPI 4.3	4-6
KPI 4.4	4-6
KPI 4.5	4-6
KPI 5.1	5-2
KPI 6.1	6-19
KPI 7.1	7-8
KPI 7.2	7-8
KPI 7.3	7-8
KPI 8.1	8-4
KPI 9.1	9-3
KPI 10.1	10-2
KPI 10.2	10-2
KPI 10.3	10-2
KPI 11.1	11-3



List of Abbreviations

Cal-OSHA	California Office of Occupational Safety and Health Administration
CIP	Capital Improvement Project
CIWQS	California Integrated Water Quality System
FOG	Fats, Oil and Grease
LRO	Legally Responsible Official
MGD	Million gallons per day
OERP	Overflow Emergency Response Plan
OES	State Office of Emergency Services
RWQCB	Regional Water Quality Control Board, Santa Ana Regional
SVCW	Silicon Valley Clean Water
SSMP	Sewer System Management Plan
Spill	Sanitary Sewer Overflow or Overflow
SSS WDRs	Sanitary Sewer Overflow Waste Discharge Requirements
SWRCB	State Water Resources Control Board
WDR	Waste Discharge Requirements
WWTP	Wastewater Treatment Plant

List of Appendices

OERP Attachment A – City Spill Response Field Data Collection Form.....	6-21
OERP Attachment B – City Spill Volume Estimation Methods and Worksheet	6-23
OERP Attachment C – City Spill Start Time Estimation Worksheet	6-25
OERP Attachment D – City Procedures for Responding to Sewer Backups	6-27
OERP Attachment E - City Spill Debriefing Form.....	6-29
OERP Attachment F – List of City Equipment Suppliers.....	6-31
OERP Attachment G – City Water Quality Monitoring Plan	6-33
OERP Attachment H – City Contractor Emergency Plan	6-35
OERP Attachment I – City Equipment and Critical Replacement Parts	6-37
Appendix 1 – Water Board Pre-Inspection Questionnaire completed by City.....	A-1
Appendix 2 – Water Board Historic Enforcement Action for City	A-2
Appendix 3 – SSMP Gap Analysis Completed by Fischer Compliance.....	A-3
Appendix 4 – City Spill Performance/Metric Report by Fischer Compliance LLC	A-4
Appendix 5 – List of City Certified Spill Reports in CIWQS	A-5
Appendix 6 – Board Presentation for Certification of 2022 SSMP	A-6



INTRODUCTION

Background

To provide a consistent, statewide regulatory approach to reduce [Sanitary Sewer Overflows \(SSO, overflow, or spill, hereafter “spill”\)](#), the State Water Resources Control Board (State Water Board) adopted [Statewide General Waste Discharge Requirements \(WDRs\) for Sanitary Sewer Systems, Water Quality Order No. 2006-0003](#) (Sanitary Sewer Systems WDRs or SSS WDRs) on May 2, 2006. The SSS WDR requires public agencies that own or operate sanitary sewer systems (consisting of one mile or more of system pipelines) to develop and implement Sewer System Management Plans (SSMPs) to reduce/eliminate spills. The SSS WDRs also require agencies to report spills to the State Water Board’s online spill database (CIWQS)¹. On September 9, 2013, the State Water Board issued and [Amended Monitoring and Reporting Program \(Amended MRP\), Water Quality Order No. WQO 2013-0058-EXEC](#), updating the original MRP adopted in 2006 requiring new record keeping, notification/reporting information and other requirements for sewer agencies in the state.

The purpose of this document is to ensure that the City is taking all feasible steps to reduce or eliminate spills to protect public health and the environment. This is accomplished by implementing the SSMP to ensure proper funding, operation, maintenance, expansion, and renewal of the City’s sewer collection system.

SSMP Organization

This SSMP is organized into the elements and requirements that are outlined in the SSS WDRs. Each of the sections of the SSMP reviews the requirement of the SSS WDRs, identifies the responsible person for that SSMP element, provides a discussion of the plan to meet the intent of the requirement and lists potential performance indicators for measuring the effectiveness of the City’s efforts related to that SSMP element.

SSMP Certification and Re-Certification Schedule

This document represents the City’s first Sewer System Management Plan. The SSMP is required to be updated every five (5) years and approved by the City’s governing board and re-certified by the Legally Responsible Official (LRO). In addition, when significant updates to the SSMP are made re-certification is required.

¹ California Integrated Water Quality System (CIWQS), available publicly at:
https://ciwqs.waterboards.ca.gov/ciwqs/readOnly/PublicReportspillServlet?reportAction=criteria&reportId=sso_main



SEWER SYSTEM MANAGEMENT PLAN (SSMP)



1.0 GOALS

1.1 Requirement

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. This will help reduce and prevent spills, as well as mitigate any spills that occur.

1.2 Responsible Person

General Manager of Utilities

1.3 Compliance

The City's spill reduction goals are:

- i. Reduce the likelihood of a spill through effective management, planning and maintenance programs.
- ii. Effectively respond to spill events.
- iii. Mitigate the effects of spills on the environment and public health.
- iv. Provide adequate capacity to convey peak flows.
- v. Provide notifications and reports to all required regulatory agencies in a timely manner.
- vi. Provide public education to increase awareness of FOG issues and how they can impact the collection system.

These goals are accomplished by implementing the measures included in the City's SSMP.

1.0 Goals - Key Performance Indicators (KPIs)		
KPI 1.1	Are Work Plans being Implemented and effective?	<i>Measured by annual review of Work Plans to ensure goals are met and intended outcomes are achieved.</i>
KPI 1.2	Are spill Reduction Goals being met?	<i>Measured by annual review spill Data for number of spills and Volume of spills</i>
KPI 1.3	Are spill reporting and notifications requirements being met?	<i>Measured by annual review of CIWQS data.</i>



SEWER SYSTEM MANAGEMENT PLAN (SSMP)

1.0 Goals - Key Performance Indicators (KPIs)

KPI 1.4	Are spill event responses effective?	<i>Measured by review of spill Event Debriefing forms to evaluate outcomes and ensure adherence to the Overflow Emergency Response Plan (OERP)</i>
----------------	--------------------------------------	--



2.0 ORGANIZATION

Implementation of the City's SSMP requires the efforts of many individuals serving in a multitude of roles. This section describes the organization of the City of Beaumont.

2.1 Authorized Representative

2.1.1 Requirement

The name of the agency's responsible or authorized representative.

2.1.2 Responsible Person

General Manager of Utilities

2.1.3 Compliance

The City's principal executive officer is the General Manager of Utilities, who serves as Legally Responsible Official (LRO.) The Wastewater Plant Supervisor and Collection System Supervisor are also designated as LRO and are fully authorized by the General Manager of Utilities to sign and certify applications, reports, or information submitted to the SWRCB.

2.2 Organizational Chart

2.2.1 Requirement

Identify the names and telephone numbers for management, administrative, and maintenance positions responsible for implementing specific measures in the SSMP program. The SSMP must identify lines of authority through an organization chart or similar document with a narrative explanation.

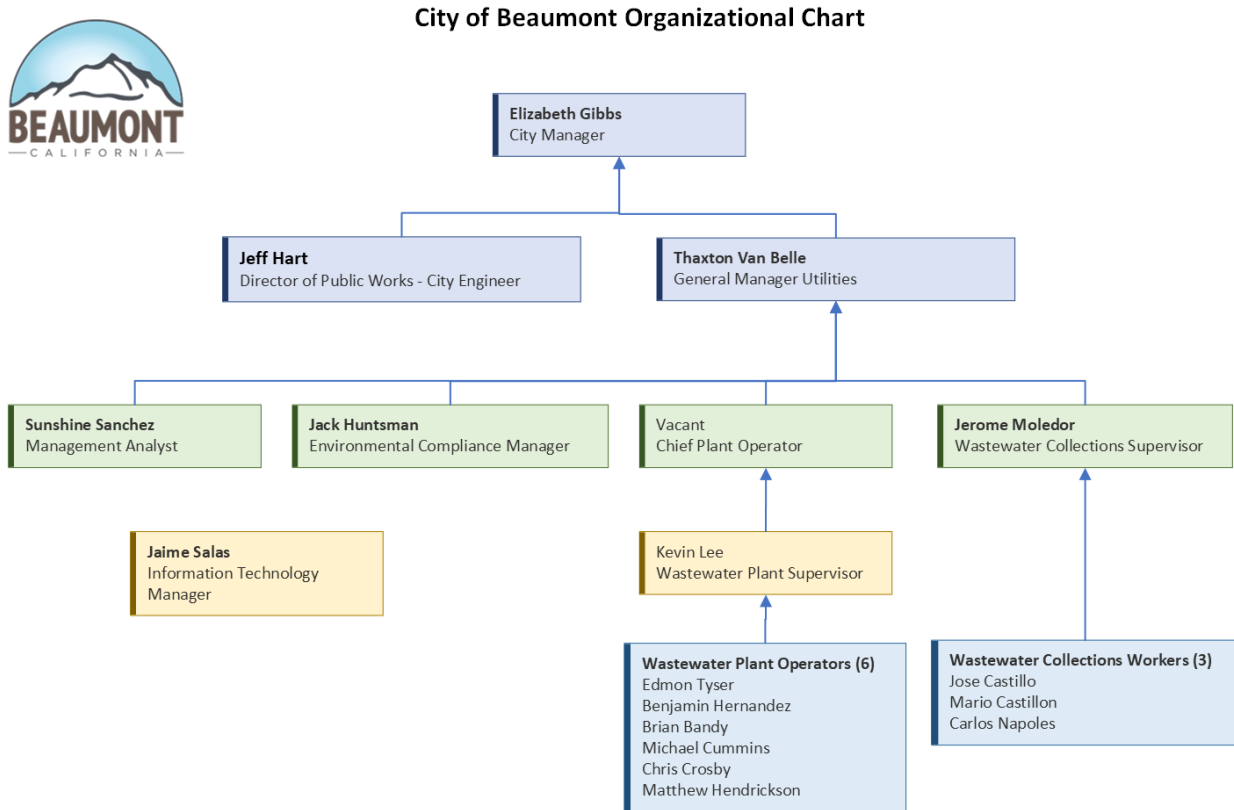
2.2.2 Responsible Person

General Manager of Utilities

2.2.3 Compliance

The current City Organizational chart is shown in Figure 2-1, below.

Figure 2-1: City of Beaumont Organizational Chart



Responsible Persons List

Director of Public Works – City Engineer

Under administrative direction, plans, oversees and directs the activities and operations of the Public Works Department, including engineering, street services, wastewater, land developments, traffic engineering, capital improvement programs, traffic planning and engineering, special projects, control staffing levels and department budget, coordinates activities with other departments and outside agencies, provide responsible/complex administrative support to the City Manager.

General Manager of Utilities

Under the general direction of the City Manager, directs, coordinates and supervises the activities and operations of the Wastewater Utilities Division which includes coordinating divisional activities with other utilities divisions, departments and outside agencies or organizations, establishes division goals, objectives, policies and procedures in accordance with the department and City’s mission statement and goals and providing professional, administrative and technical support to the City Manager in the area of wastewater/stormwater management. The Wastewater Division consists of four subdivisions, which



include Treatment Plant Operations and Maintenance, the Pre-treatment Program, Collection Systems Operations and Maintenance and Stormwater Operations and Maintenance. Serves as LRO.

Environmental Compliance Manager

Under general supervision, to perform sampling and inspection work related to the administration of the City's Pre-treatment Program; to ensure compliance with the National Pollutant Discharge Elimination System (NPDES) Permit for the Municipal Separate Storm Sewer System (MS4) and the Water Quality Management Plan (WQMP) for the Santa Ana region; to enforce the City's Industrial Waste Ordinances, storm water program, sewer collection system; and perform related work as required. Major responsibilities include performing industrial user inspections, producing accurate, legible, and legally defensible documentation of findings; analyzing data; reviewing new and tenant improvement plans and conditioning same to comply with approved standards for pre-treatment monitoring; database management and input of industrial user information; preparing written documents and regulatory reports; delivering presentations; and other related duties as directed.

Wastewater Plant Supervisor

Under general supervision of the Chief Plant Operator or designee, to perform skilled and supervisory work in the operational control of wastewater treatment processes for effective and efficient operations; to ensure that the wastewater is processed and discharged according to health and environmental regulations; and perform related work as required. Serves as LRO

Wastewater Collections Supervisor

Under general supervision of the General Manager, assists in all areas of the Wastewater Department, oversees all aspects of wastewater conveyance system operations and maintenance; supervises and directs assigned staff; is responsible for managing the daily operations of the collection and conveyance system, maintenance on infrastructure such as cleaning of gravity lines, operation and maintenance of pump stations, inspection and testing of air valve assemblies; manage the productivity of the operations and maintenance department performs other related duties as required.



Table 2-1: Responsible Persons List

Responsible Persons List		
Title	Name	Phone
Director of Public Works – City Engineer	Jeff Hart	(951) 769-8520 Ext. 588
General Manager of Utilities	Thaxton Van Belle	(951) 769-8520 Ext. 583
Environmental Compliance Mgr.	Jack Huntsman	(951) 769-8520 Ext. 349
Wastewater Plant Supervisor	Kevin Lee	(951) 769-8520 Ext. 311
Wastewater Collections Supervisor	Jerome Moledor	(951) 489-6622
Information Technology Manager	Jamie Salas	

Table 2-2 Element Description and Responsible Party

Element Description and Responsible Party		
Element	Element Description	Responsible Party
1.0 Goal	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. This will help reduce and prevent spills, as well as mitigate any spills that occur.	General Manager of Utilities
2.0 Organization	A) The name of the agency’s responsible or authorized representative.	General Manager of Utilities
	B) The names and telephone numbers for management, administrative, and maintenance positions responsible for implementing specific measures in the SSMP program. The SSMP must identify lines of authority through an organization chart or similar document with a narrative explanation; and	General Manager of Utilities



Element Description and Responsible Party		
Element	Element Description	Responsible Party
	C) The chain of communication for reporting spills, from receipt of a complaint or other information, including the person responsible for reporting spills to the State and Regional Water Board and other agencies if applicable (such as County Health Officer, County Environmental Health Agency, Regional Water Board, and/or State Office of Emergency (OES).	General Manager of Utilities
3.0 Legal Authority	A) Prevent illicit discharges into its sanitary sewer system, including I/I from satellite wastewater collection systems and laterals, storm water, unauthorized debris, etc.;	General Manager of Utilities
	B) Require proper design and construction of sewers and connections;	General Manager of Utilities
	C) Ensure access for maintenance, inspection, and repairs to publicly owned portions of laterals;	General Manager of Utilities
	D) Limit the discharge of FOG and other debris that may cause blockages; and	General Manager of Utilities
	E) Enforce violations of its sewer TBD (Ordinance)s.	General Manager of Utilities
4.0 O/M	<p>Operations and Maintenance</p> <p>A) Each wastewater collection system agency shall maintain up-to- date maps of its wastewater collection system facilities, showing all gravity line segments and manholes, pumping facilities, pressure pipes and valves, and applicable storm water pumping and piping facilities;</p>	Information Technology Manager



Element Description and Responsible Party		
Element	Element Description	Responsible Party
	B) Describe routine preventive operation and maintenance activities by staff and contractors, including a system for scheduling regular maintenance and cleaning of the sanitary sewer system with more frequent cleaning and maintenance targeted at known problem areas. The Preventive Maintenance (PM) program should have a system to document scheduled and conducted activities, such as works orders;	Wastewater Collections Supervisor
	C) should include a capital improvement plan that addresses proper management and protection of the infrastructure assets. The plan shall include a time schedule for implementing the short- and long-term plans plus a schedule for developing the funds needed for the capital improvement plan;	Director of Public Works – City Engineer
	D) Provide training on a regular basis for staff in sanitary sewer system operations and maintenance, and require contractors to be appropriately trained; and	Wastewater Collections Supervisor
	E) Provide equipment and replacement part inventories, including identification of critical replacement parts.	Wastewater Collections Supervisor
5.0 Design and Performance Provisions	A) Design and Construction Standards and specifications for the installation of new sanitary sewer systems, pump stations and other appurtenances and for the rehabilitation and repair of existing sanitary sewer system; and	Director of Public Works – City Engineer
	B) Procedures and standards for inspecting and testing the installation of new sewers, pumps, and other appurtenances and for rehabilitation and repair projects.	Director of Public Works – City Engineer



Element Description and Responsible Party		
Element	Element Description	Responsible Party
6.0 OERP	Overflow Emergency Response Plan	Wastewater Collections Supervisor
	A) Proper notification procedures so that the primary responders and regulatory agencies are informed of all spills in a timely manner;	
	B) A program to ensure an appropriate response to all overflows;	Wastewater Collections Supervisor
	C) Procedures to ensure prompt notification to appropriate regulatory agencies and other potentially affected entities (e.g., health agencies, Regional Water Boards, water suppliers, etc.) of all spills that potentially affect public health or reach the waters of the State in accordance with the MRP. All spills shall be reported in accordance with this MRP, the California Water Code, other State Law, and other applicable Regional Water Board WDRs or NPDES permit requirements. The SSMP should identify the officials who will receive immediate notification.	Wastewater Collections Supervisor
	D) Procedures to ensure that appropriate staff and contractor personnel are aware of and follow the Emergency Response Plan and are appropriately trained;	Wastewater Collections Supervisor
	E) Procedures to address emergency operations, such as traffic and crowd control and other necessary response activities; and	Wastewater Collections Supervisor



Element Description and Responsible Party		
Element	Element Description	Responsible Party
	F) A program to ensure that all reasonable steps are taken to contain and prevent the discharge of untreated and partially treated wastewater to waters of the United States and to minimize or correct any adverse impact on the environment resulting from the spills, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the discharge	Wastewater Collections Supervisor
7.0 FOG	FOG Control Program	Environmental Compliance Mgr.
	A) An implementation plan and schedule for a public education outreach program that promotes proper disposal of FOG;	
	B) A plan and schedule for the disposal of FOG generated within the sanitary sewer system service area. This may include a list of acceptable disposal facilities and/or additional facilities needed to adequately dispose of FOG generated within a sanitary sewer system service area;	Wastewater Collections Supervisor
	C) The legal authority to prohibit discharges to the system and identify measures to prevent spills and blockages caused by FOG;	General Manager of Utilities
	D) Requirements to install grease removal devices (such as traps or interceptors), design standards for the removal devices, maintenance requirements, BMP requirements, record keeping and reporting requirements;	General Manager of Utilities
	E) Authority to inspect grease producing facilities, enforcement authorities, and whether the Enrollee has sufficient staff to inspect and enforce the FOG ordinance;	Environmental Compliance Mgr.



Element Description and Responsible Party		
Element	Element Description	Responsible Party
	F) An identification of sanitary sewer system sections subject to FOG blockages and establishment of a cleaning maintenance schedule for each section; and	Wastewater Collections Supervisor
	G) Development and implementation of source control measures for all sources of FOG discharged to the sanitary sewer system for each section identified in (f) above.	Wastewater Collections Supervisor
8.0 SECAP	System Evaluation and Capacity Assurance Plan A) Evaluation: Actions needed to evaluate those portions of the sanitary sewer system that are experiencing or contributing to a spill discharge caused by hydraulic deficiency. The evaluation must provide estimates of peak flows (including flows from spills that escape from the system) associated with conditions similar to those causing overflow events, estimates of the capacity of key system components, hydraulic deficiencies (including components of the system with limiting capacity) and major sources that contribute to the peak flows associated with overflow events;	Director of Public Works – City Engineer
	B) Design Criteria: Where design criteria do not exist or are deficient, undertake the evaluation identified in (A) above to establish appropriate design criteria;	Director of Public Works – City Engineer



Element Description and Responsible Party		
Element	Element Description	Responsible Party
	C) Capacity Enhance Measures: The steps needed to establish a short and long-term CIP to address identified hydraulic deficiencies, including prioritization, alternatives analysis, and schedules. The CIP may include increases in pipe size, inflow, and infiltration (I&I) reduction programs, increases and redundancy in pumping capacity, and storage facilities. The CIP shall include an implementation schedule and shall identify sources of funding; and	Director of Public Works – City Engineer
	D) Schedule: The City shall develop a schedule of completion dates for all portions of the capital improvement program developed in (A), (C) above. This schedule shall be reviewed and updated consistent with the SSMP review and update requirements as described in Section D. 14 Of the GWDR.	Director of Public Works – City Engineer
9.0 Monitoring	Monitoring, Measurement and Program Modifications	Wastewater Collections Supervisor
	A. Maintain relevant information that can be used to establish and prioritize appropriate SSMP activities;	Wastewater Collections Supervisor
	B. Monitor the implementation and, where appropriate, measure the effectiveness of each element of the SSMP;	General Manager of Utilities
	C. Assess the success of the preventative maintenance program;	Wastewater Collections Supervisor
	D. Update program elements, as appropriate, based on monitoring or performance evaluations; and	General Manager of Utilities
	E. Identify and illustrate spill trends, including frequency, location, and volume.	Wastewater Collections Supervisor



Element Description and Responsible Party		
Element	Element Description	Responsible Party
10.0 SSMP Audits	SSMP Program Audits Conduct periodic internal audits and maintain audit reports.	General Manager of Utilities
11.0 Communication Program	Communication Program Communicate, on a regular basis, with the public on development, implementation, and performance of SSMP.	General Manager of Utilities

2.3 Spill Reporting Chain of Communication

2.3.1 Requirement

Identify the chain of communication for reporting spills, from receipt of a complaint or other information, including the person responsible for reporting spills to the State and Regional Water Board and other agencies if applicable (such as County Health Officer, County Environmental Health Agency, Regional Water Board, and/or State Office of Emergency Services (OES)).

2.3.2 Responsible Person

General Manager of Utilities

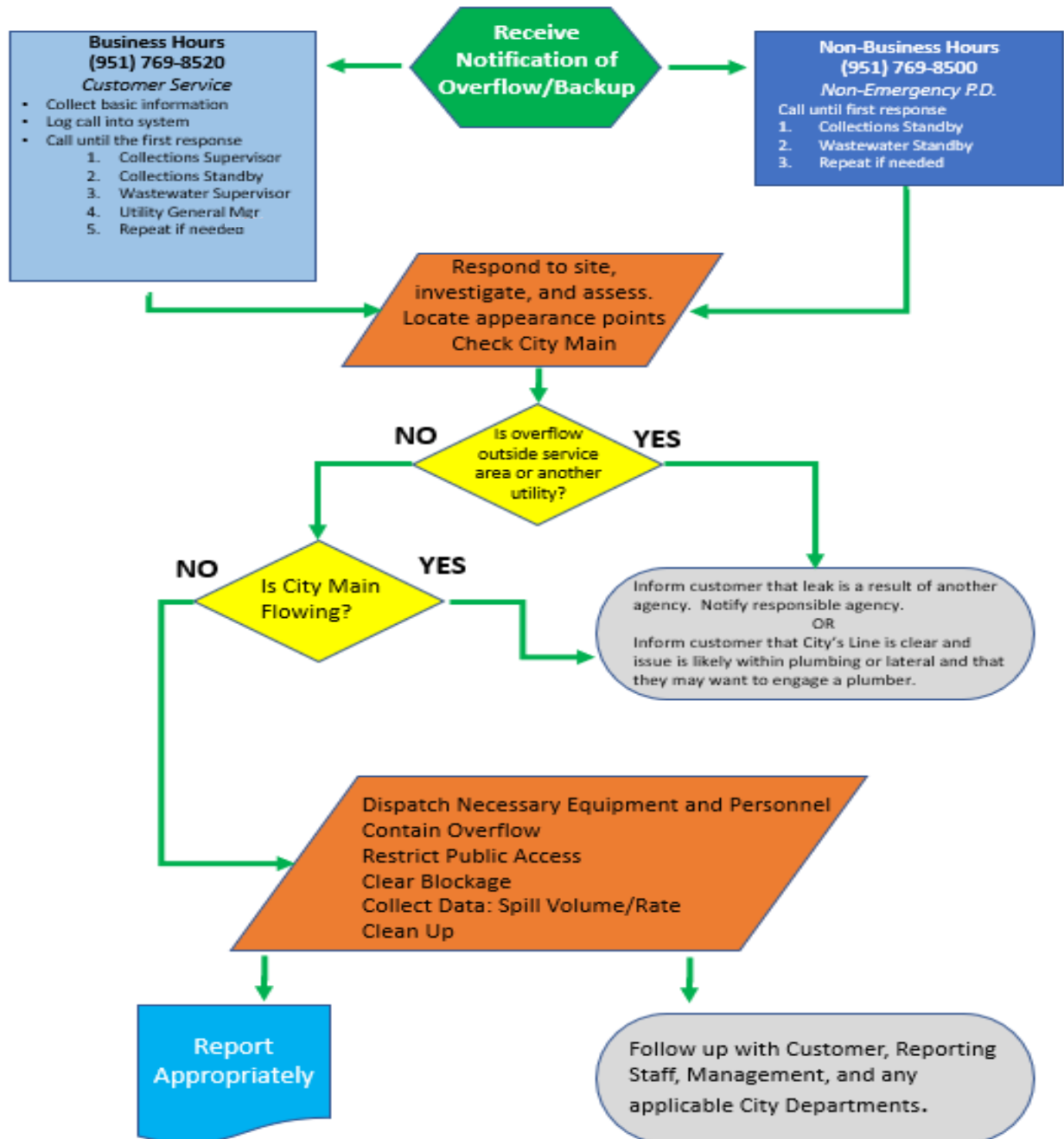
2.3.3 Compliance

- i. Customers served by the City can contact Customer Service for any Service Calls during business hours and the Police Department during non-business hours.
- ii. Once a call is received, the information is forwarded to either the Wastewater Plant Supervisor or the Wastewater Collections Supervisor, who contact Response personnel.
- iii. The Wastewater Collections Supervisor and three (3) Wastewater Collections Workers serve as first responders.
- iv. During working hours there is one (1) dedicated person who responds to customer service calls, in addition to other duties. This person responds and performs an initial assessment to determine responsibility (public or private) and resources needed. Other personnel are called to assist as needed.



- v. During non-business hours (1) person performs Stand By/On-Call Duty for a period of seven (7) days. This person responds to all customer service calls in the same manner as business hour calls.
- vi. The City's twelve (12) Lift Stations are equipped with SCADA that provide call outs for alarm conditions. These alarm calls are redundant and continue until the call is acknowledged by Response personnel. SCADA calls are sent directly to Standby/On call personnel.

Figure 2-2: Chain of Communication





SEWER SYSTEM MANAGEMENT PLAN (SSMP)



3.0 LEGAL AUTHORITY

Agencies must have the proper legal authority to conduct its critical functions, prohibit actions detrimental to the performance of the system, and to enforce any and all violations of its laws. This section describes the City's legal authority in the various required areas outlined in the SSS WDRs

3.1 Authority to Prevent Illicit Discharges

3.1.1 Requirement

Possess the necessary legal authority to prevent illicit discharges into its sanitary sewer system (examples may include I/I, stormwater, chemical dumping, unauthorized debris and cut roots, etc.)

3.1.2 Responsible Person

General Manager of Utilities

3.1.3 Compliance

City Municipal Code 13.04.020 - Unlawful discharges.

- i. No person shall discharge or cause to be discharged any stormwater, surface water, groundwater, roof runoff, subsurface drainage, polluted cooling water or polluted industrial process waters to any sanitary sewer.
- ii. Stormwater and all other unpolluted drainage shall be discharged to such sewers as are specifically designated as combined sewers or storm sewers, or to a natural outlet approved by the inspector. Unpolluted commercial and industrial cooling water or unpolluted process waters may be discharged, upon approval of the inspector and after receiving waste discharge requirements from State of California Regional Water Control Board No. 8 to a storm sewer, combined sewer, natural outlet or sanitary sewer.
- iii. Except as provided in this chapter, no person shall discharge any of the following described waters or wastes to any public sewer:
 1. Any liquid or vapor having a temperature higher than 150 degrees Fahrenheit;
 2. Any gasoline, benzene, naphtha, fuel oil, or other inflammable or explosive liquid, solid or gas;
 3. Any garbage that has not been properly shredded;
 4. Any ashes, cinders, sand, mud, straw, shavings, metal, glass, rags, feather, tar, plastics, wood, paunch manure or any other solid or viscous substance capable of causing obstruction to the flow in sewers or other interference with the proper operation of the sewage works;



5. Any waters or wastes having a pH lower than 6.0 or higher than 9.0 or having any other corrosive property capable of causing damage or hazard to structures, equipment, and personnel of the sewage works;
 6. Any waters or wastes containing a toxic or poisonous substance in sufficient quantity to injure or interfere with any sewage treatment process, constitute a hazard to humans or animals, or create any hazard in the receiving waters of the sewage treatment plant;
 7. Any waters or wastes containing suspended solids of such character and quantity that unusual attention or expense is required to handle such materials at the sewage treatment plant;
 8. Any noxious or malodorous gas or substance capable of creating a public nuisance.
- iv. The admission into the public sewers of any waters or wastes having:
1. A five-day biochemical oxygen demand greater than 300 parts per million by weight; or
 2. Containing more than 300 parts per million by weight of suspended solids; or
 3. Containing any quantity of substances having the characteristics described in Section 13.04.020 having an average daily flow greater than two percent of the average daily sewage flow of the City, shall be subject to the review and approval of the inspector.
 4. Where necessary, in the opinion of the inspector, the owner shall provide, at his expense, such preliminary treatment as may be necessary to:
 - a. Reduce the biochemical oxygen demand to 300 parts per million and the suspended solids to 300 parts per million by weight: or
 - b. Reduce objectionable characteristics or constituents to within the maximum limits provided for in Section 13.04.020, or
 - c. Control the quantities and rates of discharge of such waters or wastes. Plans, specifications, and any other pertinent information relating to proposed preliminary treatment facilities shall be submitted for the approval of the inspector and of the Water Pollution Control Commission of the state, and no construction of such facilities shall be commenced until the approvals are obtained in writing.

(Ord. 329 §2, 1961; Ord. 522 §1, 1981; Ord. 958; 10/20/09)



3.2 Authority to Properly Design and Construct Sewers

3.2.1 Requirement

Possess the necessary legal authority to require that sewers and connections be properly designed and constructed.

3.2.2 Responsible Person

Director of Public Works - City Engineer

3.2.3 Compliance

[City Municipal Code 13.08.400 - Construction standards for private sewerage facilities.](#)

All sewage facilities constructed in the City on private property and not connected to a public sewerage system shall be constructed to comply with, at a minimum, and notwithstanding all other requirements of the City, with the most recent editions of the California Plumbing and Building Codes.

[City Municipal Code 13.08.500 - General policy.](#)

The approval by the City Manager of plans for construction of sewers by private developers shall be based upon good engineering practice and upon the standards set forth in this Article.

[City Municipal Code 15.16.010 Adoption of California 2019 Plumbing Code.](#)

Except as otherwise provided in this Chapter, the California Plumbing Code, Title 24, California Code of Regulations, Part 5, including any and all amendments set forth in this Chapter, and including any and all amendments thereto that may hereafter be made and adopted by the State of California, is hereby adopted as the Plumbing Code of the City.

(Ord. No. 1119, § 13, 12-3-2019)

3.3 Authority to Ensure Access

3.3.1 Requirement

Possess the necessary legal authority to ensure access for maintenance, inspection, or repairs for portions of the lateral owned or maintained by the Public Agency

3.3.2 Responsible Person

General Manager of Utilities

3.3.3 Compliance

The City does not own any portion of the sewer lateral and therefore is not responsible for performing maintenance, inspections, or repairs.



Private property owners are required to obtain a permit from the City for work related to the privately-owned sewer lateral, which would allow for City access to inspect newly installed or repaired facilities.

[BMC 13.08.110 Maintenance of Sewer Laterals](#)

The owner shall be responsible for maintenance of the service lateral. If there is a failure of a service lateral not remediable by use of rodding tools, it shall be the responsibility of the owner to call this to the attention of the City. As a public service, the City may, at its own expense, make the necessary repairs.

3.4 Authority to Limit FOG

3.4.1 Requirement

Possess the necessary legal authority to limit the discharge of fats, oils, grease, and other debris that may cause blockages.

3.4.2 Responsible Person

General Manager of Utilities

3.4.3 Compliance

City Municipal Code [13.09.030](#), [13.09.080](#), [13.20.100](#) and SAWPA No. 8 201.0

[13.09.030](#) The discharge of fats, oils, greases, and other solids ("F.O.G.") in concentrations from food services establishments and other commercial and other industrial facilities to the City sewer systems that may adversely affect the normal function of these systems or result in blockages and/or public nuisance is prohibited.

[13.09.080](#) Sampling and inspection of food service establishments may be conducted in the time, place, manner, and frequency as determined by City Manager or his or her designee.

Chapter 13.20 ADOPTION OF SAWPA ORDINANCE1

[13.20.100](#) **SAWPA Ordinance Number 8.**

Santa Ana Watershed Project Authority Ordinance No. 8, as further amended and restated or replaced by any successor ordinance of the Santa Ana Watershed Project Authority is hereby adopted by the City of Beaumont.

[\(Ord. No. 1116, § 1, 12-3-2019\)](#) **Santa Ana Watershed Project Authority Ordinance No.8**

201.0, O. Any Material or quantity of material(s), including but not limited to fats, oils and grease (FOG), which will cause abnormal sulfide generation, obstruct flows within the collection system, or contributes to or causes a sanitary sewer overflow.



3.5 Authority to Enforce Any Violation

3.5.1 Requirement

Possess the necessary legal authority to enforce any violation of its sewer ordinances.

3.5.2 Responsible Person

General Manager of Utilities

3.5.3 Compliance

City Municipal Code 13.24.130 governs the use of public sewer and states that any person violating the provisions of the Sewer Code shall be subject to any and all existing criminal and civil penalties provided for under the laws of the State of California, and in addition thereto, shall be responsible to the City for any and all damages caused to the City by such violations.

3.0 Legal Authority - Key Performance Indicators (KPIs)

KPI 3.1	Are Codes and Ordinances adequate to meet the requirements of the SSMP?	<i>Measured by periodic review of work orders, customer complaints, and encounters by staff for any circumstances where municipal code was inadequate.</i>
----------------	---	--



4.0 OPERATION AND MAINTENANCE PROGRAM

An effective operation and maintenance program is essential to a high-performing sewer collection system and the reduction of spills. This section outlines current and planned components of the City's operation and maintenance programs.

4.1 Maintain an Up-To-Date System Map

4.1.1 Requirement

Each wastewater collection system agency shall maintain up-to-date maps of its wastewater collection system facilities, showing all gravity line segments and manholes, pumping facilities, pressure pipes and valves, and applicable storm water pumping and piping facilities.

4.1.2 Responsible Person

Wastewater Collections Supervisor

4.1.3 Compliance

Mapping of the facilities that make up the City sewer collection system plays a critical role in the effective management of the system. The City operates and maintains a Geographic Information System (GIS) mapping system that includes information for its wastewater collection system assets. The GIS mapping and associated attribute information is available to all staff through the City's website and paper maps are available for use in the field. The City is continuously upgrading and improving their mapping system.

These maps currently include:

- City Boundaries
- Streets
- Gravity Sewer Pipes
- Sewer Manholes
- Lift Stations Sites
- Force Mains

Items below are available via sources other than the GIS system:

- Air Release Valve Locations – 2021 Master Plan
- Sewer Easements
- Sewer Easement Roads
- FOG Facilities (Grease Interceptors)



Map corrections are noted by field crews, submitted to Collection System Supervisor for corrections to the paper maps, until GIS mapping is fully implemented.

4.2 Routine Preventative O&M Activities

4.2.1 Requirement

Describe routine preventive operation and maintenance activities by staff and contractors, including a system for scheduling regular maintenance and cleaning of the sanitary sewer system with more frequent cleaning and maintenance targeted at known problem areas. The preventative maintenance (PM) program should have a system to document scheduled and conducted activities, such as work orders.

4.2.2 Responsible Person

Wastewater Collections Supervisor

4.2.3 Compliance

The City currently does not have a Computerized Maintenance Management System (CMMS). The Collection System Supervisor plans and directs maintenance activities and maintains paper records. The City currently does not utilize a work order system for planning and documenting maintenance activities but is investigating CMMS programs for this purpose.

Gravity Mainline Cleaning Program

The objective of the Gravity Mainline Cleaning Program is to clean the entire system once every three years. The City has one dedicated cleaning crew and owns one Combination Hydro-Jetter/Vacuum Unit and one Hydro-Jetter unit. A systematic approach to cleaning the system is applied. Cleaning begins at the furthest upstream portions of the system with work progressing downstream. A master (paper) map is maintained to keep track of line segments cleaned. At the end of each working day, cleaning crews highlight the line segments cleaned that day. A different highlight color is used for each year.

The City has identified high frequency line segments that require cleaning on an accelerated schedule. These are cleaned Quarterly. Level sensors (Smart Covers) are utilized to monitor problem lines to help reduce the amount of cleaning required to maintain flows.

Gravity CCTV Inspection Program

The objective of the CCTV inspection program is to inspect pipes on an as-needed basis. The City uses an on-call services agreement to contract for CCTV inspections. This service is utilized for the following:

- City cleaning crews become aware of a defect through their gravity pipe cleaning process (excessive grease, roots, debris, etc.)
- Field staff discovers evidence of surcharging in a manhole.



- Compliance staff has concerns of excessive grease downstream of a Food Service Establishment (FSE)
- Locate a buried manhole or verify a pipe alignment.
- Investigate the Cause of a spill if not able to determine otherwise.
- QA/QC Root Control Program

Manhole Inspection Program

The objective of the manhole inspection program is to maintain the integrity of the access points to the collection system so preventative maintenance and emergency response procedures can occur to prevent blockages and spills. Manholes are inspected each time one is opened for maintenance purposes. Field staff perform visual inspections and note defects, which are reported to the Collection System Supervisor.

Root Control Program

The objective of the chemical root treatment program is to mitigate the risk of blockages and spills caused by roots. The City has identified gravity pipe segments with significant root intrusion and uses contracted services to apply a chemical (Razo Rooter) to control the roots. Each line segment is treated once every two years. As more line segments are discovered, they are added to the program.

Infiltration and Inflow (I&I) Reduction Program

The objective of the I&I reduction program is to help ensure adequate system capacity. This is accomplished by the following:

- Installing plugs in manhole lid vents/pick holes to prevent inflow during rain events.
- Monitor trunk sewer (x8) performance using level sensing devices (Smart Covers).
- Monitor flow trends at twelve (12) lift stations equipped with force main flow meters.

The City's 2021 Master Plan includes a project to replace flow meters at nine (9) lift stations.

Lift Station Maintenance and Inspection Program

The objective of the Lift Station Maintenance and Inspection Program is to maintain the reliability of the lift stations to effectively convey wastewater and prevent spills. The City inspects each of its twelve (12) lift stations every day, Monday through Friday. Pump runtime and flow meter data is maintained on log sheets to identify trends. Pumps are serviced as needed, based on performance (monitored by SCADA), and excessive noise and/or vibration observed by field staff.

The SCADA backup floats are periodically tested to ensure emergency alarms will be sent. One wet well is cleaned each week.

All stations are equipped with standby generators. These generators are tested twice per month and serviced by outside services annually.



Pipe Repair Program

The objective of the pipe repair program is to address issues that could potentially cause blockages and/or spills in a timely manner. The City uses an on-call service agreement with contractors to perform repairs on an emergency basis.

4.3 Prioritization Program

4.3.1 Requirement

Develop a rehabilitation and replacement plan to identify and prioritize system deficiencies and implement short-term and long-term rehabilitation actions to address each deficiency. The program should include regular visual and TV inspections of manholes and sewer pipes, and a system for ranking the condition of sewer pipes and scheduling rehabilitation. Rehabilitation and replacement should focus on sewer pipes that are at risk of collapse or prone to more frequent blockages due to pipe defects. Finally, the rehabilitation and replacement plan should include a capital improvement plan that addresses proper management and protection of the infrastructure assets. The plan shall include a time schedule for implementing the short and long-term plans plus a schedule for developing the funds needed for the capital improvement plan.

4.3.2 Responsible Person

Public Works Director

4.3.3 Compliance

The City's 2021 Master Plan has identified Capital Improvement projects and has a plan and schedule in place.

The City's 2021 Master Plan developed a Rehabilitation and Replacement for lift stations.

The City currently does not have a Rehabilitation and Replacement Program in place to address gravity pipes and manholes. The City does not routinely inspect CCTV pipes and is not able to perform condition assessment.

4.4 Training

4.4.1 Requirement

Provide training on a regular basis for staff in sanitary sewer system operations and maintenance and require contractors to be appropriately trained.

4.4.2 Responsible Person

Wastewater Collections Supervisor

4.4.3 Compliance

The objective of the Training Program is to develop competent and confident staff for the safe performance of maintenance operations. Safety compliance training is provided to field staff on a regular basis.



Training for equipment operations and maintenance procedures is accomplished by on-the-job training. Typically, the trainee is paired with an experienced employee for this purpose. Once the employee is trained, has had the opportunity to practice, and gain confidence, they are paired with the Collection System Supervisor who ultimately qualifies the trainee as competent.

The Wastewater Collections Supervisor is required, by job description, to hold a Collection System Maintenance Grade 4 certificate. All other field positions are greatly encouraged to obtain certification.

Collection system staff periodically attend CWEA Training and Conferences.

4.5 Identify Equipment and Critical Replacement Parts

4.5.1 Requirement

Provide equipment and replacement part inventories, including identification of critical replacement parts.

4.5.2 Responsible Person

Wastewater Collections Supervisor

4.5.3 Compliance

The Wastewater department collection has two vehicles for the care and maintenance of the sewer system. Two high-pressure hydro trucks have sewer line cleaning capabilities.

The Wastewater department maintains some of the expendable parts for the combination trucks. These parts include nozzles, and root cutters. Some light preventive maintenance is performed by City staff (see Section 6 for more information including spare part lists).



4.0 Operations and Maintenance - Key Performance Indicators (KPIs)		
KPI 4.1	Are maps up-to-date and accurate?	<p><i>Measured by:</i></p> <ul style="list-style-type: none"> a. <i>Periodic review to ensure maps have been updated per change requests submitted by field staff.</i> b. <i>Periodic review to ensure assets from new development projects added.</i>
KPI 4.2	Are work plans effective?	<p><i>Measured by:</i></p> <ul style="list-style-type: none"> a. <i>Annual review of work plans to ensure implementation as prescribed.</i> b. <i>Annual review of work plans to ensure goals are achieving intended outcomes.</i>
KPI 4.3	Are system defects being identified and is a plan and schedule for repair being implemented?	<p><i>Measured by:</i></p> <ul style="list-style-type: none"> a. <i>Measured By: CCTV inspection outcomes.</i> b. <i>Review of CCTV inspection data to identify and prioritize defects.</i> c. <i>Review of gravity pipe cleaning findings</i> d. <i>Review of CIP and annual Budgets to ensure proper funding. the R&R plan</i>
KPI 4.4	Is the City Training Program effective?	<p><i>Measured by:</i></p> <ul style="list-style-type: none"> a. <i>Are Staff being effectively trained on spill response procedures?</i> b. <i>Review of spill Debriefing forms for adherence to OERP.</i> c. <i>Review of spill Debriefing forms for intended outcomes.</i> d. <i>Review of submitted documentation citing contractor training.</i>
KPI 4.5	Is Replacement/Critical parts inventory up to date?	<p><i>Measured by:</i></p> <ul style="list-style-type: none"> a. <i>Annual audit of inventory list</i> b. <i>Annual review of work orders and spill Debriefing forms to ensure adequacy.</i>



5.0 DESIGN AND PERFORMANCE PROVISIONS

5.1 Design and Construction Standards and Specifications

5.1.1 Requirement

Design and construction standards and specifications for the installation of new sanitary sewer systems, pump stations and other appurtenances; and for the rehabilitation and repair of existing sanitary sewer systems.

5.1.2 Responsible Person

Director of Public Works

5.1.3 Compliance

The City's adopted Eastern Municipal Water District's Standard Specifications for Capital Projects and New Development Projects, which specifically address the requirements of this SSMP Program Element. (BMC 12.08.010.) The Standards are organized into sections covering:

- Bidding Requirements,
- General Conditions,
- Special Conditions,
- Standard Drawings,
- Detailed Provisions, and
- Approved Materials

These standards can be found at [Sewer Standard Drawings - Eastern Municipal Water District \(emwd.org\)](http://emwd.org)

Private facilities are addressed through: Beaumont Municipal Code [15.16.010](#) - Adoption of California 2019 Plumbing Code. Except as otherwise provided in this Chapter, the California Plumbing Code, Title 24, California Code of Regulations, Part 5, including all amendments set forth in this Chapter, and including all amendments thereto that may hereafter be made and adopted by the State of California, is hereby adopted as the Plumbing Code of the City.

(Ord. No. 1119, § 13, 12-3-2019)

The design and construction phase of the lifecycle of sewer facilities is critical to achieve a high level of service. If portions of the sewer system are designed and/or constructed incorrectly, they likely will not function properly regardless of the operation and maintenance program efforts or will require reallocation resources that would negatively impact the overall operations and maintenance program. This element of the SSMP is crucial reducing and preventing spills.



5.0 Design and Performance - Key Performance Indicators (KPIs)

KPI 5.1	Are design standards and inspection processes adequate and effective?	<i>Measured by annual review of project warranty CCTV inspection data to evaluate system performance and inspection methods.</i>
----------------	---	--



6.0 SANITARY SEWER OVERFLOW EMERGENCY RESPONSE PLAN (OERP)

6.1 Purpose

The purpose of the City of Beaumont's Overflow Emergency Response Plan (OERP) is to support an orderly and effective response to Sanitary Sewer Overflows (spills). The OERP provides guidelines for City personnel to follow in responding to, cleaning up, and reporting spills that may occur within the City's service area. Provision D.13vi of State Water Resources Control Board Order No. 2006-0003-DWQ requires wastewater collection agencies to have an Overflow Emergency Response Plan (OERP). This OERP satisfies the requirement.

6.2 Policy

The City's employees are required to report all wastewater overflows found and to take the appropriate action to secure the wastewater overflow area, properly report to the appropriate regulatory agencies, relieve the cause of the overflow, and ensure that the affected area is cleaned as soon as possible to minimize health hazards to the public and protect the environment. The City's goal is to respond to sewer system overflows as soon as possible following notification.

6.3 Definitions as used in this OERP

CALIFORNIA INTEGRATED WATER QUALITY SYSTEM (CIWQS): Refers to the State Water Resources Control Board on-line electronic reporting system that is used to report spills, certify completion of the SSMP, and provide information on the sanitary sewer system.

FIRST RESPONDER: City Wastewater Collection System staff that responds to an active spill.

FOG – FATS, OILS, AND GREASE: FOG refers to fats, oils, and grease typically associated with food preparation and cooking activities that can cause blockages in the sanitary sewer system.

LEGALLY RESPONSIBLE OFFICIAL (LRO): Refers to an individual who has the authority to certify reports and other actions that are submitted through CIWQS.

MAINLINE SEWER: Refers to City wastewater collection system piping that is not a private lateral connection to a user.

MAINTENANCE HOLE OR MANHOLE: Refers to an engineered structure that is intended to provide access to a sanitary sewer for maintenance and inspection.

NOTIFICATION OF A SPILL : Refers to the time at which the City becomes aware of a spill event through observation or notification by the public or other source.



NUISANCE: California Water Code section 13050, subdivision (m), defines nuisance as anything that meets all of the following requirements:

1. Is injurious to health, or is indecent or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property.
2. Affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal.
3. Occurs during, or as a result of, the treatment or disposal of wastes.

PREVENTATIVE MAINTENANCE: Refers to maintenance activities intended to prevent failures of the wastewater collection system facilities (e.g., cleaning, CCTV, inspection).

PRIVATE LATERAL SEWAGE DISCHARGES – Sewage discharges that are caused by blockages or other problems within a privately owned lateral.

SANITARY SEWER OVERFLOW (Spill) - Any overflow, spill, release, discharge, or diversion of untreated or partially treated wastewater from a sanitary sewer system. spills include:

1. Overflows or releases of untreated or partially treated wastewater that reach waters of the United States.
2. Overflows or releases of untreated or partially treated wastewater that do not reach waters of the United States; and
3. Wastewater backups into buildings and on private property that are caused by blockages or flow conditions within the publicly owned portion of a sanitary sewer system.

Spills that include multiple appearance points resulting from a single cause will be considered one spill for documentation and reporting purposes in CIWQS.

***NOTE:** Wastewater backups into buildings caused by a blockage or other malfunction of a building lateral that is privately owned are not spills.*



Table 6-1: Spill Category Descriptions

Spill Category	Description
Category 1	Discharge of untreated or partially treated wastewater of any volume resulting from a sanitary sewer system failure or flow condition that either: <ul style="list-style-type: none"> a. Reaches surface water and/or drainage channel tributary to a surface water; or b. Reached a Municipal Separate Storm Sewer System (MS4) and was not fully captured and returned to the sanitary sewer system or otherwise captured and disposed of properly.
Category 2	Discharge of untreated or partially treated wastewater greater than or equal to 1,000 gallons resulting from a sanitary sewer system failure or flow condition that either: <ul style="list-style-type: none"> a. does not reach surface water, a drainage channel, or an MS4, or b. the entire spill discharged to the storm drain system was fully recovered and disposed of properly.
Category 3	All other discharges of untreated or partially treated wastewater resulting from a sanitary sewer system failure or flow condition.

SANITARY SEWER SYSTEM: Any publicly owned system of pipes, pump stations, sewer lines, or other conveyances, upstream of a wastewater treatment plant headworks used to collect and convey wastewater to the publicly owned treatment facility. Temporary storage and conveyance facilities (such as vaults, temporary piping, construction trenches, wet wells, impoundments, tanks, etc.) are considered to be part of the sanitary sewer system, and discharges into these temporary storage facilities are not considered to be spills.

SENSITIVE AREA: Refers to areas where a spill could result in a fish kill or pose an imminent or substantial danger to human health (e.g., parks, aquatic habitats, etc.).

SEWER SERVICE LATERAL: Refers to the piping that conveys sewage from the building to the City’s wastewater collection system.



UNTREATED OR PARTIALLY TREATED WASTEWATER: Any volume of waste discharged from the sanitary sewer system upstream of a wastewater treatment plant headworks.

WATERS OF THE STATE: Waters of the State (or waters of the United States) means any surface water, including saline waters, within the boundaries of California. In case of a sewage spill, storm drains are considered to be waters of the State unless the sewage is completely contained and returned to the wastewater collection system and that portion of the storm drain is cleaned.

Work Order: An internally generated task that is scheduled or assigned to City staff as a result of a complaint or equipment maintenance program (see Electronic Service Request).

6.4 Regulatory Requirements for OERP Element of SSMP

State Water Resources Control Board Order No. 2006-0003-DWQ outlines requirements for an Overflow Emergency Response Plan that is a mandatory element of the SSMP. The collection system agency shall develop and implement an overflow emergency response plan that identifies measures to protect public health and the environment.

At a minimum, this plan must include the following:

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



6.5 Goals

The City's goals with respect to responding to spills are as follows:

1. Work safely.
2. Respond quickly to minimize the volume of the spill.
3. Eliminate the cause of the spill in a timely manner.
4. Prevent spill's from entering the storm drain system or receiving waters to the maximum extent practicable.
5. Contain the spill to the extent feasible; Minimize public contact with the spill.
6. Meet the regulatory reporting requirements.
7. Evaluate the causes of failure related to spills.

6.6 Proper Notification Procedures

6.6.1 Requirement

The spill ERP must include proper notification procedures so that the primary responders and regulatory agencies are informed of all spills in a timely manner.

6.6.2 Responsible Person

Wastewater Collection System Supervisor

6.6.3 Compliance

The ways in which the City is notified of a spill or potential spill include observation by the public, receipt of an alarm from remote site, or observation by City staff during the normal course of their work.

Public Observation

Public observation is the most common way that the City is notified of blockages and overflows.

- During normal working hours, spills can be reported to: **Customer Service line [\(951\) 769-8520](tel:9517698520).**
- During Non-Business Hours, spills can be reported to: **Non-Emergency Police Department line, [\(951\) 769-8500](tel:9517698500).**

Normal Work Hours

If the problem is within the City's service area, Customer Service collects the caller's information and location of the event and relays this information to response personnel. The Wastewater Collection System Supervisor, or designee, will dispatch a collection system crew as appropriate. The Wastewater Collection System Crew will verify the problem is with the City's sewer system. They will assess and respond accordingly and document their findings and response on the Daily Work Log.



After Hours

After hours, the Standby Employee is contacted directly by the Police Dispatch and will respond to the callout and/or alarm. A second employee is contacted for assistance, if warranted. Standby Employee will log findings and actions taken.

When calls are received, either during normal work hours or after hours, the response personnel will contact the caller to collect the following information:

- Time and date of call
- Date and Time the caller first noticed the spill.
- Narrative Description of the complaint, including location of spill and whether or not the caller is aware if the spill has reached surface waters, drainage channel or storm drains.
- Caller's name and telephone number
- Specific location of potential problem
- Nature of call
- In case of spill, estimated start time of the overflow.

City Staff Observation

Through the course of routine work activities, City staff may discover surcharging/overflowing facilities or other problems. When this occurs, problems found are reported to the appropriate City staff and an immediate response is initiated.

Alarm Calls

The City operates twelve (12) wastewater lift stations. In the event of a pump failure a high-level sensor activates the SCADA alarm system, and the City of Beaumont Wastewater Collections staff is contacted, who, in turn, respond.

6.7 Appropriate Spill Response Procedures

6.7.1 Requirement

The spill ERP must include a program to ensure an appropriate response to all overflows.

6.7.2 Responsible Party

Wastewater Collection System Supervisor

6.7.3 Compliance

The City will respond to spills as soon as practicable following notification of an overflow/backup or unauthorized discharge.



First Responder Priorities

The first responder's priorities are:

- To follow safe work practices. Special safety precautions must be observed when performing sewer work.
- To respond promptly with the appropriate and necessary equipment.
- To contain the spill wherever feasible.
- To restore the flow as soon as practicable.
- To minimize public access to and/or contact with the spilled sewage.
- To promptly notify the Wastewater Collection System Supervisor or designee in event of major spill.
- Notification to Regulatory Compliance officer is required in the event of a major spill.
- To return the spill to the sewer system.
- To restore the area to its original condition (or as close as possible); and
- To photograph and document affected and unaffected areas from a spill, making note of relevant times.

Initial Response

The first responder must respond to the problem site and visually check for potential sewer stoppages or overflows. The first responder will:

- Note arrival time at the site of the overflow/backup.
- Verify the existence of a public sewer system spill or backup.
- Determine if the overflow or blockage is from a public or private sewer.
- Identify and assess the affected area and extent of spill.
- Make necessary notifications to Wastewater Collection System Supervisor.
- If the spill is large or in a sensitive area, document conditions upon arrival with photographs.
 - Decide whether to proceed with clearing the blockage to restore the flow or to initiate containment measures. The guidance for this decision is:
 - Small spills (i.e., spills that are easily contained) – proceed with clearing the blockage.



- o Moderate or large spill where containment is anticipated to be simple proceed with the containment measures.
- o Moderate or large spills where containment is anticipated to be difficult proceed with clearing the blockage; however, whenever deemed necessary, call for additional assistance and implement containment measures.

Restore Flow

Using the appropriate cleaning equipment, set up downstream of the blockage and hydro-clean upstream from a clear manhole. Attempt to remove the blockage from the system and observe the flows to ensure that the blockage does not reoccur downstream. If the blockage cannot be cleared within a reasonable time from arrival, or sewer requires construction repairs to restore flow, then initiate containment and/or bypass pumping. If assistance is required, immediately contact other employees, contractors, and equipment suppliers (Appendix F.)

6.8 Prompt Notification and Reporting

6.8.1 Requirement

The spill ERP must include procedures to ensure prompt notification to appropriate regulatory agencies and other potentially affected entities (e.g., health agencies, Regional Water Boards, water suppliers, etc.) of all spills that potentially affect public health or reach the waters of the State in accordance with the MRP. All spills shall be reported in accordance with the MRP, the California Water Code, other State Law, and other applicable Regional Water Board WDRs or NPDES permit requirements. The SSMP should identify the officials who will receive immediate notification.

6.8.2 Responsible Party

Wastewater Collection System Supervisor

6.8.3 Compliance

The following personnel are authorized to prepare data for regulatory reporting. The City's Legally Responsible Official (LRO) is authorized to electronically sign and certify spill reports in CIWQS.

6.9 Prompt Notification and Reporting

6.9.1 Requirement

The spill ERP must include procedures to ensure prompt notification to appropriate regulatory agencies and other potentially affected entities (e.g. health agencies, Regional Water Boards, water suppliers, etc.) of all spills that potentially affect public health or reach the waters of the



State in accordance with the MRP. All spills shall be reported in accordance with the MRP, the California Water Code, other State Law, and other applicable Regional Water Board WDRs or NPDES permit requirements. The SSMP should identify the officials who will receive immediate notification.

6.9.2 *Responsible Party*

Wastewater Collection System Supervisor

6.9.3 *Compliance*

The following personnel are authorized to prepare data for regulatory reporting. The City's Legally Responsible Official (LRO) is authorized to electronically sign and certify spill reports in CIWQS.

Title	Name	Contact	Check if LRO
Wastewater Plant Supervisor	Kevin Lee	(951) 769-8520 ext 311	X
General Manager of Utilities	Thaxton Van Belle	(951) 572-3195	X
Wastewater Collection System Supervisor	Jerome Moledor	(951) 489-6622	X

Record Keeping

In accordance with the Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (GWDR), the City of Beaumont maintains records for each sanitary sewer overflow. Records include:

- Documentation of response steps and/or remedial actions.
- Photographic evidence to document the extent of the spill, field crew response operations, and site conditions after field crew spill response operations have been completed. The date, time, location, and direction of photographs taken will be documented; and
- Documentation of how any estimations of the volume discharged and/or volume recovered were calculated including all assumptions made.
- For reporting purposes, if one spill event of whatever category results in multiple appearance points in a sewer system, a single spill report is required in CIWQS that



includes the GPS coordinates for the location of the spill appearance point closest to the failure point, blockage or location of the flow condition that caused the spill, and descriptions of the locations of all other discharge points associated with the single spill event.

Reporting and notification will be in accordance with Table 10.1

Table 6-2: Regulator Required Notifications

ELEMENT	REQUIREMENT	METHOD
<p>NOTIFICATION</p>	<p>Within two hours of becoming aware of any Category 1 spill greater than or equal to 1,000 gallons discharged to surface water or spilled in a location where it probably will be discharged to surface water, the City will notify the California Office of Emergency Services (CalOES) and obtain a notification control number.</p>	<p>Call Cal OES at: (800) 852-7550</p>
<p>REPORTING</p>	<ul style="list-style-type: none"> • Category 1 spill: The City will submit draft report within 3 business days of becoming aware of the spill and certify within 15 calendar days of spill end date. • Category 2 spill: The City will submit draft report within 3 business days of becoming aware of the spill and certify within 15 calendar days of the spill end date. • Category 3 spill: The City will submit certified report within 30 calendar days of the end of month in which spill the occurred. • Spill Technical Report: The City will submit within 45 calendar days after the end date of any Category 1 spill in which 50,000 gallons or greater are spilled to surface waters. 	<p>Enter data into the CIWQS Online spill Database (http://ciwqs.waterboards.ca.gov/) certified by the Legally Responsible Official(s)</p> <p>All information required by CIWQS will be captured in the Sanitary Sewer Overflow Report.</p> <p>Certified spill reports may be updated by amending the report or adding an attachment to the spill report within 120 calendar days after the spill end date.</p> <p>After 120 days, the State spill Program Manager must be contacted to request to amend a spill report along with a justification for why the additional information was not available prior to the end of the 120 days.</p>



SEWER SYSTEM MANAGEMENT PLAN (SSMP)

ELEMENT	REQUIREMENT	METHOD
	<ul style="list-style-type: none"> • “No spill” Certification: The City will certify that no spills occurred within 30 calendar days of the end of the month or, if reporting quarterly, the quarter in which no spills occurred. • Collection System Questionnaire: The City will update and certify every 12 months 	
WATER QUALITY MONITORING	The City will conduct water quality sampling within 48 hours after initial spill notification for Category 1 spills in which 50,000 gallons or greater are spilled to surface waters.	Water quality results will be uploaded into CIWQS for Category 1 spills in which 50,000 gallons or greater are spilled to surface waters.
RECORD KEEPING	<p>The City will maintain the following records:</p> <ul style="list-style-type: none"> • spill event records. • Records documenting Sanitary Sewer Management Plan (SSMP) implementation and changes/updates to the SSMP. • Records to document Water Quality Monitoring for spills of 50,000 gallons or greater spilled to surface waters. • Collection system telemetry records if relied upon to document and/or estimate spill Volume. 	Self-maintained records shall be available during inspections or upon request.



Complaint Records

The City maintains records of all complaints received whether or not they result in sanitary sewer overflows. These complaint records include:

- Date, time, and method of notification;
- Date and time the complainant or informant first noticed the spill;
- Narrative description describing the complaint;
- A statement from the complainant or informant, if they know, of whether or not the potential spill may have reached waters of the state;
- Name, address, and contact telephone number of the complainant or informant reporting the potential spill (if not reported anonymously);
- Follow-up return contact information for each complaint received (if not reported anonymously).
- Final resolution of the complaint; and
- Work orders used to document all feasible and remedial actions taken.

All documentation tied to the Complaint Record will be maintained for a minimum of five years whether or not they resulted in a spill. Completed files are stored in hard copy in the Wastewater Collections System Supervisor's office and electronically on the City's (M) drive.

6.10 OERP Distribution and Training

6.10.1 Requirement

The spill ERP must include procedures to ensure that appropriate staff and contractor personnel are made aware of proper procedures and are appropriately trained.

6.10.2 Responsible Party

Wastewater Collection System Supervisor

6.10.3 Compliance

This section provides information on the training that is required to support this Overflow Emergency Response Plan. The Wastewater Collection System Supervisor is responsible for its implementation and maintaining records.

Initial and Annual Refresher Training

All City personnel who may have a role in responding to, reporting, and/or mitigating a sewer system overflow will receive training on the contents of this OERP. All new employees will receive training before they are placed in a position where they may have to respond. Current employees will receive annual refresher training on this plan and the procedures to be followed. The City will document all training.



Affected employees will receive annual training on the following topics by knowledgeable trainers:

- The City's Overflow Emergency Response Plan and Sanitary Sewer Management Plan.
- Spill volume estimation techniques;
- SWRCB employee knowledge expectations;
- Researching and documenting spill start times; and
- Water Quality Sampling Plan

The City will verify that annual safety training requirements are current for each employee, and that employees are competent in the performance of all core competencies. This will be verified through testing, interviews, and observations. The City will address, through additional training/instruction, any identified gaps in required core competencies.

Through SWRCB Employee Knowledge Expectations training the employee will be able to answer the following:

1. Describe name and job title.
2. Approximately when they started in this field and how long they have worked for the agency.
3. Expand on current position duties and role in responding in the field to any spill complaints.
4. Describe SOPs used to respond/mitigate spills when they occur.
5. Describe any training agency provides or contracts for conducting spill volume estimates
6. Historically, before any recent changes, walk through how they would typically receive and respond to any spill complaints in the field?
7. Who is responsible for estimating spill volumes discharged? If it is them, describe how you go about estimating the spill volume that you record on the work order/service request forms?
8. What other information collected or recorded other than what is written on the work order form?
9. Describe if and when they ever talk with people that call in spills (either onsite or via telephone) to further check out when the spill might have occurred based on what they or others know? If they do this, can they tell regulators where this information is recorded?
10. Understanding they may be instructed to take pictures of some sewer spills/backups into structures. Other than during those times, when else would they typically take any pictures of a spill?
11. Walk us through anything else they would like to add to help better understand how field crews respond and mitigate spill complaints.

Spill Response Drills



Periodic training drills or field exercises will be held to ensure that employees are up to date on these procedures, equipment is in working order, and the required materials are readily available. The training drills will cover scenarios typically observed during sewer related emergencies (e.g., mainline blockage, mainline failure, and lateral blockage). The results and the observations during the drills will be recorded and action items will be tracked to ensure completion.

Spill Training Record Keeping

Records will be kept of all training that is provided in support of this plan. The records for all scheduled training courses and for each overflow emergency response training event will include date, time, place, content, name of trainer(s), and names and titles of attendees.

6.11 Emergency Operations

6.11.1 Requirement

The spill ERP must include procedures to address emergency operations, such as traffic and crowd control and other necessary response activities.

6.11.2 Responsible Party

Wastewater Collection System Supervisor

6.11.3 Compliance

The City is committed to providing a safe work environment and training all staff on safe work practices. In the event a spill occurs that has significant impact on the ability of City response staff to safely and effectively respond to the spill due to excessive traffic and large crowds, the response will do one or more of the following:

1. Contact and coordinate with staff from other City departments to assist.
2. Contact and coordinate with police or fire department staff to assist.
3. Request Mutual Aid assistant from established mutual aid partners.

6.12 Containment/Prevention and/or Minimization/Correction of Spills

6.12.1 Requirement

A program to ensure that all reasonable steps are taken to contain and prevent the discharge of untreated and partially treated wastewater to waters of the United States and to minimize or correct any adverse impact on the environment resulting from the spills, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the discharge.



6.12.2 Responsible Party

Wastewater Collection System Supervisor

6.12.3 Compliance

Initiate Spill Containment Measures

The first responder will attempt to contain as much of the spilled sewage as possible using the following steps:

1. Determine the immediate destination of the overflowing sewage.
2. Plug storm drains using sandbags, and/or plastic mats to contain the spill, whenever appropriate. If the spill has made contact with the storm drainage system, attempt to contain the spill by blocking downstream storm drainage facilities or initiate vacuum system.
3. Contain/direct the spilled sewage using dike/dam or sandbags; and Pump around the blockage/pipe failure.

Recovery and Cleanup

The recovery and cleanup phase begin immediately after the flow has been restored and the spill has been contained to the extent possible. The spill recovery and cleanup procedures are as follows:

1. Estimate the Volume of Spilled Sewage

Use the methods outlined in the Sanitary Sewer Overflow/Backup Response Packet (Appendix G) and/or the SMART Field Guide to estimate the volume of the spilled sewage. Wherever possible, document the estimate using photos and/or video of the spill site before and during the recovery operation.

2. Recovery of spilled Sewage

Vacuum up and/or pump the spilled sewage and rinse water and discharge it back into the sanitary sewer system.

3. Clean-up

Implement clean up procedures to reduce the potential for human health issues and adverse environmental impacts that are associated with a spill event. The procedures described are for dry weather conditions and will be modified as required for wet weather conditions. In the event that an overflow occurs at night, the location will be inspected first thing the following day. The field crew will look for any signs of sewage solids and sewage-related materials that may warrant additional cleanup activities. Where cleanup of public property is beyond the capabilities of City staff, a cleanup contractor will be used.



4. Hard Surface Areas

Collect all signs of sewage solids and sewage-related material either by protected hand or with the use of rakes and brooms. Wash down the affected area with clean water and take reasonable steps to contain and vacuum up the wastewater. Allow area to dry. Repeat the process if additional cleaning is required.

5. Landscaped and Unimproved Natural Vegetation

Collect all signs of sewage solids and sewage-related material either by protected hand or with the use of rakes and brooms. Wash-down the affected area with clean water until the water runs clear. Either contain or vacuum up the wash water so that none is released. Allow the area to dry and repeat the process if necessary.

6. Natural Water Ways

The Department of Fish and Wildlife will be notified by Cal-OES for spills greater than or equal to 1,000 gallons.

7. Wet Weather Modifications

Omit flushing and sampling during heavy storm events (i.e., sheet of rainwater across paved surfaces) with heavy runoff where flushing is not required, and sampling would not provide meaningful results.

Water Quality Sampling and Testing

Water quality sampling and testing will be performed as appropriate to determine the extent and impact of the spill when spilled sewage enters a water body. The water quality sampling procedures will be implemented within 48 hours and include the following:

1. The first responders will consider the need to sample surface waters the spill may have reached. If preliminary volume estimates of the spill are 50,000 gallons or greater, the first responders will begin collecting as soon as possible but no later than 48 hours after becoming aware of the spill.
2. The water quality samples will be collected from upstream of the spill, from the spill area, and downstream of the spill in flowing water (e.g., creeks). The water quality samples will be collected near the point of entry of the spilled sewage.
3. The samples will then be taken to an accredited laboratory for testing.



Waters of the State

The following Waters of the State are in the City of Beaumont’s service area:

1. Santa Ana River via area tributaries.

Post Spill Event Debriefing

Every spill event is an opportunity to evaluate the City response and reporting procedures. Each overflow event is unique, with its own elements and challenges including volume, cause, location, terrain, climate, and other parameters.

As soon as possible after Category 1 and Category 2 spill events, all the participants, from the person who received the call to the last person to leave the site, will meet to review the procedures used and to discuss what worked and where improvements could be made in preventing or responding to and mitigating future spill events. The results of the debriefing will be documented and tracked to ensure the action items are completed as scheduled. The Regulatory Compliance Officer will coordinate and document the meeting.

6.0 OERP - Key Performance Indicators (KPIs)		
KPI 6.1	Are responses to spill events effective?	<p><i>Measured by:</i></p> <ul style="list-style-type: none"> a. <i>Review of spill Debriefing forms for adherence and to ensure intended outcomes are achieved</i> b. <i>Measured By: Review of spill Response training records to evaluate demonstrated ability of staff.</i>

LIST OF OERP ATTACHMENTS

OERP Attachment A – City Spill Response Field Data Collection Form..... 6-21

OERP Attachment B – City Spill Volume Estimation Methods and Worksheet 6-23

OERP Attachment C – City Spill Start Time Estimation Worksheet 6-25

OERP Attachment D – City Procedures for Responding to Sewer Backups 6-27

OERP Attachment E – City Spill Debriefing Form 6-29

OERP Attachment F – List of City Equipment Suppliers..... 6-31

OERP Attachment G – City Water Quality Monitoring Plan 6-33

OERP Attachment H – City Contractor Emergency Plan 6-35

OERP Attachment I – City Equipment and Critical Replacement Parts 6-37



SEWER SYSTEM MANAGEMENT PLAN (SSMP)



OERP Attachment A – City Spill Response Field Data Collection Form

Sanitary Sewer Overflow Report Form

GENERAL INFORMATION		
Names of Person Completing this Report:		Date:
Incident Street Address/Site:		
GPS Coordinates: Longitude - ____ Deg ____ Min ____ Sec Latitude - ____ Deg ____ Min ____ Sec		
City:	County:	Zip Code:
SSO Occurred in: <input type="checkbox"/> Private Facility <input type="checkbox"/> Beaumont Facility		Weather Conditions <input type="checkbox"/> Dry <input type="checkbox"/> Raining
SSO DETAILS		
Date of SSO:	Time Reported:	Crew Arrival Time:
Date SSO Ended:	Time SSO Ended:	SSO Duration (Days/Hours/Min):
SSO Rate (Gal/Min):	Estimated SSO Volume Recovered (Gal):	Estimated SSO Volume (Gal):
How was SSO Rate Estimated?		
How was SSO Volume Recovered Estimated?		
How was SSO Volume Estimated?		
SSO CLASSIFICATION		
Sanitary Sewer Overflow Category: Cat. 1 <input type="checkbox"/> <input type="checkbox"/> Cat. 2 <input type="checkbox"/> Cat. 3 <input type="checkbox"/> PLSD		
~ Category 1 any SSO that reaches a drainage channel, surface water, or Storm Drain (and not fully recovered).		
~ Category 2 any SSOs 1,000 gallons or greater that does not reach a drainage channel, surface water or Storm Drain (and not fully recovered)		
~ Category 3 is all other SSO discharges.		
~ Private Lateral Sewer Discharge (PLSD) is a discharge caused by blockage or other problems within a privately owned lateral.		
***For Category 1 spills of 1000 gallons or greater, notify CAL-OES w/in 2 hours of knowledge if notification is possible & notification doesn't impede response efforts)		
Suspected Cause of SSO: (check box if additional sheets attached):		
<input type="checkbox"/> Roots <input type="checkbox"/> Grease <input type="checkbox"/> Line Break <input type="checkbox"/> Infiltration <input type="checkbox"/> Rocks <input type="checkbox"/> Blockage <input type="checkbox"/> Vandalism <input type="checkbox"/> Debris <input type="checkbox"/> Power Failure <input type="checkbox"/> Pump Station Failure <input type="checkbox"/> Flood Damage <input type="checkbox"/> Manhole Failure <input type="checkbox"/> Construction <input type="checkbox"/> Private Property Lateral <input type="checkbox"/> Other: _____ <input type="checkbox"/> Unknown		
Brief Description of overflow cause: _____		

Sanitary Sewer Overflow Report Form

SSO Blank Page



OERP Attachment B – City Spill Volume Estimation Methods and Worksheet



Camera Icon
Means Photos are
Mandatory

Area/Volume Spill Estimation Work Sheet

Surface: Asphalt Concrete Dirt Landscape Inside Building Other _____

(Draw / Sketch outline of Spill 'Footprint' and attach photos)

Work Order Nbr: _____

~~ Breakdown the 'Footprint' into Recognizable Shapes and Determine Dimensions of Each Shape ~~

Area 1 _____

Stain Concrete, Stain Asphalt, or Measured Depth1____ Depth2 ____ Depth3 ____ Depth4 ____

Area 2 _____

Stain Concrete, Stain Asphalt, or Measured Depth1____ Depth2 ____ Depth3 ____ Depth4 ____

Area 3 _____

Stain Concrete, Stain Asphalt, or Measured Depth1____ Depth2 ____ Depth3 ____ Depth4 ____

Area 4 _____

Stain Concrete, Stain Asphalt, or Measured Depth1____ Depth2 ____ Depth3 ____ Depth4 ____

Area 5 _____

Stain Concrete, Stain Asphalt, or Measured Depth1____ Depth2 ____ Depth3 ____ Depth4 ____

Area 6 _____

Stain Concrete, Stain Asphalt, or Measured Depth1____ Depth2 ____ Depth3 ____ Depth4 ____



Camera Icon
Means Photos are
Mandatory

Area/Volume Spill Estimation Work Sheet

(To be Completed by Supervisor)

Area 1 (A) = Sq/Ft: _____ x (B) Depth: Concrete 0.0026' Asphalt 0.0013' Measured: _____
(A) x (B) = Volume: _____ Cu/Ft

Area 2 (A) = Sq/Ft: _____ x (B) Depth: Concrete 0.0026' Asphalt 0.0013' Measured: _____
(A) x (B) = Volume: _____ Cu/Ft

Area 3 (A) = Sq/Ft: _____ x (B) Depth: Concrete 0.0026' Asphalt 0.0013' Measured: _____
(A) x (B) = Volume: _____ Cu/Ft

Area 4 (A) = Sq/Ft: _____ x (B) Depth: Concrete 0.0026' Asphalt 0.0013' Measured: _____
(A) x (B) = Volume: _____ Cu/Ft

Area 5 (A) = Sq/Ft: _____ x (B) Depth: Concrete 0.0026' Asphalt 0.0013' Measured: _____
(A) x (B) = Volume: _____ Cu/Ft

Area 6 (A) = Sq/Ft: _____ x (B) Depth: Concrete 0.0026' Asphalt 0.0013' Measured: _____
(A) x (B) = Volume: _____ Cu/Ft

Total Volume: _____ *Cu/Ft

Total Volume: _____ *Cu Ft x 7.48 gallons = _____ **** Gallons Spilled**

Volume Calculated By: _____, _____
Print Name
Signature

Date: ____ / ____ / ____



OERP Attachment C – City Spill Start Time Estimation Worksheet

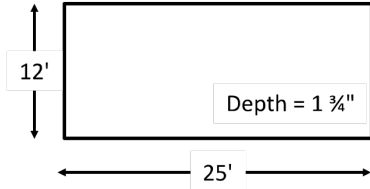
Volume Estimation Methods and Worksheets (Appendix B)

<p>To convert inches to feet (NOTE: for the purposes of this worksheet, the unit of measurement will be in feet for formula examples)</p>	<p>Divide the inches by 12 or use the chart on the right.</p> <p>Example 1: $27" \div 12 = 2.25'$</p> <p>Example 2: $1\frac{3}{4}" = ?'$ $1" (0.08') + \frac{3}{4}" (0.06') = 0.14'$</p>	<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th colspan="2">Convert Inches to Feet</th> </tr> <tr> <th>Inches</th> <th>Feet</th> </tr> </thead> <tbody> <tr><td>1/8"</td><td>0.01'</td></tr> <tr><td>1/4"</td><td>0.02'</td></tr> <tr><td>3/8"</td><td>0.03'</td></tr> <tr><td>1/2"</td><td>0.04'</td></tr> <tr><td>5/8"</td><td>0.05'</td></tr> <tr><td>3/4"</td><td>0.06'</td></tr> <tr><td>7/8"</td><td>0.07'</td></tr> <tr><td>1"</td><td>0.08'</td></tr> <tr><td>2"</td><td>0.17'</td></tr> <tr><td>3"</td><td>0.25'</td></tr> <tr><td>4"</td><td>0.33'</td></tr> <tr><td>5"</td><td>0.42'</td></tr> <tr><td>6"</td><td>0.50'</td></tr> <tr><td>7"</td><td>0.58'</td></tr> <tr><td>8"</td><td>0.67'</td></tr> <tr><td>9"</td><td>0.75'</td></tr> <tr><td>10"</td><td>0.83'</td></tr> <tr><td>11"</td><td>0.92'</td></tr> <tr><td>12"</td><td>1.00'</td></tr> </tbody> </table>	Convert Inches to Feet		Inches	Feet	1/8"	0.01'	1/4"	0.02'	3/8"	0.03'	1/2"	0.04'	5/8"	0.05'	3/4"	0.06'	7/8"	0.07'	1"	0.08'	2"	0.17'	3"	0.25'	4"	0.33'	5"	0.42'	6"	0.50'	7"	0.58'	8"	0.67'	9"	0.75'	10"	0.83'	11"	0.92'	12"	1.00'
Convert Inches to Feet																																												
Inches	Feet																																											
1/8"	0.01'																																											
1/4"	0.02'																																											
3/8"	0.03'																																											
1/2"	0.04'																																											
5/8"	0.05'																																											
3/4"	0.06'																																											
7/8"	0.07'																																											
1"	0.08'																																											
2"	0.17'																																											
3"	0.25'																																											
4"	0.33'																																											
5"	0.42'																																											
6"	0.50'																																											
7"	0.58'																																											
8"	0.67'																																											
9"	0.75'																																											
10"	0.83'																																											
11"	0.92'																																											
12"	1.00'																																											
<p>Volume of one cubic foot</p>	<p>7.48 gallons of liquid</p>																																											
<p>Area: Two-dimensional measurement represented in square feet (SQ/FT or ft²)</p>	<p>Square/rectangle: Area = Length x Width</p> <p>Circle: Area = $\pi \times r^2$ (where $\pi \approx 3.14$ and $r = \text{radius} = \frac{1}{2} \text{ diameter}$)</p> <p>Triangle: Area = $\frac{1}{2} (\text{Base} \times \text{Height})$</p>																																											
<p>Volume: Three-dimensional measurement represented in cubic feet (CU/FT or ft³)</p>	<p>Rectangle/square footprint: Volume = Length x Width x Depth</p> <p>Circle footprint (cylinder): Volume = $\pi \times r^2 \times \text{Depth}$ (where $\pi \approx 3.14$ and $r = \text{radius} = \frac{1}{2} \text{ diameter}$)</p> <p>Triangle footprint: Volume = $\frac{1}{2} (\text{Base} \times \text{Height}) \times \text{Depth}$</p>																																											
<p>Depth: Wet Stain on Concrete or asphalt surface</p>	<p>If the depth is not measurable because it is only a wet stain, use the following estimated depths: Depth of a wet stain on concrete surface: 0.0026' (1/32") Depth of a wet stain on asphalt surface: 0.0013' (1/64")</p> <p>These were determined to be a reasonable depth to use on the respective surfaces through a process of trial and error. One gallon of water was poured onto both asphalt and concrete surfaces. Once the area was determined as accurately as possible, different depths were used to determine the volume of the wetted footprint until the formula produced a result that (closely) matched the one gallon spilled. This process was repeated several times.</p>																																											
<p>Depth: Contained or "Ponded" sewage</p>	<p>Measure actual depth of standing sewage whenever possible. When depth varies, measure several representative sample points and determine the average. Use that number in your formula to determine volume.</p>																																											

Miscellaneous Computations & Examples (continued)

Area/Volume of a Rectangle or Square

Formula: Length x Width x Depth = Volume in **cubic feet**



$$\frac{25'}{\text{Length}} \times \frac{12'}{\text{Width}} \times \frac{0.14'}{\text{Depth}} = \frac{42 \text{ Cubic Feet}}{\text{Volume}}$$

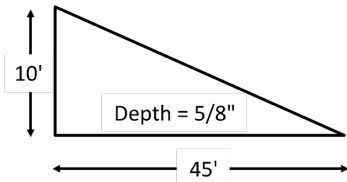
Multiply the volume by 7.48 gallons to determine the volume in **gallons**:

$$\frac{42 \text{ ft}^3}{\text{Volume}} \times \frac{7.48}{\text{gal/ft}^3} = \frac{314.16 \text{ gallons}}{\text{Volume}}$$

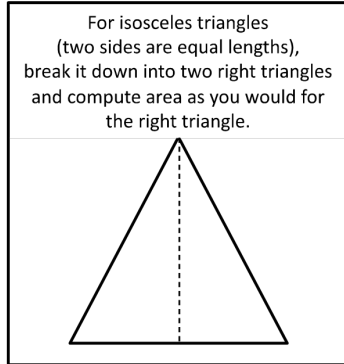
Convert Inches to Feet	
Inches	Feet
1/8"	0.01'
1/4"	0.02'
3/8"	0.03'
1/2"	0.04'
5/8"	0.05'
3/4"	0.06'
7/8"	0.07'
1"	0.08'
2"	0.17'
3"	0.25'
4"	0.33'
5"	0.42'
6"	0.50'
7"	0.58'
8"	0.67'
9"	0.75'
10"	0.83'
11"	0.92'
12"	1.00'

Area/Volume of a Right Triangle

Formula: 1/2 x Base x Height x Depth = Volume in **cubic feet**



$$0.5 \times \frac{45'}{\text{Base}} \times \frac{10'}{\text{Height}} \times \frac{0.05'}{\text{Depth}} \times \frac{7.48}{\text{gal/ft}^3} = \frac{84.15 \text{ gallons}}{\text{Volume}}$$

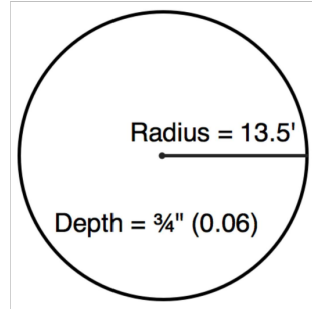


Area/Volume of a Circle

Formula: π x r² x Depth = Volume in **cubic feet**

The radius is 1/2 the diameter, which is a straight line passing from side to side through the center of a circle.

$$\frac{13.5'}{\text{Radius}} \times \frac{13.5'}{\text{Radius}} \times \frac{3.14}{\pi} \times \frac{0.06'}{\text{Depth}} \times \frac{7.48}{\text{gal/ft}^3} = \frac{256.8 \text{ gallons}}{\text{Volume}}$$



Eyeball/bucket Estimation for Smaller Overflows

STEP 1: Position yourself so that you have a vantage point where you can see the entire SSO.

STEP 2: Imagine one or more buckets or barrels of water tipped over. Depending on the size of the SSO, select a bucket or barrel size as a frame of reference. It may be necessary to use more than one bucket/barrel size.

STEP 3: Estimate how many of each size bucket or barrel it would take to make an equivalent spill. Enter those numbers in Column A of the row in the table below that corresponds to the bucket/barrel sizes you are using as a frame of reference.

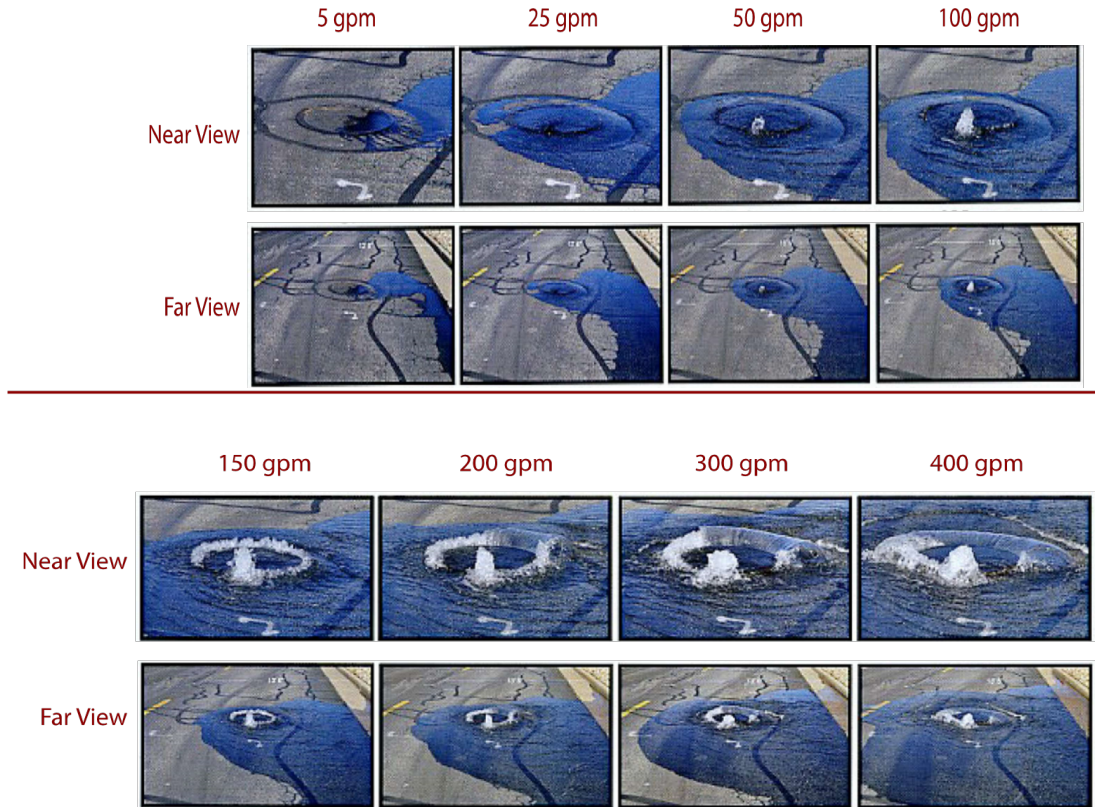
STEP 4: Multiply the number in Column A by the multiplier in Column B. Enter the result in Column C.

	A	B	C
Size of bucket(s) or barrel(s)	How many of this size?	Multiplier	Estimated SSO Volume (gallons)
1 gallon water jug		x 1 gallons	
5 gallon bucket		x 5 gallons	
32 gallon trash can		x 32 gallons	
55 gallon drum		x 55 gallons	
Other: gallons		x gallons	
Estimated Total SSO Volume:			

Duration and Flow Rate Comparison Method

Compare the SSO to reference images below to estimate flow rate of the current overflow. **NOTE: If the manhole cover in your picture has vent holes or more than one pry hole, do not use these pictures for comparison.**

Describe which reference photo(s) were used and any additional factors that influenced applying the reference photo data to the actual SSO:



*SSCSC Manhole Overflow Gauge: CWEA Southern Section Collections Systems Committee
Overflow Simulation courtesy of Eastern Municipal Water District*

Flow Rate Based on Photo Comparison: _____ gallons per minute (gpm)

Start Date and Time	1.
End Date and Time	2.
SSO Event Total Time Elapsed (subtract Line 1 from Line 2. Show in minutes.)	3.
Average Flow Rate GPM (Account for diurnal flow pattern)	4.
Total Volume Estimated Using Duration and Flow Method (Line 3 x Line 4)	5.



OERP Attachment D – City Procedures for Responding to Sewer Backups

Procedures for Responding to Overflows

FIRST RESPONDER PRIORITIES

The first responder's priorities are:

- To follow safe work practices. Special safety precautions must be observed when performing sewer work.
- To respond promptly with the appropriate and necessary equipment.
- To contain the spill wherever feasible.
- To restore the flow as soon as practicable.
- To minimize public access to and/or contact with the spilled sewage.
- To promptly notify the Wastewater Collection System Supervisor or designee in event of major SSO.
- To return the SSO to the sewer system.
- To restore the area to its original condition (or as close as possible); and
- To photograph and document affected and unaffected areas from a spill, making note of relevant times.

INITIAL RESPONSE

The first responder must respond to the problem site and visually check for potential sewer stoppages or overflows. The first responder will:

- Note arrival time at the site of the overflow/backup.
- Verify the existence of a public sewer system spill or backup.
- Determine if the overflow or blockage is from a public or private sewer.
- Identify and assess the affected area and extent of spill.
- Make necessary notifications to Wastewater Collection System Supervisor.
- If the spill is large or in a sensitive area, document conditions upon arrival with photographs.
- Decide whether to proceed with clearing the blockage to restore the flow or to initiate containment measures. The guidance for this decision is:
 - Small spills (i.e., spills that are easily contained) – proceed with clearing the blockage.
 - Moderate or large spill where containment is anticipated to be simple proceed with the containment measures.
 - Moderate or large spills where containment is anticipated to be difficult proceed with clearing the blockage; however, whenever deemed necessary, call for additional assistance and implement containment measures.

RESTORE FLOW

Using the appropriate cleaning equipment, set up downstream of the blockage and hydro-clean upstream from a clear manhole. Attempt to remove the blockage from the system and observe the flows to ensure that the blockage does not reoccur downstream. If the blockage cannot be cleared within a reasonable time from arrival, or sewer requires construction repairs to restore flow, then initiate containment and/or bypass pumping. If assistance is required, immediately contact other employees, contractors, and equipment suppliers (Appendix F).



OERP Attachment E – City Spill Debriefing Form

SSO Debriefing Form (Appendix E)

Debriefing Meeting Notes & Findings (Date: _____) Time: (_____)

Large empty rectangular area for taking notes and recording findings from the debriefing meeting.

ATTENDEES

Empty rectangular area for listing the names of attendees at the meeting.

FOLLOW-UP ITEMS

Empty rectangular area for listing any follow-up actions or items resulting from the debriefing.

Name of Person Conducting the Debriefing: _____



OERP Attachment F – List of City Equipment Suppliers

Equipment Suppliers and Services

The City utilizes On-Call Emergency Services to support staff as needed.

Company	Support Services	Phone Number
Xylem (Jim Ruffling)	Bypass Pumps & Hoses	<ul style="list-style-type: none">• Office (951)332-3701• Cell (562)572-4738
Xylem (Manny Padilla)	Combo Truck & CCTV Inspection	<ul style="list-style-type: none">• Office (951)332-3669• Cell (562)760-9258
Wright Septic	Large Vac Trucks	<ul style="list-style-type: none">• Office (951)654-4840
T.E. Roberts	Pipeline Repair	<ul style="list-style-type: none">• Office (714)669-0072
Inland water works	Pipe & Lift Station Parts	<ul style="list-style-type: none">• Office (800)794-3121
Southern Contracting Company	Electrical	<ul style="list-style-type: none">• Office (760)744-0760
Bleckert Power services (Chris)	Generator Repair	<ul style="list-style-type: none">• Cell (951)550-7618

This List will be audited annually and updated as needed



OERP Attachment G – City Water Quality Monitoring Plan

Water Quality Monitoring Plan

In accordance with subsection D.7(v) of the SSS WDRs, the City has developed a Water Quality Monitoring Plan, which will be implemented as soon as reasonable, but no longer than 48 hours from initial notification for Category 1 SSOs of 50,000 gallons or more to assess impacts from SSOs to surface waters. The plan will also be implemented when directed to do so by a governing authority.

SAMPLING PLAN

Water quality sampling and testing will be performed as appropriate to determine the extent and impact of the SSO when spilled sewage enters a water body. The water quality sampling procedures will be implemented within 48 hours and include the following:

- The first responders will consider the need to sample surface waters the SSO may have reached.
 - If preliminary volume estimates of the SSO are 50,000 gallons or greater, the first responders will begin collecting as soon as possible but no later than 48 hours after becoming aware of the SSO.
- The water quality samples will be collected from upstream of the spill, the point of entry, and downstream of the spill in flowing water (e.g., creeks).
 - The samples will then be taken to an accredited laboratory for testing.
 - Require water quality analyses for ammonia and bacterial indicators.
 - Observe proper chain of custody procedures; and
 - Repeat sampling if deemed necessary and/or at the request of regulators.

WATERS OF THE STATE

The following Waters of the State are in the City of Beaumont's service area:

- Santa Ana River via area tributaries.



OERP Attachment H – City Contractor Emergency Plan



OERP Attachment I – City Equipment and Critical Replacement Parts



7.0 FOG CONTROL PROGRAM

Based on the requirement of the State Water Resources Control Board, Order No 2006-0003-DWQ, the City has determined that a FOG Control Program is necessary to mitigate the discharge of FOG appropriately and effectively to the sanitary sewer system that could cause blockages and SSOs. This section describes the City's efforts to control FOG to reduce the impacts of SSOs

7.1 What is FOG?

Fats, oils, and grease, commonly referred to as FOG, are generated from foods such as cooking oil, shortening, lard, butter, meat fats, sauces, gravy, ice cream, soups, etc.

Two main sources of FOG discharges are from Food Service Establishments (FSE) and residential users. The excessive amount of FOG being discharged may be a result of poor kitchen practices at F.S.E.'s by employees and residential users. Pouring or washing FOG down the drain causes it to solidify, accumulate and narrow the pipes internal opening. Eventually, FOG can completely clog the inside of the pipes within the establishment or residence, the property owner's private sewer laterals or the City's public sanitary sewer system, causing sewage to back up into the establishments, residences or onto the streets and into the storm drains.

7.2 FOG Public Education Outreach Program

7.2.1 Requirement

The FOG program has been implemented and schedule for a public education outreach program that proper disposal of Fog as of 11/14/22.

7.2.2 Responsible Person

Environmental Compliance Manager

7.2.3 Compliance

Commercial / Industrial FOG Dischargers

The City has identified all existing Food Service Establishments within their jurisdiction and currently monitors the grease interceptor maintenance requirements of each facility for compliance. As a part of the annual business license renewal process, the Environmental Compliance Inspector will inspect each establishment for compliance with FOG Best Management Practices (BMP). A copy of the FOG BMPs is provided to the business owner or manager along with a copy of the Beaumont Municipal Code Chapter 13.09 "Regulating Fats, Oils, and Grease Management in Food Service Establishments." The inspector will walk through the facility with the manager or owner discussing ways to reduce or eliminate FOG discharges through ongoing employee training, review waste haul manifests and inspect that drain screens are installed in



drains. As of November 14, 2022, educational materials such as FOG compliance posters and training videos will be made available to the F.S.E.

Residential FOG Dischargers

The City implemented a public education outreach program on November 14, 2022, directed at residential customers. The City will promote the residential FOG program via Social Media Blasts periodically on the City's website with information and graphics. The City will provide FOG educational flyers to all Homeowners Associations to add to their community newsletters. The City Environmental Compliance (EC) inspector will periodically give an in-person FOG presentation at various H.O.A. meetings. The City also promotes the residential FOG program during community events, such as the Cherry Festival, Oktoberfest and other events as opportunities present themselves. The City provides targeted outreach on a case-by-case basis.

7.3 FOG Disposal

7.3.1 Requirement

The FOG control program shall include a plan and schedule for the disposal of FOG generated within the sanitary sewer system service area.

7.3.2 Responsible Person

Wastewater Collections Supervisor

7.3.3 Compliance

FOG generated within the sanitary service area is currently removed by City crews during routine maintenance of pipes and lift stations. Grease removed from the system is disposed of at the City of Beaumont WWTP located at 715 West 4th Street in Beaumont CA.

FOG generated by Food Service Establishments is required to be disposed of appropriately, in accordance with: BMC 13.09.120 (b) "Segregation and collection of waste cooking oil" and 13.09.130 "Grease interceptor maintenance requirements" as stated in section 7 (e) below

7.4 Legal Authority

7.4.1 Requirement

The City shall have the legal authority to prohibit discharges to the system and identify measures to prevent SSOs and blockages caused by FOG.

7.4.2 Responsible Person

General Manager of Utilities



7.4.3 Compliance

According to the California State Water Resources Control Board, the Industrial Waste Survey is a required part of the wastewater industrial pre-treatment program. The City requires an Industrial Waste Survey to be completed by all businesses to identify which businesses have the potential to discharge industrial wastewater to the City's sanitary sewer system with the potential to require a grease removal device.

Legal authority prohibiting discharges of FOG to the City sanitary sewer system: [BMC 13.09.030 "General prohibition"](#)

"The discharge of fats, oils, greases, and other solids ("F.O.G.") in concentrations from food services establishments and other commercial and other industrial facilities to the City sewer systems that may adversely affect the normal function of these systems or result in blockages and/or public nuisance is prohibited."

7.5 Grease Removal Devices

7.5.1 Requirement

The FOG program shall include requirements to install grease removal devices (such as traps or interceptors), design standards, maintenance requirements, BMP requirements, record keeping and reporting requirements.

7.5.2 Responsible Person

General Manager of Utilities

7.5.3 Compliance

The following California Plumbing Code and Beaumont Municipal Codes includes the requirements to install grease removal devices (such as traps or interceptors), design standards for the removal devices, maintenance requirements, BMP requirements, record keeping and reporting requirements.

California Plumbing Code 1014.0 Grease Interceptors:

"Where it is determined by the Authority Having Jurisdiction that [waste](#) pre-treatment is required, an [approved](#) type of [grease interceptor](#)(s) complies with ASME A112.14.3, ASME A112.14.4, CSA B481, PDI G-101, or PDI G-102, and sized in accordance with Section 1014.2.1 or Section [1014.3.6](#), shall be installed in accordance with the manufacturer's installation instructions to receive the drainage from fixtures or equipment that produce grease-laden [waste](#) located in areas of establishments where food is prepared, or other establishments where grease is introduced into the drainage or [sewage](#) system in



quantities that can affect line stoppage or hinder sewage treatment or private sewage disposal systems.

A combination of hydromechanical, gravity grease interceptors and engineered systems shall be allowed to meet this code and other applicable requirements of the Authority Having Jurisdiction where space or existing physical constraints of existing buildings necessitate such installations. A grease interceptor shall not be required for individual dwelling units or private living quarters. Water closets, urinals, and other plumbing fixtures conveying human waste shall not drain into or through the grease interceptor."

BMC 13.09.130 - Grease Interceptor Maintenance Requirements.

- A. Grease interceptors shall be maintained in efficient operating condition by periodic removal of the full content of the interceptor which includes wastewater, accumulated F.O.G., floating materials, sludge, and solids.
- B. All existing and newly installed grease interceptors shall be regularly maintained.
- C. No F.O.G. that has accumulated in a grease interceptor shall be allowed to pass into any sewer lateral, sewer system, storm drain, or public right-of-way during maintenance activities.
- D. Food service establishments with grease interceptors are required to submit data and information necessary to establish the maintenance frequency grease interceptors.
- E. The maintenance frequency for all food service establishments with a grease interceptor shall be determined in one of the following methods:
 - a. Grease interceptors shall be fully pumped out and cleaned at a frequency such that the combined F.O.G. and solids accumulation does not exceed 25 percent of the total liquid depth of the grease interceptor. This is to ensure that the minimum hydraulic retention time and required available volume is maintained to effectively intercept and retain F.O.G. discharge to the sewer system.
 - b. All food service establishments with a grease interceptor shall regularly maintain their grease interceptor and maintain a record of such maintenance.
 - c. Grease interceptors shall be fully pumped out and cleaned quarterly when the frequency described in (1) has not been established. The maintenance frequency may be adjusted when sufficient data have been obtained to establish an average frequency based on the requirements described in (1). Based on the actual generation of F.O.G. from the food service establishment, the maintenance frequency may increase or decrease.
 - d. If the grease interceptor, at any time, contains F.O.G. and solids accumulation that does not meet the requirements described in (1), the food service establishment shall be required to have the grease interceptor serviced



immediately such that all fats, oils, grease, sludge, and other materials are completely removed from the grease interceptor. If deemed necessary, the Program Manager may also increase the maintenance frequency of the grease interceptor from the current frequency.

BMC 13.09.120 Best Management Practices: All food service establishments shall, at a minimum, implement the following Best Management Practices, when applicable:

- A. Installation of Drain Screens. Drain screens shall be installed on all drainage pipes in food preparation areas.
- B. Segregation and Collection of Waste Cooking Oil. All waste cooking oil shall be collected and stored properly in recycling receptacles shall be maintained properly to ensure that they do not leak. Licensed waste haulers or an approved recycling facility must be used to dispose of waste cooking oil.
- C. Disposal of Food Waste. All food waste shall be disposed of directly into the organic waste bin, and not in sinks.
- D. Employee Training. Employees of the food service establishment shall be trained by the food service establishment within 180 days of November 1, 2009, and twice each calendar year thereafter, on the following subjects:
- E. How to "dry wipe" pots, pans, dishware, and work areas before washing to remove grease.
- F. How to properly dispose of food waste and solids in enclosed plastic bags prior to disposal in trash bins or containers to prevent leaking and odors.
- G. The location and use of absorption products to clean under fryer baskets and other locations where grease may be spilled or dripped.
- H. How to properly dispose of grease or oils from cooking equipment into a grease receptacle such as a barrel or drum without spilling.
- I. Training shall be documented, and employee signatures retained indicating each employee's attendance and understanding of the practices reviewed. Training records shall be available for review at any reasonable time by the Program Manager or an inspector.
- J. Maintenance of Kitchen Exhaust Filters. Filters shall be cleaned as frequently as necessary to be maintained in good operating condition. The wastewater generated from cleaning the exhaust filter shall be disposed of properly.
- K. Kitchen Signage. Best management and waste minimization practices shall be posted conspicuously in the food preparation and dishwashing areas at all times.



7.6 Inspection

7.6.1 Requirement

The District shall have the authority to inspect grease producing facilities, enforcement authorities, and whether the Enrollee has sufficient staff to inspect and enforce the FOG ordinance

7.6.2 Responsible Person

Environmental Compliance Manager

7.6.3 Compliance

The City's Municipal Code 13.09.080 provides the legal authority to inspect grease producing facilities and 13.09.140 provides enforcement authority. Inspection and enforcement are provided by the Department of Environmental Compliance. The Environmental Compliance Manager is responsible for the inspection, enforcement and establishment of record keeping practices for the FOG program.

[BMC 13.09.080 Sampling and Inspection](#)

"Sampling and inspection of Food Service Establishments may be conducted in the time, place, manner, and frequency as determined by the City Manager or his or her designee."

[BMC 13.09.140 Enforcement.](#)

- A. In addition to the specific provisions set forth in this Chapter, the City may enforce this Ordinance through any of the Civil, Criminal or Administrative Procedures established by the City of Beaumont Municipal Code.
- B. In addition to the specific provisions set forth elsewhere in this Code, the City may enforce this Chapter, through any Civil, Criminal or Administrative Procedures established by State or Federal Laws.

(Ord. 959, 10/09; §1)

7.7 Identification of Potential FOG Blockages

7.7.1 Requirement

The FOG control program shall include an identification of sanitary sewer system sections subject to FOG blockages and establishment of a cleaning maintenance schedule for each section.

7.7.2 Responsible Person

Wastewater Collections Supervisor



7.7.3 *Compliance*

The City is actively cleaning the system and as FOG problems are identified they are put on a quarterly high pressure cleaning list until they can be investigated further. Investigation of the problem areas can include CCTV inspection by a subcontractor, inspection by the City's in-house compliance officer and/or continued quarterly cleaning and spot checking by the City's cleaning crew.

7.8 **Source Control Measures**

7.8.1 *Requirement*

Development and implementation of source control measures for all sources of FOG discharged to the sanitary sewer system for each section identified in (g) above.

7.8.2 *Responsible Person*

General Manager of Utilities

7.8.3 *Compliance*

The City has a commercial FOG control program that began in 2019 and is being phased in over a five-year period. This program is directed at all Food Service Establishment businesses in the service area. The City employs one full-time position that is primarily tasked with inspecting, monitoring compliance, and educating FSE's related to FOG discharge and ensures that FSE's have grease control devices that are appropriately designed and maintained to control the discharge of FOG to the sewer collection system.



7.0 FOG - Key Performance Indicators (KPIs)		
<p>KPI 7.1</p>	<ul style="list-style-type: none"> • Is Commercial FOG Program effective? 	<p>Measured by:</p> <ol style="list-style-type: none"> a. Review of work orders and customer service complaints for FOG related issues. b. Review of enforcement actions taken against City
<p>KPI 7.2</p>	<ul style="list-style-type: none"> • Is gravity pipe cleaning program effective? 	<p>Measured by Number of FOG related SSOs or blockages</p>
<p>KPI 7.3</p>	<ul style="list-style-type: none"> • Is Residential FOG program being implemented? 	<p>Measured by</p> <ol style="list-style-type: none"> a. Annual review of community events attended. b. Annual review of flyers and notices sent to customers.



8.0 SYSTEM EVALUATION AND CAPACITY ASSURANCE PLAN

8.1 Identify Hydraulic Deficiencies

8.1.1 Requirement

Describe actions needed to evaluate those portions of the sanitary sewer system that are experiencing or contributing to an SSO discharge caused by hydraulic deficiency. The evaluation must provide estimates of peak flows (including flows from SSOs that escape from the system) associated with conditions similar to those causing overflow events, estimates of the capacity of key system components, hydraulic deficiencies (including components of the system with limiting capacity) and the major sources that contribute to the peak flows associated with overflow events.

8.1.2 Responsible Person

Director of Public Works

8.1.3 Compliance

Recognizing the importance of planning, developing, and financing wastewater system facilities to provide reliable and enhanced service for existing customers and to serve anticipated growth, the City initiated the preparation of this wastewater system master planning study in 2021.

The objective of the study included the following:

- Summarize the City's existing wastewater collection system facilities.
- Document growth planning assumptions and known future developments.
- Summarize the wastewater system performance criteria and design storm event.
- Project future wastewater flows.
- Develop and calibrate the physical characteristics of the hydraulic model (gravity mains, force mains, and lift stations).
- Evaluate the adequacy of capacity for the wastewater collection system facilities to meet existing and projected peak dry weather flows and peak wet weather flows.
- Recommend a capital improvement program (CIP) with an opinion of probable construction costs.
- Develop a 2021 Wastewater Master Plan Report.



8.2 Establish Appropriate Design Criteria

8.2.1 Requirement

Where design criteria do not exist or are deficient, undertake the evaluation identified in (a) above to establish appropriate design criteria.

8.2.2 Responsible Person

Director of Public Works

8.2.3 Compliance

A hydraulic sewer model was assembled and used in evaluating the adequacy of the City's sewer system. The hydraulic model combines information on the physical characteristics of the sewer system (pipe sizes, pipe materials, pipe slopes, etc.), and performs calculations to solve a series of mathematical equations to simulate flow in pipes.

Gravity pipes with diameters 10 inch and larger were modeled. The model was calibrated to Peak Dry Weather Flows and Peak Wet Weather Flows from two storm events, which occurred on 3/9/2020 to 3/10/2020 and 3/12/2020 to 3/13/2020. This established the design criteria for the Master Plan and will be used for future planning.

8.3 Capacity Enhancement Measures

8.3.1 Requirement

Define the steps needed to establish a short- and long-term CIP to address identified hydraulic deficiencies, including prioritization, alternatives analysis, and schedules. The CIP may include increases in pipe size, I/I reduction programs, increases and redundancy in pumping capacity, and storage facilities. The CIP shall include an implementation schedule and shall identify sources of funding.

8.3.2 Responsible Person

Director of Public Works

8.3.3 Compliance

The Master Plan outlines planned capital improvement projects to address identified hydraulic deficiencies based on existing, near-term, and long-term growth scenarios. Generally, the planned improvements assume an increase in pipe size until further engineering can be performed.

The cost estimates presented in the Capital Improvement Program (CIP) have been prepared for general master planning purposes and for guidance in project evaluation and implementation. The estimated costs include the baseline costs plus 20 percent contingency allowance to account



for unforeseen events and unknown field conditions. Capital improvement costs include the estimated construction costs plus 30 percent project related costs (engineering design, project administration, construction management and inspection, and legal costs).

Final costs of projects will depend on actual labor and material costs, competitive market conditions, final project scope, implementation schedule, and other variable factors such as: preliminary alignments generation, investigation of alternative routings, and detailed utility and topography surveys.

8.4 Schedule for Planned Enhancements

8.4.1 Requirement

The Enrollee shall develop a schedule of completion dates for all portions of the capital improvement program developed in (a)-(c) above. This schedule shall be reviewed and updated consistent with the SSMP review and update requirements as described in Section D. 14.

8.4.2 Responsible Person

Director of Public Works

8.4.3 Compliance

The 2021 Master Plan includes a Capital Improvement Program (CIP) (Table 8.3), that includes a plan, schedule, and projected costs for capacity deficiency projects as well as lift station improvement projects. The City will monitor development trends and will review the CIP annually during the budgeting process and as needed.



8.0 SECAP - Key Performance Indicators (KPIs)

KPI 8.1	Is gravity pipe capacity sufficient today and tomorrow?	<i>Measured by:</i> <ul style="list-style-type: none">a. <i>Periodic review/update of land use agencies, general planning zone designations</i>b. <i>Periodic review of new construction development trends.</i>c. <i>Annual review of CIP Plan and Schedule to ensure implementation.</i>d. <i>Measured By: Review of SSO Response training records to evaluate demonstrated ability of staff.</i>e. <i>Model new development projects to ensure capacity and system impacts.</i>
----------------	---	--



9.0 MONITORING, MEASUREMENT, AND PROGRAM MODIFICATIONS

The City is dedicated to continuous improvement. Staff demonstrates this value by continually monitoring productivity and progress and taking steps to make incremental improvements to provide a high level of service. A part of this high level of service is reducing the impact of SSOs

9.1 Maintain Relevant Information

9.1.1 Requirement

The Enrollee shall maintain relevant information that can be used to establish and prioritize appropriate SSMP activities.

9.1.2 Responsible Person

Collection System Supervisor

9.1.3 Compliance

The City currently maintains paper records for maintenance activities and SSO Events. The City has selected a Computerized Maintenance Management System (CMMS) database and anticipates implementation by June 30th, 2023.

The data the City anticipates maintaining includes:

- Total number of SSOs;
- Number of SSOs by each cause (roots, grease, debris, pipe failure, capacity, pump station failures, and other);
- Portion of sewage contained compared to total volume spilled;
- Volume of spilled sewage discharged to surface water; and
- Planned vs. actual preventive maintenance activities (Goals and Outcomes)

9.2 Measure Effectiveness

9.2.1 Requirement

The Enrollee shall monitor the implementation and, where appropriate, measure the effectiveness of each element of the SSMP.

9.2.2 Responsible Person

General Manager of Utilities



9.2.3 *Compliance*

The City monitors and measures the effectiveness of each element of this SSMP, where appropriate, based on identified key performance indicators (KPIs). Performance indicators are listed in various elements of the SSMP. KPIs are reviewed annually to monitor effectiveness. The results are maintained in an annual report and this information is used during the next audit period. The SSMP will be updated as needed to ensure continuous improvement, system reliability and sustainability.

9.3 **Assess Preventative Maintenance Program**

9.3.1 *Requirement*

The Enrollee shall assess the success of the preventative maintenance program.

9.3.2 *Responsible Person*

Collection System Supervisor

9.3.3 *Compliance*

The City reviews and evaluates the various work programs annually to ensure goals are being met and intended outcomes are being achieved. Depending on the performance, resources can be reallocated from one work program to another to most efficiently implement the City's preventative maintenance program.

9.4 **Update SSMP**

9.4.1 *Requirement*

The Enrollee shall update program elements, as appropriate, based on monitoring or performance evaluations.

9.4.2 *Responsible Person*

General Manager of Utilities

9.4.3 *Compliance*

The City is continuously monitoring and evaluating its programs and performance of SSMP program elements and will update the SSMP on a five-year interval, in accordance with requirements, and when significant changes are made. Any of these actions will be approved by the City Council.



9.5 SSO Trends

9.5.1 Requirement

The Enrollee shall identify and illustrate SSO trends, including frequency, location, and volume.

9.5.2 Responsible Person

Collection System Supervisor

9.5.3 Compliance

The City analyzes SSO trends annually. The City looks at SSO trends in frequency, volume, location, category, material type, age of asset, and cause of SSO. This helps with planning efforts and allows for effective allocation of limited resources to reduce the impact of SSOs most effectively.

9.0 MONITORING - Key Performance Indicators (KPIs)

KPI 9.1	Is SSMP in compliance and effective?	<i>Measured by annual review of KPIs</i>
----------------	--------------------------------------	--



SEWER SYSTEM MANAGEMENT PLAN (SSMP)



10.0 SSMP PROGRAM AUDIT

10.1 SSMP Program Audits

10.1.1 Requirement

As part of the SSMP, the Enrollee shall conduct periodic internal audits, appropriate to the size of the system and the number of SSOs. At a minimum the audits must occur every two years and a report must be prepared and kept on file.

10.1.2 Responsible Party

General Manager of Utilities

10.1.3 Compliance

According to the SSS WDR Section D.13.x, the objective of SSMP audits is to focus on evaluating the effectiveness of the SSMP and compliance with the SSMP requirements identified in the SSS WDR Order.

Compliance – First, the evaluation will determine if the City’s SSMP addresses all the required elements. Second, the evaluation will determine if the City is implementing its SSMP. Any violations for non-compliance will be noted in the audit report and corrected in a timely manner.

Effectiveness – Where appropriate, key performance Indicators (KPIs) have been developed for each SSMP element to evaluate effectiveness. During the audit, the KPI’s are assessed, and where appropriate, recommendations for improvement are made.

The results of the audit, including the identification of any deficiencies and corrective measures will be included in an Audit Report. A plan and schedule to address any deficiencies will be established. Any findings and related corrections that substantially change any of the elements of the SSMP will trigger an update to the SSMP, which will then be brought to the City Council for approval, followed by certification by the LRO.



10.0 SSMO AUDIT PROGRAM - Key Performance Indicators (KPIs)

KPI 10.1	Is the SSMP being audited on prescribed schedule?	<i>Measured by review of audit timelines</i>
KPI 10.2	Is the SSMP being audited for compliance and effectiveness?	<i>Measured by review of KPIs</i>
KPI 10.3	Are updates and/or modifications being implemented?	<i>Measured by Annual Review of SSMP Change Log</i>



11.0 COMMUNICATION PROGRAM

11.1 Plan of Communication with the Public

11.1.1 Requirement

The Enrollee shall communicate on a regular basis with the public on the development, implementation, and performance of its SSMP. The communication system shall provide the public the opportunity to provide input to the Enrollee as the program is developed and implemented.

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

11.1.2 Responsible Person

Thaxton Belle

11.1.3 Compliance

The City communicates with the public via direct mailings, the City website, social media, personal contact through the course of day-to-day operations and via the City's After-Hours Call Center.

a. Direct Mailings

The City occasionally mails brochures with FOG information to homeowners and to business customers regarding City services.

b. City Web Site (<http://www.beaumontca.gov>)

- The City's SSMP is posted on its website and can be used to communicate details of the SSMP implementation, FOG Control Program, and other wastewater related guidance.
- The website has several options for customers and stakeholders to contact the City staff. The City's Website includes Customer Service phone numbers for each City department.
- City Counsel agendas and minutes are posted on the website, which would include any actions taken by the counsel related to the SSMP.
- SSO reporting instructions are located on the City website.
<https://www.beaumontca.gov/1285/Sewer-Spills>



d. Social Media

- The City has a presence on Facebook, which provides an avenue for customers and stakeholders to keep abreast of City activities and provide feedback or ask questions.

e. Personal Contact

- The City's collection crew responds to all SSOs and is the most common method of communication with home and business owners, regarding issues related to SSO' and their sewer service.
 - if a residential lateral is the cause of the SSO, then a copy of the City's private lateral sewer policy is given to the homeowner/resident/business owner and response staff provide an explanation of what needs to be done to correct the problem.
- The City's Pretreatment Services interacts with the commercial and industrial businesses, including restaurants. Inspections are conducted by the Environmental Compliance Manager at restaurants to ensure that grease interceptors, sewer laterals, and outdoor areas are properly maintained. The inspectors use the inspection as an opportunity to communicate laws, regulations, and policies that affect the industry or commercial business. These laws include the FOG program, NPDES Storm Water Permit requirements, and good housekeeping practices. The inspectors are able to deliver program information in the form of brochures and other printed material.

f. City's After Hours Call Center

- Customers and stakeholders can contact the City Police Department, during non-business hours, to report emergencies and other issues to the City's Police Department. Calls received are forwarded to appropriate response personnel.

g. Community Events

- The City periodically participates in community events, which provides opportunities to promote City programs.



11.0 COMMUNICATIONS- Key Performance Indicators (KPIs)

KPI 11.1	Are SSMP activities available to the public?	<i>Measured by:</i> <ul style="list-style-type: none">a. <i>Measured By: Review to ensure current SSMP is posted on the City's website.</i>b. <i>Measured By: Review of "Contact Us" postings on City's website for SSMP related comments or inquiries.</i>c. <i>Measured By: Review of City's website to ensure Council meeting agendas and minutes are posted.</i>d. <i>Measured By: Review Customer Service Requests for SSMP related implementation issues</i>
-----------------	--	---



Appendix 1 — Water Board Pre-Inspection Questionnaire completed by City



SEWER COLLECTION SYSTEM
PRE-INSPECTION QUESTIONNAIRE
Version 2.0

PART 1 — DESCRIPTION 3

PART 2 — INSTRUCTIONS 3

PART 3 — REQUIRED INFORMATION 3

1 DOCUMENTATION 3

2 Basic Information..... 3

3 ORGANIZATION 7

Local Governing Board Information..... 7

Sewer System Management Plan Information 8

4 SEWER SYSTEM ASSETS..... 8

General System Information..... 8

Asset Mapping 8

Sewer Service Laterals [SSS WDRs, D.8, D.13(iv)] 8

Pumping Facility Assets..... 9

Force Main Sewer Assets 9

5 FINANCIAL INFORMATION 10

Funding Sources and Revenues [SSS WDRs, D.9] 10

Operations, Maintenance and Capital Funds and Expenditures [SSS WDRs, Sects. D.9] 10

6 LOCAL SEWER USE ORDINANCE [SSS WDRs, D.13(iii) and/or D.13(vii)] 10

7 CAPITAL IMPROVEMENT PLAN 11

8 OPERATIONS AND MAINTENANCE PROGRAM 11

Computerized Maintenance Management System (CMMS) 11

Inspections, Operations and Management Activities 12

Fats, Oils and Grease [SSS WDRs, D.13(iv) and D.13(viii)] 13

Sewer Contract Services 13

9 SSO EMERGENCY RESPONSE PROGRAM [SSS WDRs, D.13(vi)] 14

10 SSO REDUCTION PERFORMANCE AND MONITORING PROGRAM [SSS WDRs, D.13(ix)]..... 14

11 COLLECTIONS STAFFING AND TRAINING 14

12 MAJOR EQUIPMENT INVENTORY [SSS WDRs, D.4, D.7, D.8, D.13(iv)] 15

13 EXTERNAL COMMUNICATIONS PROGRAM 15

14 NOTIFICATION, REPORTING AND RECORD KEEPING..... 15

15 SSO PREVENTION AND MITIGATION 16

15 DECLARATION 17

PART 1 — DESCRIPTION

This Sewer Collection System Pre-Inspection Questionnaire (Questionnaire) includes questions specific to the requirements in the Sanitary Sewer System Waste Discharge Requirements Water Quality Order No. 2006-0003-DWQ (hereafter SSS WDRs), and its accompanying Amended Monitoring Plan Order No. 2008-0002-EXEC (hereafter Amended MRP).

All of the questions in this Questionnaire must be answered by the Enrollee to demonstrate how the agency is complying with the SSS WDRs and the Amended MRP. All responses provided in the Questionnaire along with the documentation required to be submitted by each Enrollee (see Part 3, Section 1) will be collected by Water Board staff at the time of the inspection.

PART 2 — INSTRUCTIONS

1. Complete all questions in the Questionnaire.
2. Save an electronic copy of the completed Pre-Inspection Questionnaire (in MS Word), and the other documentation required for your collection system (see Part 3, Section 1). Print the last page of this Questionnaire and sign it in ink.

PART 3 — REQUIRED INFORMATION

1 DOCUMENTATION

Please have the following documentation available during the inspection:

- 1.1 Sewer System Management Plan [(SSMP) [Sanitary Sewer System General Waste Discharge Requirements (SSS WDRs), Sect. D.13] and any documents referenced within the SSMP. Also include documentation showing approval of the SSMP by your agency's local governing board (e.g., Board Resolution or other documentation).
- 1.2 SSMP Program Audit¹ [SSS WDRs, Sect. D.13(x)], if not contained within your agency's SSMP
- 1.3 Sewer System Area Map [SSS WDRs, Sect. D.13(iv)], if not contained within your agency's SSMP
- 1.4 Local Sewer Use Ordinance [SSS WDRs, Sects. D.13(iii) and D.13(vi)], if not contained within your agency's SSMP
- 1.5 Evidence of Agency's SSO Field Response Documentation [SSS WDRs, Amended MRP, B.5], if not contained within your agency's SSMP
- 1.6 Rehabilitation and Replacement Plan [SSS WDRs, Sect. D.13(iv)(c)], if not contained within your agency's SSMP
- 1.7 Capital Improvement Plan (CIP) Schedule for System Evaluation and Capacity Assurance Plan (SECAP) [SSS WDRs, Sect. D.13(viii)], if not contained within your agency's SSMP

2 Basic Information

- 2.1 Collection System Waste Discharge ID number (WDID) and Collection System Name: 8SSO10543
- 2.2 Collection System Main Point(s) of Contact (name, title, address, email, and telephone number): **Thaxton Van Belle, General Manager of Utilities, 550 East 6th Street, Beaumont, CA 92220 (951) 572-3195.** Others to add later.

¹ To satisfy SSS WDRs, Sect. D.13(x), the SSMP Audit must occur at least every two years following the original approval date of the agency's SSMP by the local governing board. The SSMP Audit must measure the effectiveness and compliance of an Enrollee's SSMP.

- 2.3 Type of Sanitary Sewer System (select ONE of the following: **Municipal**, Park, School, Military, Hospital, Prison, Airport, Port, Other)
- 2.4 What is the population served by your agency's sanitary sewer system? 54,228
- 2.5 What is this fiscal year's budget for operation and maintenance sanitary sewer system facilities? 1,200,000
- 2.6 What is this fiscal year's budget for capital expenditures for sanitary sewer system facilities? 400,000

For questions 2.7 - 2.10, please identify the total number of employees (technical and mechanical) for your agency's sanitary sewer system (including pump station operations) working within the different classifications listed below.

- 2.7 Entry Level (Less than 2 years experience)
- Number of agency employees? 2
- 2.8 Journey Level (Greater than or equal to 2 years experience)
- Number of agency employees? 2
- 2.9 Supervisory Level
- Number of agency employees? 1
- 2.10 Managerial Level
- Number of agency employees? .5

For questions 2.11 – 2.14, please identify the total number of employees who hold CWEA Certification for Collection System Maintenance for your agency's sanitary sewer system (including pump station operations) for the various Certificates and Grades levels listed below.

- 2.11 Grade I
- Number of certified (Grade I Collection System Maintenance) agency employees: 4
- Number of certified (Grade I Plant Maintenance Technologist) agency employees: 1
- 2.12 Grade II
- Number of certified (Grade II Collection System Maintenance) agency employees:
- Number of certified (Grade II Electrical/Instrumentation Technologist) agency employees:
- Number of certified (Grade II Mechanical Technologist) agency employees:
- 2.13 Grade III
- Number of certified (Grade III Collection System Maintenance) agency employees: 1
- Number of certified (Grade III Electrical/Instrumentation Technologist) agency employees:
- Number of certified (Grade III Mechanical Technologist) agency employees:
- 2.14 Grade IV
- Number of certified (Grade IV Collection System Maintenance) agency employees:
- Number of certified (Grade IV Electrical/Instrumentation Technologist) agency employees:
- Number of certified (Grade IV Mechanical Technologist) agency employees:
- 2.15 Estimated Size Distribution of Assets

Diameter of sewer pipe	Gravity Sewers (miles)	Force Mains (miles)
6 inches or less	2	.4
8 inches	147	10
9 - 18 inches	27	9.6
19 - 36 inches	4	0
> 36 inches	0	0
Unknown Diameter	0	0
Totals	180	0

- 2.16 For which portion of sewer service laterals is your agency responsible? **None**
 (If None, skip question 2.17.)
- 2.17 Estimated total miles of sewer service laterals (upper and lower) for which your agency is responsible?
- 2.18 Number of sewer service lateral connections? **17450**
- 2.19 Estimated total miles of easements within your sanitary sewer system? **23**
- 2.20 What is your total easement sewer system cleaning production in miles/year?
- 2.21 What is your total gravity sewer system cleaning production in miles/year? **157**
- 2.22 Does your agency own any separately enrolled collection systems? [Y/N] **N**
- 2.23 If yes to question 2.22, which collection system(s) does your agency own?
 Collection System name(s):
 Collection System WDID(s):
- 2.24 Which wastewater treatment plant(s) (WWTPs) ultimately receive wastewater from this collection system?
 Receiving Treatment Plant name(s): **City of Beaumont WWTP**
 Receiving Treatment Plant WDID(s): **8 330 101001**
- 2.25 For question 2.24, does your agency own this/these WWTP(s)? [Y/N] **Y**
- 2.26 Does your collection system discharge into any other collection system(s)? [Y/N] **N**
- 2.27 If yes to question 2.26, which collection system(s) receive wastewater from this collection system?
 Receiving Collection System name(s):
 Receiving Collection System WDID(s):

2.28 Do any upstream collection systems greater than 25,000 gallons/day (gpd) discharge into this collection system? [Y/N] **N**

2.29 If yes to question 2.28, which collection system(s) discharge into this collection system?

Upstream Collection System name(s):

Upstream Collection System WDID(s):

2.30 Estimated Collection System Flow Characteristics for your collection system:

Average Daily Dry Weather Flow (MGD)	Peak Daily Wet Weather Flow (MGD)
3.7	6
Enter description here how info. Is derived (based on EDUs measured, etc.)	Enter description here how info. Is derived (based on EDUs measured, etc.)

2.31 How many pump stations are there throughout the sewer collection system? **12**

2.32 How many feet of above ground gravity pipelines are there throughout the sewer collection system? [#] **0**

2.33 How many feet of above ground pressurized pipelines are located throughout the sewer collection system? [#] **780'**

2.34 How many air relief valves (ARVs) are located throughout the sewer collection system? [#]

2.35 How many siphons are there throughout the sewer collection system? [#] **0**

2.36 Specify the percentage of piping and the number of pump stations constructed in the following table below:
(note: total percentage must equal 100%)

2.37 Has your agency ever conducted any historic flow monitoring for the sewer system to evaluate hydraulic characteristics during weather conditions? [Y/N] **Y**

2.38 If yes to question 2.37 above, please list all specific dates when flow monitoring was conducted. [#] **I'm going to have to pull up 1) previous I&I study and 2) During WWMP (2020)**

2.39 Does your agency have any permanently installed flow monitor(s) in the collection system? [Y/N]

2.40 If yes to question 2.39 above, please specific total number of monitor(s) installed. [#] **15 Flowmeters at Lift Stations and 8 "smart covers"**

Age	Source of Age Info. (records, estimated, etc.)	Gravity & Pressure Sewers (%)	Pump Stations ² 25k Gal/day & Over (number of stations)	Pump Stations ¹ Under 25k Gal/day (number of stations)
2000 - Present		67[%]	11	0
1980 - 1999		11[%]	1	0
1960 - 1979		6[%]	0	0
1940 - 1959		6[%]	0	0
1920 - 1939		5[%]	0	0
1900 - 1919		5[%]	0	0
Before 1900		0	0	0
Unknown Age		0	0	0
Totals		0	0	0

¹ For pump stations, flow categories are the maximum flow rate occurring over a 24-hr period based on annual operating data. Age is date asset was originally constructed.

3 ORGANIZATION

Local Governing Board Information

- 3.1 [SSS WDRs, Sect. D.13(ii)]: Is/are your agency's Legally Responsible Official(s) and Data Submitter(s) registration information up-to-date with the State Water Board? [Y/N]
- 3.2 [SSS WDRs, Sect. D.13(ii)]: If your local governing board has an internet website, please specify the internet address here:

- 3.3 [SSS WDRs, Sect. D.13(ii)]: Please list the names and titles of each of your agency's current governing board members:

Sewer System Management Plan Information

- 3.4 [SSS WDRs, Sect. E.]: Is your agency's SSMP available on your agency's website? [Y/N] **N**
- 3.5 [SSS WDRs, Sect. E.]: If yes to question 3.4, please provide the internet address here: _WWMP Provided to Fischer via Dropbox

4 SEWER SYSTEM ASSETS

General System Information

- 4.1 [SSS WDRs, Findings 2 & 3]: Please specify the basis for the population estimate in question 2.4 (e.g., official census data, estimated by agency, etc.)? **Census Data of Beaumont, plus 2.2 persons per connection in Cherry Valley**
- 4.2 [SSS WDRs, Sects. D.8, D.10]: What is the approximate size of the service area served by the sewer collection system for your agency, in square miles? [# or Unknown] **18**
- 4.3 [SSS WDRs, Sects. D.8, D.10]: Please describe the terrain within your agency's sewer service area (Mountainous, Hilly, Flat, Valley, etc.)? **Hills and Valleys, with Flat gravity basin**
- 4.4 [SSS WDRs, Sects. D.8, D.10]: Please specify what percentage of the collection system's flow comes from residential, commercial, industrial, and institutional sources. [% FOR EACH or Unknown] **UNKNOWN**

Asset Mapping

- 4.5 [SSS WDRs, D.13(iv)]: Has your agency identified and mapped all the gravity sewer line segments, public access points (manholes, lamp holes, rod holes, etc.), pumping facilities, pressure pipes and valves, and stormwater-related facilities? [Y/N] **Y**
- 4.6 [SSS WDRs, D.13(iv)]: Does your agency currently have sewer system assets mapped in a Geographic Information System (GIS)? [Y/N] **Y**
- 4.7 [SSS WDRs, D.13(iv)]: Does your agency currently have stormwater-related facilities mapped in GIS? [Y/N] **Y**
- 4.8 [SSS WDRs, D.8 and D.10]: What is the estimated number of gravity sewer line pipe segments located throughout the collection system? [# or Unknown] **UNKNOWN**
- 4.9 [SSS WDRs, D.13(iv)]: Does your agency have a formal review process in place to ensure that any mapping issues noted by field staff or others are addressed? [Y/N] **N (not yet – purchased some equipment)**
- 4.10 [SSS WDRs, D.13(iv)]: Please indicate the total number of public access points (manholes, lamp holes, rod holes, etc.) located within your sewer collection system. [# or Unknown] **UNKNOWN**

Sewer Service Laterals [SSS WDRs, D.8, D.13(iv)]

- 4.11 Has your agency ever historically owned or maintained any portion of sewer service laterals? [Y/N or Unknown] **N**
- 4.12 Does your agency have a voluntary sewer service lateral incentive program in place? [Y/N] **N**
- 4.13 How many incoming complaints did your agency receive for privately-owned sewer service lateral problems in the previous fiscal year? [# or Unknown] **20**
- 4.14 How many service calls did your agency respond to in the field for privately-owned service lateral problems in the previous fiscal year? [# or Unknown] **20**
- 4.15 Does your agency track all installation locations of sewer backflow prevention devices installed on sewer assets owned and/or maintained by your agency? **No – Don't own/maintain any**

4.16 If yes to 4.15, list number of known sewer backflow prevention devices installed on sewer assets owned and/or maintained by your agency.

Pumping Facility Assets

For questions 4.17 – 4.34 below, refer to pump station answer from question 2.31 (above)

- 4.17 [SSS WDRs, D.8, D.13(iv)]: Has your agency mapped each pump station's actual GPS coordinates? [Y/N] **Y**
- 4.18 [SSS WDRs, D.8, D.13(iv)]: Has your agency conducted a risk assessment for each asset? [Y/N] **Y**
- 4.19 [SSS WDRs, D.8 and D.10]: How many of these assets have redundant pipelines installed? [#] **5**
- 4.20 [SSS WDRs, D.8 and D.10]: How many have dedicated emergency stand-by power generators located onsite? [#] **12**
- 4.21 [SSS WDRs, D.8 and D.10]: Has your agency developed written standard and emergency operating procedures for major sewer assets covering power and/or pumping failure(s) to minimize SSOs? [Y/N] **N**
- 4.22 [SSS WDRs, D.8 and D.10]: Has your agency determined the lowest hydraulic overflow point(s) and calculated the longest possible holding time(s) for each asset? [Y/N] **WWMP?**
- 4.23 [SSS WDRs, D.6(iii) and (vi), D.8 and D.10]: Has your agency identified critical spare parts for each asset? [Y/N] **N**
- 4.24 [SSS WDRs, D.6(iii) and (vi), D.8 and D.10]: For question 4.23, does your agency maintain the spare parts identified for each asset? [Y/N] **N**
- 4.25 [SSS WDRs, D.8 and D.10]: How many facilities are located within 100 feet of a surface water, creek or drainage channel? [#] **5**
- 4.26 [SSS WDRs, D.8 and D.10]: How many are located within 20 feet of a storm drain inlet? [#] **0**
- 4.27 [SSS WDRs, D.8 and D.10]: How many pump stations are equipped with audible and/or visual alarms located in public view to expedite notification to your agency in the event of an SSO? [#] **0**
- 4.28 [SSS WDRs, D.8 and D.10]: How many pump stations are equipped with an Auto Dialer Alarm System(s) for detecting pump failure and/or high wet well levels? [#] **12**
- 4.29 [SSS WDRs, D.8 and D.10]: How many have a supervisory, control and data acquisition system (SCADA) installed and operational? [#] **12**
- 4.30 [SSS WDRs, D.8 and D.10]: For question 4.29, how many can be remotely operated? [#] **10**
- 4.31 [SSS WDRs, D.8 and D.10]: How many pump stations display emergency notification signage, including agency contact information, in public view to expedite notification to your agency in the event of an SSO? [#] **0**
- 4.32 [SSS WDRs, D.8 and D.10]: Does your agency implement vandalism control efforts to discourage unauthorized access and/or vandalism to these assets? [#] **Yes**
- 4.33 [SSS WDRs, D.8 and D.10]: How many pump stations have built-in pumping bypass capability for emergency use? [#] **Don't understand the question – Most have redundancy, some have connection points for portable pump**
- 4.34 [SSS WDRs, D.8 and D.10]: How many have electrical power connections installed to allow for the use of portable emergency generators? [#] **All have a dedicated generator**

Force Main Sewer Assets

- 4.35 [SSS WDRs, D.8, D.13(iv)]: How many sewer force mains are owned by your agency? [#] **17**
- 4.36 [SSS WDRs, D.8, D.13(iv)]: For the assets in question 4.35, has your agency conducted a risk assessment for each asset? [Y/N] **N**

- 4.37 [SSS WDRs, D.8 and D.10]: For the assets in question 4.35, how many have a dedicated corrosion protection system(s) installed? [#] **Don't know what this is**
- 4.38 [SSS WDRs, D.8 and D.10]: For the assets in question 4.35, what is the total number of air relief valves installed? [#] **Unknown**

5 FINANCIAL INFORMATION

Funding Sources and Revenues [SSS WDRs, D.9]

- 5.1 Does your agency utilize an Enterprise Fund for services provided to the public? [Y/N] Y
- 5.2 If yes to question 5.1, what is the estimated annual revenue generated from this fund? [#] \$12,335,500
- 5.3 If yes to 5.1, what is the current Enterprise Fund balance? [#] \$6,700,000
- 5.4 If no to 5.1, what is the current balance of funds available for your sewer system? [#]
- 5.5 Please provide a brief description of all sewer collection system funding source(s) (e.g., sewer user fees, annual budget allocation, property taxes, etc.). Sewer user fees, permits/application fees, fines and interest income.
-
- 5.6 What is your agency's total number of billed sewer connections? [# OR Unknown] 17,736
- 5.7 What is your agency's total number of billed customers for sewer service? [# OR Unknown] **17,736**
- 5.8 What is your agency's current average monthly household user fee for sewage collection only? [\$ or Unknown] \$44.96
- 5.9 For answer in 5.8, what is your agency's sewer fee rate basis (e.g., measured flow, calculated flow, flat fee, etc.) Flat Fee
- 5.10 For question 5.8 above, specify the last date that sewer fees were increased by your local governing board. [date] 07/01/2021
- 5.11 Has your local governing board approved any future sewer use fee increase(s)? [Y/N] 07/01/2022

Operations, Maintenance and Capital Funds and Expenditures [SSS WDRs, Sect. D.9]

- 5.12 How much did your agency spend in the last fiscal year for operations and maintenance activities (O&M) for sewer assets? [\$] \$12,657,248
- 5.13 How much did your agency spend in the last fiscal year on capital expenditures for sewer assets (e.g., new pipelines, pump station upgrades/rehabilitation, new equipment, etc.)? [\$] \$23,094,617

6 LOCAL SEWER USE ORDINANCE [SSS WDRs, D.13(iii) and/or D.13(vii)]

- 6.1 Does your agency have an adopted sewer use ordinance (Ordinance)? [Y/N]
- If no to question 6.1, skip to question 7.1
- 6.2 Specify the date of last update/change of your agency's local Ordinance approved by your agency's local governing board. [DATE]
- 6.3 Specify the time frequency in which the Ordinance is reviewed. [FREQ]
- 6.4 Does your agency have legal authority within the Ordinance to limit and enforce illicit discharges from upstream public and/or private satellite collection system(s)? [Y/N]
- 6.5 If no to question 6.4, does your agency have service agreements or other procedures to limit and enforce illicit discharges from upstream public and/or private satellite collection system(s)? [Y/N]
- 6.6 Does the Ordinance ban inflow from stormwater sources? [Y/N]

- 6.7 Does the Ordinance specify who owns and/or maintains the sewer service lateral from the building foundation to the property line (upper lateral portion)? [Y/N]
- 6.8 Does the Ordinance specify who owns and/or maintains the sewer service lateral from the property line to the sewer main line (lower lateral portion)? [Y/N]
- 6.9 Does the Ordinance require testing and/or inspection of the sewer service lateral upon remodeling, renovations and/or transfer of property/residence? [Y/N]
- 6.10 Does the Ordinance prohibit illicit discharges from service connections into the sewer? [Y/N]
- 6.11 Does the Ordinance require sewers and connections to be properly designed and constructed? [Y/N]
- 6.12 Does the Ordinance require proper maintenance, inspection and repairs of laterals? [Y/N]
- 6.13 Does the Ordinance limit the discharge of fats, oils and grease (FOG) and other debris that may cause blockages? [Y/N]
- 6.14 Does the Ordinance give your agency the authority to inspect grease producing facilities? [Y/N]
- 6.15 Does the Ordinance reference the Uniform Building Code? [Y/N]
- 6.16 Does the Ordinance reference the California Plumbing Code? [Y/N]
- 6.17 Does the Ordinance give your agency the authority to inspect, maintain and repair assets located within sewer easements? [Y/N]
- 6.18 Does the Ordinance provide your agency with the proper authority to issue notices of violation (NOVs)? [Y/N]
- 6.19 If yes to question 6.18, how many NOVs has your agency issued in the past 3 years? [# or Unknown]
- 6.20 Does the Ordinance provide your agency with the proper authority to issue enforcement penalties for violators? [Y/N]
- 6.21 If yes to question 6.20, how many enforcement penalties has your agency issued in the past 3 years? [# or Unknown]
- 6.22 Does Ordinance provide your agency with the proper authority to ban connections and/or disconnect services for violators? [Y/N]
- 6.23 If yes to question 6.22, how many actions has your agency undertaken in the past 3 years? [Y/N]
- 6.24 Does the Ordinance provide your agency with the authority to limit future development and/or building? [Y/N]
- 6.25 If yes to question 6.24, how many actions has your agency undertaken in the past 3 years? [# or Unknown]

7 CAPITAL IMPROVEMENT PLAN

- 7.1 [SSS WDRs, D.9]: What is the approval date of your Sewer Capital Improvement Plan (Sewer CIP) by your agency's local governing board? [M/D/Y] **7/2021**
- 7.2 [SSS WDRs, D.8 and D.13(iv)]: For question 7.1, is your Sewer CIP available on the internet for public review? [Y/N] **N**
- 7.3 [SSS WDRs, D.8 and D.13(iv)]: If yes to question 7.2, please specify the internet address:

- 7.4 [SSS WDRs, D.8 and D.13(iv)]: What is the projected date of your next Sewer CIP update? [M/D/Y] **7/2022**

8 OPERATIONS AND MAINTENANCE PROGRAM

Computerized Maintenance Management System (CMMS)

- 8.1 [SSS WDRs, D.8 and D.13(iv)]: Does your agency use a computerized maintenance management system (CMMS) to generate work orders and track sewer maintenance, operations and management information? [Y/N] **N**

- 8.2 [SSS WDRs, D.7 and D.13(iv)]: If yes to question 8.1, is CMMS data used for ongoing strategies to eliminate/reduce SSOs? [Y/N]
- 8.3 [SSS WDRs, D.7 and D.13(iv)]: If yes to question 8.1, is the CMMS data used to evaluate cleaning production rates? [Y/N]
- 8.4 [SSS WDRs, D.7, D.13(iv) and D.13(ix)]: If yes to question 8.1, does your agency use the CMMS information to provide data for tracking system trends, problems and/or performance? [Y/N]
- 8.5 [SSS WDRs, D.7, D.13(iv) and D.13(ix)]: If no to question 8.1, does your agency have a different method in place to provide data for tracking system trends, problems and/or performance? **Pen and paper. Trends for lift stations**

Inspections, Operations and Management Activities

- 8.6 SSS WDRs, D.7 and D.13(iv): What is the total number of focused problem areas (“hot spots”) located throughout the collection system? [#] **20**
- 8.7 [SSS WDRs, D.8, D.13(iv)]: What percentage of all gravity sewers under you agency’s responsibility have been visually inspected with Closed-Circuit Television (CCTV) to date? [#] **2%**
- 8.8 [SSS WDRs, D.8, D.13(iv)]: Specify most recent date of completion for answer listed in 8.7 above: [date]
- 8.9 [SSS WDRs, D.8, D.13(iv)]: What percentage of CCTV video listed in answer 8.7 above has been reviewed and ranked? [#] **0**
- 8.10 [SSS WDRs, D.8, D.13(iv)]: What was your agency’s total CCTV inspection production for past 12 months (miles)? **2ml**
- 8.11 [SSS WDRs, D.8, D.13(iv)]: What is your agency’s planned CCTV inspection production scheduled for the next 12 months (miles)? **Plan to use sub to video**
- 8.12 [SSS WDRs, D.8, D.13(iv)]: What was your agency’s total gravity sewer collection system cleaning production (hydro flushing, mechanical and hand rodding) over the past 12 months (miles per year)? **70 miles**
- 8.13 [SSS WDRs, D.8, D.13(iv)]: What is your agency’s total gravity sewer collection system cleaning production scheduled (hydro flushing, mechanical and hand rodding) for the next 12 months (miles per year)? **] Working to up miles.**
- 8.14 [SSS WDRs, D.8, D.13(iv)]: Does your agency have a method in use for reviewing and analyzing force main sewers and their components? [Y/N]
- 8.15 [SSS WDRs, D.8 and D.10]: Does your agency have a program to inspect and maintain air relief valves (ARVs)? [Y/N/ n/a] **Replace**
- 8.16 [SSS WDRs, D.8 and D.10]: How many ARVs are not accessible for inspection/maintenance? [#/ n/a] **0**
- 8.17 [SSS WDRs, D.7 and D.13(iv)]: What was the total number of ARVs exercised and cleaned in past 12 months? **Replaced 6**
- 8.18 [SSS WDRs, D.7 and D.13(iv)]: What is the total number of ARVs planned to be exercised and cleaned in the next 12 months? [# or Unknown] **Keep stock and repair or clean when we can.**
- 8.19 [SSS WDRs, D.13(iv)]: What is the total number of public access points (manholes, lamp holes, rod holes, etc.) inspected in the past 12 months? [# or Unknown] **178**
- 8.20 [SSS WDRs, D.13(iv)]: What is the total number of public access points (manholes, lamp holes, rod holes, etc.) scheduled to be inspected in the next 12 months? [# or Unknown] **200**
- 8.21 [SSS WDRs, D.13(iv)]: Does your agency visually inspect pipeline routes at least annually, and after major storms, earthquakes or other events that could damage these assets, to check for sink holes or leaks along force main(s)? [Y/N] **Y**
- 8.22 [SSS WDRs, D.13(iv)]: How many above ground crossings (if applicable) were inspected in the past 12 months? [#, N/A or Unknown] **4**
- 8.23 [SSS WDRs, D.13(iv)]: How many siphons (if applicable) were inspected in the past 12 months? [#, **N/A** or Unknown]
- 8.24 [SSS WDRs, D.13(iv)]: Does your agency have a process to identify areas subject to excess hydrogen sulfide corrosion? [Y or N] **Currently finding as we clean**

- 8.25 [SSS WDRs, D.13(iv)]: Does your agency have a formal pipe grading process in place to identify pipe discontinuities? [Y or N] **N**
- 8.26 [SSS WDRs, D.13(iv)]: Does your agency require video (CCTV) inspections before and after cleaning to measure the effectiveness of these activities? [#] **N**
- 8.27 [SSS WDRs, D.13(iv)]: Does your agency video (CCTV) inspect pipes after all SSO(s)? [Y/N] **N**
- 8.28 [SSS WDRs, D.13(iv)]: Does your agency conduct smoke, dye or other tests to check for illicit connections? [Y/N] **N**
- 8.29 [SSS WDRs, D.13(iv)]: If yes to question 8.28, how many miles of sewer system were tested in the past 12 months? [# or Unknown]
- 8.30 [SSS WDRs, D.13(iv)]: Does your agency use video (CCTV) to monitor discharger compliance for illicit connections? [Y/N] **N**
- 8.31 [SSS WDRs, D.13(iv)]: If yes to question 8.30, list the total number of miles of video (CCTV) inspection conducted for this purpose in the past 12 months. [# or Unknown]
- 8.32 [SSS WDRs, D.13(iv) and D.13(viii)]: Does your agency have formal agreements in place to increase resources through established mutual assistance agreements with other agencies/contractors for wet weather episodes or for SSO response activities? [Y/N] **N**
- 8.33 [SSS WDRs, D.13(iv) and D.13(viii)]: Does your agency have a program in place to identify areas with inflow and infiltration (I/I) ? [Y/N] **Added some smart covers**
- 8.34 [SSS WDRs, D.13(iv) and D.13(viii)]: If yes to question 8.33, estimate the total number of miles identified by this program. [# or Unknown] **36**
- 8.35 [SSS WDRs, D.13(iv)]: Does your agency have an active root control program in place? [Y/N] **N** But starting to identify and use root control sub-contractor
- 8.36 [SSS WDRs, D.13(iv)]: If yes to question 8.35, please list the type(s) of control efforts in place (e.g., chemical, mechanical, etc.) **Chemical.**
- 8.37 [SSS WDRs, D.13(iv)]: If your agency uses chemical(s) for root control, please list chemical(s) used. [N/A if no chem. root program] **Dukes Root Control**
- Fats, Oils and Grease [SSS WDRs, D.13(iv) and D.13(viii)]**
- 8.38 Does your agency have a commercial FOG program in place? [Y/N] **Y**
- 8.39 If no to question 8.38, has your agency justified in its SSMP why a FOG program is not needed? [Y/N]
- 8.40 If yes to question 8.38, does your agency have a FOG Ordinance separate from the sewer use ordinance? [Y/N] **Y**
- 8.41 If yes to question 8.40, please list the FOG Ordinance citation number: **13.09**
- 8.42 If yes to question 8.38, approximately how many food service establishments (FSEs) such as restaurants, schools, hospitals, jails, and convalescent homes are subject to FOG control. [#] **85**
- 8.43 If yes to question 8.38, what is the total number of FSE permits issued for FOG control? [#] **70**
- 8.44 If yes to question 8.38, what is the total number of dedicated FSE FOG inspectors? [#] **1**
- 8.45 If yes to question 8.38, how many FSE FOG inspections were conducted in past 12 months? [#] **85**
- 8.46 If yes to question 8.38, how many FSE FOG enforcement action(s) were initiated in the past 12 months? **0**
- 8.47 If yes to question 8.38, how many FSE FOG inspections are planned for the next 12 months? [#] **85**
- 8.48 Does your agency have a residential FOG program in place? [Y/N] **N**
- 8.49 If yes to question 8.48, briefly describe the program: _____
-

Sewer Contract Services

- 8.50 [SSS WDRs, D.8 and D.13(iv)]: Does your agency retain contract service(s) for sewer collection system maintenance, operations, and/or management? [Y/N]
- 8.51 [SSS WDRs, D.8 and D.13(iv)]: If yes to question 8.50, for services in excess of \$10,000/year, please provide some basic information about these services in the table below:

Contractor Name	Description (cleaning, root control, repairs, , etc.)	Frequency of Contract	Budget (annual \$)

9 SSO EMERGENCY RESPONSE PROGRAM [SSS WDRs, D.13(vi)]

- 9.1 Does your agency’s SSO Emergency Response Plan incorporate procedures for pump stations/force main sewers? [Y/N] N
- 9.2 Does your agency have a dispatcher(s) within your agency to handle, dispatch and document incoming complaints from your sewer system customers? [Y/N] N
- 9.3 If yes to 9.2, does your agency utilize a dispatch radio system for notifying collection crews who respond to SSOs? [Y/N] N
- 9.4 If yes to 9.3, please list the frequency(s) in use for the dispatch radio system: _____
- 9.5 Does your agency have standard operating procedures (SOPs) in place to test and document, at least once per year, the performance of its after-hours emergency notification system(s)? [Y/N] N
- 9.6 Does your agency provide and document any scenario-based SSO emergency response simulation training for collections staff at least on an annual basis to ensure staff are properly trained and prepared in the event of an SSO? [Y/N] N
- 9.7 If yes to 9.6, does this training include practical exercises including researching SSO start times and calculating the SSO volume spilled and recovered? [Y/N]
- 9.8 Do your emergency operating procedures (EOPs) include requirements to determine the impact of an SSO, including accelerated or additional environmental monitoring? [Y/N] N

10 SSO REDUCTION PERFORMANCE AND MONITORING PROGRAM [SSS WDRs, D.13(ix)]

- 10.1 Does your agency have a process in place to collect data to monitor performance of its SSMP and efforts in reducing SSOs? [Y/N] N
- 10.2 If yes to question 10.1, does your agency use the data collected to update SSMP program elements? [Y/N]

11 COLLECTIONS STAFFING AND TRAINING

- 11.1 [SSS WDRs, D.9]: What is the total number of dedicated sewer maintenance crews in place at your agency? [#] 2
- 11.2 [SSS WDRs, D.9]: For question 11.1, how many staff are typically in each maintenance crew? [#] 2 INCLUDING SUPERVISOR
- 11.3 [SSS WDRs, D.9 and D.13(iv)(d)]: Has your agency determined core competencies/capabilities (and any relevant gaps) for its collections staff covering at a minimum sewer line cleaning, point repairs, video (CCTV) inspections, pump station maintenance, sewer line excavation, and utility line locating? [Y/N]
- 11.4 [SSS WDRs, D.9]: If yes to question 11.3, is written documentation available? [Y/N]
- 11.5 [SSS WDRs, E]: Does your agency require collections staff to review the SSS WDRs and the agency’s SSMP at least annually? [Y/N N but will in the future]
- 11.6 [SSS WDRs, D.9]: Does your agency use a workforce planning/retention program to ensure adequate future collections staff? [Y/N] N

- 11.7 [SSS WDRs, D.8 and D.13(iv) and (vi)]: Does your agency provide initial and recurrent training to appropriate staff [including outside contractor(s)] regarding your agency's SSO Emergency Response Plan and O&M programs? [Y/N] N
- 11.8 [SSS WDRs, D.8 and D.13(iv) and (vi)]: If yes to 11.7, what is the total number of individuals trained in the past 12 months. [#]
- 11.9 [SSS WDRs, D.8 and D.13(iv) and(vi)]: For contracted sewer services, do your contracting specifications contain specific language requiring initial and recurrent training of contractor staff regarding your agency's SSO Emergency Response Plan and O&M programs? [Y/N] N

12 MAJOR EQUIPMENT INVENTORY [SSS WDRs, D.4, D.7, D.8, D.13(iv)]

- 12.1 How many combination truck(s) (hydro flush/vacuum models) are owned and/or leased by your agency? [#] 1
- 12.2 For question 12.1, how many have a dedicated logbook(s) to document fieldwork activities? [#] 1
- 12.3 How many hydro flusher(s) are owned and/or leased by your agency? [#0] Soon to be 1
- 12.4 How many mechanical rodder(s) are owned and/or leased by your agency? [#] 0
- 12.5 How many video (CCTV) inspection vehicle(s) are owned and/or leased by your agency? [#] 0
- 12.6 How many utility truck(s) are owned and/or leased by your agency? [#] 2
- 12.7 How many portable sewage pump(s) are owned and/or leased by your agency? [#] 1 Pump need hoses
- 12.8 How many portable generator(s) are owned and/or leased by your agency? [#] We have onsite generators
- 12.9 Does your agency own equipment designed to block the storm drain system, in an emergency, to prevent untreated or partially treated wastewater from reaching surface waters? [Y/N] Y we have purchased a spill response trailer but haven't completed stocking it

13 EXTERNAL COMMUNICATIONS PROGRAM

- 13.1 [SSS WDRs, D.13(xi)]: Does your agency have a program in place for communicating on a regular basis with the public regarding the development, implementation, and performance of its SSMP? N
- 13.2 [SSS WDRs, D.13(xi)]: Does your agency have a program in place for communicating with upstream or downstream satellite sewer system(s) connected to its collection system? [Y/N or N/A] N/A
- 13.3 [SSS WDRs, D.11]: Does your agency participate in responding to Underground Service Alert(s) (USA) or other similar organizations to identify and mark sewer lines? [Y/N] Y
- 13.4 [SSS WDRs, D.7, D.13(iv), G, and Amended MRP]: Does your agency's communication program give the public the opportunity to provide input as your SSMP is being implemented? [Y/N] N

14 NOTIFICATION, REPORTING AND RECORD KEEPING

- 14.1 [SSS WDRs, Amended MRP B(5)]: Are all the records required in the Amended MRP, B(5) ("Record Keeping") readily available for review by the Water Boards? [Y/N] N
- 14.2 [SSS WDRs, Amended MRP, B(5)]: Does your agency maintain a list and description of all sewer-related complaints from customers for the past 5 years, including calls received after normal working hours? [Y/N] N
- 14.3 [SSS WDRs, Amended MRP, B(5)]: If yes to question 14.2, does this include information for privately owned sewer laterals? [Y/N]
- 14.4 [SSS WDRs, G, and Amended MRP]: Does your agency have a quality assurance/quality control (QA/QC) procedure in place for review of technical information collected by field staff prior to certification of the SSO report(s) in the Water Board's online reporting system (CIWQS) by the Legally Responsible Official(s)? [Y/N] N

- 14.5 [SSS WDRs, G and Amended MRP]: Does your agency require crews to take photos of all SSOs? [Y/N] N
- 14.6 [SSS WDRs, G and Amended MRP]: If no to question 14.5, does your agency at least require crews to take photos of SSOs that result in backups into structures? [Y/N] N
- 14.7 [SSS WDRs, G and Amended MRP]: Does your agency have a procedure(s) in place for collecting field information to assist in determining the actual SSO start time? [Y/N] N
- 14.8 [SSS WDRs, G and Amended MRP]: Does your agency use SOPs to estimate SSO volume spilled, recovered and not recovered, including estimation of cleanup water used? [Y/N] N
- 14.9 [SSS WDRs, G and Amended MRP]: Does your agency regularly update initial reports given to the California Emergency Management Agency, local health department, and Regional Board as information develops regarding SSOs requiring notification? [Y/N] N
- 14.10 [Amended MRP, B.6]: Does your agency maintain water quality monitoring records as required by the Amended MRP, section B(6)? N

15 SSO PREVENTION AND MITIGATION

- 15.1 [SSS WDRs, D.13(ix)]: Does your agency generate SSO reduction performance metric(s) for its collection system for use in future planning? [Y/N] N
- 15.2 [SSS WDRs, D.13(ix)]: Does your agency have a program in place to conduct periodic video (CCTV) inspections of areas throughout the collection system that have never been evaluated by video (CCTV) to date? [Y/N or N/A] N
- 15.3 [SSS WDRs, D.13(ix)]: Does your agency document meetings between O&M and source control staff, if applicable? [Y/N or N/A] N/A
- 15.4 [SSS WDRs, 8 and D.6]: Does your agency document meetings between O&M and engineering staff to discuss system problem areas and projects, if applicable? [Y/N or N/A] N
- 15.5 [SSS WDRs, 8 and D.6]: Does your agency hold post-SSO briefings with collections staff, management and others involved, to evaluate root cause of SSOs and document service changes necessary to be prepared in responding to SSOs in the future? [Y/N] N
- 15.6 [SSS WDRs, 8 and D.6]: Does your agency pursue investigation of upstream satellite(s) or potential illicit dischargers as part of the SSO cause determination process? [Y/N] N
- 15.7 [SSS WDRs, 8 and D.6]: Does your agency adjust sewer collection system cleaning interval(s) for problem areas based on review and analysis of each past SSO? [Y/N] Y
- 15.8 [SSS WDRs, 8 and D.6]: How many of the SSOs over the past 12 months were preventable through more proactive maintenance? [# OR Unknown] 0
- 15.9 [SSS WDRs, 8 and D.6]: How many of the SSOs over the past 4 years occurred at repeat locations? [# OR Unknown] 1

15 DECLARATION

I, _____, the approved Legally Responsible Official (LRO) of collection system (name and Waste Discharge ID#) _____ certify under penalty of law that based on my inquiry of the person or persons who manage this system, or those persons directly responsible for gathering the information, the information in this Pre-Inspection Questionnaire (Version 1.0) is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine or imprisonment, for knowing violations.

Legally Responsible Official Signature

Date



Appendix 2 — Water Board Historic Enforcement Action for City

STATE OF CALIFORNIA
REGIONAL WATER QUALITY CONTROL BOARD
SANTA ANA REGION

In the Matter of:

City of Beaumont	)	Administrative Civil Liability
550 E. 6 th Street	)	Order No. R8-2010-0022
Beaumont, CA 92223	)	Stipulation for
	)	Settlement of Administrative Civil Liability
	)	Complaints

A. INTRODUCTION:

1. This is an Administrative Civil Liability (ACL) Order (hereinafter Order) presented to the Executive Officer of the Regional Water Quality Control Board, Santa Ana Region (hereinafter Regional Board), for consideration. This Order accepts the stipulations for settlement (Agreement) of two ACL Complaints (hereinafter Complaints) issued by the Regional Board's Assistant Executive Officer to the City of Beaumont (hereinafter Discharger).

B. PARTIES TO THIS AGREEMENT:

2. Regional Board's Prosecution Team represented by the Assistant Executive Officer
3. City of Beaumont (Discharger)
4. Regents of the University of California (SEP Proponent) under the direction of Dr. James O. Sickman, (Principal Investigator).

C. ACL COMPLAINTS BEING SETTLED:

5. ACL Complaint No. R8-2009-0068 issued on November 19, 2009 (Complaint No.1), Assessed Penalty: \$99,900 (Exhibit A)
6. ACL Complaint No. R8-2010-0007 issued on April 15, 2010 (Complaint No. 2), Assessed Penalty: \$111,000 (Exhibit B)

D. PROPOSED SETTLEMENT:

7. The Discharger agrees to settle the liabilities assessed in the two Complaints (total liability: \$210,900) in accordance with the following.
8. The Discharger to pay \$105,450 to State Water Resources Control Board-WDPF. This is the initial payment and it shall be mailed to the following address within 30 days of adoption of this Order:

Santa Ana Regional Water Quality Control Board
3737 Main Street, Suite 500
Riverside, CA 92501-3348

9. The Discharger to pay \$105,450 to Regents of the University of California for a Supplemental Environmental Project (SEP). This is the suspended liability payment and is also due within 30 days of adoption of this Order and shall be mailed to the address indicated in Item 8, above. A check for \$105,450 should be made payable to the Regents of the University of California. The suspended liability shall be deemed satisfied once the Discharger funds the SEP project and the SEP is completed by the SEP Proponent in accordance with the schedule proposed in the SEP proposal (Exhibit C).
10. The Regents of the University of California at Riverside shall utilize the SEP allocation of \$105,450 as per the proposed budget in accordance with the schedule included in Exhibit C.

E. DEFINITIONS

"Designated Regional Board Representative": The representative from the Santa Ana Regional Water Quality Control Board responsible for oversight of the supplemental environmental project (SEP). For this matter, the representative is: Dr. Cindy Li.

"SEP Proponent": An independent third-party with whom the Discharger/Regional Board has contracted with or otherwise engaged to perform or implement the SEP. The Principal Investigator is: Dr. James O. Sickman, Associate Professor of Hydrology, Department of Environmental Sciences, University of California, Riverside.

"Milestone Requirement": A requirement with an established time schedule for meeting/ascertaining certain identified measurements of completed work. Upon the timely and successful completion of each milestone requirement, an amount of liability will be permanently suspended or excused as set forth in the SEP proposal, Exhibit C.

"SEP Completion Date": The date in which the SEP will be completed in its entirety.

F. TERMS AND CONDITIONS OF THE AGREEMENT:

11. Complaints No. 1 and 2 were issued to the Discharger for violating the California Water Code by discharging wastewater (sewage) to waters of the State. The Discharger waived its right to a hearing for both Complaints. The total assessed liability for both these Complaints is \$210,900.
12. The Discharger agrees to settle these Complaints by making an initial payment of \$105,450 to the State Water Resources Control Board-WDPF and by funding a SEP project for the suspended liability of \$105,450.

13. The SEP Proponent agrees to complete the SEP project as per the proposed budget and the schedule included in the SEP proposal, Exhibit C.
14. Upon adoption of this Order by the Executive Officer, incorporating this Agreement, this Order represents a final and binding resolution and settlement of violations alleged in the Complaints against the Discharger and its subsidiaries, successors, assigns, and their officers, directors, employees, representative agents, and attorneys.
15. The Parties covenant and agree that they will not contest the Order before the State Water Resources Control Board, or any court.
16. The Parties agree that the procedure that has been adopted for the approval of the Agreement by the Parties, as reflected in this Order, will be adequate. In the event procedural objections are raised prior to this Order becoming effective, the Parties agree to meet and confer concerning any such objections, and may agree to revise or adjust the procedure as necessary or advisable under the circumstances.
17. **Description of the SEP:** See Exhibit C.
18. **Deliverable Products from SEP:** See Exhibit C.
19. **Budget and Milestones:** See Exhibit C.
20. **Representations and Agreements by the SEP Proponent:** As a material consideration for the Executive Officer's acceptance of this Order, the SEP Proponent represents that it will utilize the funds provided to it by the Discharger to implement the SEP in accordance with the schedule in Exhibit C. The SEP Proponent understands that its promise to implement the SEP as described in Exhibit C, in its entirety and in accordance with the schedule for implementation, is a material condition of this settlement of liability between the Discharger and the Regional Board. The SEP Proponent agrees that the Regional Board has the right to require the SEP Proponent to implement the SEP in accordance with the terms of this Order if it has received funds for that purpose from the Discharger. The SEP Proponent agrees to submit to the jurisdiction of the Regional Board to enforce the terms of this Order for purposes of implementation of the SEP.
21. The SEP Proponent represents to the Parties and to the Regional Board that the SEP Proponent will: 1) spend the SEP payment as described in the Order as per the project description in Exhibit C; and 2) provide a certified, written report to Regional Board staff consistent with the terms of this Order detailing the implementation of the SEP. The SEP Proponent agrees that Regional Board staff has the right to require an audit of the funds provided to it by the Discharger and expended by it to implement the SEP.
22. **Publicity:** Wherever the Discharger or its subcontractors or agents or the SEP proponent or its agents or subcontractors publicizes one or more elements of the SEP project, they shall state in a prominent manner that the project is being undertaken as part of the settlement of an enforcement action by the Regional Board against the Discharger.
23. **Public Notice:** The ACL Complaints, the SEP proposal and this Agreement and Order were publicly noticed at least for 30 days. All public comments received have been considered and responded to.

24. **Regional Board Staff Oversight Costs:** Regional Board staff does not anticipate any staff oversight costs for the proposed SEP.
25. **Submittal of Progress Reports:** The SEP Proponent shall provide quarterly progress reports to the Designated Regional Board Representative on the 15th day of the month following the quarter; the first quarterly report is due on: October 15, 2010.
26. **SEP Program Audit:** The SEP Proponent shall allow Regional Board staff to audit the SEP project during normal business hours.
27. **Final Certification:** On or before November 1, 2011, the SEP Proponent shall submit certified statements by responsible corporate officials representing the SEP Proponent documenting the respective expenditures by the SEP Proponent to implement and to complete the SEP. The expenditures may be external payments to outside vendors or contractors implementing the SEP. In making such certification, the official may rely upon normal company project tracking systems that capture employee time expenditures and external payments to outside vendors such as environmental and information technology contractors or consultants. The SEP Proponent shall provide any additional information requested by the Regional Board staff which is reasonably necessary to verify the SEP Proponent's SEP expenditures. The certification need not address any costs incurred by Regional Board staff for oversight. The final report shall include a certification by the Principal Investigator, under penalty of perjury, stating that the SEP has been completed in accordance with Exhibit C and any agreed upon written changes between the authorized representatives of SEP Proponent and Regional Board and the applicable provisions of this Order. Such documentation may include photographs, invoices, receipts, certifications, and other materials reasonably necessary for the Regional Board to evaluate the completion of the SEP and the costs incurred by the SEP Proponent.
28. **Third Party Audit:** If the Designated Regional Board Representative obtains information that causes the representative to reasonably believe that the SEP Proponent has not expended money in the amounts claimed by the SEP Proponent, or has not adequately completed any of the work in the SEP proposal, as described in Exhibit C, the Designated Regional Board Representative, may require, and the SEP Proponent shall submit, at its sole cost, a report prepared by an independent third party(ies) acceptable to the Regional Board providing such party(ies)'s professional opinion that the SEP Proponent has expended money in the amounts claimed by the SEP Proponent. In the event of such an audit, the SEP Proponent agrees that it will provide the third-party auditor with access to all documents which the auditor requests. Such information shall be provided to the Designated Water Board Representative within three (3) months of the completion of the SEP Proponent's SEP obligations. The audit need not address any costs incurred by the Regional Board staff for oversight.
29. **Regional Board's Acceptance of Completed SEP:** Upon the SEP Proponent's satisfaction of its obligations under this Order, the completion of the SEP and any audits, the Designated Water Board Representative, shall

- request that the Executive Officer issue a "Satisfaction of SEP Letter." The issuance of the Satisfaction of SEP Letter shall terminate any further obligations of the SEP Proponent and the Discharger under this Order.
30. **Failure to Expend All Suspended Liability on the Approved SEP Project:** In the event that the SEP Proponent is not able to demonstrate to the reasonable satisfaction of the Regional Board staff that it has spent the entire SEP Amount for the completed SEP, the SEP Proponent shall pay the difference between the SEP funds and the actual amount expended.
 31. **Failure to Complete the SEP:** If the SEP is not fully implemented as per the schedule in Exhibit C or there has been a material failure to satisfy a Milestone Requirement, the Designated Regional Board Representative shall issue a Notice of Violation. As a consequence, the SEP Proponent shall be liable to pay the entire SEP funds or, some portion thereof less the value of the completion of any Milestone Requirements. Unless otherwise ordered, the SEP Proponent shall not be entitled to any credit, offset, or reimbursement from the Regional Board for expenditures made on the SEP prior to the date of the "Notice of Violation" by the Designated Regional Board Representative. The amount of the SEP funds owed shall be determined via a "Motion for Payment of SEP Funds" before the Regional Board. Upon a determination by the Regional Board of the amount of the SEP funds, the amount owed shall be paid to the State Water Resources Control Board-WDPF within thirty (30) days after the service of the Regional Board's determination. In addition, the SEP Proponent shall be liable for the Regional Board's reasonable costs of enforcement, including but not limited to legal costs and expert witness fees. Payment of the suspended liability amount will satisfy the SEP Proponent's obligations to implement the SEP.
 32. **Regional Board is not Liable:** Neither the Regional Board members nor the Regional Board staff, attorneys, or representatives shall be liable for any injury or damage to persons or property resulting from the negligent or intentional acts or omissions by the SEP Proponent or its respective directors, officers, employees, agents, representatives or contractors in carrying out activities pursuant to this Order, nor shall the Regional Board, its members or staff be held as parties to or guarantors of any contract entered into by the SEP Proponent, or its directors, officers, employees, agents, representatives or contractors in carrying out activities pursuant to this Order.
 33. The SEP Proponent and the Discharger covenant not to sue or pursue any administrative or civil claim or claims against the Regional Board, or its officers, employees, representatives, agents, or attorneys arising out of or relating to any matter expressly addressed by the administrative civil liability, this Order or the SEP project.
 34. Nothing in this Order shall be deemed to create any rights in favor of, or to inure to the benefit of, any third party or parties, or to waive or release any defense or limitation against third party claims.
 35. The Executive Officer may extend any of the due dates in this Order upon the joint request of the Parties. Such extensions must be in writing.

36. The effective date of this Order shall be the date on which it is adopted by the Executive Officer.
37. This Order relates only to administrative civil liability for violations that were alleged in the Complaints and the SEP proposal. The Regional Board reserves all rights to take additional enforcement actions, including without limitation the issuance of administrative civil liability complaints or orders for violations that occur after the date on which the Assistant Executive Officer signed the Complaints.
38. In the event of a dispute, SEP Proponent shall file a "Notice of Dispute" with the Executive Officer or the Executive Officer's Designee within ten (10) days of discovery of the problem. The Regional Board and the SEP Proponent shall then attempt to negotiate a resolution of such claim and, if appropriate, process an amendment to implement the terms of any such resolution. If the Regional Board and SEP Proponent are unable to resolve the dispute, the decision of the Executive Officer or the Executive Officer Designee shall be final, unless appealed to a court of competent jurisdiction.
39. Each person executing this Agreement in a representative capacity represents that he or she is authorized to execute this Agreement on behalf of and to bind the entity on whose behalf he or she executes the Agreement.
40. This Agreement shall not be construed against the party preparing it, but shall be construed as if the Parties jointly prepared it and any uncertainty and ambiguity shall not be interpreted against any one party.
41. This Agreement shall not be modified by any of the Parties by oral representation made before or after the execution of this Agreement. All modifications must be made in writing and approved by the Executive Officer.
42. This Agreement may be executed by the parties and delivered in any number of counterparts, each of which when executed and delivered shall be deemed to be an original, but such counterparts shall together constitute one document.

This space intentionally left blank.

IT IS SO STIPULATED¹



Michael J. Adackapara, Division Chief
For the Santa Ana Regional Water Quality Control Board

June 30, 2010
Date

Alan C. Kapanicas, City Manager
For the City of Beaumont

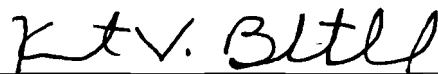
Date

Charles E. Greer, Jr., Assistant Vice-Chancellor for Research Date
For the Regents of the University of California

HAVING CONSIDERED THE PARTIES' STIPULATIONS, THE SANTA ANA REGIONAL WATER QUALITY CONTROL BOARD, BY AND THROUGH ITS EXECUTIVE OFFICER, FINDS THAT:

1. Issuance of this Stipulated Order is exempt from the provisions of the California Environmental Quality Act (Public Resources Code section 21000 et seq.), in accordance with sections 15061(b)(3) and 15321(a)(2), of Title 14 of the California Code of Regulations.
2. In adopting this Stipulated Order, the Executive Officer has considered all the factors prescribed in California Water Code section 13327. The Executive Officer's consideration of these factors is based upon information and comments provided by the Parties and by members of the public.
3. The foregoing Stipulation is incorporated into this Order.

Pursuant to section 13385 of the California Water Code and section 11415.60 of the California Government Code, the Executive Officer hereby adopts this Order.

 7/2/10

Kurt V. Berchtold Date
Executive Officer
Santa Ana Regional Water Quality Control Board

¹ The final version of this document may include more than one page with the same page number to accommodate the various executing signatures.

IT IS SO STIPULATED¹

Michael J. Adackapara, Division Chief
For the Santa Ana Regional Water Quality Control Board

Date



Alan C. Kapanicas, City Manager
For the City of Beaumont

Date

7/1/10

Charles E. Greer, Jr., Assistant Vice-Chancellor for Research Date
For the Regents of the University of California

HAVING CONSIDERED THE PARTIES' STIPULATIONS, THE SANTA ANA REGIONAL WATER QUALITY CONTROL BOARD, BY AND THROUGH ITS EXECUTIVE OFFICER, FINDS THAT:

1. Issuance of this Stipulated Order is exempt from the provisions of the California Environmental Quality Act (Public Resources Code section 21000 et seq.), in accordance with sections 15061(b)(3) and 15321(a)(2), of Title 14 of the California Code of Regulations.
2. In adopting this Stipulated Order, the Executive Officer has considered all the factors prescribed in California Water Code section 13327. The Executive Officer's consideration of these factors is based upon information and comments provided by the Parties and by members of the public.
3. The foregoing Stipulation is incorporated into this Order.

Pursuant to section 13385 of the California Water Code and section 11415.60 of the California Government Code, the Executive Officer hereby adopts this Order.

Kurt V. Berchtold Date
Executive Officer
Santa Ana Regional Water Quality Control Board

¹ The final version of this document may include more than one page with the same page number to accommodate the various executing signatures.

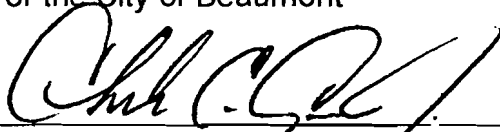
IT IS SO STIPULATED¹

Michael J. Adackapara, Division Chief
For the Santa Ana Regional Water Quality Control Board

Date

Alan C. Kapanicas, City Manager
For the City of Beaumont

Date



6/30/2010

Charles E. Greer, Jr., Assistant Vice-Chancellor for Research
For the Regents of the University of California

Date

HAVING CONSIDERED THE PARTIES' STIPULATIONS, THE SANTA ANA REGIONAL WATER QUALITY CONTROL BOARD, BY AND THROUGH ITS EXECUTIVE OFFICER, FINDS THAT:

1. Issuance of this Stipulated Order is exempt from the provisions of the California Environmental Quality Act (Public Resources Code section 21000 et seq.), in accordance with sections 15061(b)(3) and 15321(a)(2), of Title 14 of the California Code of Regulations.
2. In adopting this Stipulated Order, the Executive Officer has considered all the factors prescribed in California Water Code section 13327. The Executive Officer's consideration of these factors is based upon information and comments provided by the Parties and by members of the public.
3. The foregoing Stipulation is incorporated into this Order.

Pursuant to section 13385 of the California Water Code and section 11415.60 of the California Government Code, the Executive Officer hereby adopts this Order.

Kurt V. Berchtold
Executive Officer
Santa Ana Regional Water Quality Control Board

Date

¹ The final version of this document may include more than one page with the same page number to accommodate the various executing signatures.

EXHIBIT A

STATE OF CALIFORNIA
REGIONAL WATER QUALITY CONTROL BOARD
SANTA ANA REGION

In the Matter of:

City of Beaumont	)	Complaint No. R8-2009-0068
550 E. 6 th Street	)	for
Beaumont, CA 92223	)	Administrative Civil Liability
)	
Attn: Alan C. Kapanicas)	

YOU ARE HEREBY GIVEN NOTICE THAT:

1. The City of Beaumont (hereinafter "Beaumont") is alleged to have violated provisions of law for which the California Regional Water Quality Control Board, Santa Ana Region (hereinafter "Regional Board"), may impose administrative civil liability under California Water Code (hereinafter "CWC") §13350.
2. A hearing concerning this Complaint will be held before the Board within ninety days of the date of issuance of this Complaint, unless pursuant to CWC Section 13323, Beaumont waives its right to a hearing. The waiver procedures are specified in the attached Waiver Form. The hearing in this matter is scheduled for the Regional Board's regular meeting on January 29, 2010, at the City Council Chambers, 25541 Barton Road, City of Loma Linda, California. Beaumont, or its designated representative, will have an opportunity to appear and be heard, and to contest the allegations in this Complaint and the imposition of civil liability by the Regional Board. An agenda for the meeting and the staff report relating to this item will be mailed to you not less than 10 days prior to the hearing date.
3. If a hearing is held on this matter, the Regional Board will consider whether to affirm, reject, or modify the proposed administrative civil liability or whether to refer the matter to the Attorney General for recovery of judicial civil liability. If this matter proceeds to hearing, the Prosecution Team reserves the right to seek an increase in the civil liability amount to cover the costs of enforcement incurred subsequent to the issuance of this Complaint through hearing.

THE COMPLAINT IS BASED ON THE FOLLOWING FACTORS:

4. Beaumont owns and operates one hundred thirty five (135) miles of gravity sanitary sewer main and fifteen (15) miles of sanitary sewer force main within its service boundary. The operation and maintenance of sanitary sewer systems are regulated under the State's General Waste Discharge Requirements for Sanitary Sewer

Systems, Water Quality Order No. 2006-0003 (hereinafter "SSO Order"). On November 2, 2006, Beaumont obtained coverage under the SSO Order.

5. Beaumont's sanitary sewer system normally contains wastewater from residential, commercial and industrial establishments. Untreated sanitary wastewater (sewage) generally contains high levels of bacteria, metals, nutrients and other pollutants.
6. A series of eight separate sanitary sewer overflow (SSO) incidents occurred between March and September 2009 from Beaumont's sanitary sewer system. This resulted in an estimated aggregate volume of 132,000 gallons of sewage being discharged (60,000 gallons of the spilled sewage were recovered) either into wetlands tributary to San Timoteo Creek or to un-named, ephemeral drainage courses tributary to San Timoteo Creek. Each of these incidents resulted in a discharge of sewage to waters of the United States. Sewage discharged to these un-named tributaries mostly percolated into the soils before reaching San Timoteo Creek. The overflow incidents were as follows:
 - a) On March 12, 2009, 30,000 gallons of raw sewage were spilled from the Western Knolls force main¹ located at 1400 Western Knolls Avenue. Approximately 10,000 gallons were recovered. The reported cause of the spill was a break in a force main.
 - b) On March 29, 2009, 50,000 gallons of raw sewage were spilled from the Western Knolls force main. Approximately 30,000 gallons were recovered. The reported cause of the spill was another failure in the same force main, as the March 12th break.
 - c) On April 2, 2009, 30,000 gallons of raw sewage were spilled from the Western Knolls force main from a third force main failure incident. Approximately 20,000 gallons were recovered.
 - d) On July 22, 2009, 5,000 gallons of sewage overflowed from the Western Knolls lift station as a result of a pipe failure within the dry well of the lift station that shorted out electrical service to the pumps. None of the sewage was recovered.
 - e) On August 18, 2009, 2,000 gallons of sewage overflowed from the Upper Oak lift station as a result of a failure from a pressure relief valve. None of the sewage was recovered.
 - f) On August 20, 2009, 2,000 gallons of sewage overflowed from the Upper Oak lift station as a result of a failure from a pressure relief valve. None of the sewage was recovered.
 - g) On September 2, 2009, 3,000 gallons of sewage overflowed from a manhole at Little Lower Oak lift station as a result of a blockage within the sewer line and discharged into a storm drain. None of the sewage was recovered.
 - h) On September 23, 2009, 10,000 gallons of sewage overflowed from a manhole just up gradient of Little Lower Oak lift station. The overflow was the result of a failure of the sewage lift station. All of the sewage was discharged to wetlands tributary to San Timoteo Creek. In both this spill incident and the September 2nd incident at the Little Lower light station, all of the sewage was discharged to waters of the United

¹ Force mains are pipelines that convey wastewater under pressure.

States due to the close proximity of a storm drain inlet that was tributary to the wetlands.

7. The discharges were either into wetlands tributary to San Timoteo Creek or to ephemeral, un-named tributaries of San Timoteo Creek, a water of the United States. The Basin Plan designates the following beneficial uses for the Creek: groundwater recharge, water contact recreation, non-contact water recreation, warm fresh water habitat and wildlife habitat.
8. Provision C. 1 of the SSO Order states, "Any SSO that results in a discharge of untreated or partially treated wastewater to waters of the United States is prohibited." The above discharges were in violation of this provision of the SSO Order.
9. Provision D.1 of the SSO Order states, "The Enrollee must comply with all conditions of this Order. Any noncompliance with this Order constitutes a violation of the California Water Code and is grounds for enforcement action." Beaumont is alleged to have violated Provision C.1 of the SSO Order.
10. Pursuant to CWC §13350(e), the Regional Board may impose civil liability administratively either on a daily basis [per CWC §13350(e)(1)] or on a per gallon basis [per CWC §13350(e)(2)], but not both. The Assistant Executive Officer proposes to impose civil liability per CWC §13350 (e)(2).
11. CWC §13350(e)(2) states that administrative civil liability on a per gallon basis may not exceed ten dollars (\$10) for each gallon of waste discharged. For the eight incidents described above, the total volume discharged and not recovered was 72,000 gallons. The maximum liability for the violations cited above on a per gallon basis is \$720,000 (72,000 gallons X \$10 per gallon = \$720,000).
12. CWC §13327 specifies factors that the Regional Board shall consider in establishing the amount of civil liability. Consideration of these factors is addressed in the following table.

Factor	Comment
A. Nature, Circumstances, Extent and Gravity of Violation	Beaumont discharged an estimated 72,000 gallons of untreated wastewater (sewage) from its sanitary sewer system to either wetlands tributary to San Timoteo Creek or to ephemeral, un-named, tributaries to San Timoteo Creek. The discharge of sewage was from eight separate sanitary sewer overflows that occurred within a six month span of time. The sewage discharged to tributaries of San Timoteo Creek has

	<p>the potential to impact the designated beneficial uses of the Creek by the introduction of bacteria, nutrients, and other pollutants. For incidents involving discharges to ephemeral tributaries, the nature of the soils allowed sewage to be absorbed before reaching San Timoteo Creek. However, the nutrients and some of the other pollutants in sewage, once deposited in the soil, have the potential to migrate through the soil column into the ground water or carried by storm water into other surface waterbodies. The discharge of sewage also causes a nuisance and is a threat to public health.</p> <p>Beaumont responded to the spill in a timely manner and was able to mobilize needed equipment and personnel to swiftly clear the blockages, repair the pump stations, etc. Moreover, Beaumont has accelerated its construction activities to replace the problematic 8" force main and accelerated its schedule for bringing on-line a new lift station (Mesa Lift Station) to address the problematic lift station.</p>
B. Culpability	<p>Beaumont has failed to develop and implement a comprehensive Sanitary Sewer Management Plan (hereinafter "SSMP") in compliance with the SSO Order. Regional Board staff has been working with Beaumont staff to bring the City into compliance with the SSO Order. Beaumont's failure to develop this plan as required by the SSO Order and its failure to take proactive steps to prevent SSOs may have contributed to failures of the force main and the lift stations. Repeated failures of the force main and the pump stations could have been prevented, or at least minimized, by proper operation and maintenance of the systems through development and implementation of a SSMP. Also, the number of sanitary sewer overflows, some of them from the same location, from March to September 2009 indicates a lack of responsiveness from the City.</p>
C. Economic Benefit or Savings	<p>The Regional Board staff has insufficient information to assess economic benefit. It appears that Beaumont delayed some of the capital improvement projects and benefitted monetarily from it. The exact cost benefit from this delay could not be ascertained.</p>

D. Prior History of Violations	Beaumont reported two SSO incidents that were violations of the SSO Order prior to January 2009. Beaumont has also violated provisions of the Riverside County municipal storm water permit (of which they are a co-permittee). The Regional Board issued an administrative civil liability complaint for these violations.
E. Staff Costs	Regional Board staff spent approximately 126 hours investigating this incident. The total cost for staff time is \$18,900 (126 hrsX\$150/hr=\$18,900).
F. Ability to pay	Beaumont is a city of more than 30,000 citizens. Pursuant to Water Code section 13385(k) it is not considered a small community with financial hardship and, therefore, it appears that Beaumont has the ability to pay the proposed administrative civil liability. The Prosecution Team is not in the possession of any information that Beaumont is unable to pay the proposed liability amount.

13. After consideration of the above factors, the Assistant Executive Officer proposes that civil liability be imposed administratively on Beaumont in the amount of \$99,900 for the violations cited above.

14. This penalty assessment is based on a consideration of the potential for harm from the SSO events listed above. Based on the potential harm from the discharge and the characteristics of the discharge, the Assistant Executive Officer determined that an assessment of \$1.50 per gallon is appropriate. The total assessment based on flow is \$108,000 (72,000 gallonsX\$1.50/gallon=\$108,000). This amount is then adjusted based on Beaumont's culpability, cleanup effort and cooperation, and history of violations. As indicated in the table above, Beaumont appears to have had an inordinate number of overflow incidents that suggest a lack of proper operation and maintenance. A 0.75 adjustment factor is recommended based on consideration of Beaumont's prompt response activities, the fact that none of the discharges reached any flowing body of water, and the absence of any observable impacts on the beneficial uses from the discharges. Based on the foregoing, the 0.75 factor was used to adjust the amount calculated above resulting in an adjusted assessment of \$81,000 (\$108,000X0.75=\$81,000). CWC §13327 also requires consideration of economic benefit or savings, if any, resulting from the violation, and other matters as justice may require. These costs are added to the final liability to determine the assessed civil liability for the alleged violation(s). No economic benefit has been assessed for Beaumont's eight overflow incidents. The costs of investigation and enforcement are considered as one of the "other factors

as justice may require". The staff costs (\$18,900) are added to the amount in the above paragraph, for a total assessment of \$99,900 (\$81,000+\$18,900=\$99,900).

WAIVER OF HEARING

Beaumont may waive its right to a hearing. If you choose to do so, please sign the attached waiver form and return it, together with a check for \$99,900 payable to the State Water Resources Control Board-WDPF in the enclosed preprinted envelope. If you waive your right to a hearing and pay the assessed amount, the Regional Board may not hold a hearing regarding this complaint.

If you have any questions, please contact Stephen D. Mayville at (951) 782-4992 or Chuck Griffin at (951) 782-4996.

11/19/09
Date

Kurt V. Berchtold
Kurt V. Berchtold
Assistant Executive Officer
Regional Board Prosecution Team

EXHIBIT B

STATE OF CALIFORNIA
REGIONAL WATER QUALITY CONTROL BOARD
SANTA ANA REGION

In the Matter of:

City of Beaumont	)	Complaint No. R8-2010-0007
550 E. 6 th Street	)	for
Beaumont, CA 92223	)	Administrative Civil Liability
)	
Attn: Alan C. Kapanicas)	

YOU ARE HEREBY GIVEN NOTICE THAT:

1. The City of Beaumont (hereinafter "the City" or "Beaumont") is alleged to have violated provisions of law for which the California Regional Water Quality Control Board, Santa Ana Region (hereinafter "Regional Board"), may impose administrative civil liability under California Water Code (hereinafter "CWC") §13350.
2. A hearing concerning this Complaint will be held before the Regional Board within ninety days of the date of issuance of this Complaint, unless pursuant to CWC Section 13323, Beaumont waives its right to a hearing. The waiver procedures are specified in the attached Waiver Form. The hearing in this matter is scheduled for the Regional Board's regular meeting on April 30, 2010, at the City Council Chambers, 25541 Barton Road, City of Loma Linda, California. Beaumont, or its designated representative, will have an opportunity to appear and be heard, and to contest the allegations in this Complaint and the imposition of civil liability by the Regional Board. An agenda for the meeting and the staff report relating to this item will be mailed to you not less than 10 days prior to the hearing date.
3. If a hearing is held on this matter, the Regional Board will consider whether to affirm, reject, or modify the proposed administrative civil liability or whether to refer the matter to the Attorney General for recovery of judicial civil liability. If this matter proceeds to hearing, the Prosecution Team reserves the right to seek an increase in the civil liability amount to cover the costs of enforcement incurred subsequent to the issuance of this Complaint through hearing.

THE COMPLAINT IS BASED ON THE FOLLOWING FACTORS:

4. Beaumont owns and operates one hundred thirty five (135) miles of gravity sanitary sewer main and fifteen (15) miles of sanitary sewer force main within its service boundary. The operation and maintenance of sanitary sewer systems are regulated under the State's General Waste Discharge Requirements for Sanitary Sewer

Systems, Water Quality Order No. 2006-0003 (hereinafter "SSO Order"). On November 2, 2006, Beaumont obtained coverage under the SSO Order.

5. Beaumont's sanitary sewer system normally contains wastewater from residential, commercial and industrial establishments. Untreated sanitary wastewater (sewage) generally contains high levels of bacteria, metals, nutrients and other pollutants.
6. Beginning on December 18 and continuing into December 19, 2009, an estimated 403,000 gallons of raw sewage were spilled from the Marshall Creek Lift Station to an un-named tributary to San Timoteo Creek. Approximately 300 gallons were recovered and returned to the sanitary sewer system. This resulted in an estimated 402,700 gallons of sewage being discharged to an un-named ephemeral drainage course tributary to San Timoteo Creek, a water of the United States. Subsequently the City submitted revised estimates of the discharge volume which indicated that the total discharge volume was approximately 200,000 gallons. The initial discharge volume estimates were based on the actual difference between the average discharge volume for the previous weeks and the week of the spill incident. Subsequent estimates were based on theoretical pump and wet-well capacities, pumping times and pump cycles, which could not be independently verified. As such, the initial estimates have been used for purposes of this Complaint. Most of the discharged sewage percolated into the soil within the un-named tributary.
7. The following information is based on investigations conducted by Regional Board staff and information provided by the City and its contractors operating the sanitary sewer system and the sewage treatment plant.
 - a. The City's sanitary sewer system and its sewage treatment plant are operated by Aquarion Operating Services (hereinafter "AOS", a wholly-owned subsidiary of United Water) under contract with the City. According to information provided by the City, AOS is responsible for operation and maintenance of the City's sewage treatment plant and the sanitary sewer collection system, including the lift stations. However, AOS has indicated that it had not accepted full responsibility for operation and maintenance of some of the lift stations and sewage collection systems. The City is responsible for repair and replacement of equipment, such as the pumps and the electrical systems.
 - b. Marshall Creek lift station is a sewage pump station for pumping sewage into the force main sewer system for delivery to the sewage treatment plant. This lift station has a level alarm which sends an alarm to the SCADA system (Supervisory Control and Data Acquisition, an electronic monitoring system) located at the sewage treatment plant when the level of wastewater in the wet well exceeds a preset level. The SCADA system also receives continuous information regarding the wastewater levels in the wet wells from remote locations, such as the Marshall Creek lift station. The City's SCADA system has an operator screen and an alarm

screen. Generally a level alarm would be displayed in both systems and is an indication of a non-functioning pump or other malfunctions at the lift station.

- c. The Marshall Creek lift station was equipped with dual pumps and dual power supply sources. When the primary operating system fails, the lift station should automatically switch to the alternate (standby) system. On December 18, 2009, both pumps at the Marshall Creek lift station failed either due to an electrical failure or due to mechanical problems with the pumps.
- d. According to information provided by the City, both pumps at the lift station were tested and were found to be functional prior to the December 18th incident. However, the City stated that the spare pump was known to have problems, but functioned properly in the test mode. On December 18, 2009, the operating pump failed due to a seal problem. When this happened, the system failed to switch to the standby pump. Information provided by AOS indicated that the second pump may have failed on December 18, 2009 due to preexisting mechanical problems; the City claims that the failure was due to an electrical failure. In any case, on December 18, 2009, both pumps failed, both electrical systems failed, and the alarm sensor switch failed. These failures at the lift station triggered an alarm at the SCADA alarm screen. However, the SCADA operator screen did not register an alarm because of the malfunctioning sensor switch. Had the operator at the SCADA operator station been properly trained, high wastewater levels in the wet well indicated on the operator screen should have triggered a series of further actions, including checking the alarm screen to determine the source of high wastewater levels in the wet well. The operators at the sewage treatment plant were not properly trained to recognize and to take further steps to respond to the high wastewater levels.
- e. The overflow from the wet well at the Marshall Creek lift station continued for approximately 18 hours until an employee of an electrical contractor noticed it and reported it to the sewage treatment plant operators on December 19, 2009. Once the sewage treatment plant was notified of the incident, AOS responded within 45 minutes and the cleanup crew (another subcontractor) arrived approximately 1.5 hours later. AOS was able to start the standby pump and stop the overflow of sewage. By the time the cleanup contractor arrived, most of the sewage that overflowed had percolated into the dry creek bed and they recovered approximately 300 gallons from a total estimated discharge of 403,000 gallons.
- f. Section D.8 of the SSO Order requires the City to properly manage, operate, and maintain all parts of the sanitary sewer system owned or operated by the City to ensure that the system operators (including

employees, contractors, or other agents) are adequately trained and possess adequate knowledge, skills, and abilities. Information gathered during the investigation of this spill incident and other recent spill incidents within the City indicates that the City failed to properly manage, operate, and maintain all parts of the sanitary sewer system owned by the City. It also failed to ensure that its contractors were adequately trained and possess adequate knowledge, skills, and abilities.

- g. On November 2, 2009, AOS reported pump problems at the Marshall Creek lift station and requested the City's immediate attention. The chief plant operator requested the City to rehabilitate both pumps at the Marshall Creek lift station. As early as May 2008, the City Council had approved approximately \$200,000 to replace and/or rehabilitate the pumps at various lift stations. On November 24, 2009, the City replaced the primary pump at the lift station with a pump which was known to have some mechanical problems. The primary pump, which also had reported problems, was then used as the standby pump. The standby pump was then sent for rehabilitation. The simultaneous failure and/or malfunctions of three different systems (dual pumps, dual power supply system, and level alarm switch) indicate a lack of proper maintenance and operation of the sewer collection and appurtenance systems. The failure of the operating staff to properly monitor, review and to take appropriate action based on the information on the SCADA operator screen also indicates a lack of training.
8. The discharge was into an ephemeral, un-named tributary of San Timoteo Creek, a water of the United States. The Basin Plan designates the following beneficial uses for the Creek: groundwater recharge, water contact recreation, non-contact water recreation, warm fresh water habitat and wildlife habitat.
9. The City violated several provisions of the SSO Order. By discharging untreated wastewater to waters of the United States, it violated Provision C.1 which states, "Any SSO that results in a discharge of untreated or partially treated wastewater to waters of the United States is prohibited." Provision D.1 states, "The Enrollee must comply with all conditions of this Order. Any noncompliance with this Order constitutes a violation of the California Water Code and is grounds for enforcement action." By failing to properly operate and maintain and provide adequate training to its employees and by not ensuring that its contractors are properly trained, the City violated Provision D.8. Beaumont is alleged to have violated Provisions C.1 and D.8 of the SSO Order.
10. Pursuant to CWC §13350(e), the Regional Board may impose civil liability administratively either on a daily basis [per CWC §13350(e)(1)] or on a per gallon basis [per CWC §13350(e)(2)], but not both. The Assistant Executive Officer proposes to impose civil liability per CWC §13350 (e)(2).

11. CWC §13350(e)(2) states that administrative civil liability on a per gallon basis may not exceed ten dollars (\$10) for each gallon of waste discharged. For the discharge incident described above, the total volume discharged and not recovered was 402,700 gallons. The maximum liability for the violation cited above on a per gallon basis is \$4,027,000 (402,700 gallons X \$10 per gallon = \$4,027,000).
12. CWC §13327 specifies factors that the Regional Board shall consider in establishing the amount of civil liability. Consideration of these factors is addressed in the following table.

Factor	Comment
A. Nature, Circumstances, Extent and Gravity of Violation	<p>An estimated 402,700 gallons of untreated wastewater (sewage) was discharged from Beaumont's sanitary sewer system to an ephemeral, un-named, tributary to San Timoteo Creek, a water of the United States.</p> <p>The sewage discharged to the tributary has the potential to impact the designated beneficial uses of the San Timoteo Creek by the introduction of bacteria, nutrients, and other pollutants. The nature of the soils in the tributary allowed sewage to be absorbed and percolated before reaching San Timoteo Creek. However, the nutrients and some of the other pollutants in sewage, once deposited in the soil, have the potential to migrate through the soil column into the ground water or be carried by storm water into the Creek and other surface waterbodies. The discharge of sewage also is a threat to public health.</p> <p>Once Beaumont became aware of the discharges at the Marshall Creek lift station (18 hours after its failure), Beaumont responded to the spill and was able to mobilize equipment and personnel to put the lift station back into operation.</p>

B. Culpability	<p>Regional Board staff has alleged in a previously issued administrative civil liability complaint (Complaint No. R8-2009-0068) that Beaumont has failed to develop and implement a comprehensive Sanitary Sewer Management Plan (hereinafter "SSMP") in compliance with the SSO Order. Staff has been working with Beaumont to bring them into compliance with this provision of the SSO Order. It has been alleged that Beaumont's failure to develop this plan, as required by the SSO Order, and its failure to take proactive steps to prevent SSOs and develop a comprehensive operation and maintenance plan has contributed to previous failures of lift stations. Failures of mechanical systems associated with the lift stations could have been prevented, or at least minimized, by proper operation and maintenance of these systems through development and implementation of a SSMP. Provision D.6(i) of the SSO Order requires the Regional Board to consider the City's progress towards developing and implementing the SSMP in any enforcement action.</p> <p>As indicated above, the City also failed to ensure that its contractors were adequately trained. Had AOS employees been properly trained to effectively utilize the SCADA operator screen, the spill could have been prevented or at least minimized.</p> <p>During the previous spill incidents, Regional Board staff had reiterated to the City the need for proper operation and maintenance of its sanitary sewer systems and for providing adequate training to its employees/contractors.</p>
C. Economic Benefit or Savings	<p>Beaumont's decision to not act on a recommendation to repair problematic pump units and replace them with properly sized temporary units contributed to the magnitude of the discharge. However, based on recent information provided by the City, it appears that these savings were insignificant.</p>

D. Prior History of Violations	<p>The Assistant Executive Officer issued Administrative Civil Liability Complaint No R8-2009-0068 on November 19, 2009 to Beaumont due to eight sanitary sewer overflow incidents that discharged sewage into tributaries of San Timoteo Creek. Regional Board staff are working with Beaumont to resolve this Complaint.</p> <p>Beaumont has also violated provisions of the Riverside County Municipal Storm Water Permit (of which they are a co-permittee). The Regional Board issued an administrative civil liability complaint for these violations.</p>
E. Staff Costs	<p>Regional Board staff spent approximately 78 hours investigating this incident. The total cost for staff time is \$11,700 (78 hrsX\$150/hr=\$11,700).</p>
F. Ability to pay	<p>Beaumont is a city of more than 30,000 citizens. Pursuant to Water Code section 13385(k) it is not considered a small community with financial hardship and, therefore, it appears that Beaumont has the ability to pay the proposed administrative civil liability. The Prosecution Team is not in the possession of any information that Beaumont would be unable to pay the proposed liability amount.</p>

13. After consideration of the above factors, the Assistant Executive Officer proposes that civil liability be imposed administratively on Beaumont in the amount of \$111,000 for the violations cited above.

14. This penalty assessment is based on a consideration of the potential for harm from the sanitary sewer overflow event described above. Based on the potential harm from the discharge and the characteristics of the discharge, the Assistant Executive Officer determined that an assessment of \$0.25 per gallon is appropriate. This is based on the fact that all of the discharge percolated into a dry creek bed and there were no identifiable beneficial use impacts. The total assessment based on flow is \$100,675 (402,700 gallonsX\$0.25/gallon=\$100,675).

This amount is then adjusted based on Beaumont's a) culpability, b) the susceptibility of the discharge to cleanup and cooperation with Regional Board staff, and c) history of violations.

As indicated in the table above, Beaumont appears to have had an inordinate number of overflow incidents that suggest a lack of proper operation and maintenance. Based on lack of training and failure to implement an effective operations and maintenance

program, an adjustment factor of 1.1 was applied related to culpability. With regard to the cleanup factor, a 0.75 adjustment factor is used in considering cleanup cooperation, Beaumont's response activities (the City responded immediately upon discovery of the discharge) and the absence of any observable impacts on the beneficial uses from the discharge. With regard to the history of violations factor, the assessment was increased by a factor of 1.2 based on the chronic history of on-going violations that has resulted in the issuing of an earlier administrative civil liability complaint (Complaint No. R8-2009-0068). Applying each of these adjustment factors results in an adjusted final assessment of \$99,668.25 ($\$100,675 \times 1.1 \times 0.75 \times 1.2 = \$99,668.25$).

CWC §13327 also requires consideration of economic benefit or savings, if any, resulting from the violation, and other matters as justice may require. The amount of economic benefit is insignificant so no economic benefit has been assessed for this violation. The costs of investigation and enforcement are considered as one of the "other factors as justice may require". The staff costs (\$11,700) are added to the adjusted amount above, for a total assessment of \$111,368.25 ($\$99,668.25 + \$11,700 = \$111,368.25$). This amount is rounded to the nearest thousand for a final proposed assessment of \$111,000.00.

WAIVER OF HEARING

Beaumont may waive its right to a hearing. If you choose to do so, please sign the attached waiver form and return it, together with a check for \$111,000 payable to the State Water Resources Control Board-WDPF in the enclosed preprinted envelope. If you waive your right to a hearing and pay the assessed amount, the Regional Board may not hold a hearing regarding this complaint.

If you have any questions, please contact Stephen D. Mayville at (951) 782-4992 or Chuck Griffin at (951) 782-4996.

4/15/10
Date

Kurt V. Berchtold
Kurt V. Berchtold
Assistant Executive Officer

Exhibit C

1. Project Title: Detection of septic system waste in the Beaumont Groundwater Management Zone, California, using chemical and isotopic tracers

2. Organization Proposing the Project:

Dr. James O. Sickman, Associate Professor of Hydrology, Department of Environmental Sciences, University of California Riverside, Riverside CA 92521
 Email: jsickman@ucr.edu; Tel. (951) 827-4552

Dr. Jay Gan, Professor of Environmental Chemistry, Department of Environmental Sciences, University of California Riverside, Riverside CA 92521
 Email: jgan@ucr.edu; Tel. (951) 827-2712

3. Project Description: Septic systems are a threat to groundwater quality in the Beaumont, CA area. Septic systems contain a large suite of inorganic and organic substances, some of which have only recently been recognized as having negative effects on human health and the environment. These emerging contaminants can be extremely toxic at low levels and produce effects on the endocrine systems of higher organisms. In the proposed study, samples will be collected from groundwater wells in and around the City of Beaumont CA, in a synoptic survey. Additional samples of surface water in the region (urban and natural streams, agricultural drainage) and septic fluids may be co-collected. The samples will be used to determine concentrations of chemical and isotopic constituents that are diagnostic of the presence of septic wastewater in groundwater. These constituents include major cations, major anions, nutrients, isotopes of nitrate ($\delta^{15}\text{N}$ and $\delta^{18}\text{O}$) and emerging pharmaceutical, pesticide, and food additive contaminants. Using these diagnostic tracers and results from modeling of groundwater movement using MODFLOW 96, the investigators will assess the threat of septic systems to groundwater quality in the study region.

4. Total Project Cost: \$105,450 (see attached task budget)

5. Project schedule: Start Date: June 10, 2010. End Date December 1, 2011

	Jun '10	Jul '10	Aug '10	Sep '10	Oct '10	Nov '10	Dec '10	Jan '11	Feb '11	Mar '11	Apr '11	May '11	Jun '11	Jul '11	Aug-Dec '11
Task 1: Publication review	X	X													
Task 2: Water sampling			X	X	X										
Task 3: Inorganic analyses				X	X	X	X								
Task 4: Isotope analyses				X	X	X	X	X	X	X					
Task 5: Organic analyses				X	X	X	X	X	X	X					
Task 6: Modeling.									X	X	X	X			
Task 7: Report													X	X	X
Task 8 Project Management	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

6. Expected Products: Products of the study include a database on groundwater quality in and around the City of Beaumont, CA. A final report, which synthesizes groundwater modeling with new chemical data will be produced for the Regional Board.

Task Budget

Task	Description	Cost
1	Review of existing publications on groundwater resources in Beaumont region. Selection of wells and surface water sampling sites. Development of detailed Sampling and Analysis Plan and a Quality Assurance Project Plan.	\$5,000
2	Water sampling. Travel between Riverside and Beaumont for collection of water samples. Sample containers, filters, coolers, dry ice etc.	\$5,023
3	Analysis of water samples for: Cations, anions, and nutrients	\$6,000
4	Analysis of water samples for NO ₃ isotopes ($\delta^{15}\text{N}$ and $\delta^{18}\text{O}$) using microbial denitrifier method	\$5,250
5	Analysis of water samples for emerging contaminants which may include: acetaminophen, diuron, bisphenol-A, caffeine, carbamazepine, DEET, 17 α -ethynylestradiol, gemfibrozil, ibuprofen, sulfamethoxazole, TCEP	\$30,483
6	Modeling of groundwater using MODFLOW 96	\$16,000
7	Report preparation	\$14,871
8	Project Management and Administration	\$10,000
	Total Direct Costs	\$92,627
	Indirect costs (15% of MTDC)	\$12,823
	Total Project Costs	\$105,450



Appendix 3 — SSMP Gap Analysis Completed by Fischer Compliance

TABLE OF CONTENTS

A.	PURPOSE	2
B.	EXECUTIVE SUMMARY.....	2
C.	REGULATORY BACKGROUND	5
D.	CITY COLLECTION SYSTEM INFORMATION	6
E.	DATA SOURCES FOR GAP ANALYSIS	8
1.	GOALS	9
2.	ORGANIZATION.....	10
3.	LEGAL AUTHORITY	11
4.	OPERATIONS/MAINTENANCE	12
5.	DESIGN/PERFORMANCE.....	14
6.	OVERFLOW EMERGENCY RESPONSE PLAN.....	15
7.	FATS, OILS AND GREASE CONTROL	16
8.	SYSTEM EVALULATION/CAPACITY.....	17
9.	SSMP MEASUREMENT/MONITORING	18
10.	SSMP AUDITS.....	19
11.	COMMUNICATION	20
12.	SSMP IMPLEMENTATION.....	21
13.	TRAINING/STANDARD OPERATING PROCEDURES (SOPS).....	22
14.	SPILL DISCHARGES.....	23
15.	SPILL NOTIFICATION.....	24
16.	SPILL REPORTING	25
17.	SPILL MONITORING.....	26

A. PURPOSE

This purpose of this Sewer System Management Plan (SSMP) Gap Analysis performed by Fischer Compliance LLC is to document baseline compliance status, identify compliance gaps, and provide supporting information to be utilized for development of the City's first SSMP.

The Gap Analysis findings include identification of violations and areas of concern for "Sanitary Sewer Systems Waste Discharge Requirements" (SSS WDRs), Water Quality Order No. 2006-0003-DWQ and Amended Monitoring and Reporting Program (Amended MRP, Order No. 2013-0058-EXEC).¹

B. EXECUTIVE SUMMARY

The City hired Fischer Compliance LLC in 2022 to conduct to conduct an SSMP Audit (Gap Analysis) and develop the City's first SSMP to address the historic enforcement action taken against the City for not having a required SSMP in place to comply with the SSS WDRs (see 2022 City SSMP, Appendix 2).

The Gap Analysis revealed the City remains out of compliance with many elements of the SSS WDRs. To help City management facilitate a return to compliance as expeditiously as possible, Table 1 below provides quick references to the compliance findings.

¹ See Order Nos. 2006-003-DWQ and 2013-0058-EXEC available for download at:
https://www.waterboards.ca.gov/water_issues/programs/Spill/#general

Table 1.1 – Gap Analysis Findings (Violations)

Requirements	Violations #	Area of Concern #	Quick References
1. Goals	V 1.1	None	Page 15
2. Organization	V 2.2	None	Page 16
3. Legal	None	AOC 3.1	Page 17
4. O/M	V 4.1-4.6	AOC 4.1-4.3	Page 18
5. Design	None	None	Page 20
6. OERP	V 6.1	AOC 6.1	Page 21
7. FOG	None	AOC 7.1	Page 22
8. SECAP	None	AOC 8.1	Page 23
9. Measurement	V 9.1-9.3	None	Page 24
10. Audits	V 10.1	None	Page 25
11. Communication	V 11.1	None	Page 26
12. Implementation	V 12.1	None	Page 27
13. Training	V 13.1	None	Page 28
14. Spill Discharges	V 14.1	None	Page 29
15. Spill Notification	V 15.1	None	Page 30
16. Spill Reporting	V 16.1	None	Page 31
17. Spill Monitoring	V 17.1	None	Page 32

Table 2 – Summary of Provisions D.13(x) and D.13(ix) of the SSS WDRs

Provision Requirement	Description
Provision D.13 (x)	“SSMP Program Audits - As part of the SSMP, the City shall conduct periodic internal Audits, appropriate to the size of the system and the number of Spills. At a minimum, these SSMP Gap Analysis must occur every two years and a report must be prepared and kept on file. This SSMP Gap Analysis shall focus on evaluating the effectiveness of the SSMP and the City’s compliance with the SSMP requirements identified in this subsection (D.13), including identification of any deficiencies in the SSMP and steps to correct them.”
Provision D.13(ix)	<p>“Monitoring, Measurement, and Program Modifications”</p> <ul style="list-style-type: none"> (a) Maintain relevant information that can be used to establish and prioritize appropriate SSMP activities. (b) Monitor the implementation and, where appropriate, measure the effectiveness of each element of the SSMP. (c) Assess the success of the preventative maintenance program. (d) Update program elements, as appropriate, based on monitoring or performance evaluations; and (e) Identify and illustrate Spill trends, including frequency, location, and volume.

The City’s current work programs were reviewed to evaluate site-specific elements in place for its management, maintenance, and operations of the City sanitary sewer collection system to protect public health and the environment through minimizing sanitary sewer overflows (Spills). To ensure objective and effective outcomes of the Gap Analysis, the following critical elements and information provided by the City were reviewed and evaluated:

- Desktop compliance and document review.
- Review of State Water Board “Pre-Inspection Questionnaire” partially completed by the City.
- Onsite and virtual conferences with interviews with City management and staff.
- Certified spill reports and additional information recorded for the City in CIWQS.

C. REGULATORY BACKGROUND

California Water Boards Spill Reduction Program

The California Water Boards is charged with preserving, enhancing, and restoring the quality of California's water resources and drinking water for the protection of the environment, public health, and all beneficial uses of water quality. The Water Boards utilize the SSS WDRs as the primary regulatory tool for regulating publicly owned sewer systems part of its [Sanitary Sewer Overflow Reduction Program](#) mandated by the California Legislature. For addressing noncompliance, the [State Water Board's Water Quality Enforcement Policy](#) is used by the state and regional water board staff as necessary to address noncompliance.

SSMP Audits play a significant role in Water Board statewide prioritizations for compliance inspections, and individual enforcement actions for addressing noncompliance. Historic examples of compliance inspections, audits, and enforcement actions are available on the State Water Board Sanitary Sewer Systems Spill Reduction Program [online library](#). "Self-reporting" data including individual spill reports certified by the City are hosted by the [California Integrated Water Quality Management System \(CIWQS\)](#) online. Additional [detailed compliance and enforcement reports](#) are also available online with individual [spill data "flat files."](#)

U.S. EPA National Sewage Spill Enforcement Initiative

The United States Environmental Protection Agency (U.S. EPA) is charged with enforcing the [federal Clean Water Act](#). Since California has taken the lead with implementation of its own regulations for addressing Spills, the U.S. EPA relies on the SSS WDRs as the primary tool for evaluating compliance with the federal Clean Water Act. Historic records for collection system compliance inspections, compliance and enforcement cases and other information can be found using U.S. EPA' [Enforcement and Compliance History Online \(ECHO\)](#). SSMP Audits play significant importance to U.S. EPA staff with implementation of a [National Enforcement Initiative](#) for collection systems to keep raw sewage out of the nation's waters.

D. CITY COLLECTION SYSTEM INFORMATION

The City of Beaumont owns and operates sanitary sewer collection system (collection system) serving a population of approximately 54,228 (18 square miles) and includes a total of 17,450 sewer connections. The collection system consists of 180 miles of gravity sewer mains, 20 miles of pressure ("force main") sewers, 12 sewer lift stations and 23 miles of Brine Line. The collection system serves areas in (SSMP data) Counties. The City of Beaumont is located in Riverside County on the southern portion of California, east of the City of Banning. The City is located approximately 11 miles north of the City of Hemet, 5 miles east of the City of Banning, 12 miles east of City of Moreno Valley, and 7 miles southeast of the City of Yucaipa. The City currently encompasses an area greater than 26,000 acres, with an approximate population of 50,000 residents.

The City's service area is generally bound to the north by Brookside Avenue, to the east by Highlands Springs Avenue, and to the southwest of Monero Valley Freeway. The topography is generally steep, with slopes increasing from north to south toward the Interstate 10. Figure ES.2 displays the City's existing service area and the general plan boundary. The City operates and maintains a wastewater collection system that covers the majority of developable area within Planning Boundary. Currently, the wastewater flows are conveyed to the City of Beaumont Wastewater Treatment Plant (WWTP).

Current information recorded in CIWQS² for the City collection system is presented in Figure 3, below.

General Information						
Region	Place ID	Place Name	Place Type	Place Address	Place County	
8	631243	Beaumont City CS	Collection_System	550 East 6Th Beaumont, CA, 92223	Riverside	

Related Parties						
Party	Party Type	Party Name	Role	Classification	Relationship Start Date	Relationship End Date
299229	Person	Kevin Dale Lee	Is Onsite Manager For		03/29/2022	
551638	Person	Thaxton J. Van Belle	Is Onsite Manager For		01/14/2019	
560178	Person	Amer Jakher	Is Onsite Manager For		11/03/2016	09/21/2018
524414	Person	Jeremy Perales	Is A Data Submitter For		08/26/2010	02/15/2019
524415	Person	Kimberley Dunbar	Is Onsite Manager For		08/26/2010	03/01/2019
515102	Person	Allen Harralson	Is Onsite Manager For		07/27/2009	08/01/2010
332994	Person	Vincent Ferrini	Is Onsite Manager For		11/09/2007	11/19/2015
445907	Organization	Beaumont City	Owner	City Agency	01/24/2007	
119804	Person	Michael A Pistilli	Is Onsite Manager For		04/04/2006	

Total Related Parties: 9

Regulatory Measures								
Reg Measure ID	Reg Measure Type	Region	Program	Order No.	WDID	Effective Date	Expiration Date	Status Amended?
300636	Enrollee	8	SSOMUNILRG	2006-0003-DWQ	8SSO10543	11/02/2006		Active N

Total Reg Measures: 1

Violations							
Violation ID	Occurred Date	Violation Type	(-) Violation Description	Corrective Action	Status	Classification	Source
Report displays most recent five years of violations. Refer to the Interactive Violation Report for more data.							

Total Violations: 0 **Priority Violations: 0**

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

Violation Types

Enforcement Actions				
Enf Id	Enf Type	Enf Order No.	Effective Date	Status
373820	Admin Civil Liability	R8-2010-0022	04/15/2010	Historical
373815	Admin Civil Liability	R8-2010-0022	11/19/2009	Historical

Total Enf Actions: 2

Inspections						
Inspection ID	Inspection Type	Lead Inspector	Actual End Date	Planned	Violations	Attachment
Total Inspections: 0						

Last Inspection: None

The current report was generated with data as of: 06/27/2022

Figure 3 – CIWQS detailed City information in CIWQS.

² California Integrated Water Quality System (CIWQS) maintained by the State Water Board, available publicly at: https://ciwqs.waterboards.ca.gov/ciwqs/readOnly/PublicReportSSOServlet?reportAction=criteria&reportId=sso_main

E. DATA SOURCES FOR GAP ANALYSIS

- 2021 City Draft Sewer Masterplan
- Onsite meetings with City staff and management.
- 2022 [Pre-Inspection Questionnaire](#) partially completed by City (see 2022 SSMP, Appendix 1)
- CIWQS data and Spill data “flat files” posted on Spill Reduction Website³.
- Collection system operational data.
- CIWQS operational performance/spill data and metrics.
- Online and in-person interviews from City management and staff.

³ See https://www.waterboards.ca.gov/water_issues/programs/Spill/

1. GOALS

SSS WDR Provisions	Citations
Provision D.13(i)	“Goal: 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. This will help reduce and prevent Spills, as well as mitigate any Spills that do occur.”
Provision D.3	“The Enrollee shall take all feasible steps to eliminate Spills. If an Spill does occur, the Enrollee shall take all feasible steps to contain and mitigate the impacts of an Spill.”
Provision D.4	“In the event of an Spill, the Enrollee shall take all feasible steps to prevent untreated or partially treated wastewater from discharging from storm drains into flood control channels or waters of the United States by blocking the storm drainage system and by removing the wastewater from the storm drains.”
Provision D.8	“The Enrollee shall properly, manage, operate, and maintain all parts of the sanitary sewer system owned or operated by the Enrollee, and shall ensure that the system operators (including employees, contractors, or other agents) are adequately trained and possess adequate knowledge, skills, and abilities.”

COMPLIANCE FINDINGS			IDENTIFIED COMPLIANCE GAPS	
Violations	Area of Concern	Current Practices	Compliance Needs	Recommended Best Practices
<ul style="list-style-type: none"> • Yes (V1.1) (No current goals established) 	<ul style="list-style-type: none"> • None 	<ul style="list-style-type: none"> • No Spill reduction goals established. 	<ul style="list-style-type: none"> • City needs to set their own SSMP program goals. • City needs to ensure they can measure how goals are being met or not.⁴ 	<ul style="list-style-type: none"> • Reduce likelihood of Spills through proper planning and effective maintenance programs. • Promptly and efficiently respond to Spill events. • Mitigate the effects of Spills on public health and environment. • Consider utilizing new Key Performance Indicators (KPIs) to measure effectiveness.

2. ORGANIZATION

SSS WDR Provisions	Citations
Provision D.13 (ii)	“Organization: The SSMP must identify: The name of the responsible or authorized representative as described in Chapter J of this Order. The names and telephone numbers for management, administrative, and maintenance positions responsible for implementing specific measures in the SSMP program. The SSMP must identify lines of authority through an organization chart or similar document with a narrative explanation; and The chain of communication for reporting Spills, from receipt of a complaint or other information, including the person responsible for reporting Spills to the State and Regional Water Board and other agencies if applicable (such as County Health Officer, County Environmental Health Agency, Regional Water Board, and/or State Office of Emergency Services (OES)).”
Provision D.9	“The Enrollee shall allocate adequate resources for the operation, maintenance, and repair of its sanitary sewer system, by establishing a proper rate structure, accounting mechanisms, and Auditing procedures to ensure an adequate measure of revenues and expenditures. These procedures must be in compliance with applicable laws and regulations and comply with generally acceptable accounting practices.”
Provision D.11	“The Enrollee shall develop and implement a written Sewer System Management Plan (SSMP) and make it available to the State and/or Regional Water Board upon request. A copy of this document must be publicly available at the Enrollee’s office and/or available on the Internet. This SSMP must be approved by the Enrollee’s governing board at a public meeting.”

COMPLIANCE FINDINGS			IDENTIFIED COMPLIANCE GAPS	
Violations	Area of Concern	Current Practices	Compliance Needs	Best Practice Recommendations
<ul style="list-style-type: none"> • Yes (V2.1) (Incomplete assigned responsibilities for required SSMP elements). 	<ul style="list-style-type: none"> • None 	<ul style="list-style-type: none"> • Some responsibilities defined. 	<ul style="list-style-type: none"> • City needs to established specific assigned responsibilities to each individual element of the SSMP. 	<ul style="list-style-type: none"> • Consider utilizing new Key Performance Indicators (KPIs) to measure effectiveness.

3. LEGAL AUTHORITY

SSS WDR Provisions	Citations
Provision D.13 (iii)	“(iii)Legal Authority: Each Enrollee must demonstrate, through sanitary sewer system use ordinances, service agreements, or other legally binding procedures, that it possesses the necessary legal authority to: Prevent illicit discharges into its sanitary sewer system (examples may include I/I, stormwater, chemical dumping, unauthorized debris and cut roots, etc.); Require that sewers and connections be properly designed and constructed; Ensure access for maintenance, inspection, or repairs for portions of the lateral owned or maintained by the Public Agency; Limit the discharge of fats, oils, and grease and other debris that may cause blockages, and Enforce any Inspection Violations of its sewer ordinances.”

COMPLIANCE FINDINGS			IDENTIFIED COMPLIANCE GAPS	
Violations	Area of Concern	Current Practices	Compliance Needs	Best Practice Recommendations
<ul style="list-style-type: none"> • None 	<ul style="list-style-type: none"> • Yes (AOC 3.1) (Additional legal review of existing authority should be performed to ensure compliance with Provision D.13(iii) of SSS WDRs. 	<ul style="list-style-type: none"> • Some authority in place. 	<ul style="list-style-type: none"> • Additional review of legal authority needed. 	<ul style="list-style-type: none"> • Consider utilizing new Key Performance Indicators (KPIs) to measure effectiveness. • Annual review of City codes and ordinances to ensure adequate legal authority required.

4. OPERATIONS/MAINTENANCE

SSS WDR Provisions	Citations
Provision D.13 (iv)	“(iv)Operation and Maintenance Program. The SSMP must include those elements listed below that are appropriate and applicable to the Enrollee’s system: Maintain an up-to-date map of the sanitary sewer system, showing all gravity line segments and manholes, pumping facilities, pressure pipes and valves, and applicable stormwater conveyance facilities; Describe routine preventive operation and maintenance activities by staff and contractors, including a system for scheduling regular maintenance and cleaning of the sanitary sewer system with more frequent cleaning and maintenance targeted at known problem areas. The Preventative Maintenance (PM) program should have a system to document scheduled and conducted activities, such as work orders; Develop a rehabilitation and replacement plan to identify and prioritize system deficiencies and implement short-term and long- term rehabilitation actions to address each deficiency. The program should include regular visual and TV inspections of manholes and sewer pipes, and a system for ranking the condition of sewer pipes and scheduling rehabilitation. Rehabilitation and replacement should focus on sewer pipes that are at risk of collapse or prone to more frequent blockages due to pipe defects. Finally, the rehabilitation and replacement plan should include a capital improvement plan that addresses proper management and protection of the infrastructure assets. The plan shall include a time schedule for implementing the short- and long-term plans plus a schedule for developing the funds needed for the capital improvement plan; Provide training on a regular basis for staff in sanitary sewer system operations and maintenance, and require contractors to be appropriately trained; and Provide equipment and replacement part inventories, including identification of critical replacement parts.”
Provision D.3	“The Enrollee shall take all feasible steps to eliminate Spills. In the event that an Spill does occur, the Enrollee shall take all feasible steps to contain and mitigate the impacts of an Spill.
Provision D.4	“In the event of an Spill, the Enrollee shall take all feasible steps to prevent untreated or partially treated wastewater from discharging from storm drains into flood control channels or waters of the United States by blocking the storm drainage system and by removing the wastewater from the storm drains.”
Provisions D.7/D.8/D.9	Mitigation of Spills, properly operate, maintain, manage, allocation of adequate resources.

COMPLIANCE FINDINGS			IDENTIFIED COMPLIANCE GAPS	
Violations	Area of Concern	Observed Practices	Compliance Needs	Best Practice Recommendations
<ul style="list-style-type: none"> • Yes (V4.1) (Lack of sufficient resources for proper operations and maintenance to comply with Provision D.8) • Yes (V4.2) (Insufficient program in place to ensure maps are up to date). • Yes (V 4.3) (Lack of ongoing tracking system to document, schedule and prioritize and routine system maintenance). • Yes (V 4.4) (Lack of system rehabilitation and replacement program to prioritize and schedule work to address known system deficiencies). • Yes (V 4.5) (Insufficient training and documentation on core competencies). • Yes (V 4.6) (Insufficient critical spare parts inventory). 	<ul style="list-style-type: none"> • Yes (AOC 4.1) Lack of existing resources to address ongoing collection system maintenance (total of 4 maintenance personnel to operate over 180 miles of gravity pipelines and XX pump stations is insufficient). • Yes (AOC 4.2) System spill metrics in CIWQS show significantly higher metrics than current regional average (~11,000 gallons per spill since 2007). • Yes (AOC 4.3) Various operations and maintenance programs need to be further developed and/or improved to help reduce future spills and violations). 	<ul style="list-style-type: none"> • Established gravity pipe cleaning program in place. • Established capital improvement program (CIP). • Established lift station inspection program including specific lift station deficiencies. • New project underway to upgrade existing lift station flow metering. • Established root control program. • Established monitoring (Smart cover) equipment in place. • GIS system for mapping accessible from network. 	<ul style="list-style-type: none"> • Develop condition assessment program. • Establishment of work order system to schedule and track ongoing maintenance. • Establishment system to ensure maps are up to date and include all required information. • Establishment of routine CCTV program and condition assessment. • Establishment of easement maintenance program. • Establishment of critical spare parts inventory. • Establishment of standard operating procedures. • Establishment of training program utilizing SOPs. • Establishments of ongoing repair/replacement program to complete identified needs. • Better tracking staff time and labor. 	<ul style="list-style-type: none"> • Consider utilizing new Key Performance Indicators (KPIs) to measure effectiveness.

5. DESIGN/PERFORMANCE

SSS WDR Provisions	Citations
Provision D.13 (v)	“Design and Performance Provisions: Design and construction standards and specifications for the installation of new sanitary sewer systems, pump stations and other appurtenances; and for the rehabilitation and repair of existing sanitary sewer systems; and Procedures and standards for inspecting and testing the installation of new sewers, pumps, and other appurtenances and for rehabilitation and repair projects.”
Provision D.13(iv)	Operations and maintenance program.

COMPLIANCE FINDINGS			BEST PRACTICE RECOMMENDATIONS	
Violations	Areas of Concern	Current Practices	Compliance Needs	Best Practice Recommendations
<ul style="list-style-type: none"> • None 	<ul style="list-style-type: none"> • None 	<ul style="list-style-type: none"> • Approximately two years ago, the City upgraded and adopted standards and specifications for new facilities. 	<ul style="list-style-type: none"> • TBD (needs more information on specific citations from Jack and Thaxton covering I/I, prevent illicit discharges, proper design of sewers, etc.) • Need website/URL including references showing current inspection practices (engineering). 	<ul style="list-style-type: none"> • Consider utilizing new Key Performance Indicators (KPIs) to measure effectiveness. • Establish SOPs for new construction inspections. • Post standard specifications on website. • Annual review of standard specifications to ensure current best practices.

6. OVERFLOW EMERGENCY RESPONSE PLAN

SSS WDR Provisions	Citations
Provision D.13 (vi)	“Overflow Emergency Response Plan - Each Enrollee shall develop and implement an overflow emergency response plan that identifies measures to protect public health and the environment. At a minimum, this plan must include the following: Proper notification procedures so that the primary responders and regulatory agencies are informed of all Spills in a timely manner; A program to ensure an appropriate response to all overflows; Procedures to ensure prompt notification to appropriate regulatory agencies and other potentially affected entities (e.g. health agencies, Regional Water Boards, water suppliers, etc.) of all Spills that potentially affect public health or reach the waters of the State in accordance with the MRP. All Spills shall be reported in accordance with this MRP, the California Water Code, other State Law, and other applicable Regional Water Board WDRs or NPDES permit requirements. The SSMP should identify the officials who will receive immediate notification; Procedures to ensure that appropriate staff and contractor personnel are aware of and follow the Emergency Response Plan and are appropriately trained; Procedures to address emergency operations, such as traffic and crowd control and other necessary response activities; and A program to ensure that all reasonable steps are taken to contain and prevent the discharge of untreated and partially treated wastewater to waters of the United States and to minimize or correct any adverse impact on the environment resulting from the Spills, including such accelerated or additional monitoring as may be necessary to Determine the nature and impact of the discharge.”
Provisions D.3, D.4, D.7, D.8	Reduce/prevent Spills/impacts to storm drains, proper O/M.

COMPLIANCE FINDINGS			IDENTIFIED COMPLIANCE GAPS	
Violations	Areas of Concern	Current Practices	Compliance Needs	Best Practice Recommendations
<ul style="list-style-type: none"> • Yes (V6.1) (Lack of OERP and implementation to ensure adequate emergency spill response readiness). 	<ul style="list-style-type: none"> • Yes (AOC 6.1) Current procedures for notifying response staff about complaints is insufficient to ensure all calls are received, document and addressed. 	<ul style="list-style-type: none"> • Some field emergency response procedures in place. 	<ul style="list-style-type: none"> • Establishment of effective field response procedures for spill response activities. • Establishment of new contractor training procedures. 	<ul style="list-style-type: none"> • Consider utilizing new Key Performance Indicators (KPIs) to measure effectiveness. • Train personnel on new OERP. • Annual review of OERP. • Event debriefs for all spills to determine causes and measure effectiveness.

7. FATS, OILS AND GREASE CONTROL

SSS WDR Provisions		Citations		
Provision D.13 (vii)		<p>“FOG Control Program: Each Enrollee shall evaluate its service area to Determine whether a FOG control program is needed. If an Enrollee Determines that a FOG program is not needed, the Enrollee must provide justification for why it is not needed. If FOG is found to be a problem, the Enrollee must prepare and implement a FOG source control program to reduce the amount of these substances discharged to the sanitary sewer system. This plan shall include the following as appropriate: An implementation plan and schedule for a public education outreach program that promotes proper disposal of FOG; A plan and schedule for the disposal of FOG generated within the sanitary sewer system service area. This may include a list of acceptable disposal facilities and/or additional facilities needed to adequately dispose of FOG generated within a sanitary sewer system service area; The legal authority to prohibit discharges to the system and identify measures to prevent Spills and blockages caused by FOG; Requirements to install grease removal devices (such as traps or interceptors), design standards for the removal devices, maintenance requirements, BMP requirements, record keeping and reporting requirements; Authority to inspect grease producing facilities, enforcement authorities, and whether the Enrollee has sufficient staff to inspect and enforce the FOG ordinance; An identification of sanitary sewer system Chapters subject to FOG blockages and establishment of a cleaning maintenance schedule for each Chapter; and Development and implementation of source control measures for all sources of FOG discharged to the sanitary sewer system for each Chapter identified in (f) above.”</p>		
Provisions D.3, D.4, D.8		Reduce/prevent Spills/impacts to storm drains, proper O/M.		
COMPLIANCE FINDINGS			IDENTIFIED COMPLIANCE GAPS	
Violations	Area of Concern	Current Practices	Compliance Needs	Recommended Best Practices
<ul style="list-style-type: none"> • None 	<ul style="list-style-type: none"> • Yes (AOC 7.1) City should improve FOG authority for limiting discharges of grease into system). 	<ul style="list-style-type: none"> • Established FOG reduction program in place. • Inspections of all Food Service Establishments (FSEs) at least once per year. • Established record keeping practices for FOG inspections and enforcement. 	<ul style="list-style-type: none"> • Establish additional authority and limits for reducing potential future FOG impacts to sewer system. 	<ul style="list-style-type: none"> • Consider utilizing new Key Performance Indicators (KPIs) to measure effectiveness. • Annual review of FOG program to check and measure effectiveness; adjust as necessary. • Periodic CCTV inspect City sewers downstream of FSEs.

8. SYSTEM EVALUATION/CAPACITY

SSS WDR Provisions	Citations
Provision D.13 (viii)	<p>“System Evaluation and Capacity Assurance Plan: The Enrollee shall prepare and implement a capital improvement plan (CIP) that will provide hydraulic capacity of key sanitary sewer system elements for dry weather peak flow conditions, as well as the appropriate design storm or wet weather event. At a minimum, the plan must include Evaluation: Actions needed to evaluate those portions of the sanitary sewer system that are experiencing or contributing to a Spill discharge caused by hydraulic deficiency. The evaluation must provide estimates of peak flows (including flows from Spills that escape from the system) a spill with conditions similar to those causing overflow events, estimates of the capacity of key system components, hydraulic deficiencies (including components of the system with limiting capacity and the major sources that contribute to the peak flows a spill with overflow events; Design Criteria: Where design criteria do not exist or are deficient, undertake the evaluation identified in (a) above to establish appropriate design criteria; and capacity Enhancement Measures: The steps needed to establish a short- and long-term CIP to address identified hydraulic deficiencies, including prioritization, alternatives analysis, and schedules. The CIP may include increases in pipe size, I/I reduction programs, increases and redundancy in pumping capacity, and storage facilities. The CIP shall include an implementation schedule and shall identify sources of funding. Schedule: The Enrollee shall develop a schedule of completion dates for all portions of the capital improvement program developed in (a)-(c) above. This schedule shall be reviewed and updated consistent with the SSMP review and update requirements as described in Chapter D. 14.”</p>
Provisions D.8, D.8	Proper O/M, adequate capacity for conveying base/peak flows.

COMPLIANCE FINDINGS			BEST PRACTICE RECOMMENDATIONS	
Violations	Area of Concern	Current Practices	Improving Effectiveness	Recommended Best Practices
<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> Yes. (AOC 8.1) (draft Master Plan should be finalized and also identify deficient problem locations, budgets/projects and commitments short/long-term to reduce future spills). 	<ul style="list-style-type: none"> Established draft Sewer Masterplan in 2021. Ongoing sewer rate studies. Utilization of Geographic Information System (GIS). Evaluating a combined wastewater and collection system prioritization program during budget cycles. 	<ul style="list-style-type: none"> Finalize Masterplan. Establish/track ongoing progress for budgets, projects completed projects; collect/publish data to track ongoing progress of CIP. 	<ul style="list-style-type: none"> Consider utilizing new Key Performance Indicators (KPIs) to measure effectiveness.

9. SSMP MEASUREMENT/MONITORING

SSS WDR Provisions	Citations
Provision D.13 (ix)	<p>“System Evaluation and Capacity Assurance Plan: The Enrollee shall prepare and implement a capital improvement plan (CIP) that will provide hydraulic capacity of key sanitary sewer system elements for dry weather peak flow conditions, as well as the appropriate design storm or wet weather event. At a minimum, the plan must include: Evaluation: Actions needed to evaluate those portions of the sanitary sewer system that are experiencing or contributing to an Spill discharge caused by hydraulic deficiency. The evaluation must provide estimates of peak flows (including flows from Spills that escape from the system) a spill with conditions similar to those causing overflow events, estimates of the capacity of key system components, hydraulic deficiencies (including components of the system with limiting capacity) and the major sources that contribute to the peak flows a spill with overflow events; Design Criteria: Where design criteria do not exist or are deficient, undertake the evaluation identified in (a) above to establish appropriate design criteria; and capacity Enhancement Measures: The steps needed to establish a short- and long-term CIP to address identified hydraulic deficiencies, including prioritization, alternatives analysis, and schedules. The CIP may include increases in pipe size, I/I reduction programs, increases and redundancy in pumping capacity, and storage facilities. The CIP shall include an implementation schedule and shall identify sources of funding. Schedule: The Enrollee shall develop a schedule of completion dates for all portions of the capital improvement program developed in (a)-(c) above. This schedule shall be reviewed and updated consistent with the SSMP review and update requirements as described in Chapter D. 14.”</p>
Provisions D.13(i), D.13(iv) D.3, D.4	Goals, proper O/M, reduce/prevent Spills/impacts to storm drains.

COMPLIANCE FINDINGS			BEST PRACTICE RECOMMENDATIONS	
Violations	Area of Concern	Current Practices	Compliance Needs	Recommended Best Practices
<ul style="list-style-type: none"> • Yes (V9.1) (no system in place for scheduling and tracking ongoing maintenance). • Yes (V9.2) (not monitoring implementation and measuring effectiveness and success of preventative maintenance). • Yes (V9.3) (Not measuring and monitoring Spill trends). 	<ul style="list-style-type: none"> • None 	<ul style="list-style-type: none"> • Staff checks indicate City is meeting established response time goals for spills. 	<ul style="list-style-type: none"> • Structured reviews and established records. 	<ul style="list-style-type: none"> • Consider utilizing new Key Performance Indicators (KPIs) to measure effectiveness. • Event debriefs for all spills to determine causes and measure effectiveness.

10. SSMP AUDITS

SSS WDR Provisions	Citations
Provision D.13 (x)	“As part of the SSMP, the Enrollee shall conduct periodic internal SSMP Gap Analysis, appropriate to the size of the system and the number of Spills. At a minimum, these SSMP Gap Analysis must occur every two years and a report must be prepared and kept on file. The audit shall focus on evaluating the effectiveness of the SSMP and the Enrollee’s compliance with the SSMP requirements identified in this subchapter (D.13), including identification of any deficiencies in the SSMP and steps to correct them.”
Provision D.13(ix)	Monitoring/Measurement/Program Performance (measure/assess O/M, Spill trends)

COMPLIANCE FINDINGS			BEST PRACTICE RECOMMENDATIONS	
Violations	Area of Concern	Current Practices	Compliance Needs	Recommended Best Practices
<ul style="list-style-type: none"> • Yes (V10.1) (Lack of periodic ongoing completed SSMP Audits, findings and incorporation of data into SSMP) 	<ul style="list-style-type: none"> • None 	<ul style="list-style-type: none"> • No comments. 	<ul style="list-style-type: none"> • Document work programs, compliance status and effectiveness for each SSMP element with future SSMP Audit(s). • Outline SSMP Audit commitments in new City SSMP. 	<ul style="list-style-type: none"> • Consider utilizing new Key Performance Indicators (KPIs) to measure effectiveness.

11. COMMUNICATION

SSS WDR Provisions	Citations
Provision D.13 (xi)	<p>“Communication Program – The Enrollee shall communicate on a regular basis with the public on the development, implementation, and performance of its SSMP. The communication system shall provide the public the opportunity to provide input to the Enrollee as the program is developed and implemented.</p> <p>The Enrollee shall also create a plan of communication with systems that are tributary and/or satellite to the Enrollee’s sanitary sewer system.”</p>
Provision D.13(vi)	OERP

COMPLIANCE FINDINGS			BEST PRACTICE RECOMMENDATIONS	
Violations	Area of Concern	Current Practices	Improving Effectiveness	Improving Resilience
<ul style="list-style-type: none"> Yes (V 11.1) (no existing communication program in place). 	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> No comments 	<ul style="list-style-type: none"> Ensure public has opportunity to comment on SSMP. Improve procedures between satellite sewers and private systems. 	<ul style="list-style-type: none"> Consider utilizing new Key Performance Indicators (KPIs) to measure effectiveness.

12. SSMP IMPLEMENTATION

SSS WDR Provisions	Citations
Provision D.11	“The Enrollee shall develop and implement a written Sewer System Management Plan (SSMP) and make it available to the State and/or Regional Water Board upon request. A copy of this document must be publicly available at the Enrollee’s office and/or available on the Internet. This SSMP must be approved by the Enrollee’s governing board at a public meeting.”
Provisions D.3,D.4 D.7 D.8, Amended MRP	Reduce/prevent Spills/impacts to storm drains, properly operate, maintain, manage, compliance with Monitoring and Reporting requirements.

COMPLIANCE FINDINGS			BEST PRACTICE RECOMMENDATIONS	
Violations	Area of Concern	Current Practices	Improving Effectiveness	Improving Resilience
<ul style="list-style-type: none"> Yes. (V 12.1) Lack of SSMP implementation across most work program). 	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> Most work programs need to be improved and tracked to improve spill reduction/SSMP effectiveness. 	<ul style="list-style-type: none"> Additional documentation, procedures, training and implementation of work programs needed. 	<ul style="list-style-type: none"> Consider utilizing new Key Performance Indicators (KPIs) to measure effectiveness. Consider new ways of tracking data continuously to measure effectiveness and document improvements over time.

13. TRAINING/STANDARD OPERATING PROCEDURES (SOPs)

SSS WDR Provisions		Citations		
Provisions D.8, D.3, D.4, D.13(iv), D.13(vi)		Properly operate, maintain, manage, reduce/prevent Spills/impacts to storm drains, proper O/M, OERP.		
Provision D.13(vi)		<p>“Overflow Emergency Response Plan - Each Enrollee shall develop and implement an overflow emergency response plan that identifies measures to protect public health and the environment. At a minimum, this plan must include the following: Proper notification procedures so that the primary responders and regulatory agencies are informed of all Spills in a timely manner; A program to ensure an appropriate response to all overflows; Procedures to ensure prompt notification to appropriate regulatory agencies and other potentially affected entities (e.g. health agencies, Regional Water Boards, water suppliers, etc.) of all Spills that potentially affect public health or reach the waters of the State in accordance with the MRP. All Spills shall be reported in accordance with this MRP, the California Water Code, other State Law, and other applicable Regional Water Board WDRs or NPDES permit requirements. The SSMP should identify the officials who will receive immediate notification; Procedures to ensure that appropriate staff and contractor personnel are aware of and follow the Emergency Response Plan and are appropriately trained; Procedures to address emergency operations, such as traffic and crowd control and other necessary response activities; and A program to ensure that all reasonable steps are taken to contain and prevent the discharge of untreated and partially treated wastewater to waters of the United States and to minimize or correct any adverse impact on the environment resulting from the Spills, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the discharge.”</p>		
COMPLIANCE FINDINGS			BEST PRACTICE RECOMMENDATIONS	
Violations	Area of Concern	Current Practices	Improving Effectiveness	Improving Resilience
<p>Yes. (V 13.1) Existing training program inadequate).</p>	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> No comments 	<ul style="list-style-type: none"> TBD 	<ul style="list-style-type: none"> Consider utilizing new Key Performance Indicators (KPIs) to measure effectiveness.

14. SPILL DISCHARGES

SSS WDR Provisions	Citations
Amended MRP	“The Enrollee shall develop and implement a written Sewer System Management Plan and make it available to the State and/or Regional Water Board upon request. A copy of this document must be publicly available at the Enrollee’s office and/or available on the Internet. This SSMP must be approved by the Enrollee’s governing board at a public meeting.”
Provisions D.3,D.4, D.7, D.8, Amended	Reduce/prevent Spills/impacts to storm drains, properly operate, maintain, manage, compliance with Monitoring and Reporting requirements.

COMPLIANCE FINDINGS			BEST PRACTICE RECOMMENDATIONS	
Violations	Area of Concern	Current Practices	Improving Effectiveness	Improving Resilience
<ul style="list-style-type: none"> Yes (V14.1) The City certified it discharged 214,260 gallons of sewage to surface waters since 2007. 	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> No comments 	<ul style="list-style-type: none"> Implement additional improvements to be outlined in SSMP for further increasing existing spill reduction performance. 	<ul style="list-style-type: none"> Consider utilizing new Key Performance Indicators (KPIs) to measure effectiveness and make necessary adjustments to ongoing O/M program over time.

15. SPILL NOTIFICATION

SSS WDR Provisions	Citations
<p>Amended MRP, Chapter B.</p>	<p>“For any Category 1 Spill greater than or equal to 1,000 gallons that results in a discharge to a surface water or spilled in a location where it probably will be discharged to surface water, either directly or by way of a drainage channel or MS4, the enrollee shall, as soon as possible, but not later than two (2) hours after (A) the enrollee has knowledge of the discharge, (B) notification is possible, and (C) notification can be provided without substantially impeding cleanup or other emergency measures, notify the Cal OES and obtain a notification control number. 2. To satisfy notification requirements for each applicable Spill, the enrollee shall provide the information requested by Cal OES before receiving a control number. Spill information requested by Cal OES may include:</p> <ul style="list-style-type: none"> i. Name of person notifying Cal OES and direct return phone number. ii. Estimated Spill volume discharged (gallons). iii. If ongoing, estimated Spill discharge rate (gallons per minute). iv. Spill Incident Description: <ul style="list-style-type: none"> a. Brief narrative. b. On-scene point of contact for additional information (name and cell phone number). c. Date and time enrollee became aware of the Spill. d. Name of sanitary sewer system agency causing the Spill. e. Spill. Indication of whether the Spill has been contained. vi. Indication of whether surface water is impacted. vii. Name of surface water impacted by the Spill, if applicable. viii. Indication of whether a drinking water supply is or may be impacted by the Spill. ix. Any other known Spill impacts. x. Spill incident location (address, Agency, state, and zip code). <p>3. Following the initial notification to Cal OES and until such time that an enrollee certifies the Spill report in the CIWQS Online Spill Database, the enrollee shall provide updates to Cal OES regarding substantial changes to the estimated volume of untreated or partially treated sewage discharged and any substantial change(s) to known impact(s).”</p>

COMPLIANCE FINDINGS			BEST PRACTICE RECOMMENDATIONS	
Violations	Area of Concern	Current Practices	Improving Effectiveness	Improving Resilience
<ul style="list-style-type: none"> • Yes (V 15.1) Some missed notification timeframes have been missed resulting in violations. 	<ul style="list-style-type: none"> • None 	<ul style="list-style-type: none"> • No comments 	<ul style="list-style-type: none"> • Development and implementation of a new standard operating procedure (SOP) for spill reporting to avoid future noncompliance. 	<ul style="list-style-type: none"> • Consider utilizing new Key Performance Indicators (KPIs) to measure effectiveness.

16. SPILL REPORTING

SSS WDR Provisions	Citations
Amended MRP	“The Enrollee shall develop and implement a written Sewer System Management Plan (SSMP) and make it available to the State and/or Regional Water Board upon request. A copy of this document must be publicly available at the Enrollee’s office and/or available on the Internet. This SSMP must be approved by the Enrollee’s governing board at a public meeting.”
Provisions D.3, D.4, D.7, D.8, Amended MRP	Reduce/prevent Spills/impacts to storm drains, properly operate, maintain, manage, compliance with Monitoring and Reporting requirements.
Prohibition 1	All Spills reaching waters of the United States are prohibited.

COMPLIANCE FINDINGS			BEST PRACTICE RECOMMENDATIONS	
Violations	Area of Concern	Current Practices	Improving Effectiveness	Improving Resilience
<ul style="list-style-type: none"> Yes (V16.1) Some missed reporting timelines have been missed resulting in violations. 	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> Call tree and basic forms in place. 	<ul style="list-style-type: none"> Improve field data collection and other response forms in new SSMP. Development and implementation of a new standard operating procedure (SOP) for spill reporting to avoid future noncompliance. 	<ul style="list-style-type: none"> Consider utilizing new Key Performance Indicators (KPIs) to measure effectiveness.

17. SPILL MONITORING

SSS WDR Provisions	Citations
Amended MRP	“The Enrollee shall develop and implement a written Sewer System Management Plan (SSMP) and make it available to the State and/or Regional Water Board upon request. A copy of this document must be publicly available at the Enrollee’s office and/or available on the Internet. This SSMP must be approved by the Enrollee’s governing board at a public meeting.”
Provisions D.3, D.4, D.7, D.8, Amended MRP	Reduce/prevent Spills/impacts to storm drains, properly operate, maintain, manage, compliance with Monitoring and Reporting requirements.

COMPLIANCE FINDINGS			BEST PRACTICE RECOMMENDATIONS	
Violations	Area of Concern	Current Practices	Improving Effectiveness	Improving Resilience
<ul style="list-style-type: none"> • Yes (V 17.1) City lacks large spill (>50,000 gallons) monitoring program to ensure readiness. 	<ul style="list-style-type: none"> • None 	<ul style="list-style-type: none"> • No comments 	<ul style="list-style-type: none"> • Development of new SOP to avoid future non-compliance. • Improve calculations and data to improve supporting evidence for spill start time, volume, and final spill findings ; ensure all data matches fields certified in CIWQS. 	<ul style="list-style-type: none"> • Consider utilizing new Key Performance Indicators (KPIs) to measure effectiveness.



Appendix 4 — City Spill Performance/Metric Report by Fischer Compliance LLC

A. SPILL TRENDS AND COMPLIANCE BENCHMARKS

This section presents the City trends in Spills since 2007 and provides some information to allow comparing the City Spills with other collection systems in the Santa Ana Regional Water Board area.

Information obtained from the Amended MRP provides definitions of the different Spill categories shown in Figure 4, below.

CATEGORIES	DEFINITIONS [see Section A on page 5 of Order 2006-0003-DWQ, for Sanitary Sewer Overflow (SSO) definition]
CATEGORY 1	<p>Discharges of untreated or partially treated wastewater of <u>any volume</u> resulting from an enrollee's sanitary sewer system failure or flow condition that:</p> <ul style="list-style-type: none"> • Reach surface water and/or reach a drainage channel tributary to a surface water; or • Reach a Municipal Separate Storm Sewer System (MS4) and are not fully captured and returned to the sanitary sewer system or not otherwise captured and disposed of properly. Any volume of wastewater not recovered from the MS4 is considered to have reached surface water unless the storm drain system discharges to a dedicated storm water or groundwater infiltration basin (e.g., infiltration pit, percolation pond).
CATEGORY 2	<p>Discharges of untreated or partially treated wastewater of <u>1,000 gallons or greater</u> resulting from an enrollee's sanitary sewer system failure or flow condition that <u>do not</u> reach surface water, a drainage channel, or a MS4 unless the entire SSO discharged to the storm drain system is fully recovered and disposed of properly.</p>
CATEGORY 3	<p>All other discharges of untreated or partially treated wastewater resulting from an enrollee's sanitary sewer system failure or flow condition.</p>
PRIVATE LATERAL SEWAGE DISCHARGE (PLSD)	<p>Discharges of untreated or partially treated wastewater resulting from blockages or other problems <u>within a privately owned sewer lateral</u> connected to the enrollee's sanitary sewer system or from other private sewer assets. PLSDs that the enrollee becomes aware of may be <u>voluntarily</u> reported to the California Integrated Water Quality System (CIWQS) Online SSO Database.</p>

Figure 4.1 – SSS WDRs Spill and Private Lateral Sewage Discharge (PLSD) definitions¹.

¹ See [Water Quality Order No. 2013-0058-EXEC](#).

City Sanitary Sewer Overflows (2007-2022)

Figures 4.2-4.15 below present detailed data and charts for the City since 2007 including information the City spill performance with other collection systems within the Santa Ana Regional Water Board area.



Figure 4.2 – City Spill trends and metrics (by number of Spills) since 2007.

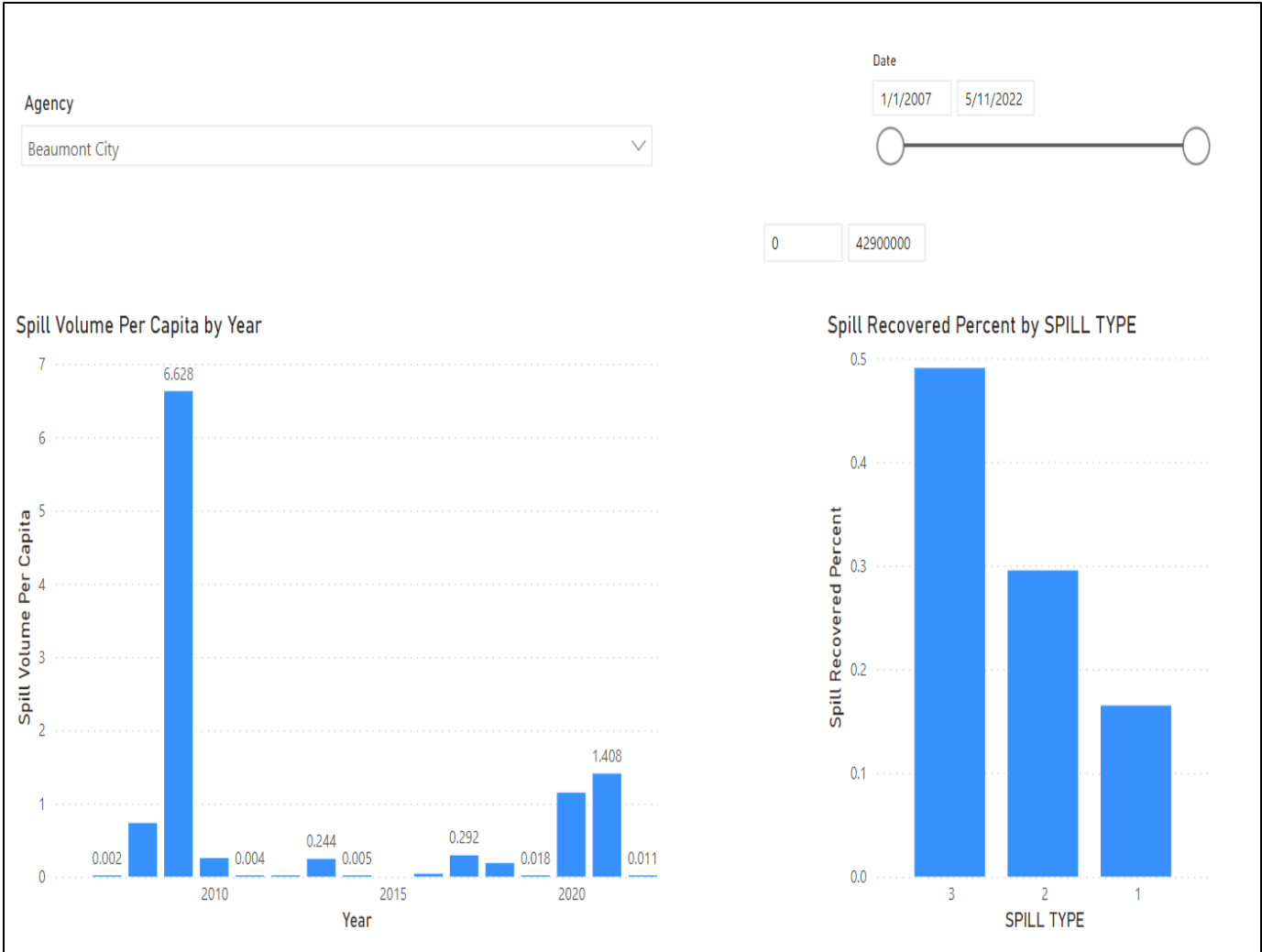


Figure 4.3 – City Spill trends and metrics (by volume of Spills) since 2007.

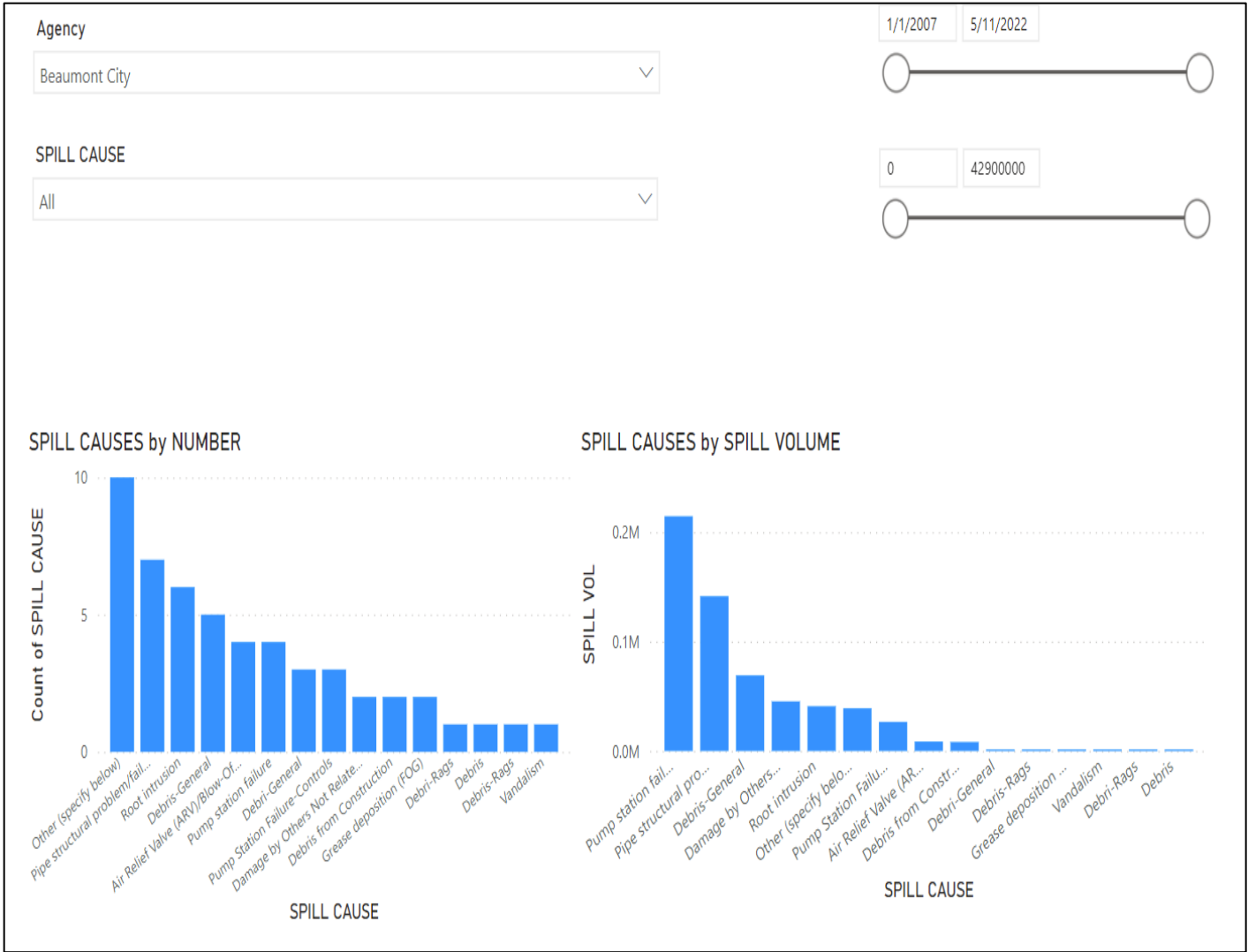


Figure 4.4 – City spill causes and volumes data (since 2007).

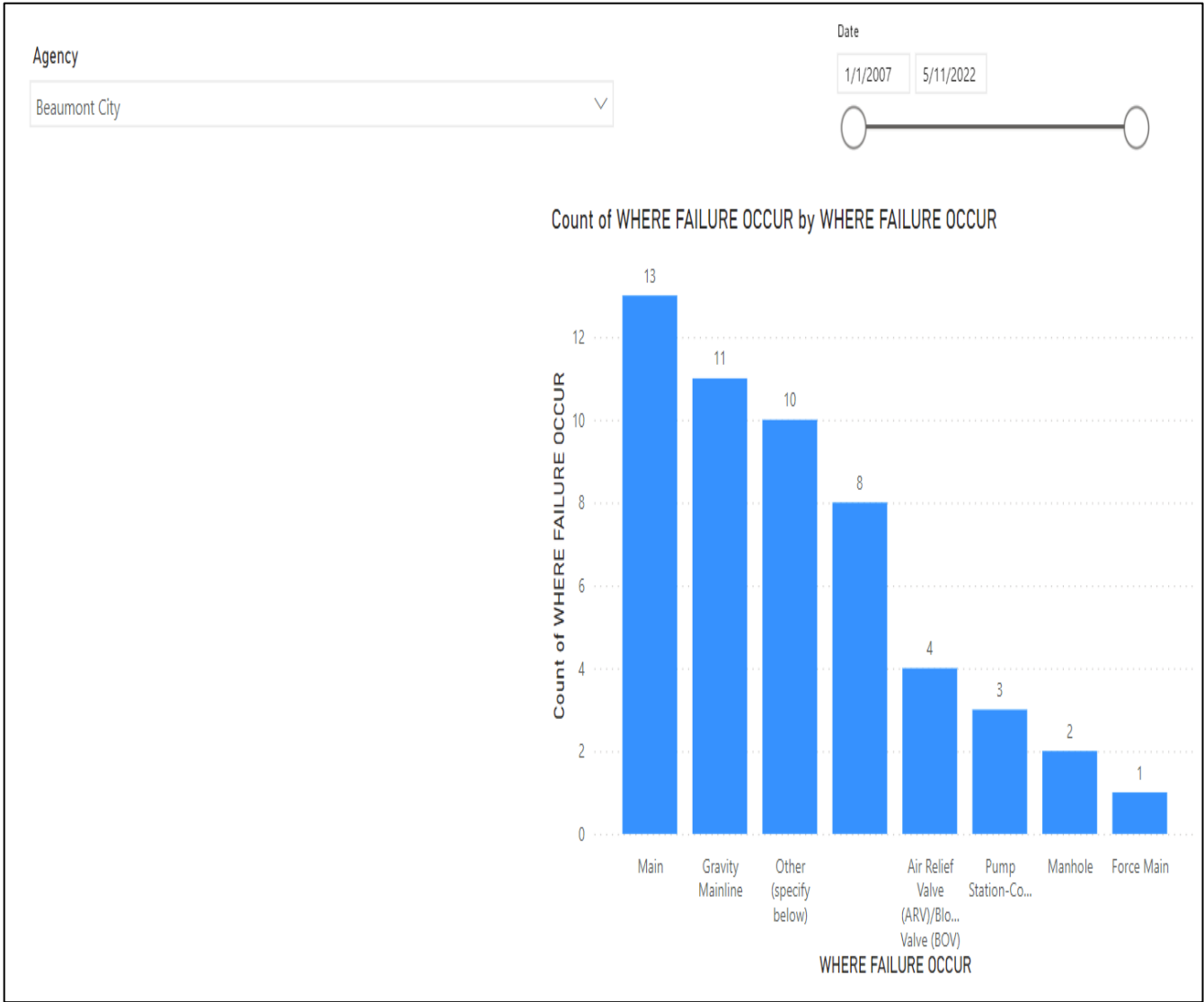


Figure 4.5 – City spill data by asset failure location (since 2007).

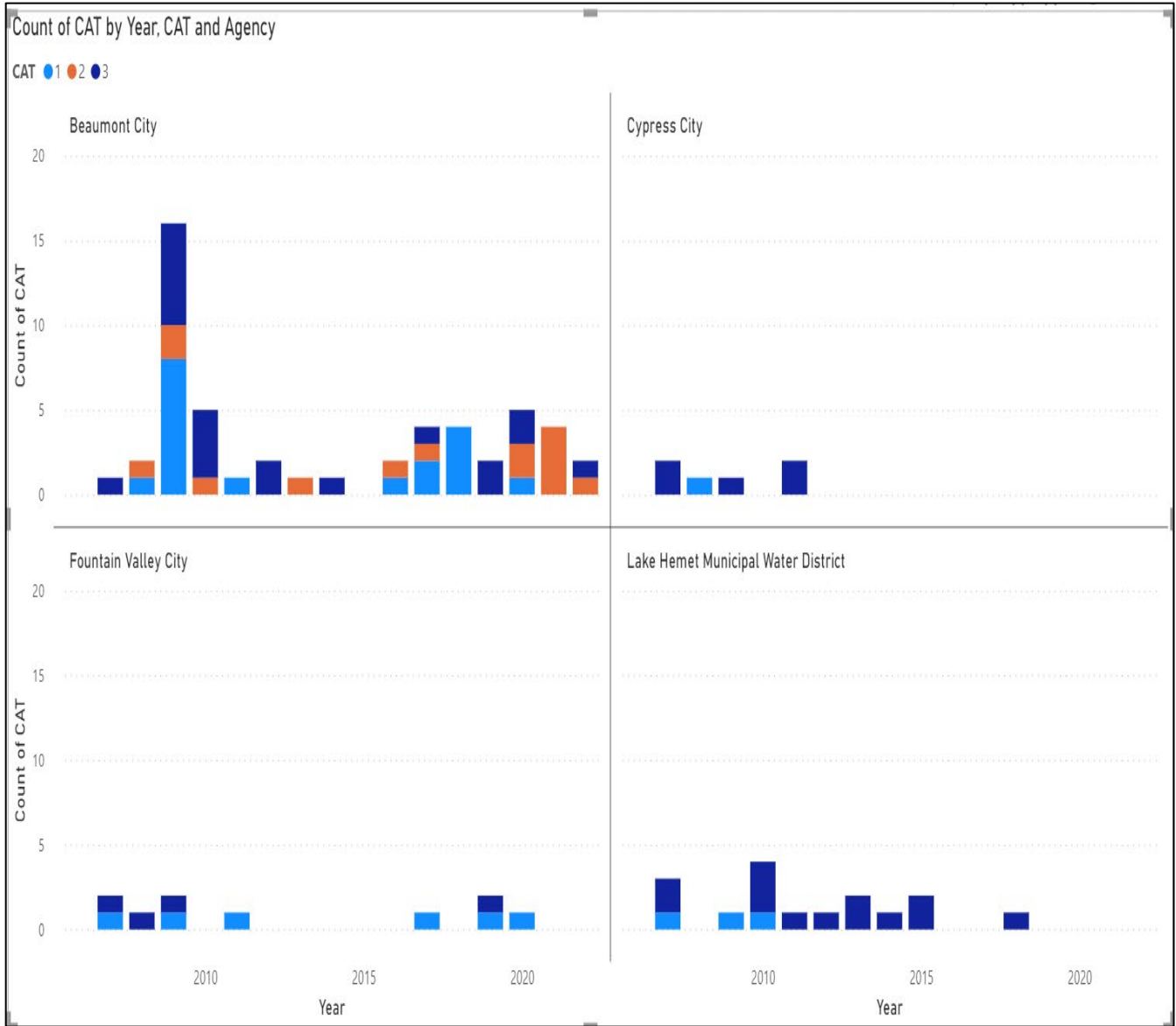


Figure 4.6 – City Counts of spills compared with other agencies in region (since 2007)

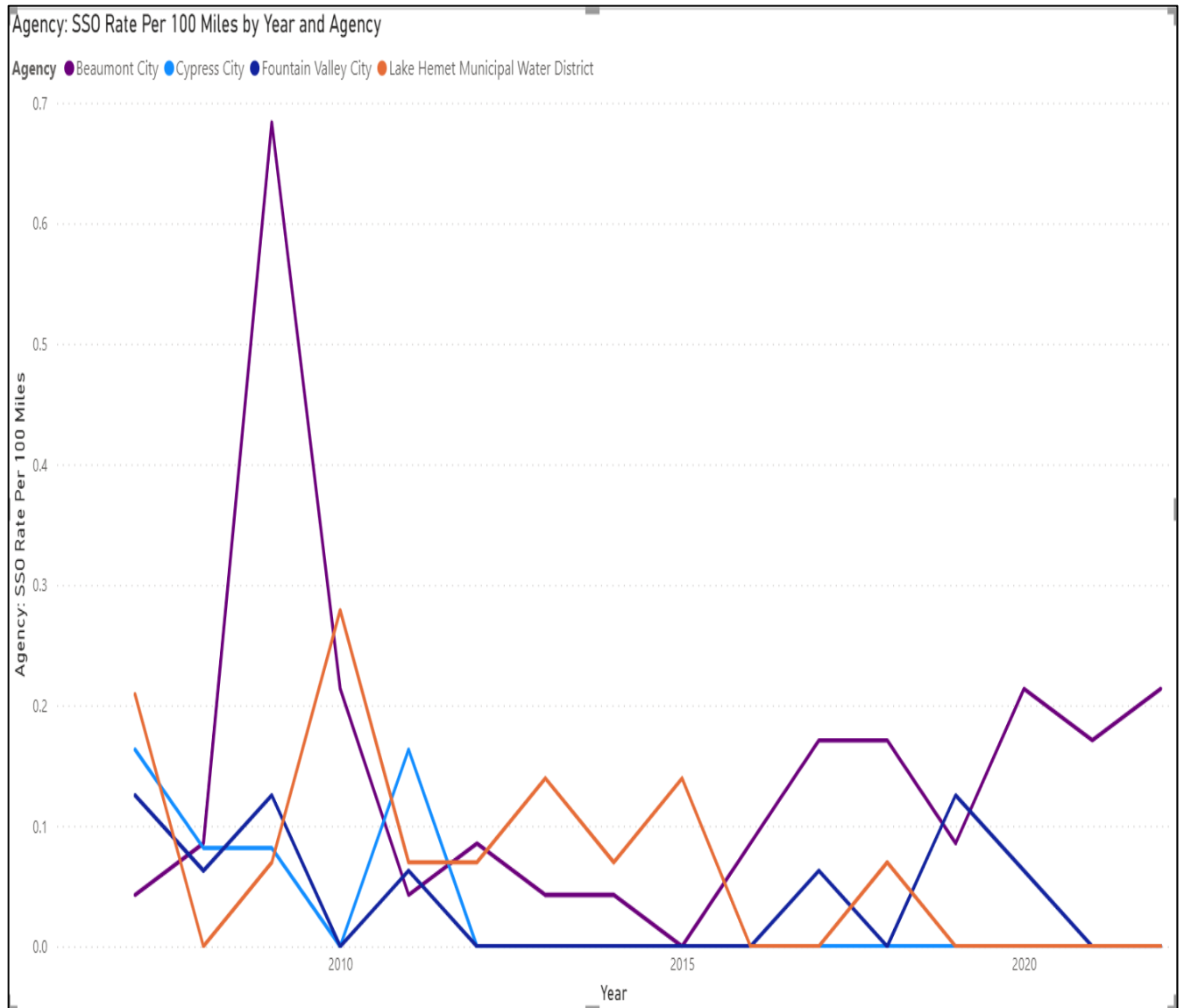


Figure 4.7 – City spill rates compared with other agencies in region (since 2007)

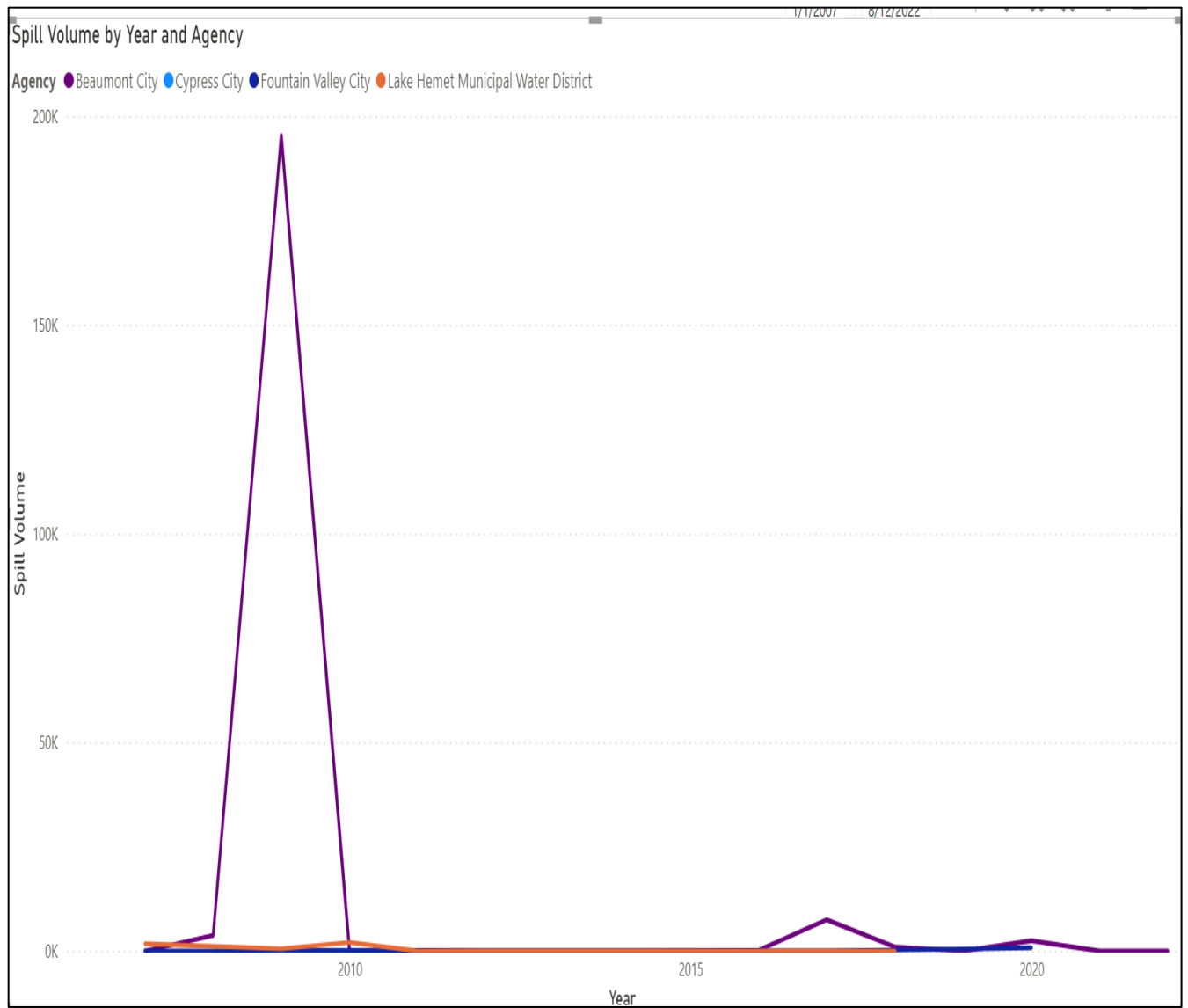


Figure 4.8 – City spill volume compared with other agencies in region (since 2007)

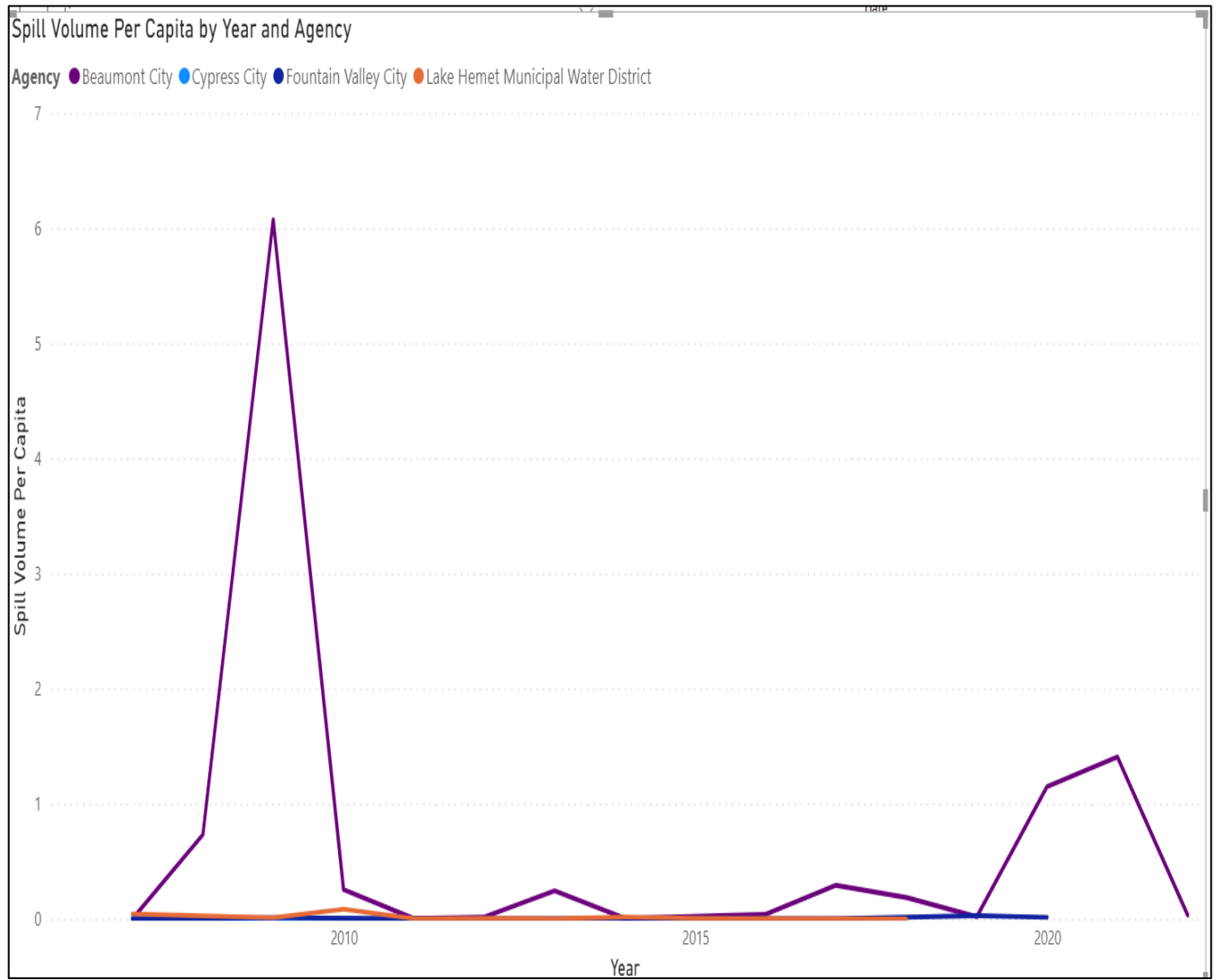


Figure 4.8 – City spill volume per capita compared with other agencies in region (since 2007)

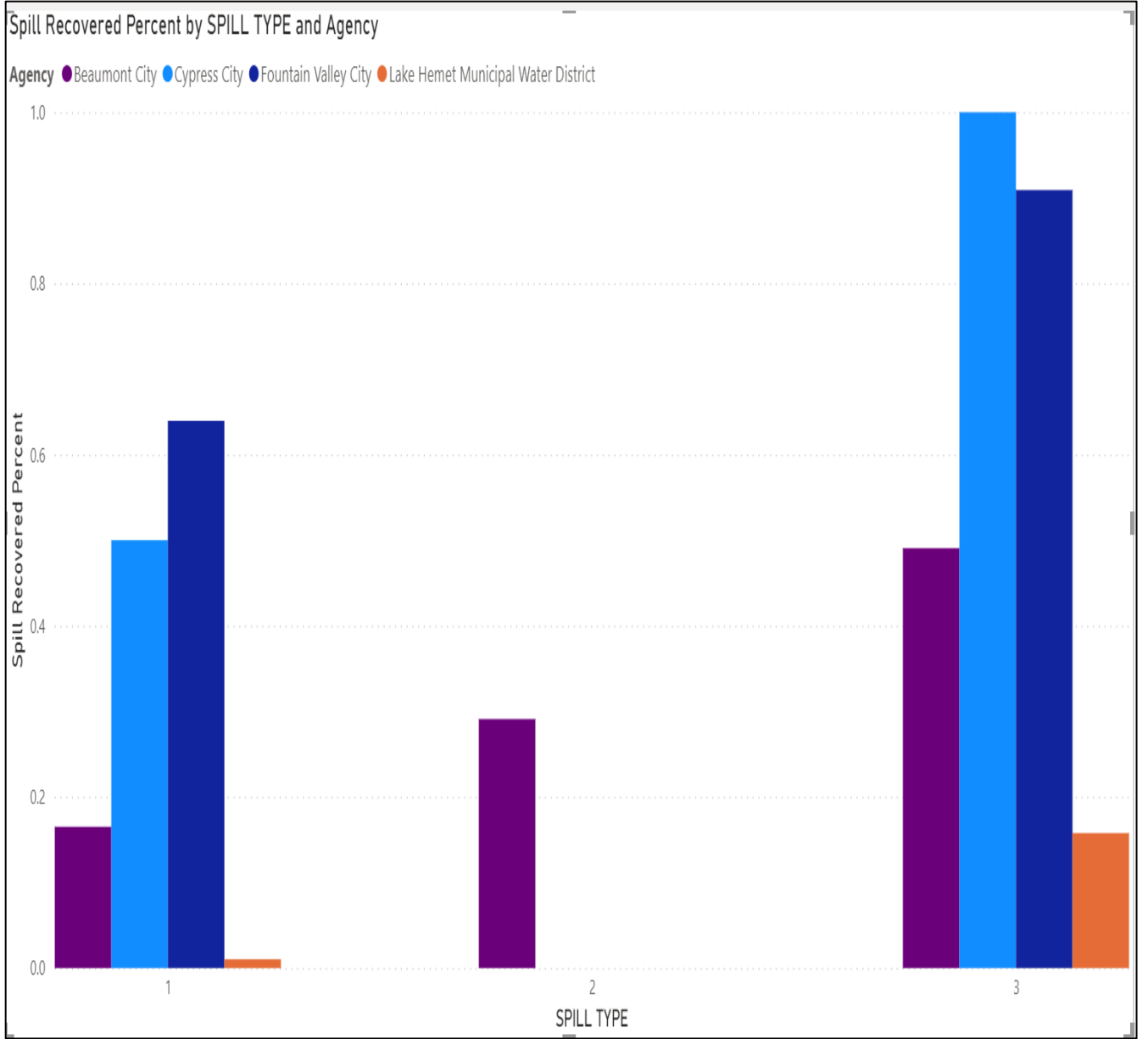


Figure 4.9 – City spill recovery percentage compared with other agencies in region (since 2007).

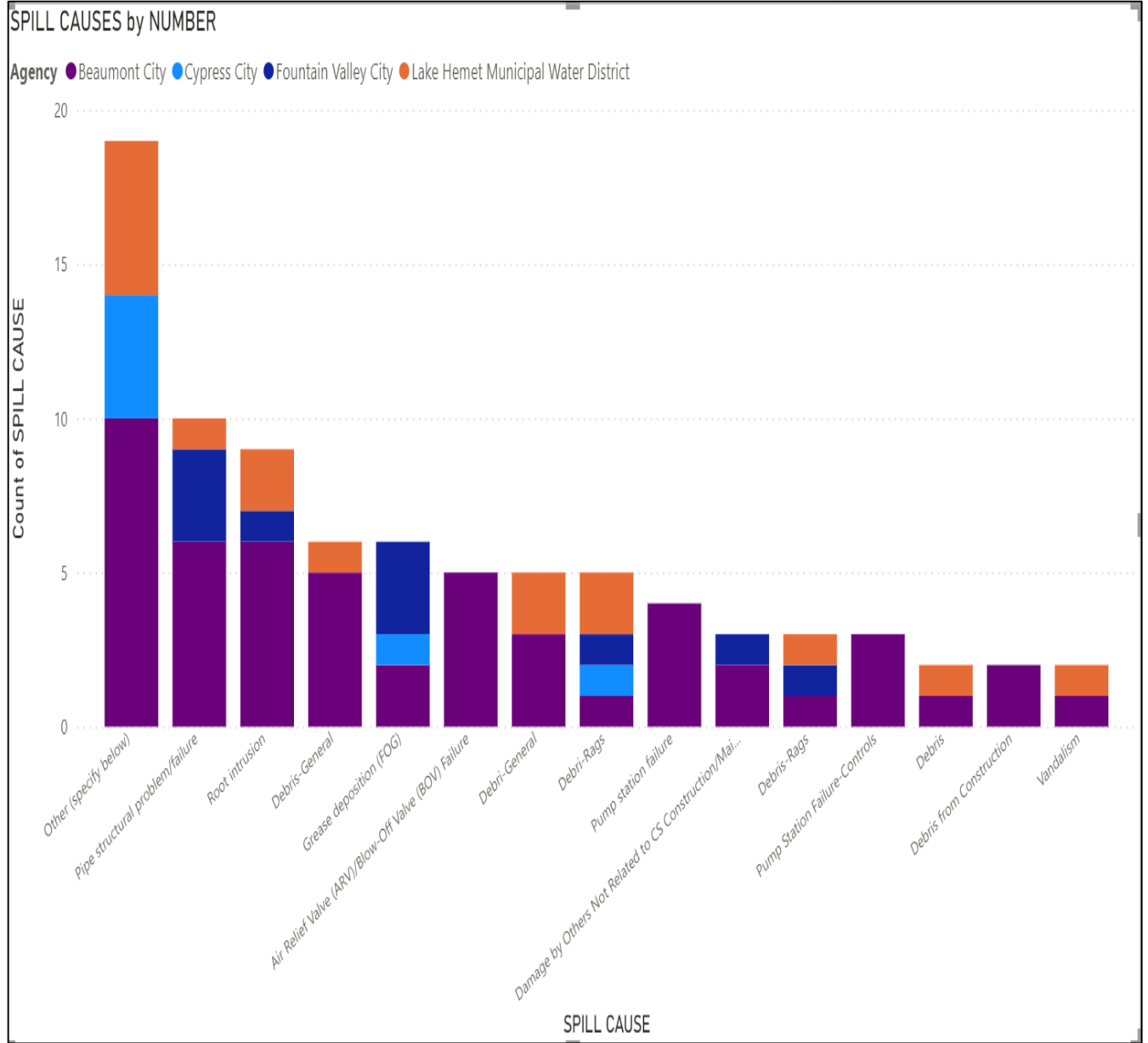


Figure 4.10 – City Spill data by asset failure location compared with other agencies in region (since 2007).

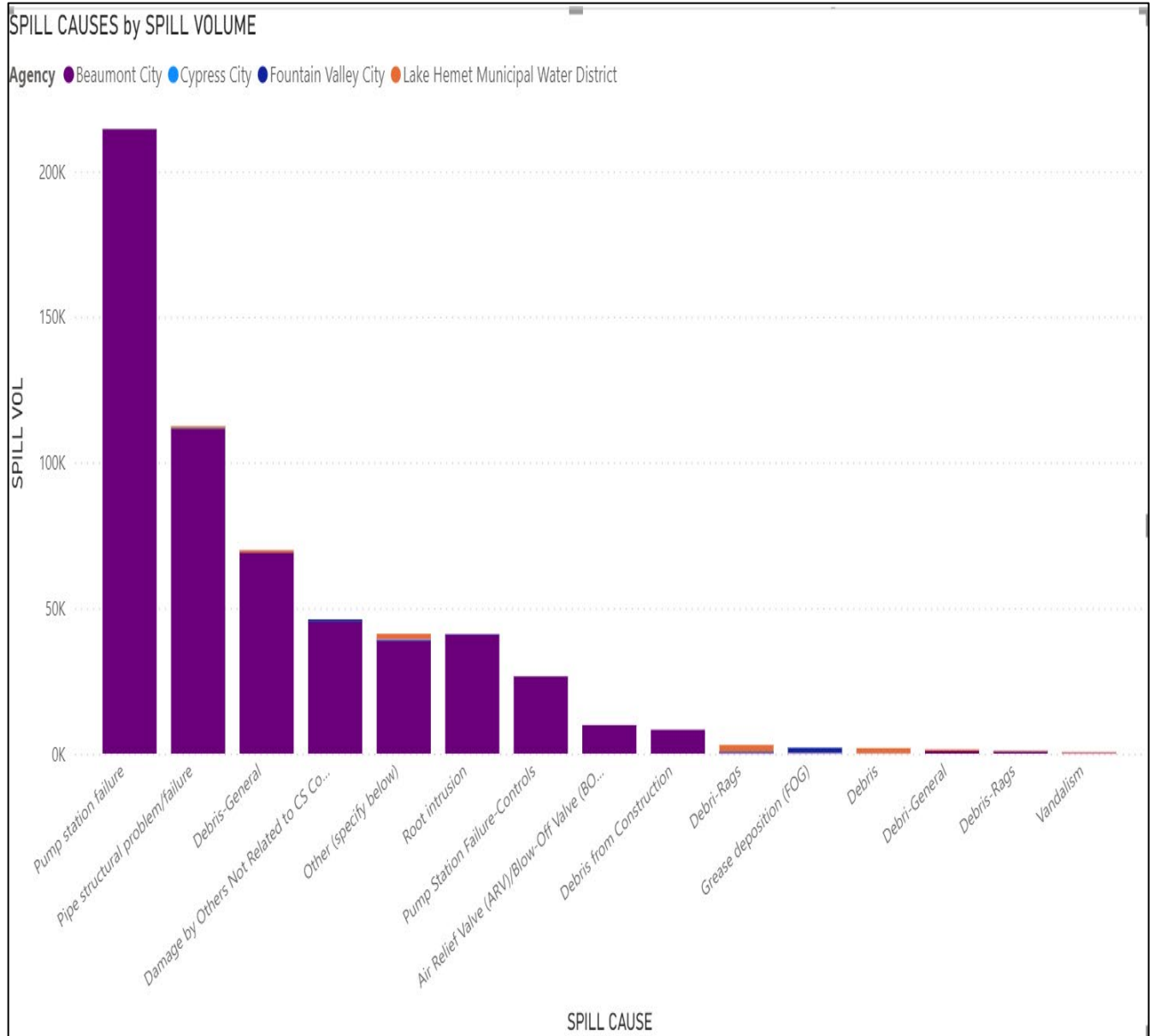


Figure 4.11 – City spill causes by volume compared with other agencies in region (since 2007).

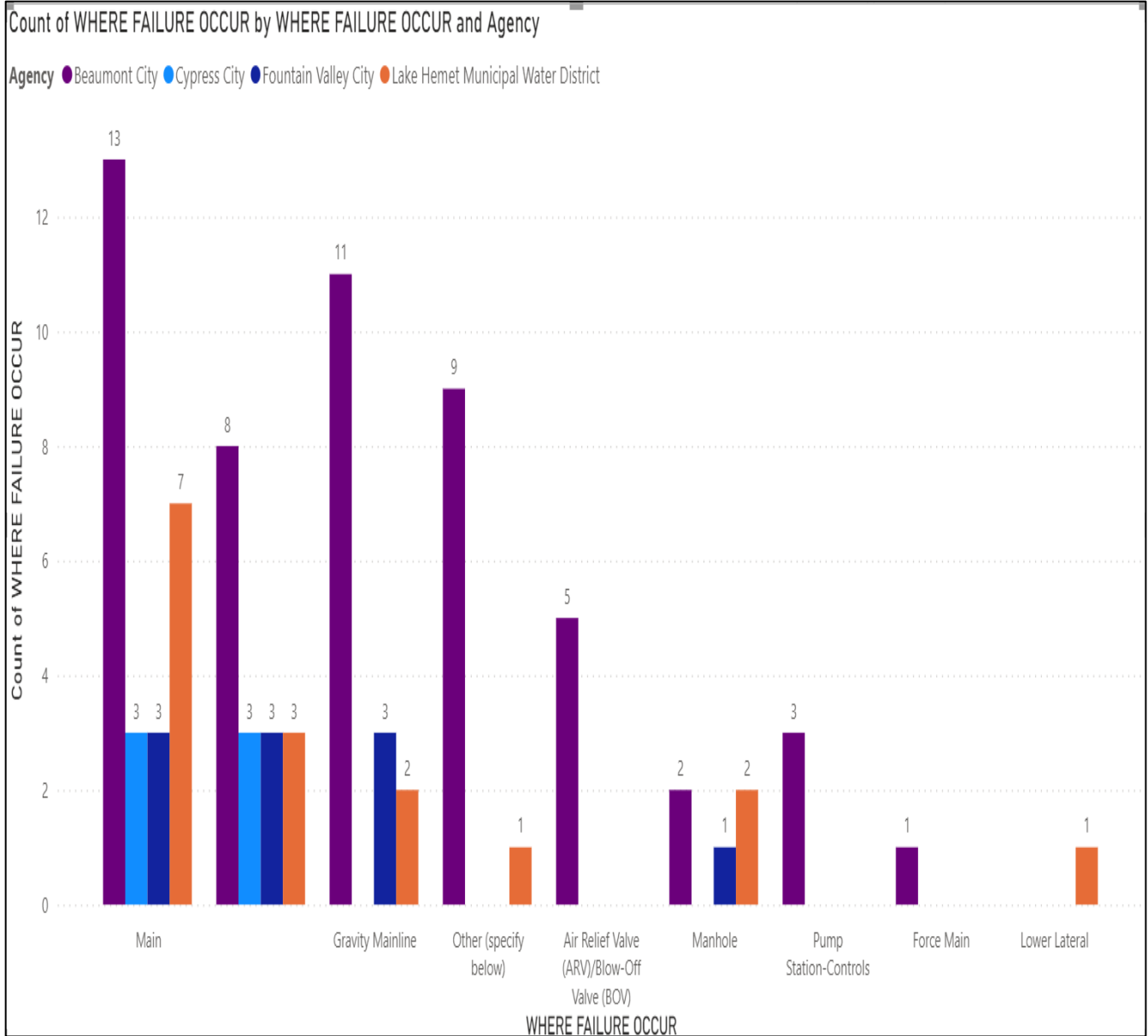


Figure 4.12 – City spills by where failure occurred compared with other agencies in region (since 2007).

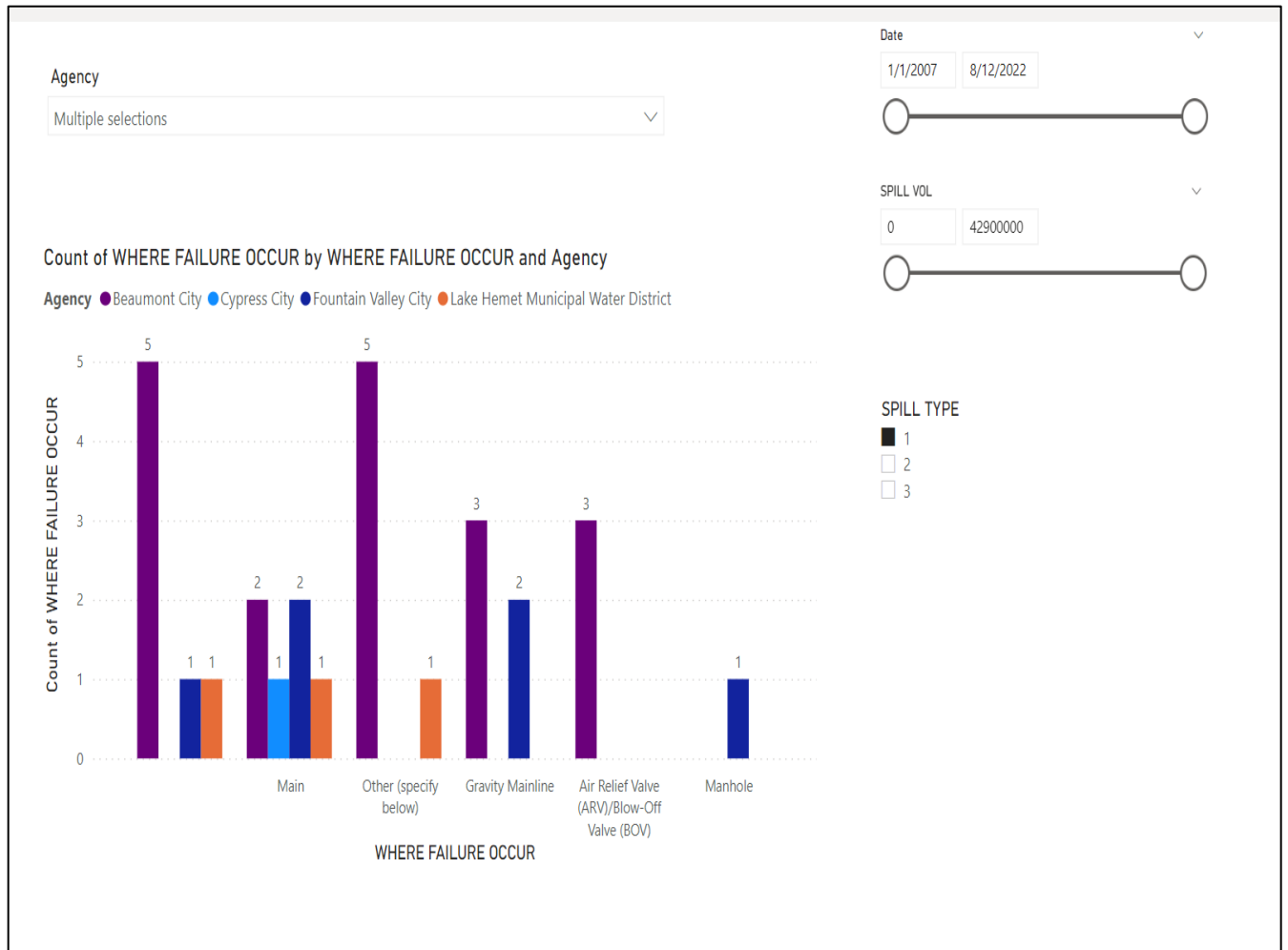


Figure 4.13 – City asset failure location for Category 1 compared with other agencies in region (since 2007).

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

Date Range: Start_Date (10/28/2021) End_Date (10/28/2022)

DRILLDOWN HISTORY: [\[GO BACK TO LISTING OF COLLECTION SYSTEMS\]](#)

Beaumont City CS

Agency: Beaumont City

General Information

Region	Place ID	Place Name	CS Category	Place Address	Place County
8	631243	Beaumont City CS	Municipal (Public)	550 East 6Th Beaumont, CA, 92223	Riverside

Collection System Spill Summary

Operational Indices: Beaumont City CS

	Spill Rate Index (spills/100mi/yr)								
	Category 1			Category 2			Category 3		
	Mainlines	Laterals	Not Specified	Mainlines	Laterals	Not Specified	Mainlines	Laterals	Not Specified
Beaumont City CS	0.0	N/A	0.0	2.56	N/A	0.0	0.51	N/A	0.0
State Municipal (Public) Average	3.43	N/A	1.6	2.41	N/A	5.2	5.28	N/A	1.86
Region Municipal Average	0.58	N/A	0.0	1.46	N/A	0.39	0.66	N/A	0.23

	Net Volume Spills Index (gallons/1000 Capita/yr)								
	Category 1			Category 2			Category 3		
	Mainlines	Laterals	Not Specified	Mainlines	Laterals	Not Specified	Mainlines	Laterals	Not Specified
Beaumont City CS	0.0	N/A	0.0	1449.71	N/A	0.0	10.84	N/A	0.0
State Municipal (Public) Average	1518.02	N/A	18661.62	503.74	N/A	2713.18	91.83	N/A	17.81
Region Municipal Average	15.06	N/A	0.0	172.88	N/A	209.49	0.9	N/A	0.09

Figure 4.14 – CIWQS spill performance data for City compared with other agencies in region and state (since 2007).



Appendix 5 — List of City Certified Spill Reports in CIWQS

SSO Public Report - Detail Page

Here is the detail page of your SSO public report search for the selected region, responsible agency, or collection system. These results correspond to the following search criteria:

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

- Agency (**Beaumont City**)
- Spill Type (**sso_cat1_2_3**)

The table below presents important details for all sewage discharge locations, as submitted through individual SSO reports, which meet the search criteria selected. If data is not shown for a particular field, it means the Enrollee did not provide the information and was not required to do so. To view the entire SSO report for a specific sewage discharge location, please select the corresponding EVENT ID.

DRILLDOWN HISTORY:

REGION: 8

EVENT ID	Region	Responsible Agency	Collection System	SSO Category	Start Date	SSO Vol	Vol of SSO Recovered	Vol of SSO Reached Surface Water	SSO Failure Point	WDID
728717	8	Beaumont City	Beaumont City CS	Category 3	2007-04-10 10:00:00.0	100	50	0	Main	8SSO10543
728782	8	Beaumont City	Beaumont City CS	Category 2	2008-02-09 09:00:00.0	36,000	0	0	Main	8SSO10543
730624	8	Beaumont City	Beaumont City CS	Category 1	2008-02-10 10:40:00.0	3,750	0	3,750	Lfit station	8SSO10543
731709	8	Beaumont City	Beaumont City CS	Category 3	2009-01-11 13:30:00.0	200	0	0		8SSO10543
734948	8	Beaumont City	Beaumont City CS	Category 2	2009-03-12 08:00:00.0	30,000	10,000	0	Pump station force main	8SSO10543
735718	8	Beaumont City	Beaumont City CS	Category 1	2009-03-29 00:00:00.0	50,000	30,000	1,000		8SSO10543
735896	8	Beaumont City	Beaumont City CS	Category 1	2009-04-02 08:00:00.0	30,000	20,000	8,000		8SSO10543
741977	8	Beaumont City	Beaumont City CS	Category 3	2009-07-22 12:22:00.0	500	450	0	Main	8SSO10543
741993	8	Beaumont City	Beaumont City CS	Category 2	2009-07-22 06:00:00.0	5,000	0	0	Failure of lift station caused by 3/8" line that comes from discharge side of pump breaking. Water filled drywell either overwhelming or failing the sump pump. water level in drywell rose to level of shorting out electrical components in drywell, including controls, and communication equipment. Both wetwell and drywell filled to overflowing.	8SSO10543
741994	8	Beaumont City	Beaumont City CS	Category 3	2009-07-25 06:00:00.0	650	0	0	Main	8SSO10543
743409	8	Beaumont City	Beaumont City CS	Category 1	2009-08-18 15:00:00.0	1,500	0	1,500		8SSO10543
743480	8	Beaumont City	Beaumont City CS	Category 1	2009-08-20 06:00:00.0	2,000	0	2,000	(ARV) Relief valve in line for pump station prior to force main (discharge side of pump)	8SSO10543
744193	8	Beaumont City	Beaumont City CS	Category 1	2009-09-02 00:00:00.0	3,000	0	3,000		8SSO10543
744978	8	Beaumont City	Beaumont City CS	Category 1	2009-09-22	10,000	0	10,000	Lift Station	8SSO10543

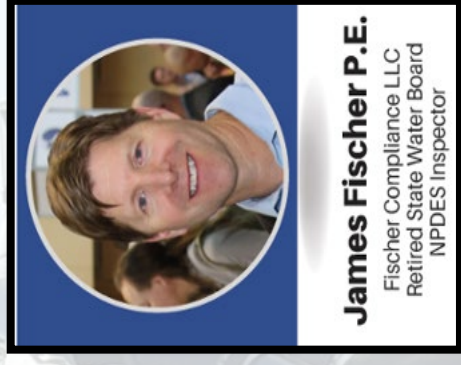
					00:00:00.0					
746863	8	Beaumont City	Beaumont City CS	Category 3	2009-11-18 08:30:00.0	50	0	0		Main 8SSO10543
746905	8	Beaumont City	Beaumont City CS	Category 1	2009-11-19 14:00:00.0	250	240	10		Main 8SSO10543
747311	8	Beaumont City	Beaumont City CS	Category 3	2009-12-03 13:00:00.0	350	300	0		Main 8SSO10543
747666	8	Beaumont City	Beaumont City CS	Category 1	2009-12-18 11:30:00.0	195,750	300	195,450		8SSO10543
747977	8	Beaumont City	Beaumont City CS	Category 3	2009-12-24 11:00:00.0	150	125	0		8SSO10543
748384	8	Beaumont City	Beaumont City CS	Category 3	2010-01-12 12:00:00.0	100	95	0	ARV bleed off valve connecting boot failed spraying some of the water onto surface at lift station instead of returning it to wetwell	8SSO10543
752164	8	Beaumont City	Beaumont City CS	Category 2	2010-05-03 09:06:00.0	12,816	12,000	0	Lift station force main	8SSO10543
753837	8	Beaumont City	Beaumont City CS	Category 3	2010-06-23 07:00:00.0	300	225	0		8SSO10543
754320	8	Beaumont City	Beaumont City CS	Category 3	2010-06-30 05:00:00.0	150	0	0		Main 8SSO10543
758145	8	Beaumont City	Beaumont City CS	Category 3	2010-10-25 07:00:00.0	425	350	0		Main 8SSO10543
760181	8	Beaumont City	Beaumont City CS	Category 1	2011-01-04 10:00:00.0	200	0	200		Main 8SSO10543
781525	8	Beaumont City	Beaumont City CS	Category 3	2012-05-21 15:23:00.0	200	150	0		Main 8SSO10543
783295	8	Beaumont City	Beaumont City CS	Category 3	2012-07-10 12:22:00.0	700	0	0		Main 8SSO10543
790496	8	Beaumont City	Beaumont City CS	Category 2	2013-01-17 14:15:00.0	13,211	13,211	0		Main 8SSO10543
806013	8	Beaumont City	Beaumont City CS	Category 3	2014-05-08 12:20:00.0	270	270	0		Manhole 8SSO10543
831985	8	Beaumont City	Beaumont City CS	Category 1	2017-01-21 13:30:00.0	7,500	0	7,500	At lateral elbow connection at manhole at 22 feet depth.	8SSO10543
837527	8	Beaumont City	Beaumont City CS	Category 2	2017-07-23 21:35:00.0	3,000	0	0	Gravity Mainline	8SSO10543
841577	8	Beaumont City	Beaumont City CS	Category 1	2017-11-13 13:02:00.0	4,650	0	4,650	Gravity Mainline	8SSO10543
841745	8	Beaumont City	Beaumont City CS	Category 3	2017-11-20 16:44:00.0	700	700	0	Gravity Mainline	8SSO10543
846338	8	Beaumont City	Beaumont City CS	Category 1	2018-04-08 11:46:00.0	3,000	1,000	1,000	Gravity Mainline	8SSO10543
846494	8	Beaumont City	Beaumont City CS	Category 1	2018-04-13 06:19:00.0	700	200	500	Gravity Mainline	8SSO10543
849772	8	Beaumont City	Beaumont City CS	Category 1	2018-07-29 09:12:00.0	3,200	0	200	Air Relief Valve (ARV)/Blow-Off Valve (BOV)	8SSO10543
858853	8	Beaumont City	Beaumont City CS	Category 3	2019-06-06 15:30:00.0	750	150	0	Gravity Mainline	8SSO10543
862108	8	Beaumont City	Beaumont City CS	Category 3	2019-10-14 14:00:00.0	250	225	0	Gravity Mainline	8SSO10543
867086	8	Beaumont City	Beaumont City CS	Category 3	2020-05-09	70	65	0	Gravity Mainline	8SSO10543

867138	8	Beaumont City	Beaumont City CS	Category 3	12:00:00.0 2020-05-30 13:50:00.0	100	90	0	Pump Station-Controls	8SSO10543
867754	8	Beaumont City	Beaumont City CS	Category 2	2020-07-02 11:24:00.0	19,350	500	0	Pump Station-Controls	8SSO10543
870400	8	Beaumont City	Beaumont City CS	Category 1	2020-11-13 08:40:00.0	5,000	1,500	2,500	Contractor's actions over-filled gravity thickener	8SSO10543
870539	8	Beaumont City	Beaumont City CS	Category 2	2020-11-20 11:00:00.0	37,800	25,600	0	Gravity Mainline	8SSO10543
874134	8	Beaumont City	Beaumont City CS	Category 2	2021-05-18 18:15:00.0	7,080	4,000	0	Pump Station-Controls	8SSO10543
877323	8	Beaumont City	Beaumont City CS	Category 2	2021-10-31 12:00:00.0	57,750	0	0	Gravity Mainline	8SSO10543
878088	8	Beaumont City	Beaumont City CS	Category 2	2021-12-14 09:50:00.0	4,000	1,000	0	Gravity Mainline	8SSO10543
878250	8	Beaumont City	Beaumont City CS	Category 2	2021-12-22 09:55:00.0	7,500	100	0	Manhole	8SSO10543
880403	8	Beaumont City	Beaumont City CS	Category 3	2022-03-15 11:00:00.0	600	0	0	Force Main	8SSO10543
881700	8	Beaumont City	Beaumont City CS	Category 2	2022-06-10 08:00:00.0	1,200	450	0	Air Relief Valve (ARV)/Blow-Off Valve (BOV)	8SSO10543
883730	8	Beaumont City	Beaumont City CS	Category 2	2022-10-04 06:04:00.0	13,440	2,100	0	Gravity Mainline	8SSO10543

The current report was generated with data as of: Thursday, February 09, 2023



Appendix 6 — Board Presentation for Certification of 2022 SSMP



City of Beaumont

Sewer System Management Plan (SSMP) Board Presentation

Feb 28, 2023

3230 Arena Blvd, STE 245, Sacramento, CA 95834 (jim@fischercompliance.com)

1. Contents

1. Background
2. Findings
3. Conclusions



1. Background

Thank You City Team Members:

1. Thaxton VanBelle, SSMP Project Manager
2. Laurie Miller/Sunshine Sanchez, SSMP Project Facilitators
3. Jack Huntsman, SSMP Source Control/Ordinances
4. Kevin Lee, SSMP/Operations
5. Jerome Moledor, SSMP/Operations

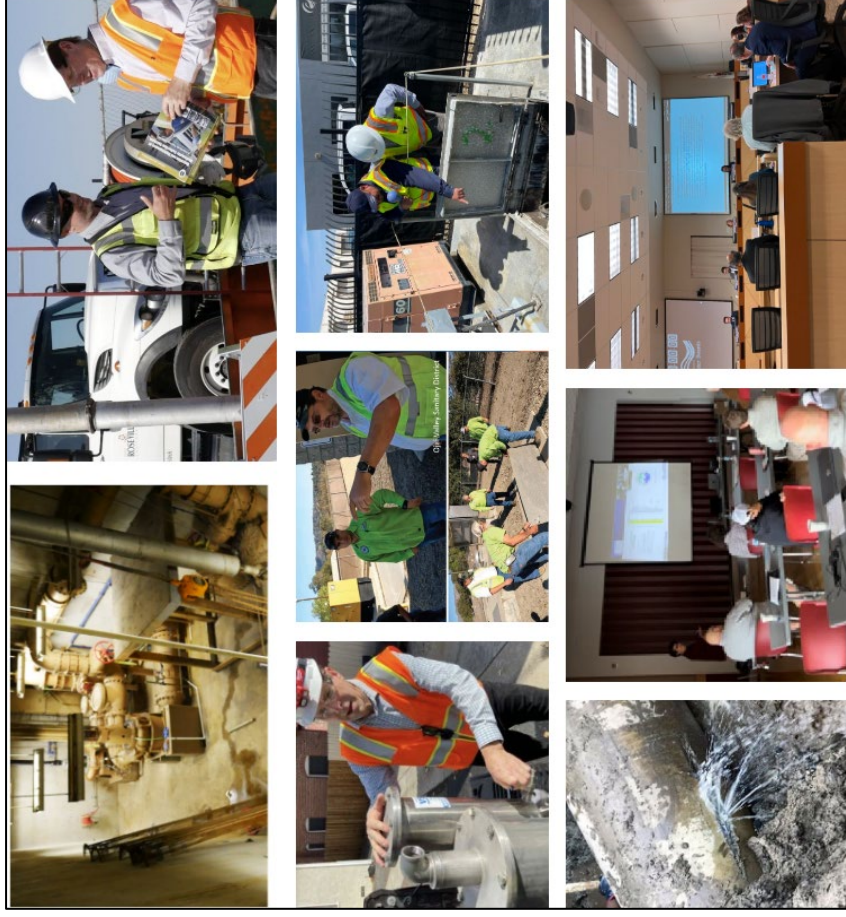


1. Background



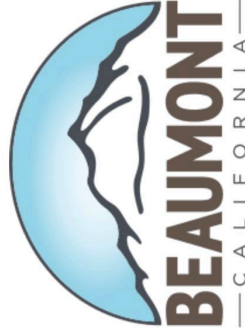
SSMP Board Presentation (2/28/2023)

- About Fischer Compliance LLC



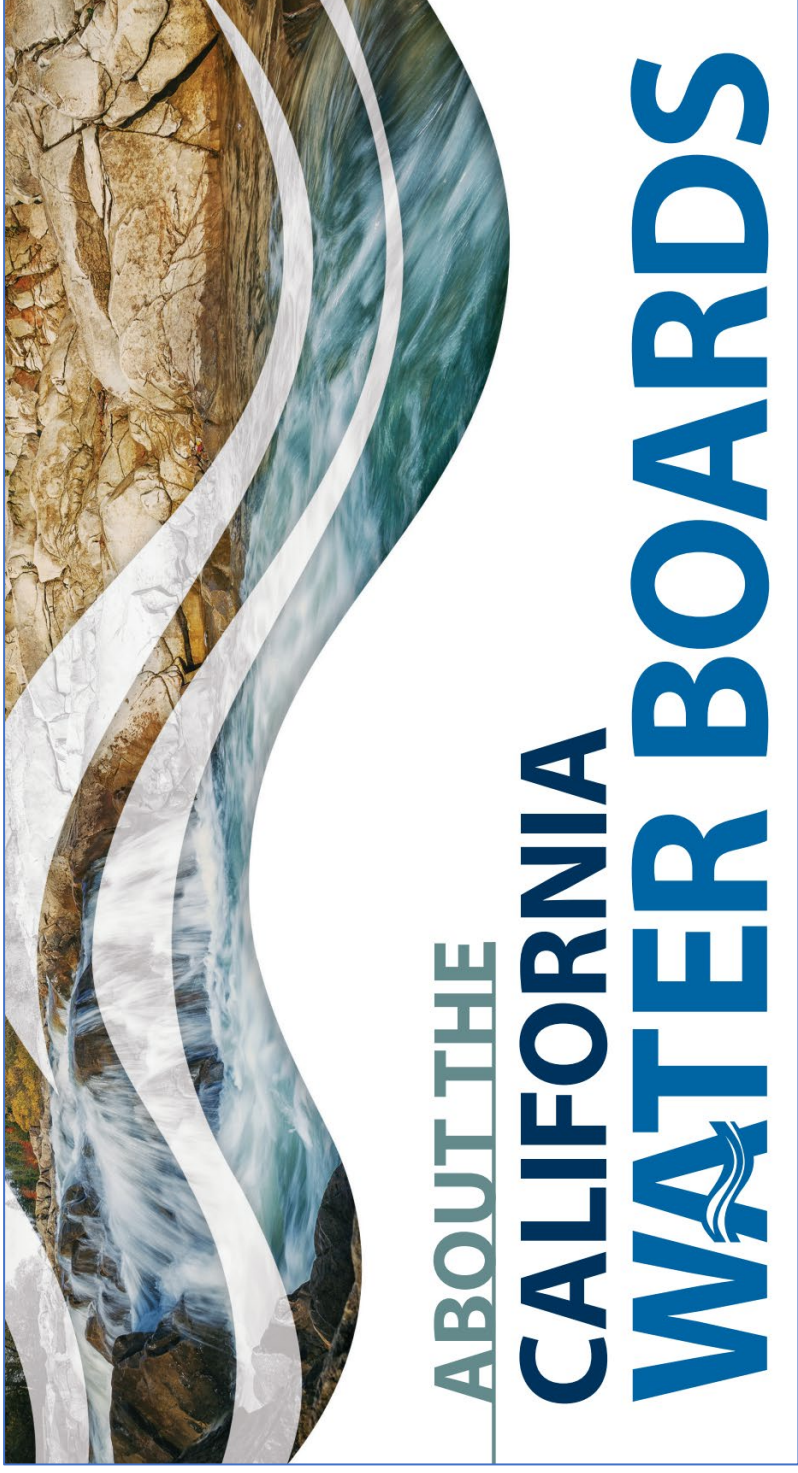
FISCHER COMPLIANCE, LLC is a professional water and wastewater regulatory compliance consulting company, delivering high quality compliance consulting services to public municipalities.

- 30+ years regulatory compliance experience
 - 12+ years California lead for Sanitary Sewer Systems
 - Waste Discharge Requirements (SSS WDRs)
 - Clean Water Act Inspector – U.S. EPA
- Subject matter expert in wastewater collection systems and California Water Board Enforcement Policy



1. Background

- About the State/Regional Water Boards



1. Background

- About the State/Regional Water Boards



OUR MISSION: To preserve, enhance, and restore the quality of California's water resources and drinking water for the protection of the environment, public health, and all beneficial uses, and to ensure proper water resource allocation and efficient use, for the benefit of present and future generations.

1. Background

- About the Water Board Order

State Water Resources Control Board Order No. 2006-0003-DWQ

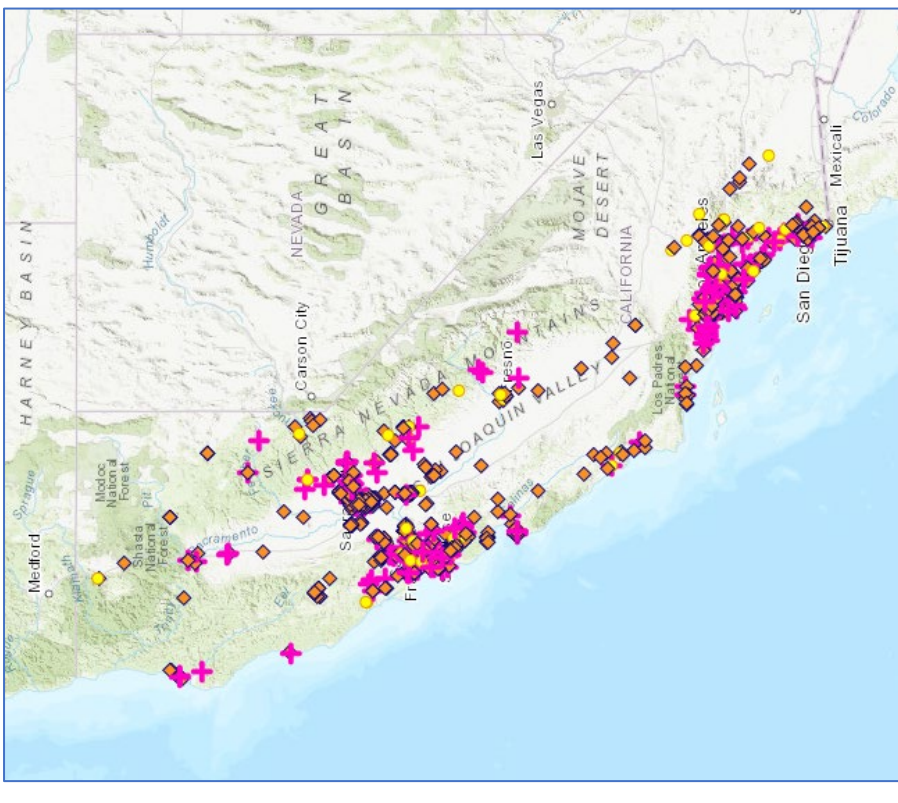
- “Statewide General Waste Discharge Requirements for Sanitary Sewer Systems”

1. Background

- About the Water Board Order (2006-003-DWQ)

Why was the Order issued?

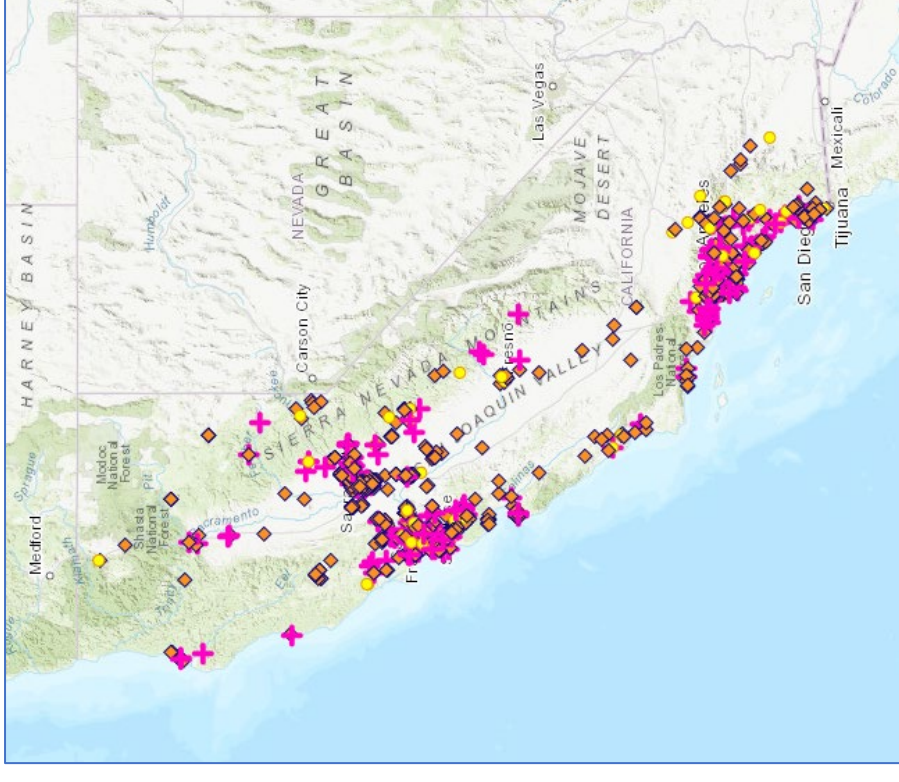
- Major causes of Spills include:
 - Grease Blockages; Root Blockages; Debris Blockages
 - Sewer Line Flood Damage
 - Manhole Structure Failures
 - Vandalism
 - Contractor Caused damage
 - Pump Station Mechanical Failures, Power Outages
 - Excessive Storm or Ground Water (I&I)
 - Lack of Proper Operation & Maintenance
 - Insufficient Capacity



1. Background

- About the Water Board Order (2006-003-DWQ)

- ✓ Sanitary sewer systems experience periodic failures resulting in discharges that may affect waters of the state.
- ✓ Sanitary Sewer Overflows (SSOs) often contain suspended solids, pathogenic organisms, toxic pollutants, nutrients, oxygen-demanding organic compounds, oil, grease and other pollutants.
- ✓ SSOs may cause a public nuisance, threaten public health, adversely affect aquatic life and impair the recreational use and aesthetic enjoyment of surface waters



1. Background

- About the Water Board Order (2006-003-DWQ)

What is the Sewer System Management Plan (SSMP)?

- A **system-specific plan** for the **proper and efficient management, operation and maintenance of sanitary sewer systems** that takes into consideration **risk management and cost benefit analysis**.
- It must contain a **spill response plan** that establishes standard procedures for immediate response to an SSO in a manner designed to **minimize water quality impacts and potential nuisance conditions**

1. Background

- About the Water Board Order (Large Enforcement Case)

Administrative Civil Liability Complaint No. R6V-2016-0042 Issued to City of Victorville for Series of Sanitary Sewer Overflow Events, San Bernardino County

On July 1, 2016, the Water Board Prosecution Team issued Administrative Civil Liability Complaint No. R6V-2016-0042 (Complaint) to the City of Victorville (City) in response to alleged violations associated with six sanitary sewer overflow events and City sewer collection system planning, operations, and maintenance. The Water Board Prosecution Team and City subsequently entered into settlement negotiations, during which three additional sanitary sewer overflow events occurred. A proposed settlement order was subsequently prepared and issued for public comment.

[Show More](#)

1. Background

- About the City SSMP Project



1. Background

- About the City SSMP Project

1. Address past violations and enforcement action (2009/2010)

Santa Ana Regional Board Order No. **R8-2009-0068** resolving 8 separate sewage spills

- 8 individual spills (72,000 gallons spilled to surface waters)
- Failure to develop/implement comprehensive SSMP
- Penalty Assessed: \$99,000

1. Background

- About the City SSMP Project

1. Address past violations and enforcement action (2009/2010)

Santa Ana Regional Board Order No. **R8-2010-007** resolving 1 large sewage spill

- 402,700 gallons spilled to surface water/failure of Marshall Creek Lift Station
- Failure to develop SSMP/take proactive steps to prevent spills/implement comprehensive operations/maintenance plan
- Penalty Assessed: \$111,000

1. Background

- About the City SSMP Project
 - 2. Perform Gap Analysis
 - a. Review the required elements of the SSMP
 - b. Review City of Beaumont's sewer collection system programs, activities & performance
 - c. Identify actions and activities required to achieve compliance
 - d. Memorialize in a report (will serve as audit report)

1. Background

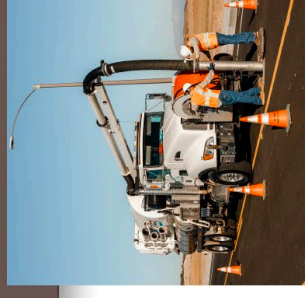
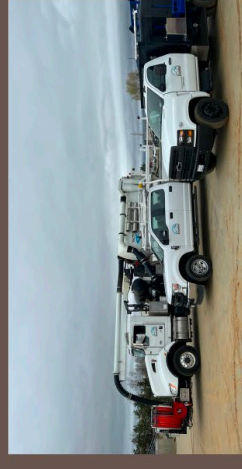
- About the City SSMP Project
- 3. Develop First City Sewer System Management Plan (SSMP)
 - a. Meet or exceed regulatory requirements
 - b. Develop Key Performance Indicators (KPI's) to measure effectiveness
 - c. Provide Orientation to staff

2. Findings

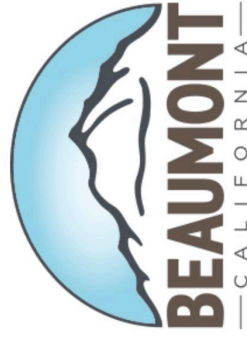
- New City SSMP (Dec 2022)



2022



SEWER SYSTEM MANAGEMENT PLAN



2. Findings

- Implementation of SSMP still deficient
- Insufficient pipe Rehabilitation and Repair Program
- Substantial future investments in equipment and procedures needed



SEWER SYSTEM MANAGEMENT PLAN (SSMP)

4.9 Pipe Repair Program

The objective of the pipe repair program is to address issues that could potentially cause blockages and/or spills in a timely manner. The City uses an on-call service agreement with contractors to perform repairs on an emergency basis.

4.10 Prioritization Program

4.10.1 Requirement

Develop a rehabilitation and replacement plan to identify and prioritize system deficiencies and implement short-term and long-term rehabilitation actions to address each deficiency. The program should include regular visual and TV inspections of manholes and sewer pipes, and a system for ranking the condition of sewer pipes and scheduling rehabilitation. Rehabilitation and replacement should focus on sewer pipes that are at risk of collapse or prone to more frequent blockages due to pipe defects. Finally, the rehabilitation and replacement plan should include a capital improvement plan that addresses proper management and protection of the infrastructure assets. The plan shall include a time schedule for implementing the short and long-term plans plus a schedule for developing the funds needed for the capital improvement plan.

4.10.2 Responsible Person

Public Works Director

4.10.3 Compliance

The City's 2021 Master Plan has identified Capital Improvement projects and has a plan and schedule in place.

The City's 2021 Master Plan developed a Rehabilitation and Replacement for lift stations.

The City currently does not have a Rehabilitation and Replacement Program in place to address gravity pipes and manholes. The City does not routinely inspect CCTV pipes and is not able to perform condition assessment.

3. Conclusions

- Conclusions

- ✓ The City SSMP document fully complies with WDR Provision D.11.
- ✓ Full implementation of the City SSMP is still lacking in some areas.
- ✓ City wastewater team continues to improve SSMP implementation and address compliance gaps.

3. Conclusions

- Conclusions

- ✓ 2022 “Reissued” WDR Requirements (Order No. 2022-0103-DWQ):
 - ✓ Re-Enrollment, due between 4/5/23 to 6/4/23
 - ✓ Submittal of Legally Responsible Official information, due 6/4/23

3. Conclusions

- Conclusions

- ✓ **2022 “Reissued” WDR Requirements (Order No. 2022-0103-DWQ):**
- ✓ Update City SSMP/Emergency Response Plan, due 6/4/23
- ✓ Upload City SSMP to State Water Board’s California Integrated Water Quality System (CIWQS), due 6/4/23



Fischer Compliance LLC
3230 Arena Blvd, STE 245
Sacramento, CA 95834
(916) 606-5275
jim@fischercompliance.com

Contact Information

