

Sanitary Sewer Management Plan (SSMP)

City of Claremont



June 2020

Executive Summary

On May 2, 2006, the State Water Resources Control Board (SWRCD) adopted Statewide General Waste Discharge Requirements and Monitoring and Reporting Program (Order) by issuing Order No. 2006-003 (Appendix A). The regulations in the Order were born out of growing concern about the water quality impacts of sanitary sewer overflows (SSOs), particularly those that cause beach closures or pose serious health and safety or nuisance concerns. Two major components of the waste discharge requirement (WDRs) are the requirements that owners and operators of publicly owned collection sewer systems one (1) mile long or greater



apply for coverage under the Order and that they develop and implement a Sewer System Management Plan (SSMP).

The City of Claremont (City) filed its Notice of Intent (NOI) application with the SWRCB in August 2007 in compliance with the Order. The City subsequently received its California Integrated Water Quality System (CIWQS) username and password for accessing the state's on-line reporting database. The City then completed its "collection system questionnaire" and will file there all subsequent updates and all required SSO reporting.

In accordance with the Order, the SSMP must be updated every five (5) years to reflect any significant updates or program changes. This SSMP has been updated to reflect the changes to the City's Sanitary Sewer System program. The SSMP is divided into thirteen chapters, which closely align with the respective provisions contained in the Order. Each of the following chapters addresses one of the key elements of the SSMP program requirements.

EXE	CUTIVE SUMMARY	1
<u>CHA</u>	APTER 1. GOALS OF THE SEWER MANAGEMENT PLAN	<u>5</u>
<u>CHA</u>	APTER 2. SSMP DEVELOPMENT AND IMPLEMENTATION	6
<u>CHA</u>	APTER 3. SANITARY SEWER SYSTEM ORGANIZATION	7
3.1	INTRODUCTION	7
3.2	COMMUNITY SERVICES DEPARTMENT ORGANIZATION & MISSION	
3.3	COMMUNITY DEVELOPMENT DEPARTMENT	8
3.4	CITY SSMP RESPONSIBILITIES	8
3.5	RESPONSIBLE & AUTHORIZED REPRESENTATIVES	10
3.6	CITY & SEWER SYSTEM MANAGEMENT, ORGANIZATION & STRUCTURE	10
3.7	ORGANIZATION CHART AND RESPONSIBILITIES	11
3.7.1	DESCRIPTION OF RESPONSIBILITIES	11
3.8	CHAIN OF COMMUNICATION FOR SSO REPORTING	14
<u>CHA</u>	APTER 4. LEGAL AUTHORITY	<u> 15</u>
4.1	Legal Authority - Generally	15
4.2	LEGAL AUTHORITY TO PREVENT ILLICIT DISCHARGES INTO THE SANITARY SEWER SYSTI	см 15
4.3	LEGAL AUTHORITY TO REQUIRE SEWERS AND CONNECTIONS BE PROPERLY DESIGNED A	ND
CONS	STRUCTED	15
4.4	LEGAL AUTHORITY TO ENSURE ACCESS FOR MAINTENANCE, INSPECTION, OR REPAIRS	16
4.5	LEGAL AUTHORITY LIMITING THE DISCHARGE OF FOG AND OTHER DEBRIS THAT MAY (
	CKAGE	
4.6	LEGAL AUTHORITY TO ENFORCE ANY VIOLATION OF SEWER ORDINANCES	16
<u>CHA</u>	APTER 5. OPERATION AND MAINTENANCE PROGRAM	<u> 17</u>
5.1	DESCRIPTION OF THE SANITARY SEWER SYSTEM	17
5.2	PREVENTIVE MAINTENANCE PROGRAM	
5.2.1	SEWER LINE AND MANHOLE INSPECTION	
5.2.2		
5.2.3		
5.2.4		
5.2.5		
5.2.6		
5.2.7		
5.3	REHABILITATION AND REPLACEMENT PLAN	
 5.3.2	Condition Assessment Program	
5.3.3		
5.5.5	EXCITMENT MINIMULENTINGE TIND INET EAGEWEENT I OLICI	

5.4	TRAINING FOR FIELD OPERATIONS PERSONNEL AND CONTRACTORS	19
<u>CHA</u>	PTER 6. OVERFLOW EMERGENCY RESPONSE PLAN	<u> 20</u>
6.1	INTRODUCTION	20
6.2.1	Emergency Response Procedures	21
6.2.2	RESPONSIBILITIES OF SSO RESPONSE PERSONNEL	21
6.2.3	DESCRIPTION OF RESPONSIBILITIES	22
6.3	EMERGENCY RESPONSE PROCEDURES NOTIFICATIONS AND REPORTING REQUIREMENTS	23
6.3.1	DURING BUSINESS HOURS	23
6.3.2	AFTER BUSINESS HOURS (INCLUDING WEEKENDS & HOLIDAYS)	23
6.3.3	REPORTING REQUIREMENTS	23
6.4	EQUIPMENT FOR EMERGENCY RESPONSE	28
6.5	RECORDS, RECORD RETENTION POLICIES & PROCEDURES AND DATA MANAGEMENT	29
<u>CHA</u>	PTER 7. FATS, OIL, AND GREASE (FOG) CONTROL PROGRAM	<u> 30</u>
7.1	INTRODUCTION	30
7.2	PUBLIC EDUCATION OUTREACH PROGRAM	30
7.3	THE LEGAL AUTHORITY TO PROHIBIT DISCHARGES TO THE SYSTEM AND IDENTIFY	
MEAS	URES TO PREVENT SSOS AND BLOCKAGES CAUSED BY FOG	30
7.4	REQUIREMENTS FOR GREASE REMOVAL DEVICE INSTALLATION AND DESIGN STANDARDS;	
MAIN	TENANCE, BMP, RECORD KEEPING, AND REPORTING REQUIREMENTS	31
7.5	AUTHORITY TO INSPECT GREASE-PRODUCING FACILITIES, ENFORCEMENT AUTHORITIES, A	ND
EVIDE	ENCE OF ADEQUATE STAFFING TO INSPECT AND ENFORCE THE FOG ORDINANCE	31
7.6	CLEANING SCHEDULE FOR IDENTIFIED FOG-PRONE SEWER SEGMENTS	32
<u>CHA</u>	PTER 8. DESIGN AND PERFORMANCE PROVISION	<u> 33</u>
8.1	DESIGN & CONSTRUCTION STANDARDS	33
8.1.1	New Facility Standards	33
8.1.2	Rehabilitation Standards	33
8.2	INSPECTION, TESTING & APPROVAL OF NEW & REHABILITATED SYSTEM COMPONENTS	33
<u>CHA</u>	PTER 9. SYSTEM EVALUATION AND CAPACITY ASSURANCE PLAN	<u> 34</u>
9.1	System Evaluation	34
9.2	DESIGN CRITERIA AND REQUIRED CAPACITY	34
9.2.1	PIPE CAPACITY	34
9.2.2	DESIGN CAPACITY	35
9.3	CAPACITY ENHANCEMENT MEASURES	35
9.4	SEWER CAPACITY	36
9.4.1	REQUIRED CAPACITY – COMPUTATION FROM AVERAGE DAILY FLOW	36
<u>CHA</u>	PTER 10. MONITORING, MEASUREMENT, AND PROGRAM	
MOL	DIFICATION	<u> 37</u>
10.1	Monitoring	37

10.2	EFFECTIVENESS EVALUATION	37
10.3	Program Modification	
10.4	SSO TRENDING & REDUCTIONS	37
<u>CHAI</u>	PTER 11. SSMP PROGRAM AUDITS/UPDATES	<u> 38</u>
11.1	SSMP Program Audit	38
11.2	SSMP CERTIFICATION	38
11.3	SMP MODIFICATION AND RE-CERTIFICATION	38
<u>CHAI</u>	PTER 12. COMMUNICATION PROGRAM	<u> 39</u>
COMMUNICATION		
SSMP AVAILABILITY		

Appendices:

- A Waste Discharge Requirements, Order No. 2006-0003, and Monitoring Program
- **B** City of Claremont Ordinance
- C CIWQS Website and General Reporting/Use Information
- D City of Claremont SSO Event Report Form (Template)
- E Annual SSO Location Map

-5

Chapter 1. Goals of the Sewer Management Plan

The Goals of this SSMP are to ensure the following:

- 1. That the City's sanitary sewer collection system facilities are properly operated, maintained, and managed to reduce the frequency and severity of sanitary sewer overflows (SSOs) and their potential impacts on public health, on safety, and on the environment;
- 2. That when SSOs occur, prompt action is taken to identify, contain, remove the cause, promptly report the event to appropriate regulatory authorities, and ensure that the public is adequately and timely notified;
- 3. That all SSOs and system deficiencies and remedial actions taken are well documented;
- 4. That the City's sewer system operators, employees, contractors, responders, or other agents are adequately trained and equipped to address an SSO event; and
- 5. That the City's sewer system is adequately designed, constructed, and funded to provide adequate capacity to convey base flows and peak flows while meeting or exceeding applicable regulations, laws, and the generally acceptable practices relative to sanitary sewer system operations and maintenance.

6

Chapter 2. SSMP Development and Implementation

As part of the SSMP development process, the City was required to prepare and incorporate schedule identifying regulatory into its SSMP Plan а and SSMP development/implementation deadlines and milestones. The City's SSMP Development Plan and Schedule met those deadlines found in the Order as based on the City's specific population and service area. Based on the 2018 American Community Survey, the City of Claremont has a population of 36,854.1 This information was provided in the City's initial Notice of Intent (NOI) for coverage under the Order as found in the City's application and payment of related permit fees. Table 1, included in Section 4, shows the City's SSMP Development Plan and Implementation Schedule. As also required by the Order, the City's plan has been approved by the City's governing board, the Claremont City Council. As with other parts of this document, the schedule and supporting information may be modified during later development.

¹ City population in year 2018 estimated at 35,854 (based on the 2018 American Community Survey 5-Year Estimates)

Chapter 3. Sanitary Sewer System Organization

3.1 Introduction

The sanitary sewer service in the City of Claremont (City) is managed and operated by the City of Claremont. The physical sewer collection infrastructure is owned by the City and consists of approximately 122 miles of gravity sewer lines, associated private laterals, related sewer manholes and/or clean-outs. The sewage collected from the City's sewer collection system is transported to a collection/interceptor main owned by the Sanitation Districts of Los Angeles County, District 21. Customers, including residential, multi-family, commercial, industrial, and governmental entities are billed for sanitary sewer service on their sanitation bill. Fees for sewage service are based on formulas and fees established by the City of Claremont. The City is solely responsible for the operation, control, and maintenance of the City's sanitary sewer system.

3.2 Community Services Department Organization & Mission

The City's Community Services Department is the primary department responsible for addressing SSOs. The Community Services Department is responsible for several primary service sectors: administration, sanitation, motor fleet, cemetery, and all facility, landscape, and infrastructure maintenance, including the sewer network. Administration provides general management and administrative functions for the Department. One Community Services Manager oversees administrative support and major enterprise operations (sanitation, motor fleet, storm and sewer networks, and cemetery) while a second Community Services Manager oversees all maintenance operations for minor street maintenance, street striping, streetlights, street signs, sidewalks, landscape and trees, facilities, and parks.

While the enterprise operations are performed primarily by in-house staff with supplemental contract services, a significant portion of maintenance operations is performed by outside contractors, particularly for major facility and infrastructure maintenance and repair. In-house maintenance staff is responsible for minor repairs to sidewalks, playground equipment, potholes, irrigation, sign replacement and installation, litter abatement, and inspections across all service areas, including the storm and sewer networks. With regard to the sewer system, staff camera and jet lines, monitor hot spots and contract with outside service providers for mainline videotaping, slip lining, any mainline repairs and vector services. Staff also monitors the condition of the storm network and contracts with outside service providers to clean inlets and culverts every fall and spring, prior to and following the rainy season.

The Department's administrative unit is responsible for a variety of general management and support functions, including:

- Managing various service contracts for infrastructure maintenance.
- Representing the Department at Committee, Commission, and City Council meetings.
- Responding to public inquiries regarding street and/or other public infrastructure maintenance and/or usage.
- Responding to citizen complaints or service requests, evaluating problems, and following up with the appropriate division, department, or staff to resolve and / or correct.
- Scheduling work, processing payments, inspecting work, obtaining quotes, and purchasing materials as necessary.

3.3 Community Development Department

The City's Community Development Department is organized in three primary divisions: Planning, Building, and Engineering. This Department maintains the integrity of the public right-of-way by overseeing the design of infrastructure, issuing permits, and inspecting construction activities, including the review of property development plans for offsite street storm drain and utility connections. The Community Development Department is dedicated to maintaining and improving the quality of life in Claremont by planning for future needs, promoting environmental quality, overseeing the development of the municipal infrastructure, managing capital improvement projects for new installations, and protecting health and safety.

The Planning Division is also responsible for the preparation of CEQA and NEPA environmental compliance documents for CIP projects.

3.4 City SSMP Responsibilities

The City is not a member of the Consolidated Sewer Maintenance District (CSMD) and is, therefore, solely responsible for all aspects of the SSMP. **Table 3.1.** reflects the actions and documents that have been developed by the City in support of the SSMP.

Program Element and Order (WDR) Section	SSO/WDR Completion Dates (<i>Population between 10,000 and 100,000</i>):	City
Application for Permit Coverage <i>Section C</i>	November 2, 2006	X
LRO, System Questionnaire, and Monthly Reporting Program ^{1, 2} Section G	January 2, 2007	X
SSMP Development Plan and Schedule <i>No specific Section</i>	November 1, 2007	X
Goals and Organization Structure Section D 13 (i) & (ii)	November 1, 2007	X
Overflow Emergency Response Program Section D 13 (vi) ^{3,4}		X
Legal Authority Section D 13 (iii)	May 1, 2009	X
Operation and Maintenance Program Section D 13 (iv)		X
Grease Control Program Section D 13 (vii) ⁵		X
Design and Performance Section D 13 (v)		X
System Evaluation and Capacity Assurance Plan <i>Section D 13 (viii)</i>	August 1, 2009	X
Final SSMP, incorporating all of the SSMP requirements <i>Section D 13</i> ⁶		X
SSMP Audits Section D 13(x)	June 2020	X
SSMP Update Section D 14	May 28, 2015 June 9, 2020	X

Table 3.1. City SSMP Responsibilities

3.5 **Responsible & Authorized Representatives**

As required by the Order, the names of the responsible and/or authorized representative(s), departments, and contractors responsible for SSMP compliance must be provided. **Table 3.2.** provides the contact information for the various responsible parties for compliance with the SSMP program. The City's designated official for this program is the City Manager. The City Manager is responsible for the overall execution of the compliance actions required under the WDRs. The City Manager has designated the Director of Community Services as the lead for program implementation. Additionally, the Director of Community Services is also responsible for the execution of all reports and correspondence as required under the Order.

Legally Responsible Official:	Telephone:	Mailing Address/Email:
Primary:		
Jeremy Swan, Community Services Director <u>City secondary/alternate LROs:</u>	(909) 399-5432	1616 Monte Vista Avenue Claremont, CA 91711-2319
Kristin Mikula, Community Services Manager	(909) 399-5431	1616 Monte Vista Avenue Claremont, CA 91711-2319

Table 3. 2. Authorized/Designated Responsible Officials

3.6 City & Sewer System Management, Organization & Structure

The City's Community Services Department is responsible for the overall maintenance of the City's sanitary sewer collection system while the Community Development Department is responsible for the overall design and capacity of the system. The total adopted operating budget for system operation, maintenance, and administration for the 2019/2020 - Fiscal Year is \$1,009,058. In addition, \$329,320 is included in the Capital Improvement Budget for capital projects. The City has 3.25 full-time equivalent dedicated management and operation positions directly involved in sewer system maintenance. City staff administers the City's sewer collection system operation, provides engineering evaluation of proposed and existing sewer facilities, administers preventive maintenance and sewer construction programs, and oversees the maintenance of the sewer collection system facilities and related records and plans.

The City's Community Development Department plays a critical role in preventing the overcapacity of the sanitary sewer system through the planning and development process. This Department also enforces building and construction standards in existing, new, or

redevelopment projects. As noted, this Department includes Engineering, Building and Safety, and Planning Divisions. Its mission is to protect the public's health, safety, and welfare through responsive and objective application and enforcement of adopted and mandated laws and regulations that govern development and construction. The Department also promotes development activities that protect the historical and cultural resources of the City.

3.7 Organization Chart and Responsibilities

The following organization charts show the structure and relationships of all City administrative, management, and field positions. The City's general organizational structure and departments most responsible for sewer system functions are presented in Figure 3.1. Below are general descriptions of the City's positions and related responsibilities, including other related support divisions, departments, and/or organizations.

3.7.1 Description of Responsibilities

The description of the roles and responsibilities of each position related to the SSMP are as follows:

- **City Council** The City Council is responsible for establishing new and amending existing laws governing the operations of the City's sewer system. The City Council has final authority over all aspects of City operations. The City Council generally delegates the overall day-to-day operations to the City Manager.
- **City Manager** The City Manager is the City's primary and original Legally Responsible Official (LRO) for development and implementation of the City's SSMP. The City Manager generally delegates the day-to-day function of the sewer system to the City's Director of Community Services and the Director of Community Development. Each is responsible for portions of the City's sewer system planning, management, operation, and functioning.
- Director of Community Services The Director of Community Services is responsible for the maintenance of the sanitary sewer system consistent with regulatory requirements and best practices. Where and when necessary, the Director of Community Services oversees emergency sewer repair activities, special studies, investigations, and reports concerning sewer infrastructure, claims, and litigations relating to sewer system operations. Further the Director of Community Services reports to and can act on behalf of the City Manager and is the responsible contact for all SSO/SSMP issues, concerns, and/or obligations.
- Director of Community Development The Director of Community Development is responsible for providing information to the general public on Building, Planning, Zoning, Housing, Economic Development, and Redevelopment Programs, including the design, capacity and construction of the sanitary sewer system. The department issues permits, inspects new construction, and ensures compliance with the applicable planning, zoning, and building code requirements.

- **City Engineer** The City Engineer assists the City's Director of Community Development in establishing City infrastructure standards and directing general engineering reviews and installations, including evaluating work by private and public operations. The City Engineer reports to and can act on behalf of the Director of Community Development with regard to the sanitary sewer system.
- Administrative and Office Assistants (All Departments) They assist all departments in the preparation of and responses to complaints, including sanitary sewer overflows, departmental budgets, correspondence, maintenance scheduling, coordination, and similar day-to-day business functions. This staff is also responsible for the sewer service charge direct assessments.
- **Contractor Services** Some of the compliance actions called for by the Order will be provided by private contractors. The City utilizes an outside contractor when a rotating camera is needed for CCTV inspections, snaking lines when jetting is not effective, slip-lining and repairing mainlines, and for vector services.



3.8 Chain of Communication for SSO Reporting

The chain of communication for reporting SSOs, from receipt of a complaint or other reliable information source to reporting to appropriate regulatory agencies, is described. Specifically, the City can currently receive notification of SSO occurrences via the following methods:

Contact	Telephone
City Hall	(909) 399-5460
Community Services	(909) 399-5431
Community Services Director	(909) 399-5431
Community Services Manager	(909) 399-5431
Maintenance Supervisor	(909) 399-5431
Maintenance Crewleader	(909) 399-5431
Mainteannce Craftsworker I	(909) 399-5431
Maintenance On-Call After Hours: through Police Department Dispatch	(909) 626-1296

The City investigates the nature of all complaints received and where they are found, noting whether the overflow is a Class 1 or Class 2. The City will only respond to an SSO from a private lateral that enters a stormwater conveyance system or waters of the U.S.

Chapter 4. Legal Authority

4.1 Legal Authority – Generally

The City of Claremont's legal authority to own and operate a sanitary sewer system is derived from its incorporation as a City.

In compliance with the WDR, this Chapter highlights the City's legal authority to do the following: (1) prevent illicit discharges into the sanitary sewer system; (2) require that sewers and connections be properly designed and constructed; (3) ensure access for maintenance, inspection, or repairs; (4) limit the discharges of FOG and other debris that may cause blockage; and (5) enforce any violation of sewer ordinances or City Municipal Codes (CMC). The legal authorities for the specific areas stipulated in the WDRs are covered in Chapters 5 and 13 of the Municipal Code and are discussed below:

4.2 Legal Authority to Prevent Illicit Discharges into the Sanitary Sewer System

In accordance with the City's Municipal Code, Title 13.16.010, the City has adopted Title 20 – Utilities of the Los Angeles County (LACO) Code – which regulates sanitary sewers and industrial waste in the county as its Sanitary Sewer and Industrial Waste Use Ordinance. The LACO Plumbing Code Title 28, Sections 306.2, 714.2, and 1101.2 prohibits the unauthorized discharge of rain, surface, or subsurface water (inflows) into the collection system. LACO Code, Title 20, Section 20.36.010, prohibits the illegal dumping of offensive or damaging substances such as chemicals, debris, etc. Other Sections of the Code that prohibit various forms of illicit discharges are 20.24.020, 20.24.200, 20.32.080, 20.32.650, etc. This program consists of sewer line cleaning and the maintenance program, which includes closed-circuit television (CCTV) and other mechanisms to detect illicit discharges. The LACO Title 20, Section 20.24.080, requires that property owners be responsible for maintenance of their house laterals, including eliminating cracks, tree roots, and other debris. These laws combined constitute the City's legal authority to prevent illicit discharges into the sewer system.

4.3 Legal Authority to Require Sewers and Connections Be Properly Designed and Constructed

Municipal Code - Title 13.04.020, requires that the design of new main line sewers and pumping plants respectively in the City obtain the proper permit from the City's Engineering Department. Title 13.04.040 of the Code requires that the design of new house laterals also conform to the requirements of the Code. In accordance with Municipal Code Title 13, Section 13.04.020, the construction of a collection sewer system

is required to conform to all the requirements prescribed by the City's Engineering Department.

4.4 Legal Authority to Ensure Access for Maintenance, Inspection, or Repairs

Municipal Code – Title 13.02.080 gives the City the legal right to set requirements to allow unrestricted maintenance access to the public sewer infrastructure located in private property. Access for inspection, maintenance, and/or repairs is secured through the City's enforcement of the requirement for legally recorded sewer easements around all public sewer appurtenances located in private properties. Sewer easements are detailed on the sewer construction plans and are thoroughly reviewed by the City for adequacy in size and accuracy of alignment during the plan check process. Plan checkers take special care to ensure that maintenance crews will have sufficient access for the movement of equipment and materials for both routine and emergency repair or construction work on the system.

4.5 Legal Authority Limiting the Discharge of FOG and Other Debris That May Cause Blockage

Municipal Code - Title 5.05 gives the City the legal authority to regulate the discharges of fats, oils, and grease from facilities within the City of Claremont. Title 5.05.120 requires the installation of grease interceptors at all food facilities within the City that cannot demonstrate adequate control of FOG. Title 5.05.050 prohibits the discharge of FOG and other substances that may, among other things, clog, obstruct, fill, or necessitate frequent repairs, cleaning out, or flushing of sewer facilities in the City's sewer system. Municipal Code - Title 5.05.120 gives the Director of Community Services the authority to require the installation of treatment facilities, including grease interceptors, at any facility that generates FOG in the amount that will damage or increase the maintenance costs of the sewer collection system.

4.6 Legal Authority to Enforce any Violation of Sewer Ordinances

Municipal Code – Title 13.16.010, through the adoption of Division 2 – Sanitary Sewers and Industrial Waste of the Code gives the City the legal authority to inspect main line sewers, sewage pumping plants, interceptors, etc., as often as deemed necessary, to ascertain whether such facilities are maintained and operated in accordance with the municipal and County of Los Angeles Code.

The City of Claremont's Director of Community Services is empowered to enforce all the requirements prescribed in Division 2 – Sanitary Sewers and Industrial Waste of the Code. The Municipal Code, Section 13.16.040, allows criminal penalties for any violations of the Sewer and Industrial Waste Ordinances.

Chapter 5. Operation and Maintenance Program

5.1 Description of the Sanitary Sewer System

The City of Claremont's sanitary sewer system consists of mainly 8-, 10-, 12-, and 15-inch collector pipes, which form two major collection systems in the City, one north of Foothill Blvd and the other south of Foothill Blvd. It covers the areas served as indicated in the sewer maps and sewer database system. All sewage collected in the City's sewer system is carried to trunk lines located on Towne Avenue, Garey Avenue, and Mountain Avenue. These trunk lines belong to the Los Angeles County Sanitation



District No. 21. According to the City's 1987 Sewer Master Plan, the City's sewer system conveys approximately 20.465 cfs of flow.

In order to ensure that the existing system has adequate capacity to serve existing and new development for the City, in 2015 the City's Engineering Division commissioned a new Sewer Master Plan assessment.

5.2 Preventive Maintenance Program

The City's maintenance programs are funded through levying of an annual sewer service charge currently at \$68.00/year per dwelling, per equivalent single-family dwelling unit otherwise called a sewage unit (s.u.). The total annual revenue generated for the various sewer programs through the \$68.00 per s.u. charge is approximately \$837,000. These funds are managed and administered by the City and reviewed and adjusted as necessary to raise sufficient revenues for the maintenance programs.

The following is a summary of the preventive maintenance activities implemented by the City of Claremont:

5.2.1 Sewer Line and Manhole Inspection

The interior and exterior of manholes are inspected on an as needed basis for any structural defects, sewage flow condition, presence of vermin or rodents, deleterious industrial waste, odors, and any signs of unusual settlement around the manholes and along sewer alignments.

5.2.2 Manholes and Siphons

On an as needed basis, these facilities are inspected and cleared of any stoppages or flow restrictions.

5.2.3 Sewer Line Cleaning

Sewer lines are cleaned by hydro jet or rodding. Frequency of cleaning is response driven. Sewer lines known to accumulate grease, garbage grinds, or sand known as "hot spots" are inspected monthly or quarterly, depending on the severity of the issue and those segments prone to root growth are periodically jetted to maintain appropriate flows.

5.2.4 Vermin and Rodent Control

Sewers infested by insects or rodents are monitored by a licensed professional.

5.2.5 Sewage Lift Station and Pump Stations

The operation and maintenance of the City's lift station located at Williams and Foothill Blvd. follows the instructions provided by pump and electrical control equipment manufacturers as specified in the equipment Operation and Maintenance (O&M) manual(s).

Each lift and pump station are regularly inspected and by Community Services Department maintenance crews Department and maintained through contracts with outside service contractors

5.2.6 Work Scheduling

Community Services field staff regularly jet mainlines based on knowledge of hot spots and maintenance schedules. In addition, service requests initiated by residents are created by administrative staff receiving calls. Service Order Requests (SOR) are then given to the Community Services Director and/or his designee. The SOR is then routed to the appropriate staff to complete. Once the task is completed the SOR is returned and filed in the Community Services front office for future reference.

5.2.7 City Sewer Mapping System

The City maintains plans of the City's sewer facilities. Data on the plans, such as system location and alignment, pipe material, size, etc., are also stored in the Computer Aided Design Drafting (CADD) system. The maps are updated, as necessary, to reflect any changes in the system. The City's sewer maps were updated in 2015 as part of the City's Sewer Master Plan project.

5.3 Rehabilitation and Replacement Plan

5.3.1 Operation and Maintenance Budget



The City of Claremont Community Services Department operates the City's sewer collection system. Each year, based on the number of new connections and waste flow, the Department is empowered to establish a budget sufficient to cover these items: salary and benefits, training, system maintenance, utility expenses, vehicles/equipment, fuel, and outside contractor services.

5.3.2 Condition Assessment Program

The City of Claremont maintains approximately 122 miles of

sewer lines within the community. The existing City sewer pipes, ranging from 8 to 15 inches in diameter, are made of a number of different materials including: vitrified clay pipe (VCP), polyvinyl chloride (PVC), asbestos cement pipe (ACP), acrylonitrile butadiene styrene (ABS), reinforced concrete pipe (RCP), and Cured in Place (CIP) material. Naturally, as these sewer lines age, structural problems such as cracks, joint separation, root intrusion, etc. develop. To ensure that these problems are properly mitigated, the City has a program in place to minimize and correct issues arising from its aging sanitary sewer system. The City funds these activities through the collection of sewer system assessment fees.

As mentioned earlier in this document, the City collects a sewer assessment, an annual fee of \$68.00/year per s.u. This charge is reviewed and may be adjusted as necessary by the City to raise sufficient funds for the Sewer Improvement and Maintenance Program. In accordance with the Condition Assessment Program, sewer line videotaping by closed-circuit television (CCTV) to assess the condition of the pipes is required as a condition of approval for connecting existing and new developments projects.

Following the Sewer Master Plan project in 2015, the City commissioned a comprehensive CCTV inspection of the entire sewer system, which was completed in 2018. The CCTV inspection was utilized to formulate a 5-year Sewer Rehabilitation Project to address identified deficiencies. The first phase of the Sewer Rehabilitation Project was completed as part of the 2018-19 Capital Improvement Project and the second phase is budgeted in 2019-20.

5.3.3 Equipment Maintenance and Replacement Policy

The equipment utilized in the maintenance of the City's sewer facilities is owned by the City or is provided by outside service contractors. The City has full responsibility for the maintenance and replacement of City-owned equipment.

5.4 Training for Field Operations Personnel and Contractors

The City of Claremont provides technical and safety training to its staff on a regular basis. Formalized components to this training include safety meetings, annual stormwater training, and training manuals for the various aspects of the operation and maintenance activities, Informal components include "hands-on" training and tailgate meetings.

The City requires contractors to be appropriately trained prior to performing any work within the City. Contractors must submit copies of applicable training certifications to include (but not limited to) Injury and Illness Prevention Program, Confined Space Entry, etc., for review and acceptance.

Chapter 6. Overflow Emergency Response Plan

6.1 Introduction

This plan summarizes the actions that the City staff must take in responding, reporting, and resolving sanitary sewer overflows (SSOs). A SSO is any overflow, spill, discharge, or diversion of untreated or partially treated wastewater from a sanitary sewer system. SSOs typically contain high levels of suspended solids, pathogenic organisms, toxic pollutants, nutrients, oil, and grease. These substances cause surface or groundwater pollution, threaten public health, adversely affect aquatic life, and impair the recreational use and enjoyment of surface waters. SSOs often occur as a result of broken pipes, equipment failure, or system overload. Prevention measures include, but are not limited to, visual inspections, monitoring and maintenance programs, employee training, and public education.

The sanitary sewer service in the City of Claremont is managed and operated by the Community Services Department. The physical sewer collection infrastructure is owned by the City and consists of 122 miles of gravity sewer pipe. The sewage collected from the City's sewer collection system is transported to a collection/interceptor main owned by the Sanitation Districts of Los Angeles County No. 21. Community Services is responsible for the operation, control, and maintenance of the sanitary sewer system.

The City of Claremont utilizes the best management practices and protocols prescribed by its "Municipal Activities Best Management Practices Manual" and the Los Angeles County Sewer Maintenance Division "Overflow Response Instruction Manual" (Appendix F). The City's Emergency Overflow Response Team's priority is to stop the overflow, contain it if possible, and ensure the facility or area is returned to its normal operating condition. In the event of an SSO, the City is responsible for containing the release (if possible) and securing the area. The City will then notify the appropriate agencies, such as the County of Los Angeles Health Department, the Los Angeles Regional Water Quality Control Board (LARWQCB), and the State Office of Emergency Service. City staff will contain the flow and minimize runoff. In the case of larger sanitary sewer incidents, the City will take steps to minimize the release until contract support staff arrival. If a SSO arises in a residential area, the City will provide residents in surrounding areas of the overflow with information regarding the cause and corrective action to be taken. Furthermore, the City will ensure that the property owner takes the necessary steps to clean up the release and makes any required repairs of the private lateral. In addition, the City will notify DPW Flood Maintenance Division (FMD) and the LARWQCB of any overflows that discharge into the storm drain system. The FMD provides assistance in outlining and confining the spill before it reaches the waters of the United States.

6.2 Spill Response Team Responsibility

6.2.1 Emergency Response Procedures

This section describes specific actions to be performed by Community Services in the event of a sanitary sewer overflow. The objectives of these actions are:

- To protect public health, environment, and property from sanitary sewer overflows and restore surrounding area back to normal as soon as possible;
- To establish perimeters and control zones with appropriate traffic cones and barricades, vehicles, or use of natural topography (e.g., hills, berms etc.);
- To promptly notify appropriate regulatory authorities, providing overflow information and potential impacts.
- To contain the sanitary sewer overflow to the maximum extent possible including preventing the discharge of raw-sewage into surface waters; and

6.2.2 Responsibilities of SSO Response Personnel

It is the responsibility of the first responder at the site of a sanitary sewer overflow to protect the health and safety of the public by mitigating the impact of the spill. Should the spill not be the responsibility of the City (i.e., Private Lateral), but there is imminent danger to public health, public or private property, or to the quality of surface waters, then appropriate emergency action will be taken. Upon arrival at a spill, the response team shall perform the following:

- Determine the cause of the sanitary sewer overflow, e.g. sewer line blockage; pump station mechanical or electrical failure, sewer line break, etc.;
- Identify and request, if necessary, assistance or additional resources to correct the overflow, or to assist in the determine of its cause;
- Take immediate steps to stop the sanitary sewer overflow, (e.g. relieve pipeline blockage, manually operate pump station controls, repair pipe, etc.). Extraordinary steps may be considered where overflows from private property threaten public health and safety (e.g., an overflow running off from private property into the public right-of-way); and
- Request additional personnel, materials, supplies, or equipment that will expedite and minimize the impact of the sanitary sewer overflow.

6.2.3 Initial Measures for Containment

Community Services staff will initiate measures to contain the overflowing sewage and recover, where possible, sewage which has already been discharged, minimizing impact to public health or the environment. The following actions shall be taken:

- Determine the immediate destination of the overflow, e.g. storm drain, street curb gutter, body of receiving water, creek bed, etc;
- · Identify and request the necessary materials and equipment to contain or isolate the overflow, if not readily available; and
- Take immediate steps to contain the overflow, e.g., block or sand-bag storm drains, recover through vacuum truck, divert into downstream manhole, etc.
- · Control access to affected area (including barricade or caution tape etc.) if this is determined to be necessary

Since SSOs can occur at anytime and anywhere within the City, notifications may come from multiple agencies. Clarification concerning each agency's reporting requirements is outlined in Section 3 of this chapter.

6.2.3 Description of Responsibilities

The following narrative represents the order in which the City departments are generally notified in the event of an overflow.

- City of Claremont (Administrative and Office Assistants) Assist Community Services Department in the preparation of correspondence, maintenance scheduling, and response to complaints, including SSOs. If an SSO is reported, the Administrative/Office Assistant will forward the call to the Director of Community Services, Community Services Manager or the Maintenance Supervisor, whoever is first available. If the overflow is determined to have occurred on private property, staff will contact the Engineering Public Works Inspector for verification and a staff referral to Code Enforcement.
- **Community Services Department** Community Services staff are on-call after hours; if dispatched, the Director of Community Services will notify the Maintenance Supervisor to investigate. If the overflow occurs in the public right-of-way, the Maintenance Supervisor will notify the appropriate response staff.
- **Community Services Manager** The City's Community Services Manager is responsible for contacting the Maintenance Supervisor or Maintenance Crewleader in the event of an SSO, if they haven't already been advised. Before alerting appropriate officials, he/she must assure containment of the flow. Once the site clean-up is complete, the Community Services Manager is required to revisit the overflow site to assure it is returned to its original condition. The City Engineer may be notified for further assurance. The Community Services Manager is also responsible for reporting the SSO to the appropriate authorities based on standard protocols.

- Maintenance Supervisor The City's Maintenance Supervisor is responsible for regular maintenance of the sanitary sewer system and responsible for responding to SSOs. If on public property or within the ROW, he / she contains the flow, monitors any flow into the MS4 system, and cleans up the flow in accordance with established protocols and best practices.
- **City Engineer** The City Engineer assists Community Services in the identification of the sanitary sewer connections. He/she supports Community Services in determining mainline alignment and connections, evaluating system capacity, and addressing water quality issues.

6.3 Emergency Response Procedures Notifications and Reporting Requirements

The City is responsible for reporting SSOs to the appropriate regulatory agencies on behalf of the City. SSOs that occur in the City are reported to the State Water Resources Control Board, in accordance with the notification guidelines contained in Table 6.1 and are also presented below in this section.

As noted above, because notifications can come from one or more sources, the following outlines the general procedures for response to an SSO.

6.3.1 During business hours

City personnel are available during business hours 7:00 am - 6:00 pm, Monday – Thursday, to receive and act on any calls to problems with the sewer system.

6.3.2 After business hours (including weekends & holidays)

After normal business hours, weekends and holidays, emergency calls are received by the Police Department and routed to the on-call staff, who are dispatched to the problem site.

6.3.3 Reporting requirements

All SSOs that result from a failure in any portion of a sanitary sewer system under the City's management must be reported. For the purposes of reporting, SSOs fall into one of four classifications: Category 1, Category 2, Category 3, or Private Lateral. These classifications are defined below followed by the reporting requirements for each.

• <u>Category 1:</u>

All discharges of untreated or partially treated wastewater of <u>any volume</u> resulting from a failure in the City's sanitary sewer are classified as the following:

(1) Reach surface water and/or reach a drainage channel tributary to a surface water; or

(2) Reach a municipal separate storm sewer system 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 municipal separate storm sewer system is considered to have reached surface water unless the storm drain system discharges to a dedicated storm water or ground water infiltration basin (e.g., infiltration percolation pond, dry well).

<u>Category 2:</u>

Discharges of untreated or partially treated wastewater of 1,000 gallons or greater resulting from the City's sanitary sewer system failure or flow condition that do not reach surface water, a drainage channel, or a municipal separate storm sewer system unless the entire SSO discharged to the storm drain system is fully recovered and disposed of properly.

• <u>Category 3:</u>

All other discharges of untreated or partially treated wastewater resulting from the City's sanitary sewer system failure or flow condition.

• Private Laterals:

Discharges of untreated or partially treated wastewater resulting from blockages or other problems within a privately-owned sewer lateral connected to the City's sanitary sewer system. Reports of these events are submitted by the City on a voluntary basis to the CIWQS Online SSO Database. This type of sewage discharge is the responsibility of the private lateral or collection system owner depending on the amount and duration of the spill.





6.3.4 Notification Requirements

6.3.4.1 California Emergency Management Agency (Cal EMA)

Within 2 hours of spill awareness of any Category 1 SSO greater than or equal to 1,000 gallons notify the California Emergency Management Agency and obtain a notification control number. Call Cal EMA at (800) 852-7550.

6.3.4.2 California Integrated Water Quality System (CIWQS):

- <u>Category 1 SSO</u>: Submit draft report within 3 business days of becoming aware of the SSO and certify within 15 calendar days of the SSO end date.
- <u>Category 2 SSO</u>: Submit draft report within 3 business days of becoming aware of the SSO and certify within 15 calendar days of the SSO end date.
- <u>Category 3 SSO</u>: Submit Certified report within 30 calendar days of the end of the month in which the SSO occurred.
- <u>SSO Technical Report</u>: Certify within 45 calendar days after the end of any Category 1 SSO in which 50,000 gallons or greater is spilled to surface waters.
- "No Spill" Monthly Certification: Certify that no SSOs occurred within 30 calendar days of the end of the month in which no SSOs occurred.
- Collection System Questionnaire: Update and certify every 12 months.

6.3.4.3 Los Angeles County Department of Public Health:

 SSO ≥ 1000 gallons: Notify the Health Department as soon as possible, but no later than 2 hours after becoming aware of the spill.

6.3.4.4 Los Angeles Regional Water Quality Control Board (LARWQCB) / California Integrated Water Quality System (CIWQS):

- Category 1:

Within 24 hours notify the LARWQCB with confirmation that the OES/local health department has been notified. CIWQS spills must go through their first "Draft Submittal" within 3 days after the enrollee is first notified that the spill occurred and must be certified within 15 days of the conclusion of spill response and remediation.

- Category 2:

Spills must be reported within 30 days after the month in which the spill occurred.

6.3.4.5 Private Laterals:

 The City is not responsible for problems within a privately owned lateral. It is the owner's responsibility to contact sewer maintenance services.

- Code Enforcement will issue a Notice of Violation or Correction to the property owner.
- If the source of the SSO is found to be a private lateral in the public right-ofway, the Community Services Division is contacted to contain the flow and prevent it from entering the storm drains.

Emergency Notifications and reporting requirements for agencies to be notified are presented below in **Table 6.3**.

Table 6.3



6.4 Equipment for Emergency Response

The following is a listing of typical SSO response equipment and materials that will be maintained by the City. It is not intended as an exclusive or complete listing. Equipment and materials may and will vary depending on the type of event, time of day, location, etc. Additionally, the City will maintain an inventory of forms and materials to ensure that adequate supplies are available. Training sessions and events will be held annually to train staff on SSO response procedures and on the safe

use of the items listed below.

Documents, Forms, Etc.

- ✓ Procedures Manual for SSO Response
- ✓ Event Report Forms
- ✓ List of Important Contacts



Disposal Bags and Ties

Mechanical Equipment

- ✓ Jetter
- ✓ Camera System
- ✓ Rodder

Equipment/ Inventory

✓ Portable Work Lights (area) ✓ Barricades – Street & Tape

 \checkmark

- ✓ Rain Gear (incl. boots)
 ✓ Sand Bags
- ✓ Water Key
- ✓ Bolt Cutters ✓ Nitrite Gloves
- ✓ Hydrant Wrench
 ✓ Eye Protection
- ✓ Brooms, Shovels, etc.
 ✓ Eye Wash Kit
- ✓ Portable Pump with Hoses
 ✓ Flashlights
- ✓ Drain Plugs (pipe plugs) ✓ Barricades Street & Tape

Because flows can occur at any time, day or night, these materials are readily available to authorized staff.

6.5 Records, Record Retention Policies & Procedures and Data Management

The Community Services Division maintains all records of Class 1 and Class 2 overflows (as defined in Section 6.3.3) on file at the Community Services offices. The City documents the location, date, and time of the all SSO events and includes the documentation in each annual report with any corresponding photos.

Chapter 7. FATS, OIL, AND GREASE (FOG) CONTROL PROGRAM

7.1 Introduction

The City of Claremont adopted Municipal Code Chapter 5.05 the Regulation of Discharges of Fats, Oils, and Grease from Food Facilities and Municipal Code Chapter 13.04.010 as the Sanitary Sewer and Industrial Waste Ordinance.

7.2 Public Education Outreach Program



The City Community Services Division provides information concerning the FOG best management practices at its public counter. This information includes proper disposal of FOG, installation of backwater valves, house lateral maintenance, and other SSO prevention measures. The City intends to distribute FOG best management (BMP) posters and outreach brochures during routine restaurant and industrial/commercial facility inspections.

The City plans to continuously educate the community on methods to handle FOG and to reduce the disposal of FOG into the collection system.

7.3 The Legal Authority to Prohibit Discharges to the System and Identify Measures to Prevent SSOs and Blockages Caused by FOG

The City of Claremont by adopting Chapter 5.05.120 and 5.05.140 is given the legal authority to require the installation of grease interceptors and/or grease traps at all food facilities that cannot demonstrate adequate control of FOG. Chapter 5.05.080 also authorizes the City to require any existing industrial or commercial facilities that discharge FOG materials that have a potential to cause blockages to obtain an industrial waste discharge permit from the Sanitation District of Los Angeles County. Chapter 5.05.170 authorizes the Director of Community Services to order the inspection and/or sampling of the wastewater discharges of any food facility subject to the City's FOG program. Chapter 5.05.190 prohibits the discharge of FOG and other substances that may, clog, obstruct, fill, or require frequent repairs, cleaning out, or flushing of sewer facilities in the sewer system.

7.4 Requirements for Grease Removal Device Installation and Design Standards; Maintenance, BMP, Record Keeping, and Reporting Requirements



Pretreatment devices are required for all new food facilities, including restaurants and other food establishments in accordance with Chapter 5.05.070 of the Municipal Code. They are required to be designed per the California Plumbing Code and shall be approved by the Building Official, installed and operated in a manner to control discharges of FOG into the sanitary sewer system and to ensure that the facilities do not create nuisances, menaces to the public peace, health or safety hazards, or adverse impacts on the public sewerage system, soil,

underground, and/or surface waters. In addition, any existing or new industrial and/or commercial facility that discharges FOG materials is required at the discretion of the Director of Community Services to obtain an industrial waste discharge permit from the Sanitation District of Los Angeles County in accordance with Chapter 5.05.080. If there is a FOG-related problem associated with an industrial waste permit, the City will take enforcement action against the facility.

The City does not issue permits or inspect household sewage disposal to the sanitary sewer system. However, the City's Municipal Code Chapter 5. 05.190 and Title 13 Chapter 13.040.010 prohibit the discharge of waste which causes or contributes to the City violating its discharge requirements established by any regulatory agency with jurisdiction over the City.

7.5 Authority to Inspect Grease-Producing Facilities, Enforcement Authorities, and Evidence of Adequate Staffing to Inspect and Enforce the FOG Ordinance

The City has the legal authority to inspect and enforce the City of Claremont FOG Ordinance. The City has adequate resources to perform any necessary inspection and enforcement of FOG generating facilities. In addition, the City has established a funding mechanism in Chapter 5.05.060 for the monitoring and inspection of FOG facilities.

The Director of Community Services is charged with the responsibility of enforcing the City's FOG Ordinance.



Chapter 5.05.170 grants the City staff the authority to conduct inspections and/or sample wastewater discharged from food and other establishments that have the potential to generate FOG.

7.6 Cleaning Schedule for Identified FOG-Prone Sewer Segments

FOG-prone sections of sewer collection systems, otherwise referred to as "hot spots," are identified during routine maintenance operations and investigations of pipeline obstructions and SSOs. These are typically cleaned by hydro jetting and rodding if tree roots are encountered.

Generally, restaurant facilities subject to the FOG program are responsible for cleaning the FOG interceptors, and the City is authorized to conduct periodic inspections of these facilities as necessary. Portions of the City's collection system found to have persistent FOG problems are subject to inspection and enforcement by the City depending on the magnitude of the problem.

Chapter 8. Design and Performance Provision



8.1 Design & Construction Standards

The City of Claremont requires all sewers to be designed in accordance with the California Plumbing Code. To further ensure that sewer facilities are properly designed and constructed, the City requires that all sanitary sewer plans are designed by state of California licensed engineers. Review of plans is performed by the City Engineer and/or the Building Official prior to approval for construction and inspection of the actual construction work.

8.1.1 New Facility Standards

The City through its Building and Safety Department provides inspection of the installation of new sanitary sewer collection systems.

8.1.2 Rehabilitation Standards

The City's Community Services Department provides rehabilitation and inspection of deteriorated sanitary sewer collection systems.

8.2 Inspection, Testing & Approval of New & Rehabilitated System Components

The City requires that "As-Built" sewer plans of the completed projects to be submitted prior to final approval for acceptance of sewer facilities for public use.

Chapter 9. System Evaluation and Capacity Assurance Plan

9.1 System Evaluation

The City of Claremont is responsible for ensuring that the public sewer infrastructure is correctly designed, adequately sized, and easily maintainable.

9.2 Design Criteria and Required Capacity

The City Engineer provides a thorough review of all



sewer plans for proposed development projects in the City to ensure the following: (1) they are properly designed with sufficient capacity for current and future base, peak and wet weather flow demands; and (2) any impact of the proposed project on existing sewer system is mitigated prior to being approved by the City. During construction, the projects are continuously inspected by the City's Public Works Inspector to ensure that the sewer facilities are constructed in accordance with the approved plans and specifications.

Claremont Municipal Code Title 13, Chapter 13.04.010, requires that the new sewer connections have an application submitted through the City's Engineering Division. Further, 13.02.040 of the Code requires that the design of new house laterals also conforms to the design and engineering standards set forth in the California Plumbing Code and obtain authorization from the Engineering Division.

The City Engineer provides a thorough review of all sewer plans for proposed development and redevelopment projects in the City to ensure these purposes: (1) sewers are properly designed with sufficient capacity for current and future base, peak, and wet weather flow demands; and (2) any impact of the proposed project on the existing sewer system is mitigated prior to being approved by the City Engineer.

The City Engineer determines what capacity is necessary in each public sewer to provide for the proper collection of sewage in the City. In the event that a development or redevelopment project exceeds the available sewer capacity, the City will withhold the issuance of a building permit until such time as adequate capacity is available or can be made available before the building is occupied.



9.2.1 Pipe Capacity

Pipe capacity is determined using Mannings Equation for Open Channel Flow (roughness coefficient equal to 0.013), which is used to determine pipe capacities. "75% Full" indicates the peak pipeline capacity when the fluid depth is $\frac{3}{4}$ the diameter of the pipe.

9.2.2 Design Capacity

All gravity sewer pipes within the City up to and including 8 inches in diameter are sized to carry peak flows when 50% full. All gravity sewer pipe larger than 8 inches are sized to carry peak flow when 75% full.

Land Use Category	Flow Coefficient
Single-Family Residential	200 GDP/CAPITA
High Density Residential	35 GDP/STUDENT
Commercial/Industrial	.020 CFS/ACRE
Public Facility/Schools	.015 CFS/ACRE

9.3 Capacity Enhancement Measures

The City of Claremont requires the satisfactory completion of a capacity study by a state of California Registered Civil Engineer prior to giving approval for any project that can affect the capacity of the public system. Completed studies are required to analyze the capacity in the existing system and must include mitigation requirements for the developer to ensure adequate capacity. In addition, capacity assessments must justify the sizing of proposed lines to accommodate the peak flows from all area's tributary to the mainline sewer under consideration or pumping station, now and in the future. The approved capacity study is referenced directly by the plan checker when design plans for the new infrastructure are submitted to assure adequate capacity. All proposals for new connection to the existing sewer must also comply with the Municipal Chapter 13 standards for managing available sewer capacity.

City requires new connection to comply with California Plumbing Code standards. Permits for construction of any public sewer infrastructure are not issued until the plan check process has been satisfactorily completed, thus insuring the functional design and adequate capacity of the public sewer collection system.

The City of Claremont's program to optimize the use of available sewer capacity and prevent SSOs includes: (1) As needed closed-circuit television (CCTV) to identify pipe segments needing repairs, or with infiltration/inflow (I/I) or tree root intrusion problems; (2) Inspection and Enforcement in areas subject to FOG blockages; and (3) A Capital Improvement program to effect repairs or replacement of damaged pipe segments as necessary. Pipe segments identified to be deficient, through the City's 2014 Sewer Master Plan Capacity Study, will be upgraded utilizing the City's sewer funds.

9.4 Sewer Capacity

The City Engineer determines what capacity is necessary in each public sewer to provide for the proper collection of sewage in the City. In the event that a development or redevelopment project exceeds the available sewer capacity, the City will withhold the issuance of a building permit until such time as adequate capacity is available or can be made available before the building is occupied.

9.4.1 Required Capacity – Computation from Average Daily Flow

The size and grade of each public sewer must always be such as to provide sufficient capacity for peak flow rates of discharge.

Chapter 10. Monitoring, Measurement, and Program Modification

10.1 Monitoring

The Community Services Department is responsible for documenting all relevant data on SSOs that occur within the City of Claremont through the Online SSO System. These will include the monthly SSO reports for the City and any special reports to regulatory agencies, etc. The data is periodically analyzed to evaluate the effectiveness of the City's SSMP.

10.2 Effectiveness Evaluation

The evaluation of the City's SSMP Program Effectiveness shall be based on such key performance indicators such as the total number of overflows, overflow response time, reduction in repeated incidents of SSO at some location, total overflow equal to or greater than 1,000 gallons or reaching the waters of the United States, and reduction in number of overflows that are caused by sewer capacity-related problems.

10.3 Program Modification

The City will continually update or modify the key elements of its SSMP based on the results of the above-mentioned monitoring and program effectiveness evaluations.

10.4 SSO Trending & Reductions

The annual SSO location maps prepared by the City are enclosed in **Appendix E**. The cause of each SSO incident is also recorded and shown on the map sheets. These maps are used for establishing SSOs patterns, identifying hot spots, and for work-assignment scheduling by the City's Community Services Division.

Chapter 11. SSMP Program Audits/Updates



11.1 SSMP Program Audit

The City of Claremont will conduct an internal review/audit of its SSMP program and prepare a report every two years. The audit shall focus on evaluating the effectiveness of the SSMP and on the records of the City's compliance actions during the audit period. Copies of all completed audit reports will be kept on file in the City's Community Services Department.

11.2 SSMP Certification

The SSMP has to be certified by the Community Services Director to be in compliance with the requirements set forth in the WDRs and which has been presented to the City Council for approval at a public meeting. In addition, the City Community Services Director has completed the certification portion in the Online SSO Database Questionnaire (http://ciwqs.waterboards.ca.gov/) by checking the appropriate milestone box, printing, and signing the automated form and sending the signed form to this address:

State Water Resources Control Board Division of Water Quality Attn: SSO Program Manager P.O. Box 100 Sacramento, CA 95812

11.3 SMP Modification and Re-certification

The City will review and update its SSMP every five (5) years to ensure that it is current. Should significant amendments be made to any portion or portions of the SSMP, it will be resubmitted to the City Council for approval and re-certification. The re-certification will be in accordance with the certification process described in Section 11.2 above.

Chapter 12. Communication Program

Communication

The City will provide all stakeholders and interested parties (upon request), including the general public and other agencies, with status updates on the development and implementation of the SSMP and consider comments made by them. The City will utilize media such as letters, newsletters, brochures, notices in newspapers, and the City's home web page for conveying this information.

SSMP Availability

Copies of the SSMP will be maintained in the City's Community Services Division and posted on the City's home web page (www.ci.claremont.ca.us). The document will also be made readily available to the Regional Water Quality Control Board (Region 4) upon request and to the operators of any collection system or treatment facility downstream of the City's system.

Terms and Definitions:

Blockage – A buildup of debris in the sewer, which stops the flow of wastewater and allows the water to back up behind the stoppage, sometimes causing an overflow. Also called a stoppage.

CSMD – The Consolidated Sewer Maintenance District. The CSMD is an agency of Los Angeles County, and is governed by the Los Angeles County Board of Supervisors.

Department of Public Health – One or more of the State Health Departments, for example, the Los Angeles County Health Department. This department also responds to and monitors sanitary sewer overflows.

Enrollee – A federal or state agency, municipality, county, district, and other public entity that owns or operates a sanitary sewer system, as defined in the general WDRs, and that has submitted a complete and approved application for coverage under this Order.

Geographical Information System (GIS) – A database linked with mapping, which includes various layers of information used by government officials. Examples of information found on a GIS can include a sewer map and sewer features such as pipe location, diameter, material, condition, and last date cleaned or repaired. The GIS also typically contains base information such as streets and parcels.

Infiltration/Inflow (I/I) – Infiltration is generally considered to be extraneous water that enters the sewer system over longer periods of time, such as groundwater seepage through cracks in the sewer. Inflow is generally considered to be extraneous water that enters the system as a direct result of a rain event, such as through defects in the sewer. While it is impossible to control all I/I, it is certainly desirable to reduce I/I when cost-effective.

Lateral – The portion of sewer that connects a home or business with the main line in the street.

Nuisance – California Water Code Section 13050, subdivision (m), defines nuisance as anything which meets all of the following requirements: (a) 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; (b) 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; and/or (c) occurs during or as a result of the treatment or disposal of wastes.

Regional Water Quality Control Board – Anyone of the nine (9) regional state agencies charged by the State Water Resource Control Board to oversee federal and state water quality regulations.

Sanitary sewer overflow (SSO) – Any overflow, spill, release, discharge, or diversion of untreated or partially treated wastewater from a sanitary sewer system. SSOs include the following:

- (i) Overflows or releases of untreated or partially treated wastewater that reach waters of the United States;
- (ii) Overflows or releases of untreated or partially treated wastewater that do not reach waters of the United States; and
- (iii) 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.

Sanitary sewer system – Any 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 SSOs. For purposes of this Order, sanitary sewer systems include only those systems owned by public agencies that are comprised of more than one mile of pipes or sewer lines.

Sanitation Districts of Los Angeles County – The entity that collects sewage from various municipal and regional areas and treats the sewage pursuant to federal and state requirements. There are more than 27 districts throughout Los Angeles County.

Satellite collection system – The portion, if any, of a sanitary sewer system owned or operated by a different public agency than the agency that owns and operates the wastewater treatment facility to which the sanitary sewer system is tributary.

Sewage – The liquid, solid, or gaseous waste generated from homes or business and industrial processes.

SMD – The Los Angeles County Department of Public Works, Sewer Maintenance Division.

SSO Reporting System – Online spill reporting system that is hosted, controlled, and maintained by the State Water Board, the web address for this site is http://ciwqs.waterboards.ca.gov. This online database is maintained on a secure site and is controlled by unique usernames and passwords.

State Water Resources Control Board – The State agency responsible for developing, enacting, and enforcing regulations of water quality.

Stoppage – A buildup of debris in the sewer, which stops the flow of wastewater and allows the water to back up behind the stoppage, sometimes causing an overflow. Also called a blockage.

Untreated or partially treated wastewater – Any volume of waste discharged from the sanitary sewer system upstream of wastewater treatment plant headworks.

Wastewater Collection System – All pipelines, pump stations, and other facilities upstream of the headworks of the wastewater treatment plant that transport wastewater from its source to the wastewater treatment plant.

Abbreviations/Acronyms

ACO	Accumulative Capital Outlay Program
APWA	American Public Works Association
CADD	Computer Aided Design Drafting
CALOSHA	California Occupation, Safety and Health Administration
CCTV	Closed-Circuit Television
CSMD	Consolidated Sewer Maintenance District
DPW	Los Angeles County Department of Public Works
FOG	Fats, Oil, and Grease
GIS	Geographical Information System
I/I	Infiltration inflow
LACO CODE	Los Angeles County Code Title 20 – Utilities
LACO PLUMBIMG CODE	Los Angeles County Plumbing Code – Title 28
LVMWD	Las Virgenes Metropolitan Water District
MARINA SMD	Marina Sewer Maintenance District
MMS	Maintenance Management System
OES	Office of Emergency Service
RWQCB	Regional Water Quality Control Board
SMD	Sewer Maintenance Districts
SSMP	Sewer System Management Plan
SSOs	Sanitary Sewer Overflows
WDRs	Statewide General Waste Discharge Requirements