



## **Lancaster Sanitary Sewer Collections System 2008-2009 Annual Performance Report**

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## **Lancaster Sanitary Sewer Collections System 2008-2009 Annual Performance Report**

**Purpose:** This report is intended to provide pertinent information on the operations and maintenance of the City of Lancaster Sanitary Sewer Collections System from July 1, 2008, through June 30, 2009. It includes the growth of the sewer system, and accomplishments, and performance of the Utility Services Division staff that are responsible for the operation and maintenance (O&M) of the sewer system to protect the health and safety of the residents of the City of Lancaster.

**Background:** The City assumed responsibility for the O&M of its sanitary sewer system from the County of Los Angeles Consolidated Sewer Maintenance District on July 1, 2008, believing that local control of the system was in the best interest of its residents.

**System Growth and Characteristics:** In the 4-5 years prior to the City assuming O&M responsibility of the system, the City experienced a significant growth in housing development and associated population. The sewer system grew in order to serve the increased population. Table I: Sewer System Statistics below compares the makeup of the sewer system from July 1, 2008, to June 30, 2009.

**Table I: Sewer System Statistics**

<b>System Characteristics</b>	<b>July 1, 2008</b>	<b>June 30, 2009</b>	<b>Net Change</b>	<b>% Change</b>
Pipe Length (miles)	325	390	+65	20%
No. of Manholes	7450	8312	+862	12%
No. of Sewer Pump Stations	1	1	0	0%

As shown above, on July 1, 2008, the system consisted of approximately 325 miles of various sized sewer mains, 7,450 manholes and a single lift station. On June 30, 2009, the system had grown to approximately 390 miles of various sized sewer mains, 8,312 manholes and a single lift station. This indicates an approximately 20% increase in the length of pipes and a 12% increase in the number of manholes in the system during the year.

The pipe sizes range from 6" to 24" and include cast or ductile iron, and vitrified clay pipe (VCP). The majority of the sewer pipe in the system is 8" diameter VCP.

The age of the sewer system is between 1 and 50+ years with an average age of 29 years.

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**Accomplishments:** This is the first full year the Utility Services Division has operated and maintained its sewer system. As such there was much time devoted to training and purchasing needed tools and equipment and preparing policies and procedures for the Division.

*Hired Staff to include:*

- 1- Public Works Supervisor
- 1 - Lead Utility Maintenance Worker
- 2 - Utility Maintenance Worker II
- 5 - Utility Maintenance Worker I

(Most staff was hired in May and June prior to the beginning of the reporting period)

*Purchased Equipment and tools to include:*

- 1 - Hydro Vactor
- 1 - Mechanical Rodder
- 2 - Utility Bed Trucks
- 2 - Pickup Trucks
- 1 - Small CCTV Camera for Pipeline Inspection
- Various small tools such as: pumps, nozzles, bars, hand tools etc.

*Training:* Staff received training in various areas of responsibility including:

- Sewer cleaning methods and tools
- Safety
- Emergency response to sewer spills
- Confined space awareness and processes
- Pump station maintenance
- First Aid and CPR
- Job site safety and defensive driving
- California Water Environment Association (CWEA) specific training for passing Grades I, II and III as appropriate for the position held

*Certification:* All staff prepared for and passed the required CWEA test appropriate for their position:

- 5 - CWEA Grade I
- 3 - CWEA Grade II
- 1 - CWEA Grade III

*Rules and Regulations:* Staff prepared and City Council/ management approved, or adopted as necessary the following ordinances, resolutions and documents to allow for the proper O&M of the sewer system:

- Sanitary Sewer and Industrial Waste Ordinance
- Fats, Oils and Grease (FOG) Ordinance
- Sewer System Management Plan
- State Waste Discharge Requirements
- Levy of Sewer Service Charge for 2009-2010
- Confined Space Program Manual and Policy

## Lancaster Sanitary Sewer Collections System 2008-2009 Annual Performance Report

**Performance:** During the year Staff performed the following maintenance on the sewer system:

<b>Sewer System Performance</b>		<b>7/1/08 to 6/30/09</b>
<i>Pipe Cleaning</i>		
Flushing		
Planned Maintenance		402,924 lf / 76.3 mi
Unplanned Maintenance		4,200 lf / 0.79 mi
Root Cut		
Planned Maintenance		348,688 lf / 66 mi
Unplanned Maintenance		1,400 lf / 0.26 mi
Planned to unplanned Maintenance		99%
<i>CCTV Inspection</i>		17,500 lf / 3.31mi
<i>Manholes</i>		
Inspected		3771 ea
Repaired		36 ea
<i>*Number of Public Sanitary Sewer Overflows (SSO) Events</i>		5
*SSO Rate, SSO/100 Mi/Yr		1.28
*Portion of SSO Runoff Contained		95%
*Portion SSO Runoff to Surface Waters		0%
<i>* Main SSO Causes</i>		
*Grease		80%
*Vandalism		20%

\*Performance measures required by the City of Lancaster's Sewer System Management Plan (SSMP) dated March 2009. Staff also responded to 2 private SSO. SSO were reported as required by law.

The above chart indicates approximately 30% of the entire sewer system was cleaned during the year and 99% of the work performed was planned work, rather than unplanned emergency work.

Other: Utility Services Manager assumed the additional responsibilities of Confined Space Program Manager and FOG Control Program Manager during the course of the reporting period.

## **Lancaster Sanitary Sewer Collections System 2008-2009 Annual Performance Report**

**Conclusion:** The Utility Services Division staff met and/or exceeded the performance objectives established with respect to the operations and maintenance of the Lancaster Sanitary Sewer System for Fiscal Year 2008-2009.

It is anticipated that the sewer system will continue to grow and that as the system ages Capital Improvement projects will be required to repair or replace pipes and manholes. The City has established financial reserves to provide for the repair and future replacement of the sewer system.

## Utility Services Division Performance Objectives

The following performance objectives were established for the Utility Services Division for the Sewer Collections System for FY 2008-2009.

### Complete monthly, quarterly, semi-annual, and annual routine maintenance work as scheduled 95% of the time.

Provide for the health and safety of the citizens of Lancaster through proper maintenance of the sewer collection system.

Respond to and report all public Sanitary Sewer Overflows (SSO) in accordance with WDR.

Respond to citizen concerns within 24 hours of receiving notification for general issues and within 2 hours for emergency issues.

Train staff to CWEA Sewer Collection System Technician Certification Requirement.

Provide an Annual Sewer Collection System Report to City Council.

### Goal:

The City's goal is to provide the residents of Lancaster the best possible service at the most economical cost. By reporting vandalism, Sanitary Sewer Overflows (SSO) and by properly disposing of fats, oils and grease (FOG), citizens can assist in keeping service up and costs down.

### *Sanitary Sewer Overflows*

SSO pose a health risk to the public and must be immediately addressed. Such overflows can be costly to the City, as they may result in state and federal fines as well as additional man-hours. Blockages impede scheduled maintenance efforts and require maintenance crews to take strenuous steps in order to clear, clean, and disinfect the area to protect public health.

### *FOG*

FOG is a combination of fats, oils and grease used in food processing and in preparation of meals. FOG bearing materials, among others, include: cooking oil, fat, lard, grease, butter, tallow, shortening and margarine. During food preparation, meats such as beef, pork, lamb, poultry, and seafood also generate FOG. Kitchen waste containing these materials, as well as water that has been used to wash kitchen equipment and floors, contains waste FOG. FOG does not belong in the sewer system as it is a major contributor to SSO.

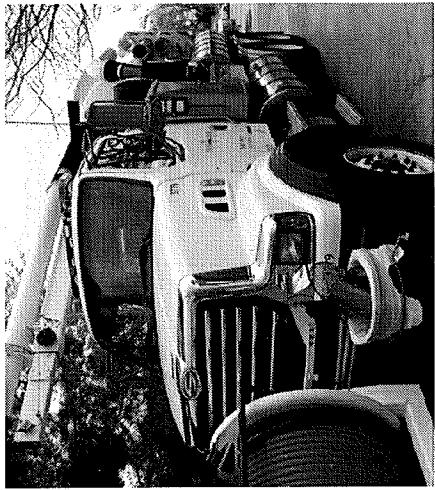
### No Drugs Down the Drain

Please do not dispose of medications or other drugs in the sewer system. They can be properly disposed of at:

Antelope Valley Environmental  
Collection Center  
1200 West City Ranch Road  
Palmdale, CA 93551  
(888) 253-2652

### You Can Help

Please report vandalism, FOG violations, suspicious activity around manholes, spills or strong sewage odors to the City at (661) 723-5985 during regular business hours or (661) 810-7000 after hours.

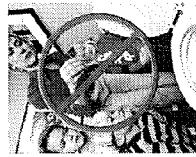


**2008-2009**

## Sanitary Sewer System First

**Annual**

## Performance Report



August 2009

# 2008-2009 Sanitary Sewer System Annual Performance Report

**Purpose:** This is the first annual sanitary sewer system performance report relating to the operations and maintenance (O&M) of the Lancaster Sewer Collections System. This report is intended to provide pertinent information on the O&M of the system during the previous fiscal year.

**Background:** The City assumed responsibility for the O&M of its sanitary sewer system from the County of Los Angeles Consolidated Sewer Maintenance District on July 1, 2008, believing that local control of the system was in the best interest of its residents.

The Public Works Department Utility Services Division is responsible for O&M of the system.

On July 1, 2008, the system consisted of approximately 325 miles of various sized sewer mains, 7,450 manholes and a single lift station. On June 30, 2009, the system consists of approximately 390 miles of various sized sewer mains, 8,312 manholes and a single lift station.

This indicates a 20% increase in the size of the system the first year.

The sewer mains range in age from 1 to 50+ years old with an average age of 29 years old.

**Accomplishments:** During the reporting period the Utility Services Division has accomplished the following :

**Hired Staff including:** 1 Public Works Supervisor, 1 Lead Utility Maintenance Worker, 2 Utility Maintenance Worker II, and 5 Utility Maintenance Worker I

**Purchased Equipment including:** 1 Hydro Vactor, 1 Mechanical Rodder, 2 Utility Bed Trucks, 2 Pickup Trucks, 1 Small CCTV Camera, and various small tools such as: pumps, nozzles, bars, and other hand tools.

**Training:** Staff received training in various areas of responsibility including: Sewer cleaning methods and tools, emergency response to sewer spills, confined space awareness and processes, pump station maintenance, First Aid and CPR, job site safety and defensive driving, and California Water Environment Association (CWEA) specific training for passing Grades I, II and III as appropriate for the position held and other training provided through the City.

**Certification:** All staff prepared for and passed the required CWEA test appropriate for their positions: 5 CWEA Grade I, 3 CWEA Grade II, and 1 CWEA Grade III

**Rules and Regulations:** Staff prepared and City approved or adopted as necessary the following ordinances, resolutions, and documents to allow for the proper O&M of the sewer system:

- \*Sanitary Sewer and Industrial Waste Ordinance
- \*Fats, Oils and Grease (FOG) Ordinance
- \*Sewer System Management Plan
- \*State Waste Discharge Requirements

- \*Levy of Sewer Service Charge for 2009-2010
- \*Confined Space Program Policy and Manual

**Performance:** Staff provided the following O&M services to the citizens of Lancaster. Note 99% of the work accomplished by the Utility Maintenance Crews was Preventative Maintenance (PM) work.

	Sewer System Performance	7/1/08 to 6/30/09
<i>Pipe Cleaning</i>		
Flushing	Planned Maintenance	76.3 mi
	Unplanned Maintenance	0.79 mi
<i>Root Cut</i>		
	Planned Maintenance	66 mi
	Unplanned Maintenance	0.26 mi
<i>CCTV Inspection</i>	Percent of Planned to Unplanned Maintenance	99%
<i>Manholes</i>	Inspected	3771 ea
	Repaired/Raised to Grade	36 ea
<i>Number of Public SSO Events</i>		5
<i>SSO Rate, SSOs/100 Mi/Yr</i>		1.28
<i>Portion of SSO Contained Waters</i>	95%	
<i>Portion of SSO to Surface Waters</i>	0%	
<i>SSO Causes</i>	Grease	80%
	Vandalism	20%

Utility Services Manager assumed the additional responsibilities of Confined Space Program Manager and FOG Control Program Manager during the course of the reporting period.