



**PUBLIC WORKS DEPARTMENT
WASTEWATER COLLECTION SYSTEM
ASSET MANAGEMENT
PERFORMANCE AUDIT**

Internal Audit Division

**Governmental Affairs Committee
October 5, 2016**

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AUDIT OBJECTIVES

Assess the efficiency and effectiveness of five core components of wastewater asset management:

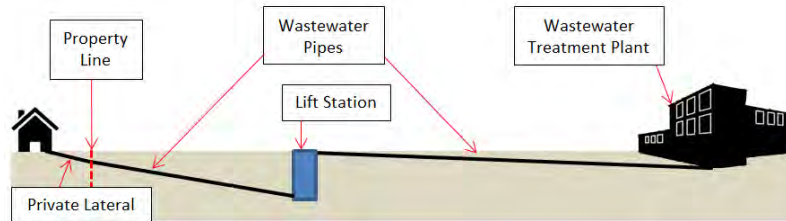
- 1) Asset inventory
- 2) Level of service
- 3) Critical assets
- 4) Operation and Maintenance
- 5) Long-term funding strategy



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BACKGROUND



Over 820 miles of public sewer pipelines

414 miles of sewer laterals (public and private)

40 million gallons per day of wastewater transported

19 pump stations



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AUDIT FINDINGS

1. The division has established adequate administrative practices and internal controls to carry out the requirements of the Sewer System Management Plan (SSMP) as required by the state.
2. The division has a comprehensive five-year Capital Improvement Plan (CIP).
3. A comprehensive maintenance management system is needed that will integrate with a robust GIS mapping system.



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AUDIT RECOMMENDATION and MANAGEMENT RESPONSE

1. Develop an implementation plan with the Innovation Technology (IT) Department to migrate information from CadMe to ArcGIS; interface the work order system (UWAM) with ArcGIS to improve staff efficiency and effectiveness.

Concur. In order for the UWAM to be effective it needs to be coupled with a modern and up-to-date mapping system. The Division will soon be opening recruitment for a Wastewater Collection System Scheduling Coordinator (Scheduler).

The Wastewater Division will meet with the IT department to discuss and develop an implementation plan as recommended.



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AUDIT RECOMMENDATION and MANAGEMENT RESPONSE

2. Reduce inefficiencies in troubleshooting and monitoring all wastewater pump stations by investing in specific equipment.

Concur. Incorporation of pump motor AMP readings into SCADA across all stations would improve efforts to troubleshoot issues and, when warranted, dispatch resources to remote facilities. Three of the 19 pump stations already have this capability and all are equipped with failure alarms. Pump motor AMP readings would be an enhancement to existing diagnostics.

In 2016 the Wastewater Division will undertake a wastewater and storm water lift station evaluation study to assess conditions and needs.



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RECOMMENDATION

That the Governmental Affairs Committee receive, review, provide input, and recommend approval to the City Council the Public Works Department Wastewater Collection System Asset Management performance audit report.



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