

Meeting Date: 10/20/2015

Report Type: Staff/Discussion

Report ID: 2015-00898

Title: Department of Utilities Water, Wastewater, and Storm Drainage Workshop

Location: Citywide

Recommendation: Receive and file.

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Presenter: John F. Shirey, City Manager, (916) 808-7213, Office of the City Manager; Bill Busath, Director of Utilities, (916) 808-1434, Department of Utilities

Department: Department Of Utilities

Division: Office of the Director

Dept ID: 14001611

Attachments:

1-Description/Analysis

2-Background

City Attorney Review

Approved as to Form

Joe Robinson

10/7/2015 2:44:17 PM

Approvals/Acknowledgements

Department Director or Designee: Bill Busath - 10/6/2015 2:37:13 PM

Description/Analysis

Issue Detail: Department of Utilities (DOU) staff is presenting an overview of the water, wastewater and storm drainage systems, their challenges, and proposed capital investment programs. Information will also be presented on rate adjustment alternatives to support these proposed programs.

Policy Considerations: This workshop is informational only.

Economic Impacts: None.

Environmental Considerations: None.

Sustainability: None.

Commission/Committee Action: The City Council formed a Utilities Rate Advisory Commission (URAC) in 2008 to provide recommendations to the Mayor and City Council on the City's utility service rates. DOU presented the overview of the water, wastewater and storm drainage systems, their challenges, and proposed capital investment programs to the URAC on September 9 and 23, 2015.

Rationale for Recommendation: Not Applicable.

Financial Considerations: None.

Local Business Enterprise (LBE): Not applicable.

BACKGROUND

Water System Overview

The Department of Utilities (DOU) manages the City's municipal water supply system, which is valued at over \$3.5 billion. Water system management includes retailing water to customers within the City limits and wholesaling water to six agencies. The City's water system includes two water treatment plants, many storage reservoirs and groundwater wells and approximately 1,700 miles of pipelines. Due to the extraordinary drought, the City is accelerating its water meter transition program by four years and will complete it by the end of 2020 instead of the state's mandated deadline of January 2025. Accelerating the water meter installation program will improve water conservation and ensure a more fair and equitable billing system for all city residents.

The City's water infrastructure is aging and requires significant investment to maintain, rehabilitate and address ever increasing regulatory requirements. Some of the key challenges facing the City's water system include:

- Replacing and rehabilitating water treatment facilities and pipelines prior to failure;
- Completing the installation of water meters by December 2020;
- Meeting all water quality regulatory requirements;
- Updating computer systems to operate and manage facilities effectively and efficiently; and
- Constructing security systems to protect water facilities.

To meet these challenges, DOU is developing a four-year water capital investment plan that includes:

- Rehabilitating and replacing 8.5 miles of pipelines and rehabilitating water treatment plants and reservoirs;
- An accelerated Water Meter Program that will install 41,000 water meters and replace 76 miles of aged water pipelines located in backyards;
- Improvements to the City's generators and water quality laboratory to comply with regulatory mandates;
- An Information Technology Program that upgrades the City's utility billing system, upgrades DOU's computer maintenance management systems, and implements new systems to manage capital projects planning and design; and
- Program support for new security systems, operations and maintenance and CIP contingency planning.

Wastewater System Overview

DOU manages more than two-thirds of the City's wastewater system, which is valued at over \$2.3 billion. The Sacramento Area Sewer District manages the remaining one-third of the system. The City's wastewater system includes treatment and storage facilities, pumping plants, underground storage facilities, pump stations and more than 800 miles of pipelines.

The City's wastewater system, like its water system, is aging and requires significant investment to maintain, rehabilitate and meet regulatory mandates. Rehabilitation and replacement of the City's combined sewer system is necessary to ensure the community's wastewater pipes and facilities are safe and reliable. Some key wastewater system challenges include:

- Meeting regulatory requirements to minimize sanitary sewer outflows and prevent sewage discharges into local creeks and rivers;
- Replacing and rehabilitating treatment facilities and pipelines prior to failure;
- Updating computer systems to operate and manage facilities effectively and efficiently; and
- Constructing security systems to protect wastewater facilities.

To meet the challenges, DOU is developing a four-year wastewater capital investment plan that includes:

- Rehabilitating and replacing 4.2 miles of aged pipelines and rehabilitating 10 pump stations;
- Constructing improvements to storage facilities and replacing undersized pipelines to comply with regulatory mandates;
- An Information Technology Program that upgrades the City's utility billing system, upgrades DOU's computer maintenance management systems, and implements new systems to manage capital projects planning and design; and
- Program support for new security systems, operations and maintenance and CIP contingency planning.

Storm Drainage System Overview

DOU manages the City's storm drainage system within the City limits, which is valued at over \$3.1 billion. The drainage system collects urban and storm runoff and pumps the water into local creeks, channels and rivers. The drainage system includes 135

drainage basins, 104 pump stations, 842 miles of pipelines, 62 water quality and flood control basins, and 429 miles of creeks, channels and ditches. The City's combined wastewater system also collects storm drainage runoff that is conveyed to and treated at the Sacramento Regional Wastewater Treatment Plant prior to discharging to the Sacramento River.

The drainage infrastructure is aging and undersized and requires significant investment to upgrade, maintain, rehabilitate and meet regulatory requirements. Rehabilitation and replacement of the City's storm drainage system are necessary to ensure the reliability of the system and the safety of the city residents. Under Proposition 218, rate adjustments for this service require voter approval. Storm drainage rates have not been adjusted since 1996. Some of the key challenges facing the drainage system include:

- Master planning the remaining 82 of the City's 135 drainage basins;
- Constructing system improvements to pipelines, pump stations and detention facilities to comply with City Council mandated 10 and 100-year flood protection levels of service;
- Replacing and rehabilitating pump stations, channels and pipelines prior to failure;
- Meeting regulatory requirements to minimize the discharge of pollutants into local creeks and rivers;
- Updating computer systems to operate and manage facilities effectively and efficiently; and
- Constructing security systems to protect drainage facilities.

To meet the challenges, DOU is developing a four-year drainage capital investment plan that includes:

- Rehabilitating and replacing 1.4 miles of aged pipelines and rehabilitating 11 pump stations;
- Constructing improvements to storage facilities and replace undersized pipelines to meet levels of service and regulatory requirements;
- An Information Technology Program that upgrades the City's utility billing system, upgrades DOU's computer maintenance management systems, and implements new systems to manage capital projects planning and design; and
- Program support for new security systems, operations and maintenance and CIP contingency planning.

Next Steps

Over the next few weeks, DOU will work with the City Council, URAC, Water Ad-Hoc Committee, Independent Budget Analyst, Budget and Audit Committee, and community stakeholders to finalize rate proposals for the water, wastewater, and storm drainage programs. In addition, DOU will conduct a robust community and stakeholder engagement program to inform stakeholders about the water, wastewater, and storm drainage systems, their associated challenges, and necessary investments to meet those challenges.