## FY2019-2025 Capital Investment Program

# W-16 Replacement of Aging Water Infrastructure

Category: Water Status: Ongoing

Department: Utilities LocationWater Service Area

Programmed Expenditures								
Programmed /	Appropriated	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Expenditures	To Date	Budget	Budget	Budget	Budget	Budget	Budget	Budget
165.947.448	83,042,885	19,705,563	9.914.000	10.113.000	10.317.000	10,736,000	10.950.000	11.169.000

#### **Description and Scope**

This program focuses primarily on replacing small diameter asbestos cement (AC) pipe that has reached its useful life. A secondary benefit is increasing the emergency fireflow available to neighborhoods. This investment will have ramped up water pipeline replacement to 5 miles/year by 2018, and then be adjusted with inflation to maintain the 5 miles per year replacement rate. At that rate, water pipe will need to last on average 100-125 years. Pipes are selected for replacement based on risk of failure (likelihood and consequence), failure history, and coordination with other construction, such as planned street overlays (which reduce restoration costs). Project costs include a 2.8 percent cost increase reflecting actual bid experience for pipe replacement.

## Rationale

In the short term, this program reduces the likelihood of catastrophic system failures, unplanned service interruptions, damage claims to the city, and sharp rate increases to react to system failures rather than proactively managing the system. In the long term, timely replacement or repair of water system assets keeps customer rates as low as practical by managing the system at the least life-cycle cost while maintaining target service levels and meeting regulatory requirements.

#### **Environmental Impacts**

Replacing aging water infrastructure ensures a reliable supply of safe drinking water in sufficient quantity for homes and businesses. Minimizing water system failures means reduced environmental damage such as flooding and erosion, which can damage lakes, streams, and wetlands. Timely replacement of aging water pipes and appurtenances reduces the voume of treated, potable water lost to leakage into the ground or following system breaks.

# **Operating Budget Impacts**

This program will have no significant impact on operating revenues and/or expenditures.



Project Activities	From - To	Amount
Project Costs	Ongoing	165,947,448

Schedule of Activities

Total Budgetary Cost Estimate: 165,947,448

Means of Financing
Funding Source Amount

Utility Rates/Fees 165,947,448

**Total Programmed Funding:** 165,947,448 **Future Funding Requirements:** 

Comments