FY2015-2021 Capital Investment Program

S-16 Sewer Pump Station Improvements

Category: Sewer Status: Ongoing

Department: Utilities Location: Pump stations throughout the Sewer Utility's service area

Programmed Expenditures								
Programmed	Appropriated	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Expenditures	To Date	Budget	Budget	Budget	Budget	Budget	Budget	Budget
20,600,491	12,181,491	512,000	1,340,000	2,310,000	1,075,000	1,097,000	1,090,000	995,000

Description and Scope

This ongoing program funds rehabilitation of the 36 pump and 10 flush stations in Bellevue's wastewater system. Stations are prioritized based on the risk and consequence of failure, maintenance and operations experience, pump station age, and coordination with other projects. Stations scheduled for work in 2015-21 include: Lake Heights, Wilberton, Cedar Terrace, Lake Hills #17, Cozy Cove, Parkers, Evergreen East, Evergreen West, Fairweather, Hunt's Point, Lake Hills #6, and Lake Hills #7. Historically this program funded rehabilitation of one station per year. Two stations/year are planned beyond 2017 since the electrical and mechanical equipment in them will have reached their 25-30 year useful life. Analysis of 25 stations is currently underway to improve the forecast needs for schedule and cost, and could result in reprioritization of scheduled stations.

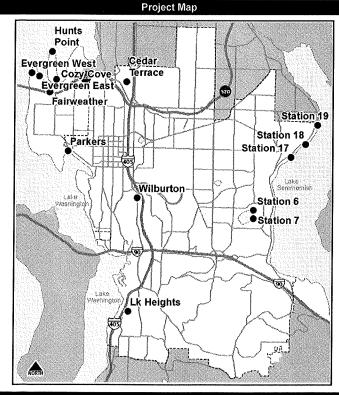
Rationale

Much of the sewage collected from homes and businesses passes through one or more of 36 pump stations and 10 flush stations (in-lake, low-pressure facilities that periodically 'flush' the nearly-flat sewer lakelines with lake water.) Although some flush station components may last longer than 25 years, pumps and electrical system replacement is needed every 25 years. Complete station replacement is needed every 75 to 100 years. Beyond service life, components fail more frequently, technology becomes obsolete, and parts replacement becomes difficult or impossible. Bellevue's commitment to a healthy environment, as well as state and federal laws require that we minimize pump station overflows; repeated violations can result in sanctions. Station rehabilitation improves reliability and safety, reduces the risk of system overflow and failure, and reduces the liability associated with such failures.

Environmental Impacts

The majority of the improvement work will be within the existing pump stations and no substantial environmental impacts are anticipated. The State Environmental Protection Act (SEPA) determinations (typically Determinations of Non-Significance) and exemptions from Shoreline regulations are obtained as required for each pump station as it is upgraded.

Operating Budget Impacts



Project Activities	From - To	Amount
Project Costs	1985 - 2021	20,600,491

Schedule of Activities

Total Budgetary Cost Estimate: 20,600,491

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Funding Source	Amount
Utility Rates/Fees	20,600,491

Total Programmed Funding: 20,600,491 Future Funding Requirements:

Comments