



2023-2029 Adopted Utilities Capital Investment Program (CIP) Plan Water

The Water Utility owns and operates over 600 miles of water distribution and transmission mains, 24 reservoirs with 41.5 million gallons of storage, and 22 pump stations. Water is supplied by the Cascade Water Alliance by contractual arrangement with the City of Seattle through the Tolt and Cedar River supply systems. Bellevue's Water Utility serves all of Bellevue as well as the adjacent communities of Clyde Hill, Hunts Point, Medina, Yarrow Point, and sections of the city of Kirkland.

Capital improvements for the Water Utility are generally based on Bellevue's 2016 Water System Plan and are informed by ongoing asset management analyses and other emerging system operational needs. The System Plan identifies system improvements needed to continue to meet the demands of population growth and system aging, and to provide for orderly system expansion and improvements which increase system reliability, efficiency, and maintain desired levels of service. The water system continues to be analyzed on an ongoing basis to identify pressure, capacity, and storage needs to inform future capital projects.

The 2023-2029 Utilities CIP Plan recognizes that significant investments are needed to maintain aging systems and replace components that are reaching the end of their useful life. The Water CIP also includes investments that are necessary to meet system capacity needs in response to growth and demand in the system.

Funded CIP Projects

CIP Plan Number	Project Title	\$ in 000s	
		2023-2029 Project Cost	Total Estimated Cost
W-16	Water Main Replacement	\$ 111,530	\$ 239,067
W-67	Pressure Reducing Valve (PRV) Station Rehabilitation	8,932	19,004
W-69	Minor (Small) Water Capital Improvement Projects	209	8,931
W-85	Reservoir Rehabilitation or Replacement	11,718	40,467
W-91	Water Pump Station Rehabilitation or Replacement	10,180	28,961
W-98	Replacement of Large Commercial Meter Vaults	3,206	7,355
W-99	Water Service Line and Saddle Replacement Program	1,857	5,383
W-103	Increase Drinking Water Storage Availability for West Operating Area	4,216	9,445
W-110	Water Supply Inlet Rehabilitation	304	2,618
W-111	Maintenance and Operations Yard - Water	3,867	9,200
W-112	Water System Capital Planning	890	890
W-115	SCADA Upgrade - Water	1,162	1,242
W-117	170th Pl. SE Pressure Improvements	1,367	2,117
W-118	Somerset Highlands Pressure & Flow Improvements	5,781	5,781
W-119	Groundwater Well Improvements	12,835	12,835
W-120	Project and Portfolio Management System - Water	167	167
	Total Water	\$ 178,221	\$ 393,463

Combined, Completed Projects

CIP Plan Number	Project Title	\$ in 000s	
		2023-2029 Project Cost	Total Estimated Cost
NONE			
	Total Combined, Completed Projects	-	-

W-16: Water Main Replacement

Category: High Quality Built & Natural Environment

Status: Ongoing

Department: Utilities

Location: Citywide

Programmed Expenditures

<u>Programmed Expenditures</u>	<u>Appropriated To Date</u>	<u>FY 2023 Budget</u>	<u>FY 2024 Budget</u>	<u>FY 2025 Budget</u>	<u>FY 2026 Budget</u>	<u>FY 2027 Budget</u>	<u>FY 2028 Budget</u>	<u>FY 2029 Budget</u>
239,066,885	127,536,885	11,954,000	12,525,000	19,447,000	16,158,000	17,351,000	16,329,000	17,766,000

Description and Scope

This program focuses on replacing water mains that have reached their useful life, with the goal of reducing risk. Additional benefits include increasing the firefighting flow available to neighborhoods, improve reliability with additional valves (to limit service shutdowns), and improving earthquake resiliency with more robust pipe. This investment funds pipeline replacement at a rate of 5 miles/year, adjusted with inflation. At that rate, water pipe will need to last on average 100-125 years to sustainably maintain the entire 608-mile water distribution system. Pipes are prioritized for replacement based on risk of failure (likelihood and consequence), break history, potential for cost savings or reduced neighborhood impacts by coordinating with other construction projects (e.g., planned street overlays), and opportunities to address level of service deficiencies (low flow or pressure) or vulnerable pipes in poor soils.

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

Operating Budget Impacts

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

Project Map



Schedule of Activities

<u>Project Activities</u>	<u>From - To</u>	<u>Amount</u>
Project Costs	Ongoing	239,066,885

Total Budgetary Cost Estimate: 239,066,885

Means of Financing

<u>Funding Source</u>	<u>Amount</u>
Beginning Fund Balance	99,554,722
Transfers from Other City Funds	139,512,163
Total Programmed Funding:	239,066,885
Future Funding Requirements:	-

FY2023-2029

Comments

W-67: Pressure Reducing Valve (PRV) Station Rehabilitation

Category: High Quality Built & Natural Environment Status: Ongoing
 Department: Utilities Location: Citywide

Programmed Expenditures

<u>Programmed Expenditures</u>	<u>Appropriated To Date</u>	<u>FY 2023 Budget</u>	<u>FY 2024 Budget</u>	<u>FY 2025 Budget</u>	<u>FY 2026 Budget</u>	<u>FY 2027 Budget</u>	<u>FY 2028 Budget</u>	<u>FY 2029 Budget</u>
19,003,971	10,071,971	800,000	823,000	1,093,000	1,348,000	3,124,000	948,000	796,000

Description and Scope

This ongoing program rehabilitates or replaces aging, obsolete pressure reducing valve (PRV) stations throughout the water service area. It will also add remote flow and pressure sensors to monitor these stations. The number of PRV stations that are rehabilitated varies from year to year based on the annual program budget and the rehabilitation costs, but over the long term should average about 3 PRVs per year to sustainably rehabilitate over 150 stations on a roughly 25-year cycle. Prioritization criteria include access requirements, safety, maintenance history, age, and efficiencies gained with overlapping or adjacent projects.

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

Operating Budget Impacts

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

Project Map



Schedule of Activities

Project Activities	From - To	Amount
Project Costs	Ongoing	19,003,971

Total Budgetary Cost Estimate: 19,003,971

Means of Financing

Funding Source	Amount
Transfers from Other City Funds	19,003,971

Total Programmed Funding: 19,003,971

Future Funding Requirements: -

FY2023-2029

Comments

W-69: Minor (Small) Water Capital Improvement Projects

Category: High Quality Built & Natural Environment Status: Ongoing

Department: Utilities Location: Citywide

Programmed Expenditures

<u>Programmed Expenditures</u>	<u>Appropriated To Date</u>	<u>FY 2023 Budget</u>	<u>FY 2024 Budget</u>	<u>FY 2025 Budget</u>	<u>FY 2026 Budget</u>	<u>FY 2027 Budget</u>	<u>FY 2028 Budget</u>	<u>FY 2029 Budget</u>
8,930,619	8,721,619	-	-	-	-	-	-	209,000

Description and Scope

This ongoing program pays for small improvements to Bellevue's water system to resolve deficiencies, improve efficiencies, or resolve maintenance problems, often in conjunction with other programs such as the Transportation overlay program. Projects are prioritized based on criteria including public safety/property damage, maintenance frequency, operator safety, environmental risk, reliability and efficiency gains, coordination with other city projects or development activity, and level of service impact.

Rationale

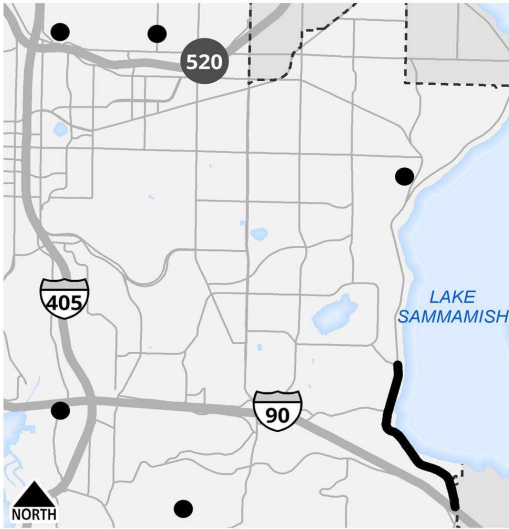
In the short term, this program reduces the likelihood of catastrophic system failures, unplanned service interruptions, damage claims to the city, and sharp rate increases to react to system failures rather than proactively managing the system. In the long term, timely replacement or repair of water 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

Operating Budget Impacts

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

Project Map



Schedule of Activities

<u>Project Activities</u>	<u>From - To</u>	<u>Amount</u>
Project Costs	Ongoing	8,930,619

Total Budgetary Cost Estimate: 8,930,619

Means of Financing

<u>Funding Source</u>	<u>Amount</u>
Transfers from Other City Funds	8,930,619

Total Programmed Funding: 8,930,619

Future Funding Requirements: -

FY2023-2029

Comments

W-85: Reservoir Rehabilitation or Replacement

Category: High Quality Built & Natural Environment Status: Ongoing
 Department: Utilities Location: Citywide

Programmed Expenditures

<u>Programmed Expenditures</u>	<u>Appropriated To Date</u>	<u>FY 2023 Budget</u>	<u>FY 2024 Budget</u>	<u>FY 2025 Budget</u>	<u>FY 2026 Budget</u>	<u>FY 2027 Budget</u>	<u>FY 2028 Budget</u>	<u>FY 2029 Budget</u>
40,467,477	28,749,477	750,000	3,488,000	1,257,000	1,086,000	794,000	3,633,000	710,000

Description and Scope

This program funds recoating, rehabilitation, seismic retrofits and/or replacement of drinking water reservoirs to maintain these facilities for reliable operation. Bellevue operates and maintains 24 active drinking water reservoirs and shares partial ownership (and access to water) in 4 other reservoirs maintained and operated by neighboring utilities.

Rationale

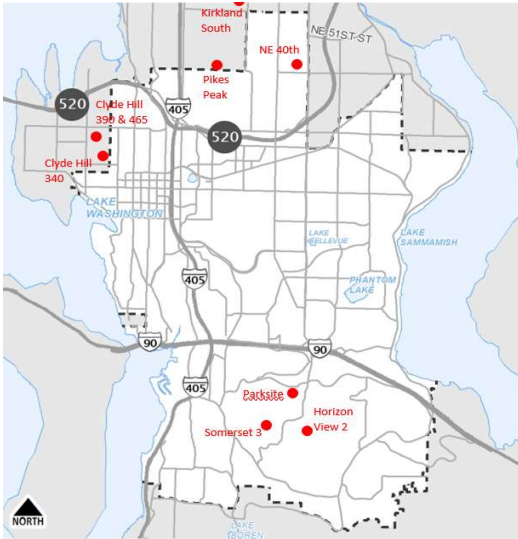
In the short term, this program reduces the likelihood of catastrophic system failures, unplanned service interruptions, damage claims to the city, and sharp rate increases to react to system failures rather than proactively managing the system. In the long term, timely replacement or repair of water 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

Operating Budget Impacts

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

Project Map



Schedule of Activities

<u>Project Activities</u>	<u>From - To</u>	<u>Amount</u>
Project Costs	Ongoing	40,467,477

Total Budgetary Cost Estimate: 40,467,477

Means of Financing

<u>Funding Source</u>	<u>Amount</u>
Transfers from Other City Funds	40,467,477

Total Programmed Funding: 40,467,477

Future Funding Requirements: -

FY2023-2029

Comments

W-91: Water Pump Station Rehabilitation or Replacement

Category: High Quality Built & Natural Environment Status: Ongoing
 Department: Utilities Location: Citywide

Programmed Expenditures

<u>Programmed Expenditures</u>	<u>Appropriated To Date</u>	<u>FY 2023 Budget</u>	<u>FY 2024 Budget</u>	<u>FY 2025 Budget</u>	<u>FY 2026 Budget</u>	<u>FY 2027 Budget</u>	<u>FY 2028 Budget</u>	<u>FY 2029 Budget</u>
28,961,473	18,781,473	4,462,000	2,682,000	1,786,000	410,000	422,000	-	418,000

Description and Scope

This program was established in 2005 to rehabilitate or replace drinking water pump stations. Bellevue operates and maintains 21 pump stations, and shares partial ownership in a separate pump station operated by Coal Creek Utility District. Based on a needs assessment of each pump station, investments can range from basic improvements to complete reconstruction. The rehabilitation work may include capacity, safety and reliability improvements, new mechanical and electrical equipment, on-site emergency power generation, and seismic retrofits.

Rationale

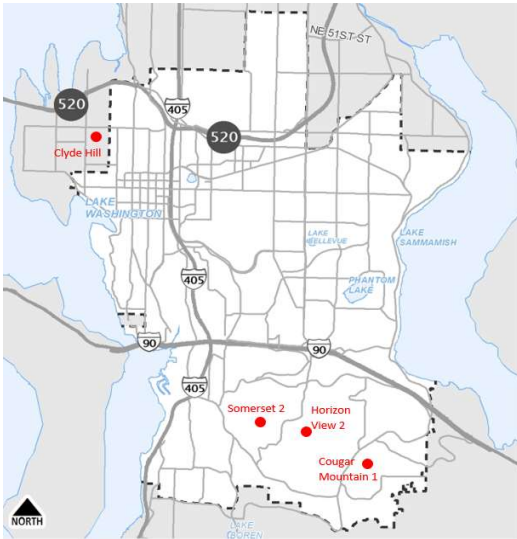
In the short term, this program reduces the likelihood of catastrophic system failures, unplanned service interruptions, damage claims to the city, and sharp rate increases to react to system failures rather than proactively managing the system. In the long term, timely replacement or repair of water 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

Operating Budget Impacts

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

Project Map



Schedule of Activities

<u>Project Activities</u>	<u>From - To</u>	<u>Amount</u>
Project Costs	Ongoing	28,961,473

Total Budgetary Cost Estimate: 28,961,473

Means of Financing

<u>Funding Source</u>	<u>Amount</u>
Transfers from Other City Funds	28,961,473
Total Programmed Funding:	28,961,473
Future Funding Requirements:	-

FY2023-2029

Comments

W-98: Replacement of Large Commercial Water Meter Vaults

Category: High Quality Built & Natural Environment Status: Ongoing
 Department: Utilities Location: Citywide

Programmed Expenditures

<u>Programmed Expenditures</u>	<u>Appropriated To Date</u>	<u>FY 2023 Budget</u>	<u>FY 2024 Budget</u>	<u>FY 2025 Budget</u>	<u>FY 2026 Budget</u>	<u>FY 2027 Budget</u>	<u>FY 2028 Budget</u>	<u>FY 2029 Budget</u>
7,355,163	4,149,163	503,000	389,000	541,000	1,311,000	45,000	417,000	-

Description and Scope

This program systematically replaces aging, obsolete vaults housing high-volume commercial water meters (3" and larger). Due to their location and condition, these meters pose safety and access concerns and are generally beyond the ability of O&M crews to replace. Improved performance accuracy is a secondary benefit of the program. This ongoing program replaces approximately 4 commercial meter vaults each year.

Rationale

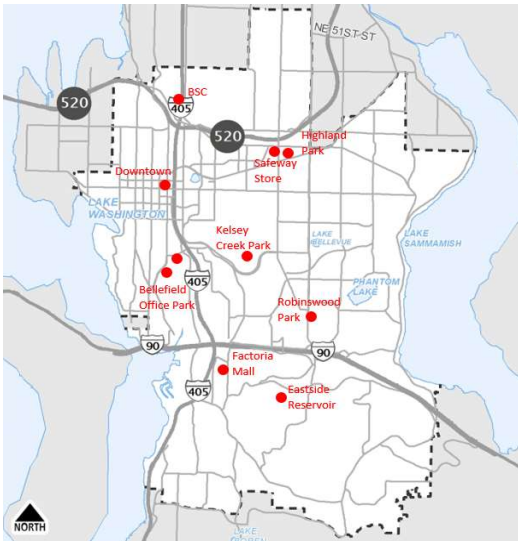
In the short term, this program reduces the likelihood of catastrophic system failures, unplanned service interruptions, damage claims to the city, and sharp rate increases to react to system failures rather than proactively managing the system. In the long term, timely replacement or repair of water 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

Operating Budget Impacts

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

Project Map



Schedule of Activities

<u>Project Activities</u>	<u>From - To</u>	<u>Amount</u>
Project Costs	Ongoing	7,355,163

Total Budgetary Cost Estimate: 7,355,163

Means of Financing

<u>Funding Source</u>	<u>Amount</u>
Transfers from Other City Funds	7,355,163

Total Programmed Funding: 7,355,163

Future Funding Requirements: -

FY2023-2029

Comments

W-99: Water Service Line and Saddle Replacement Program

Category: High Quality Built & Natural Environment Status: Ongoing
 Department: Utilities Location: Citywide

Programmed Expenditures

<u>Programmed Expenditures</u>	<u>Appropriated To Date</u>	<u>FY 2023 Budget</u>	<u>FY 2024 Budget</u>	<u>FY 2025 Budget</u>	<u>FY 2026 Budget</u>	<u>FY 2027 Budget</u>	<u>FY 2028 Budget</u>	<u>FY 2029 Budget</u>
5,382,500	3,525,500	552,000	796,000	337,000	-	-	19,000	153,000

Description and Scope

This program replaces aging and deteriorating water service saddles (the component connecting the service line to the water main), and water service lines (the City-owned pipe between the main and the meter), in response to known deficiencies and/or in advance of planned street improvements. Annual expenditures can vary widely depending on the condition of saddles and service lines where street improvement projects are planned.

Rationale

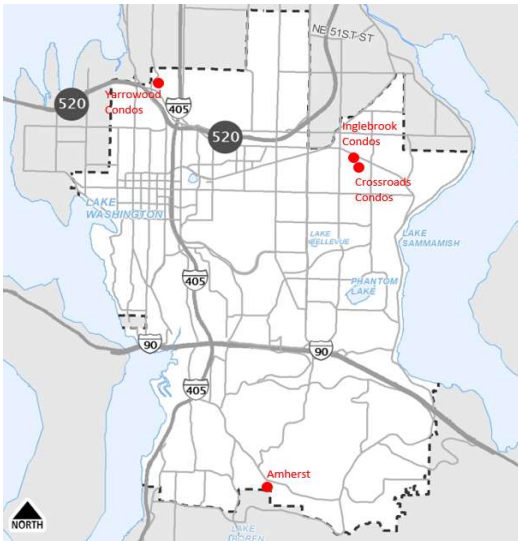
In the short term, this program reduces the likelihood of catastrophic system failures, unplanned service interruptions, damage claims to the city, and sharp rate increases to react to system failures rather than proactively managing the system. In the long term, timely replacement or repair of water 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

Operating Budget Impacts

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

Project Map



Schedule of Activities

Project Activities	From - To	Amount
Project Costs	Ongoing	5,382,500

Total Budgetary Cost Estimate: 5,382,500

Means of Financing

Funding Source	Amount
Transfers from Other City Funds	5,382,500
Total Programmed Funding:	5,382,500
Future Funding Requirements:	-

FY2023-2029

Comments

W-103: Increase Drinking Water Storage Availability for West Operating Area

Category: High Quality Built & Natural Environment

Status: Ongoing

Department: Utilities

Location: Wilburton

Programmed Expenditures

<u>Programmed Expenditures</u>	<u>Appropriated To Date</u>	<u>FY 2023 Budget</u>	<u>FY 2024 Budget</u>	<u>FY 2025 Budget</u>	<u>FY 2026 Budget</u>	<u>FY 2027 Budget</u>	<u>FY 2028 Budget</u>	<u>FY 2029 Budget</u>
9,445,086	5,229,086	-	-	400,000	1,099,000	1,755,000	962,000	-

Description and Scope

This project is for design and construction of facilities to increase the drinking water storage available for anticipated population growth in Downtown, Bellevue, and Wilburton areas. System improvements will be made in this CIP window to allow transfer of surplus water stored in East Bellevue to the growth areas, assuring emergency storage is available for near-term growth. These improvements include upgrades to transmission mains in NE 8th Street and at SE 7th and 140th Ave SE, and upgrades to system Pressure Reducing Valves. The project also includes analysis of emergency well capacity to supplement regional supply in case of an outage, which may offset or reduce the need for added storage. The 2015 Water System Plan update analyzed required timing and volume as well as siting considerations for storage to meet the needs of planned growth..

Rationale

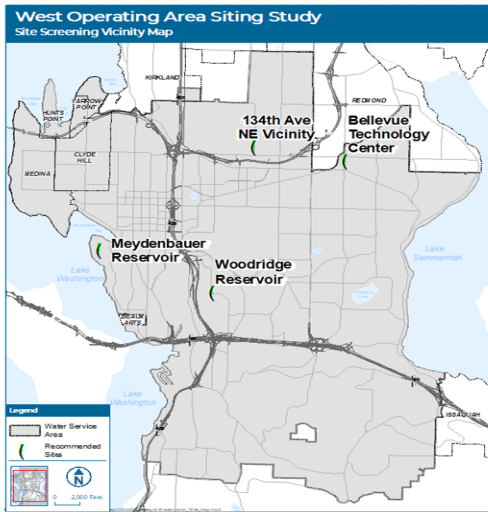
In the short term, utility capacity will be available without delaying development and redevelopment projects. In the long term, recovering the cost of projects from growth will reduce future rate increases to pay for utility system replacement.

Environmental Impacts

Operating Budget Impacts

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

Project Map



Schedule of Activities

Project Activities	From - To	Amount
Project Costs	Ongoing	9,445,086

Total Budgetary Cost Estimate: 9,445,086

Means of Financing

Funding Source	Amount
Transfers from Other City Funds	9,445,086
Total Programmed Funding:	9,445,086
Future Funding Requirements:	-

FY2023-2029

Comments

W-110: Water Supply Inlet Rehabilitation

Category: High Quality Built & Natural Environment Status: Ongoing
 Department: Utilities Location: Citywide

Programmed Expenditures

<u>Programmed Expenditures</u>	<u>Appropriated To Date</u>	<u>FY 2023 Budget</u>	<u>FY 2024 Budget</u>	<u>FY 2025 Budget</u>	<u>FY 2026 Budget</u>	<u>FY 2027 Budget</u>	<u>FY 2028 Budget</u>	<u>FY 2029 Budget</u>
2,618,000	2,314,000	175,000	129,000	-	-	-	-	-

Description and Scope

This program is for the renewal and replacement of water supply Inlet stations, where Bellevue draws water from the regional water transmission system. Bellevue manages 14 inlet stations, and shares ownership in 3 other inlet stations operated by adjacent utilities. Projects are proposed to maintain reliability, improve safety, reduce risk, and renew aging infrastructure.

Rationale

In the short term, this project 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

Operating Budget Impacts

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

Project Map



Schedule of Activities

<u>Project Activities</u>	<u>From - To</u>	<u>Amount</u>
Project Costs	Ongoing	2,618,000

Total Budgetary Cost Estimate: 2,618,000

Means of Financing

<u>Funding Source</u>	<u>Amount</u>
Transfers from Other City Funds	2,618,000

Total Programmed Funding: 2,618,000

Future Funding Requirements: -

FY2023-2029

Comments

W-111: Maintenance and Operations Yard

Category: High Quality Built & Natural Environment Status: Ongoing
 Department: Utilities Location: Citywide

Programmed Expenditures

<u>Programmed Expenditures</u>	<u>Appropriated To Date</u>	<u>FY 2023 Budget</u>	<u>FY 2024 Budget</u>	<u>FY 2025 Budget</u>	<u>FY 2026 Budget</u>	<u>FY 2027 Budget</u>	<u>FY 2028 Budget</u>	<u>FY 2029 Budget</u>
9,200,000	5,333,000	-	-	2,466,000	1,401,000	-	-	-

Description and Scope

As the City of Bellevue continues to grow, there is a critical need for long range operational facilities planning to ensure that the Utilities Department (Utilities) can meet the community's current and future needs in an efficient and timely manner. The current service locations are functioning at or near capacity, and there is significant risk that they will not be sufficient to meet Utilities' growing operational needs. To address this, Utilities initiated the development of a long range Operations and Maintenance (O&M) Facilities Plan.

Based on the recommendation of the O&M Facilities Plan, property acquisition, design, and construction were funded through the Council adopted 2019-2025 and 2021-2027 CIP budgets, with \$16M of funding split between the water and sewer funds (\$8M each).

Programs included in this proposal are:

- W-111 Operations and Maintenance Land Acquisition - Water
- S-111 Operations and Maintenance Land Acquisition - Sewer

Rationale

The Utilities Operations and Maintenance Facilities Plan outlines strategic, 20-year investments to address vulnerabilities caused by inadequate, poorly positioned, and deteriorating facilities. Land acquisition and development of the Utilities North End Yard will start the Utility on the path to:

Environmental Impacts

Operating Budget Impacts

TBD

Project Map



Schedule of Activities

<u>Project Activities</u>	<u>From - To</u>	<u>Amount</u>
Project Costs	Ongoing	9,200,000

Total Budgetary Cost Estimate: 9,200,000

Means of Financing

<u>Funding Source</u>	<u>Amount</u>
Beginning Fund Balance	5,333,000
Transfers from Other City Funds	3,867,000
Total Programmed Funding:	9,200,000
Future Funding Requirements:	-

FY2023-2029

Comments

W-112: Water System Capital Planning

Category: High Quality Built & Natural Environment

Status: New

Department: Utilities

Location: Citywide

Programmed Expenditures

<u>Programmed Expenditures</u>	<u>Appropriated To Date</u>	<u>FY 2023 Budget</u>	<u>FY 2024 Budget</u>	<u>FY 2025 Budget</u>	<u>FY 2026 Budget</u>	<u>FY 2027 Budget</u>	<u>FY 2028 Budget</u>	<u>FY 2029 Budget</u>
890,000	-	-	286,000	404,000	200,000	-	-	-

Description and Scope

This program funds early capital project planning, which is applicable to both existing CIP programs and future capital projects yet to be identified. The proposed budget includes a new Water System Plan, which is required every ten years by the Washington State Department of Health and Bellevue City Code. Also included is assistance preparing applications for Federal Emergency Management Agency grants for seismic mitigation projects.

Rationale

Environmental Impacts

Operating Budget Impacts

Project Map



Schedule of Activities

<u>Project Activities</u>	<u>From - To</u>	<u>Amount</u>
Project Costs	Ongoing	890,000

Total Budgetary Cost Estimate: 890,000

Means of Financing

<u>Funding Source</u>	<u>Amount</u>
Transfers from Other City Funds	890,000

Total Programmed Funding: 890,000

Future Funding Requirements: -

FY2023-2029

Comments

W-115: SCADA Upgrade - Water

Category: High Quality Built & Natural Environment Status: Ongoing
 Department: Utilities Location: Citywide

Programmed Expenditures

<u>Programmed Expenditures</u>	<u>Appropriated To Date</u>	<u>FY 2023 Budget</u>	<u>FY 2024 Budget</u>	<u>FY 2025 Budget</u>	<u>FY 2026 Budget</u>	<u>FY 2027 Budget</u>	<u>FY 2028 Budget</u>	<u>FY 2029 Budget</u>
1,242,000	80,000	614,000	316,000	232,000	-	-	-	-

Description and Scope

The City of Bellevue Utilities Department utilizes a supervisory control and data acquisition (SCADA) system to control and monitor the potable water, wastewater and storm water systems. Since the initial installation in the 1970s, this system has utilized leased copper telephone lines as the SCADA communications media. With age, the copper phone lines used for communicating vital control logic and retrieving precious data have become increasingly unreliable. Any break in communications within our SCADA network increases the risk and cost of providing essential Utility services to our customers.

The family of projects under the SCADA Infrastructure Upgrades program will improve the reliability and security of the SCADA system across 32 potable water sites, 48 wastewater sites and 11 storm water sites. These projects will install a private, secure cellular and fiber-optic communications network and optimize the operation of the cities three utilities.

Rationale

Environmental Impacts

Operating Budget Impacts

Project Map



Schedule of Activities

<u>Project Activities</u>	<u>From - To</u>	<u>Amount</u>
Project Costs	Ongoing	1,242,000

Total Budgetary Cost Estimate: 1,242,000

Means of Financing

<u>Funding Source</u>	<u>Amount</u>
Transfers from Other City Funds	1,242,000

Total Programmed Funding: 1,242,000

Future Funding Requirements: -

FY2023-2029

Comments

W-117: 170th PI SE Pressure Improvements

Category: High Quality Built & Natural Environment Status: Approved and Begun
 Department: Utilities Location: West Lake Sammamish

Programmed Expenditures

<u>Programmed Expenditures</u>	<u>Appropriated To Date</u>	<u>FY 2023 Budget</u>	<u>FY 2024 Budget</u>	<u>FY 2025 Budget</u>	<u>FY 2026 Budget</u>	<u>FY 2027 Budget</u>	<u>FY 2028 Budget</u>	<u>FY 2029 Budget</u>
2,117,000	750,000	617,000	477,000	273,000	-	-	-	-

Description and Scope

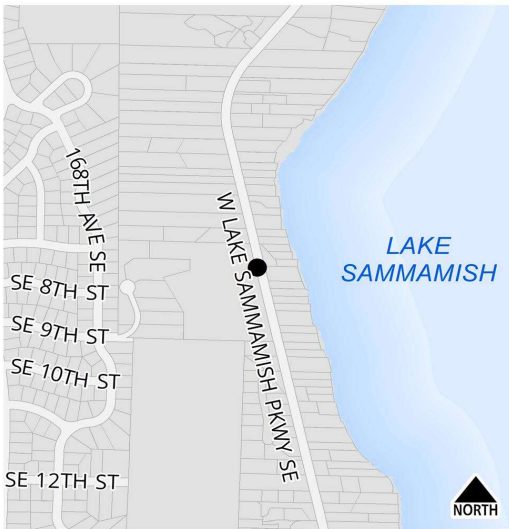
This project is the final phase of improvements to address low pressure deficiencies in the Sammamish 270 pressure zone (SA270), and specifically on 170th PI SE, as identified in the 2016 Water System Plan (p. 4-21). Water mains installed on 170th PI SE circa 1980 have never provided the minimum 30 psi pressure established by the City and required by the WA State Department of Health, due to high elevation relative to West Lake Sammamish Pkwy and SA270. As a solution, this project includes installation of water main and a pressure-reducing valve (PRV) station in an existing driveway across Weowna Park, to provide higher-pressure water on 170th PI SE.

Rationale

Environmental Impacts

Operating Budget Impacts

Project Map



Schedule of Activities

<u>Project Activities</u>	<u>From - To</u>	<u>Amount</u>
Project Costs	Ongoing	2,117,000

Total Budgetary Cost Estimate: 2,117,000

Means of Financing

<u>Funding Source</u>	<u>Amount</u>
Transfers from Other City Funds	2,117,000

Total Programmed Funding: 2,117,000

Future Funding Requirements: -

FY2023-2029

Comments

W-118: Somerset Highlands Pressure & Flow Improvements

Category: High Quality Built & Natural Environment Status: New
 Department: Utilities Location: Somerset

Programmed Expenditures

<u>Programmed Expenditures</u>	<u>Appropriated To Date</u>	<u>FY 2023 Budget</u>	<u>FY 2024 Budget</u>	<u>FY 2025 Budget</u>	<u>FY 2026 Budget</u>	<u>FY 2027 Budget</u>	<u>FY 2028 Budget</u>	<u>FY 2029 Budget</u>
5,781,000	-	440,000	906,000	2,435,000	2,000,000	-	-	-

Description and Scope

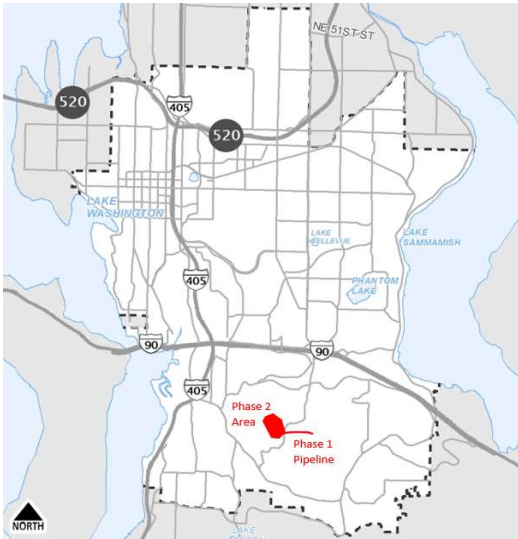
This program is proposed to address level of service deficiencies identified in the 2016 Water System Plan. During a fire event in Somerset Highlands, when high flows are drawn from local hydrants, customers at high elevations are likely to lose water service due to capacity bottlenecks. This loss of pressure would also create water quality risks, which may require boil water orders over a larger area to avoid contamination. Existing capacity was acceptable during original construction (late 1960s), but the flow available is inadequate based on City policy and current Washington State Department of Health minimum requirements. The proposed improvements will add capacity to meet the minimum level of service and resolve these deficiencies.

Rationale

Environmental Impacts

Operating Budget Impacts

Project Map



Schedule of Activities

<u>Project Activities</u>	<u>From - To</u>	<u>Amount</u>
Project Costs	Ongoing	5,781,000

Total Budgetary Cost Estimate: 5,781,000

Means of Financing

<u>Funding Source</u>	<u>Amount</u>
Transfers from Other City Funds	5,781,000
Total Programmed Funding:	5,781,000
Future Funding Requirements:	-

FY2023-2029

Comments

W-119: Groundwater Well Improvements

Category: High Quality Built & Natural Environment

Status: New

Department: Utilities

Location: Crossroads

Programmed Expenditures

<u>Programmed Expenditures</u>	<u>Appropriated To Date</u>	<u>FY 2023 Budget</u>	<u>FY 2024 Budget</u>	<u>FY 2025 Budget</u>	<u>FY 2026 Budget</u>	<u>FY 2027 Budget</u>	<u>FY 2028 Budget</u>	<u>FY 2029 Budget</u>
12,835,000	-	-	-	360,000	1,919,000	923,000	1,734,000	7,899,000

Description and Scope

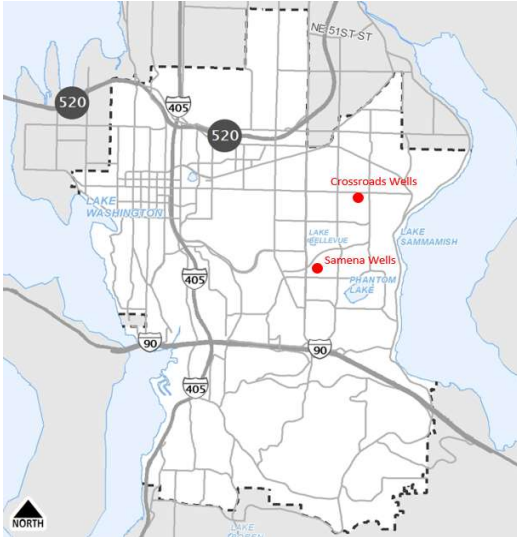
Bellevue Utilities maintains four groundwater wells for municipal water purposes, including non-potable or potable uses, and emergency water supplies. These wells were the sole supply of water to the Lake Hills and Crossroads neighborhoods in the 1950s and 1960s, before purchasing water from Seattle. This program is proposed to fund projects that maintain readiness, protect water quality, and optimize use of groundwater. Well assessment and rehabilitation work will restore and maintain well condition and yield. Improvements at the Crossroads site will increase access to groundwater for irrigation and tanker truck filling, improve well head protection measures, and improve response time and capacity to augment normal supplies in an emergency. An emergency well siting study will evaluate option to install additional, emergency-only wells throughout the service area, as recommended by the City's Water Distribution System Seismic Vulnerability Assessment.

Rationale

Environmental Impacts

Operating Budget Impacts

Project Map



Schedule of Activities

<u>Project Activities</u>	<u>From - To</u>	<u>Amount</u>
Project Costs	Ongoing	12,835,000

Total Budgetary Cost Estimate: 12,835,000

Means of Financing

<u>Funding Source</u>	<u>Amount</u>
Transfers from Other City Funds	12,835,000
Total Programmed Funding:	12,835,000
Future Funding Requirements:	-

FY2023-2029

Comments

W-120: Project and Portfolio Management System-Water

Category: High Quality Built & Natural Environment Status: New
 Department: Utilities Location: Citywide

Programmed Expenditures

<u>Programmed Expenditures</u>	<u>Appropriated To Date</u>	<u>FY 2023 Budget</u>	<u>FY 2024 Budget</u>	<u>FY 2025 Budget</u>	<u>FY 2026 Budget</u>	<u>FY 2027 Budget</u>	<u>FY 2028 Budget</u>	<u>FY 2029 Budget</u>
167,000	-	134,000	33,000	-	-	-	-	-

Description and Scope

This proposal is a collaboration between the Utilities and Transportation Departments to purchase and implement a modern tracking and reporting system to support the management and delivery of both departments' Capital Investment Programs and Projects. Upon funding approval, both departments will finalize the Request for Proposals for a new Project and Portfolio Management System that will support CIP delivery through improved management tools, tracking and reporting functionality. The draft RFP for this project has already been developed collaboratively between Utilities, Transportation, I.T.D., and FAM (Procurement). Once finalized, the departments will review RFP vendor submissions, which will include evaluation of written proposals and software demonstrations. Upon satisfactory results of a preferred vendor, the negotiations and resulting contract development and execution are finalized, the Departments will proceed with software configuration, implementation, and staff training.

Rationale

Currently, the work of delivering the CIP is supported through use of the Project Reporting System (PRS), which is a software solution built by Bellevue's Information Technology Department (ITD) more than a decade ago to track and report on financial status of individual CIP projects. It is the only software system currently available for Transportation and Utilities to track project expenditures compared to cost projections and adopted budgets for CIP projects. PRS suffers from poor performance and instability and lacks analysis and reporting functionality. Staff tasked with delivering the CIP currently utilize PRS and numerous different Excel spreadsheets to track project delivery and budget elements. These spreadsheets are not connected to each other and there is risk that data between the spreadsheets may not be consistent or correct. This requires ongoing quality checking and correction, which takes staff time away from other important tasks.

In 2017, a business case was developed by Utilities and Transportation Departments to seek a better system to support project and program management and a request for information (RFI) process was undertaken to garner input from the industry on available systems. Due to City budget constraints, the formal procurement of a new system was put on hold.

Since 2017, the need for an enterprise Project and Portfolio Management System has increased due to the size and complexity of both department's Capital Investment Programs. Therefore, this proposal will resume work started in 2017 and fund implementation and ongoing maintenance of a new project tracking and reporting system that will improve functionality for management of CIP Program delivery over the current model of using PRS in conjunction with numerous, disconnected and difficult to manage excel spreadsheets. Implementation of a new system is expected to yield improved tracking and management of project scopes, schedules, budgets and risks to better achieve project delivery goals and contribute to meeting program and portfolio accomplishment targets as well.

Environmental Impacts

Operating Budget Impacts

Project Map



Schedule of Activities

<u>Project Activities</u>	<u>From - To</u>	<u>Amount</u>
Project Costs	Ongoing	167,000

Total Budgetary Cost Estimate: 167,000

Means of Financing

<u>Funding Source</u>	<u>Amount</u>
Transfers from Other City Funds	167,000

Total Programmed Funding: 167,000

Future Funding Requirements: -

FY2023-2029

Comments