

Seattle Public Utilities

Drainage and Wastewater

Overview

Seattle Public Utilities (SPU) maintains the network of sewer and drainage systems throughout the City of Seattle. These systems include approximately:

- 448 miles of sanitary sewers
- 968 miles of combined sewers
- 68 Pump Stations
- 5.5 miles of wastewater force mains
- 84 City-owned and permitted Combined Sewer Overflow points
- 38 Combined Sewer Overflow control detention tanks/pipes
- 481 miles of storm drains / 290 storm drain outfalls
- 33,750 catch basins
- 65 miles of ditches, 128 miles of culverts
- 30 miles of stream channel (49 creeks, 6 of which are salmon bearing)
- 9 acres of green stormwater infrastructure
- 17 detention/treatment ponds
- 295 drainage flow control facilities
- 578 water quality structures

The Drainage and Wastewater (DWF) Capital Improvement Program (CIP) is the vehicle for rehabilitating, replacing, improving, and expanding this infrastructure, as well as constructing projects that protect and enhance our City's public health and environmental resources. Planned spending in the DWF CIP is approximately \$1.24 billion over the next six years, from 2022 to 2027.

Thematic Priorities/Project Selection Criteria

The goal of the DWF CIP is to construct facilities that reduce the frequency of flooding and sewer backups for customers and improve water quality and habitat in the environment by reducing sewage overflows and the impacts of flooding and stormwater pollution. Projects in the DWF CIP are guided by various Federal regulations, City policies, long-term plan documents, the Drainage Systems Analysis, the Wastewater System Analysis, and the SPU Asset Management Committee (AMC) benefit criteria. Many DWF CIP projects are outlined in the Plan to Protect Seattle's Waterways and Asset Management Plans. In addition to candidate capital projects identified from these planning documents, projects are identified from external projects and opportunities and emergencies or other unexpected events. All potential capital projects are prioritized for consideration into the CIP budget. Priority rankings are based on the following set of criteria:

- **Public Health, Safety & Environment:** The overriding priority for the DWF is protecting public health and safety, improving services to customers and decreasing our impact on the environment. Examples of highly ranked projects in this category include the South Park Pump Station, Localized Flood Control program, Sanitary Sewer Overflow Capacity program, South Park Water Quality Facility, and NDS Partnering.
- **Infrastructure Reliability & Risk:** How a project addresses infrastructure conditions or vulnerabilities, based on an understanding of the consequence of a risk occurring and its likelihood. Examples of highly ranked projects in this category include the Pipe Rehabilitation and Pump Station improvement programs.

SPU – Drainage and Wastewater

- **Regulatory, Mandates, Legal Agreements:** The City of Seattle/SPU must meet State and Federal regulatory requirements to comply with the Clean Water Act (CWA) and the Consent Decree that was entered in court on July 3, 2013, between the City, the U.S. Environmental Protection Agency (EPA), and the U.S. Department of Justice (DOJ). The two most significant regulatory drivers associated with the CWA are the National Pollutant Discharge Elimination System (NPDES) Waste Discharge Permit (aka NPDES CSO Permit) and the NPDES Phase I Municipal Stormwater Permit (aka NPDES MS4 Permit). This ranking category considers the degree to which the project is driven by Federal, State, and local laws, permit and regulatory requirements, and consent decrees; as well as by legal agreements with public and private parties and the specific mandates of the City Council and Mayor. Examples of highly ranked projects in this category include the Ship Canal Water Quality Project, CSO Retrofits, South Park Water Quality Facility, and Natural Drainage System (NDS) Partnering.
- **External Drivers and Opportunities:** SPU’s responsiveness to, or engagement with, the projects of other Departments or jurisdictions, or opportunities to provide multiple benefits, address service equity, or reduce ratepayer costs through outside funding opportunities. Examples of highly ranked projects in this category include the Seattle Department of Transportation’s Move Seattle projects.
- **Service Equity:** Factors in service equity are incorporated into the prioritization of potential projects in any program based on amalgamated data from the Office of Sustainability and Environment, including race, education, language and median income. Known disparities of historical service levels are also considered within racial equity planning tools such as stakeholder analyses and inclusive outreach planning.

Every project is rated against each criterion. Criteria ratings are then considered in determining an overall project priority ranking, using expert judgment (rather than a formula). Priority rankings for the CIP are determined by the leads for each LOB, with reviews by key internal stakeholders. Project priority rankings are used to clarify and document which projects are most important and why, to help determine which projects at the margin will be included, excluded or deferred from the CIP, and which projects should receive priority attention if a staff or financial resource constraint should arise.

To aid SPU in making responsible decisions on behalf of ratepayers prioritized projects must then be justified through a business case process that establishes that a problem or opportunity is timely and important and that the proposed solution is superior to alternatives based on a triple bottom line analysis (economic, environmental, and social) of life-cycle benefits and costs. The process also recognizes that a project may be a “must-do” project (e.g. required by regulations). Business Cases must be approved by the SPU CEO/General Manager and Asset Management Committee.

DWW Priorities that are also Mayor/Council Priorities

Improvements to DWW infrastructure result in safer communities, a healthier environment, and regulatory compliance which are goals inherent within the Mayor’s key values (safe, affordable, vibrant and interconnected City that fosters innovation).

- **Aligning Capital Investments with Community Planning.** SPU has aligned planning for the South Park Water Quality Facility with the Office of Planning and Community Development’s Open Space planning in the S. Park Urban Village area and the Duwamish Valley Action Plan.

2022-2027 Adopted Capital Improvement Program

SPU – Drainage and Wastewater

- **Aligning Capital Investments with Seattle Department of Transportation’s modal plan.** SPU has several projects to facilitate citywide interconnectivity efforts:
 - Primary investments are around supporting transportation led projects as part of the Move Seattle Levy, described below within the shared costs projects Budget Control Level (BCL).
 - SPU is also leading a joint SPU/SDOT project in the South Park industrial area providing long desired Drainage Conveyance and Roadway infrastructure.
 - The NDS Program, described below, collaborates with SDOT and has identified numerous joint sidewalk/bioretenion project locations.

- **Expand use of Green Stormwater Infrastructure** has been identified by Mayor and Council as a priority. Projects that will help achieve the Citywide stretch goal to manage 700MG of stormwater annually with GSI by 2025, include the following:
 - The Natural Drainage Systems (NDS) Partnering program will use bioretention to reduce storm water pollution in creeks and to improve neighborhoods. The NDS Partnering Program will build natural drainage systems along approximately 66 blocks (330’ block equivalents) in the Longfellow, Thornton, and Pipers Creek watersheds. The first of these projects was 30th Ave NE, with construction led by SDOT, which was completed in 2019.
 - GSI in Urban Villages Program. SPU and Council created the GSI in Urban Villages Program to complement proposed up zones through HALA, as well as the City’s overall growth strategy. This new program has flexibility to address a variety of system problems within urban villages and urban centers, including flooding, sewer backups, water quality, and creek protection. Early Green Infrastructure in Urban Villages projects include Cloverdale Bioretention (South Park neighborhood, construction 2021), Crown Hill GSI and Lake City Floodplain Park (Options Analysis in progress), and a variety of development partnerships.
 - RainWise Program fights water pollution by offering rebates to property owners for controlling stormwater at residences, schools, and businesses. This program was developed by SPU but is now delivered jointly with King County Wastewater Treatment Division. Over 1,500 Seattle residents and businesses have installed voluntary rain gardens or cisterns through this program, managing over 26 million gallons of runoff every year.

CIP Highlights

2022-2027 Adopted Drainage and Wastewater Fund CIP by BCL
(In ‘000s; total may not sum due to rounding)

BCL	2022	2023	2024	2025	2026	2027	Total
Protection of Beneficial Uses	20,911	39,473	47,444	50,010	41,235	36,677	235,749
Sediments	4,560	6,789	13,349	17,809	11,543	12,369	66,421
Combined Sewer Overflows	98,151	106,987	70,944	32,364	8,188	33,835	350,470
Rehabilitation	40,685	46,960	40,692	40,144	42,946	33,000	244,428
Flooding, Sewer Backup & Lndsl	29,967	13,292	30,188	18,829	32,865	47,925	173,066
Shared Cost Projects	15,345	34,550	38,263	21,544	19,731	11,278	140,711
Technology	4,299	4,299	4,299	4,299	4,299	4,299	25,794
Total	213,919	252,351	245,179	184,999	160,808	179,383	1,236,639

2022-2027 Adopted Capital Improvement Program

Protection of Beneficial Uses: This program makes improvements to the City’s drainage system to reduce the harmful effects of stormwater runoff on creeks and receiving water bodies and preserves the storm water conveyance function of our creeks through stream culvert repair and rehabilitation. The program includes projects to meet regulatory requirements, primarily NDS Partnering Projects (a key component of Seattle’s Plan to Protect Seattle’s Waterways) which improves water quality with GSI approaches while partnering with SDOT to provide streetscape enhancements. The program also includes projects that are part of the SPU and Council-created GSI in Urban Villages Program. Funding in the DWF CIP is focused on cost effective stormwater and water quality projects such as NDS Partnering, GSI in Urban Villages projects, Capitol Hill Water Quality project, and the Taylor Creek Culvert Replacement project.

Sediments: The City of Seattle is a Potentially Responsible Party (PRP) for cleanup liabilities for contaminated sediments at the Lower Duwamish Waterway Superfund Site, the Harbor Island Superfund Site, and Gas Works Park because of alleged historic contributions from Combined Sewer Overflows (CSO) and storm drain discharges, or other City-owned facilities. The City continues to work with EPA, the Washington State Department of Ecology, King County, and other PRPs on an assessment of contaminants and sources. The Sediments program provides funding for studies and analysis for cleanup of contaminated sediment sites in which the City is a participant, for engineering design and construction of actual cleanup of contaminated sites, and for liability allocation negotiations. The study phase of sediment remediation projects often requires multiple years before specific cleanup actions are defined. Current projections reflect cleanup construction adjacent to Gasworks Park, the Duwamish Waterway Sediment Remediation, and East Waterway Remediation projects beginning in 2024 based on preliminary schedules.

Combined Sewer Overflows: This program consists of projects that are mandated by State and Federal regulations to control combined sewer overflows (CSOs) into the City’s receiving waters. During heavy rainfall events, the combination of stormwater (about 90 percent of the volume) and sewage may exceed the capacity of the combined sewer system (CSS) and overflow into our waterways – causing a combined sewer overflow (CSO). CSOs spill a mixture of raw sewage and stormwater into local waterways at 85 outfalls throughout the City. In some instances, these spills may violate water quality standards, create unacceptable risk to public health, contaminate sediment and habitat for endangered species and pollute the Puget Sound.

Annual CSOs have been reduced from 20-30 billion gallons per year by both the City and the County in 1970 to about 1 billion gallons per year, today. The City’s overflows account for 100-200 million gallons per year. SPU currently does not meet regulatory mandates that limit CSOs to one untreated overflow per outfall location per year. SPU is required by State and Federal law to achieve control of CSOs by 2030. The CSO Long Term Control Plan (LTCP), also called the Plan to Protect Seattle’s Waterways, was approved by regulators in May 2015. Ultimately the Consent Decree requires completion of construction of all CSO reduction projects by December 2030. CSOs must be proven to be controlled one year after completion of construction. Continuing investments in CSO control will enable SPU to achieve compliance with the 2030 milestone.

Projects in the CSO Program include large infrastructure projects (e.g. storage structures, pipes, tunnels, wet weather treatment plants, stormwater separation, pump stations, etc.), smaller retrofits, construction of Green Stormwater Infrastructure (GSI) for CSO control, and development and

2022-2027 Adopted Capital Improvement Program

SPU – Drainage and Wastewater

implementation of regulatory required plans such as the Plan to Protect Seattle’s Waterways. The largest project in the DWF CIP is the Ship Canal Water Quality Project (SCWQP). The SCWQP consists of a 2.7-mile-long, approximately 18-foot-diameter tunnel that, when completed, will capture and store approximately 75 million gallons of sewage and stormwater flows from Ballard, Fremont, Wallingford and Queen Anne.

Other key efforts in the program include Pump Station 13 Upgrade and Force Main Rehabilitation and Pump Station 22 Retrofit and Force Main Upgrade. Planning work is underway and will continue through the coming years for additional CSO reduction efforts to meet CSO Consent Decree compliance date requirements. SPU currently expects to spend approximately \$350 million over the next six years on CSO reduction projects. The majority of this spending is associated with the SCWQP.

Rehabilitation: This program consists of projects that repair, rehabilitate or replace existing drainage and wastewater assets to maintain or improve the current functionality level of the system. Assets that are addressed include:

- pump station structures, airlift conversions, major mechanical, ventilation and electrical components;
- drainage facilities including water quality structures, flow control structures and large surface water facilities; and
- drainage and wastewater conveyance pipes and structures (catch basins, maintenance holes and sandboxes).

Work within this program is a critical component to achieving SPU’s Consent Decree target of four sanitary sewer overflows per 100 miles of sewer pipe annually. Individual projects are defined by the type and method of rehabilitation and/or replacement and include emergency rehabilitation, no-dig pipe lining rehabilitation by crews or contract, full mainline dig pipe replacement by contract, dig point sewer pipe and structure rehabilitation by crews or contract, and pump station repairs or replacement by crew or contractor.

This proposed budget will include a new drainage facility master project to rehabilitate or replace water quality structures, flow control structures and large surface water facilities by crew or contractor.

Flooding, Sewer Back-up, and Landslides: This program is responsible for preventing and alleviating flooding and sewer backups in the City of Seattle, with a primary focus on the protection of public health, safety, and property. The program area is focused on planning, design, and construction of new pipes, ditches, culverts, detention facilities, and GSI that control and/or convey storm runoff to the ultimate discharge locations of creeks, lakes, and the Puget Sound. This program also involves protecting SPU drainage and wastewater infrastructure in landslide prone areas, both from impending small landslides, and providing drainage improvements where surface water generated from the City right-of way is contributing to small landslides. Lastly, this program also includes sewer capacity projects that reduce sewer backups and helps lower the risk of exceeding the Consent Decree target of four sanitary sewer overflows per 100 miles of sewer pipe per year. Major projects in this program include the Pearl Street SSO reduction project, the 12th Avenue drainage project, and the South Park Water Quality and Pump Station project. The South Park Water Quality Facility is a regulatory commitment within the Plan to Protect Seattle’s Waterways.

Shared Cost Projects: This program includes individual capital improvement projects which typically benefit multiple Lines of Business (LOB) (e.g. the Water LOB and the Drainage and Wastewater LOB) and whose costs are "shared," or paid for by more than one of SPU's utility funds.

The Adopted Budget for the Shared Cost program includes budgets for a number of interdepartmental projects including the Alaskan Way Viaduct and Seawall Replacement, Move Seattle, Center City Streetcar, and Sound Transit Link Light Rail. This BCL also includes funding for SPU Facility Improvements such as the South Operations Center, the North Operations Center, and a new dewatering facility near the South Transfer Station. Other programs in this BCL include DWW Heavy Equipment Purchases, 1% for the Arts, and several smaller projects.

Technology: The Technology CIP is managed in six program areas that provide a department-wide view of technology investments to address SPU's strategic, business, and City-wide priorities. These areas are:

- Customer Contact and Billing;
- Enterprise Information Management;
- IT Infrastructure;
- Project Delivery & Performance;
- Science & System Performance; and
- Asset Information Management.

Investments in 2021 address several of SPU's key initiatives, including:

- Financial Management and Internal Controls;
- Operational Excellence and Performance Management;
- An Easy and Engaged Customer Experience;
- Data-driven Decision Support; and
- Project Delivery/Project Controls.

In 2022, SPU will continue focusing its technology spending on the highest priority business needs. These projects would primarily be within the Customer Contact and Billing Program, Project Delivery and Performance Program, as well as the Asset Information Management Program.

With the new Customer Information System (CIS) already in place, the next major projects for SPU within the Customer Contact and Billing Program include the Utilities Customer Self-Service Portal project, the Customer Contact and Billing Upgrade, CIS Workflow, and the CIS Reporting. Other projects slated would be enhancements to SPU's Enterprise Project Management System and the Development Systems Integration project, and the Maximo Business Intelligence upgrade along with other projects that have been deferred in previous years.

CIP Revenue Sources

Historically, the DWF CIP has been funded primarily by revenue bonds serviced by ratepayers. However, DWF financial policies adopted in 2003 gradually increase cash contributions from SPU to fund the CIP. By 2007, a 3-year average of 25 percent of total CIP costs were funded by a cash contribution, with the remaining capital needs being debt financed.

SPU's DWF CIP is funded largely by Drainage and Sewer ratepayers. SPU issues bonds, serviced by ratepayers that cover approximately 75 percent of the CIP, with the remainder funded by cash. DWF rates were approved by the Mayor and City Council in 2021 for the three-year period of 2022-2025.

SPU also actively seeks grants and low-interest loans. Loans like this offer a lower interest rate than what SPU can borrow/issue debt and offset the need to draw down extra dollars from the construction fund. SPU also receives Remedial Action Grants from the Washington State Department of Ecology for up to 50 percent of sediments cleanup project costs.

Summary of Upcoming Budget Issues and Challenges

The biggest challenge for DWF will be continuing to manage priority projects while still complying with regulatory requirements from the EPA, and Washington State Department of Ecology (DOE) - all within the financial limitations of the Fund.

The City negotiated a Consent Decree between the City, the EPA, and the DOJ for compliance with the CWA and State regulations. The Consent Decree was entered in court on July 3, 2013, and includes deadlines for development and implementation of the LTCP and will drive spending in the CSO Reduction Program over the next several years. The Consent Decree also includes requirements to implement a Capacity Management, Operations and Maintenance (CMOM) Program, which drives operations and maintenance spending and CIP spending in the Rehabilitation Program. Additionally, an NPDES permit for stormwater includes requirements to help protect local waterways and the Puget Sound from damaging pollutants and excessive runoff. This increased regulatory emphasis on protecting and improving water quality has resulted in the need for the City to make substantial investments in detention, water quality treatment (e.g., GSI), CSO retrofits, pipe and pump station rehabilitation, and inflow/infiltration reduction.

- **Detention:** This focuses on storing stormwater and/or sewage during a rainfall event and can be accomplished through detention ponds (for stormwater), GSI (for stormwater) or underground tanks or tunnels (for both wastewater and stormwater). Detention can be added to the drainage system to offset the impacts of larger storms that overwhelm the conveyance capacity of the combined sewer system and can result in backups of sewage, localized flooding and releases of untreated sewage.
- **Water Quality Treatment:** This focuses on removing pollutants and can be accomplished through GSI or the use of technology such as specialized media filters. GSI is the use of green solutions to help reduce untreated overflows by allowing stormwater to infiltrate slowly into the ground, cutting the volume of stormwater entering the system, and providing water quality treatment through natural processes as the polluted runoff comes in contact with the soil and vegetation. The use of GSI is required as part of development through Seattle's NPDES permit and Stormwater Code.
- **CSO Retrofits:** This focuses on optimizing the existing collection, pumping and storage systems, using low-cost repairs and modifications to reduce overflows to waterways.
- **Pipe and Pump Station Rehabilitation:** This consists of repairing, rehabilitating, or replacing existing gravity sewer pipes, wastewater pump stations, and/or force mains that have deficiencies or have reached the end of their useful life.

2022-2027 Adopted Capital Improvement Program

- **Inflow/Infiltration Reduction:** This focuses on filling in cracks in sewer lines that allow groundwater to enter the system. It also addresses parts of the system where there are direct stormwater connections to the sanitary sewer system which can/should be directed to a separated stormwater system. By reducing inflow/infiltration, it is possible to reduce the frequency and volume of SSOs and sewer backups.

Other challenges DWF faces in meeting its obligations:

- 1) **Addressing public expectations:** it is challenging to address public expectations around our basic service level programs, such as flooding and system capacity. SPU is unable to prioritize these programs at this time due to rate pressure caused by the significant costs of the federally mandated consent decree. The separated drainage and wastewater systems are at capacity during storm events, or lacking the fundamental infrastructure at various locations across the City. The impacts can range from very serious (basement sewer back-ups) to nuisance (limited street or yard flooding) issues.
- 2) **Construction Costs:** due to market conditions and building large infrastructure in dense urban areas costs to construct drainage and wastewater infrastructure have increased significantly putting additional pressure on the portfolio.
- 3) **Climate Change:** increasing rainfall intensities resulting from climate change are increasing pressure on drainage and wastewater infrastructure leading to increased CSOs and driving the need for larger solutions and additional system improvements.

Future Projects/What is on the Horizon

Over the next 10 years, the DWF CIP will be driven largely by regulatory requirements, major transportation projects, and Operations Crew Facilities. Major projects include the completion of the Ship Canal Water Quality Project, sediment remediation, and other projects necessary under the LTCP/Plan to Protect Seattle's waterways, and localized flooding reduction in Broadview, and flood reduction and water quality improvements in South Park.

SPU is moving forward with a comprehensive planning effort within the [Shape Our Water](#) plan. The result of this effort will be an integrated system plan, to better identify the highest priority locations and potential funding and financing strategies. The Shape Our Water project will provide a 50-year plan for managing and improving Seattle's drainage and wastewater systems and increasing our water resilience. Through this planning effort, SPU will identify the partnerships, programs, and projects that will improve the performance and resilience of our drainage and wastewater systems while optimizing social and environmental co-benefits for the City. We are developing our plan through technical analysis, robust community engagement and an integrated approach to planning. By the end of 2023, SPU will have near- and long-term plans for drainage and wastewater programs, partnerships, and infrastructure investments over the next 50 years. This planning is part of building a better Seattle by providing drainage and wastewater services that are affordable, safe, green, and just in a climate uncertain future.

City Council Changes to the Proposed CIP

2022-2027 Adopted Capital Improvement Program

SPU – Drainage and Wastewater

The City Council made no change to the 2022-2027 Proposed CIP for the SPU Drainage and Wastewater Line of Business.

Beneficial Uses Program

Project No:	MC-SU-C3317	BSL Code:	BC-SU-C333B
Project Type:	Ongoing	BSL Name:	Protection of Beneficial Uses
Project Category:	Improved Facility	Location:	Various
Current Project Stage:	N/A	Council District:	Multiple
Start/End Date:	N/A	Neighborhood District:	Multiple
Total Project Cost:	N/A	Urban Village:	Multiple

This ongoing project develops drainage related projects to improve the water quality, stream function and habitat in the streams and receiving waters of Seattle. Projects include stream and habitat restoration to reduce flooding, culvert repair and replacements to protect public safety, and green stormwater infrastructure projects to address flooding and control and clean runoff to streams.

Resources	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Drainage and Wastewater Rates	9,370	2,636	966	11,559	17,372	13,768	10,880	10,000	76,551
Total:	9,370	2,636	966	11,559	17,372	13,768	10,880	10,000	76,551
Fund Appropriations / Allocations ¹	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Drainage and Wastewater Fund	9,370	2,636	966	11,559	17,372	13,768	10,880	10,000	76,551
Total:	9,370	2,636	966	11,559	17,372	13,768	10,880	10,000	76,551

O&M Impacts: This is an ongoing program and any O&M needed as a result of this program is included in SPU's Operating Budget.

¹Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars

Broadview Long-Term Plan

Project No:	MC-SU-C3812	BSL Code:	BC-SU-C380B
Project Type:	Ongoing	BSL Name:	Flooding, Sewer Backup & Landslide
Project Category:	Improved Facility	Location:	Broadview
Current Project Stage:	N/A	Council District:	Council District 5
Start/End Date:	N/A	Neighborhood District:	Northwest
Total Project Cost:	N/A	Urban Village:	Not in an Urban Village

The Broadview Long-Term Plan had been an ongoing program to address longstanding drainage and wastewater problems. The current funded capital project within that program is the 12th Avenue NW Drainage Basin project, which addresses public and private flooding problems in that area by providing stormwater detention and green infrastructure.

Resources	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Drainage and Wastewater Rates	8,572	5,329	4,158	185	-	-	-	-	18,245
Total:	8,572	5,329	4,158	185	-	-	-	-	18,245
Fund Appropriations / Allocations¹	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Drainage and Wastewater Fund	8,572	5,329	4,158	185	-	-	-	-	18,245
Total:	8,572	5,329	4,158	185	-	-	-	-	18,245

O&M Impacts: This is an ongoing program and any O&M needed as a result of this program is included in SPU's Operating Budget.

¹Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars

Creek Culvert Replacement Program

Project No:	MC-SU-C3314	BSL Code:	BC-SU-C333B
Project Type:	Ongoing	BSL Name:	Protection of Beneficial Uses
Project Category:	Improved Facility	Location:	Various
Current Project Stage:	N/A	Council District:	Multiple
Start/End Date:	N/A	Neighborhood District:	Multiple
Total Project Cost:	N/A	Urban Village:	Multiple

This ongoing project provides for the repair and replacement of stream culverts that are part of SPU's critical drainage infrastructure. Culverts are prioritized for repair or replacement based on structural condition. Projects are then sequenced based on prioritization and other factors such as readiness to proceed, ability to address other drainage needs (e.g., flooding, maintenance), potential partnerships, synergies with other projects and availability of funding.

Resources	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Drainage and Wastewater Rates	5,667	2,032	1,272	1,224	5,893	7,525	10,095	10,077	43,785
Total:	5,667	2,032	1,272	1,224	5,893	7,525	10,095	10,077	43,785
Fund Appropriations / Allocations¹	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Drainage and Wastewater Fund	5,667	2,032	1,272	1,224	5,893	7,525	10,095	10,077	43,785
Total:	5,667	2,032	1,272	1,224	5,893	7,525	10,095	10,077	43,785

O&M Impacts: This is an ongoing program and any O&M needed as a result of this program is included in SPU's Operating Budget.

¹Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars

CSO Facility Retrofit

Project No:	MC-SU-C3611	BSL Code:	BC-SU-C360B
Project Type:	Ongoing	BSL Name:	Combined Sewer Overflows
Project Category:	Improved Facility	Location:	Various
Current Project Stage:	N/A	Council District:	Multiple
Start/End Date:	N/A	Neighborhood District:	Multiple
Total Project Cost:	N/A	Urban Village:	Not in an Urban Village

This ongoing project retrofits, upgrades, and modifies existing Combined Sewer Overflows (CSO) reduction facilities in Seattle CSO basins. Retrofit projects cost-effectively optimize and maximize existing system operation to minimize CSOs to the greatest extent possible, reducing long term CSO storage needs. This project assists in achieving State Department of Ecology's requirement of an average of no more than one CSO event per outfall per year.

Resources	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Drainage and Wastewater Rates	23,505	5,369	112	-	-	-	-	-	28,987
Total:	23,505	5,369	112	-	-	-	-	-	28,987
Fund Appropriations / Allocations¹	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Drainage and Wastewater Fund	23,505	5,369	112	-	-	-	-	-	28,987
Total:	23,505	5,369	112	-	-	-	-	-	28,987

O&M Impacts: This is an ongoing program and any O&M needed as a result of this program is included in SPU's Operating Budget.

¹Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars

Drainage Capacity Program

Project No:	MC-SU-C3802	BSL Code:	BC-SU-C380B
Project Type:	Ongoing	BSL Name:	Flooding, Sewer Backup & Landslide
Project Category:	Improved Facility	Location:	Various
Current Project Stage:	N/A	Council District:	Multiple
Start/End Date:	N/A	Neighborhood District:	Multiple
Total Project Cost:	N/A	Urban Village:	Multiple

This ongoing program provides flood control and local drainage and wastewater projects to improve system capacity or increase the existing level of service. Candidate projects are identified through DWW investigations, claims, complaints, studies, and prior planning. Drainage "spot" projects and small landslides prevention projects are also included within this program. The Localized Flood Control Program improves Drainage and Wastewater levels of service.

Resources	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Drainage and Wastewater Rates	22,587	3,195	2,978	4,249	4,069	6,929	7,065	16,725	67,798
Total:	22,587	3,195	2,978	4,249	4,069	6,929	7,065	16,725	67,798
Fund Appropriations / Allocations ¹	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Drainage and Wastewater Fund	22,587	3,195	2,978	4,249	4,069	6,929	7,065	16,725	67,798
Total:	22,587	3,195	2,978	4,249	4,069	6,929	7,065	16,725	67,798

O&M Impacts: This is an ongoing program and any O&M needed as a result of this program is included in SPU's Operating Budget.

¹Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars

Drainage Facilities Rehabilitation

Project No:	MC-SU-C3711	BSL Code:	BC-SU-C370B
Project Type:	Ongoing	BSL Name:	Rehabilitation
Project Category:	Improved Facility	Location:	Citywide
Current Project Stage:	N/A	Council District:	Multiple
Start/End Date:	N/A	Neighborhood District:	Multiple
Total Project Cost:	N/A	Urban Village:	Multiple

This new project provides for improvements and upgrades to SPU-owned drainage facilities including, but not limited to, detention/treatment ponds, flow control facilities, and water quality structures. Typical improvements may include, but are not limited to, the repair, rehabilitation, or replacement of drainage facilities.

Resources	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Drainage and Wastewater Rates	230	770	2,250	2,250	2,250	2,250	2,250	2,000	14,250
Total:	230	770	2,250	2,250	2,250	2,250	2,250	2,000	14,250

Fund Appropriations / Allocations ¹	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Drainage and Wastewater Fund	230	770	2,250	2,250	2,250	2,250	2,250	2,000	14,250
Total:	230	770	2,250	2,250	2,250	2,250	2,250	2,000	14,250

O&M Impacts: This is an ongoing program and any O&M needed as a result of this program is included in SPU's Operating Budget.

¹Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars

Future CSO Projects

Project No:	MC-SU-C3612	BSL Code:	BC-SU-C360B
Project Type:	Ongoing	BSL Name:	Combined Sewer Overflows
Project Category:	Improved Facility	Location:	N/A
Current Project Stage:	N/A	Council District:	Multiple
Start/End Date:	N/A	Neighborhood District:	Multiple
Total Project Cost:	N/A	Urban Village:	Multiple

This project is for future combined sewer overflow (CSO) reduction projects that will be identified through the CSO Long-Term Control Plan (LTCP) Update. Future projects are most likely to include underground storage projects, wastewater lift station improvements, and/or wastewater conveyance system improvements. Planning for the projects began in 2018, and the projects should complete their construction by 2030.

Resources	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Drainage and Wastewater Rates	3,190	4,295	1,256	827	4,545	6,070	6,210	33,177	59,570
Total:	3,190	4,295	1,256	827	4,545	6,070	6,210	33,177	59,570
Fund Appropriations / Allocations¹	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Drainage and Wastewater Fund	3,190	4,295	1,256	827	4,545	6,070	6,210	33,177	59,570
Total:	3,190	4,295	1,256	827	4,545	6,070	6,210	33,177	59,570

O&M Impacts: This is an ongoing program and any O&M needed as a result of this program is included in SPU's Operating Budget.

¹Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars

Green Stormwater Infrastructure Program

Project No:	MC-SU-C3610	BSL Code:	BC-SU-C360B
Project Type:	Ongoing	BSL Name:	Combined Sewer Overflows
Project Category:	Improved Facility	Location:	Citywide
Current Project Stage:	N/A	Council District:	Multiple
Start/End Date:	N/A	Neighborhood District:	Multiple
Total Project Cost:	N/A	Urban Village:	Multiple

This ongoing program provides construction of Green Stormwater Infrastructure (GSI) as a component of combined sewer overflow (CSO) reduction within the uncontrolled CSO basins. Work includes roadside bioretention and the RainWise program. RainWise provides financial incentives to private property owners within our uncontrolled CSO basins for construction of properly sized and installed raingardens or cisterns. The program supports the City's current regulatory strategy for compliance with CSO National Pollutant Discharge Elimination System (NPDES) permit.

Resources	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Drainage and Wastewater Rates	14,888	1,322	310	201	250	250	250	500	17,970
Total:	14,888	1,322	310	201	250	250	250	500	17,970
Fund Appropriations / Allocations ¹	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Drainage and Wastewater Fund	14,888	1,322	310	201	250	250	250	500	17,970
Total:	14,888	1,322	310	201	250	250	250	500	17,970

O&M Impacts: This is an ongoing program and any O&M needed as a result of this program is included in SPU's Operating Budget.

¹Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars

GSI for Protection of Beneficial Uses

Project No:	MC-SU-C3316	BSL Code:	BC-SU-C333B
Project Type:	Ongoing	BSL Name:	Protection of Beneficial Uses
Project Category:	Improved Facility	Location:	Various
Current Project Stage:	N/A	Council District:	Multiple
Start/End Date:	N/A	Neighborhood District:	Multiple
Total Project Cost:	N/A	Urban Village:	Multiple

This ongoing program provides construction of Green Stormwater Infrastructure (GSI) within the separated stormwater system. Work includes right-of-way retrofits with bioretention and/or biofiltration for water quality treatment and flow control, as well as potential expansion of private property incentives for construction of properly sized and installed rain gardens or cisterns (RainWise program) into creek watersheds. The Natural Drainage Systems Projects within this program will achieve the water quality goals for the NDS Partnering Program identified in Seattle's Plan to Protect Seattle's Waterways (the Long Term Control Plan requirement within our Consent Decree) while coordinating with SDOT and community groups to deliver co-benefits such as sidewalks. The program also includes projects that are part of the SPU and Council created GSI in Urban Villages Program which will deliver multi-purpose green infrastructure projects in urban villages and urban centers through community partnerships and development synergies.

Resources	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Drainage and Wastewater Rates	23,474	16,832	18,673	26,690	24,179	28,717	20,260	16,600	175,424
Total:	23,474	16,832	18,673	26,690	24,179	28,717	20,260	16,600	175,424
Fund Appropriations / Allocations¹	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Drainage and Wastewater Fund	23,474	16,832	18,673	26,690	24,179	28,717	20,260	16,600	175,424
Total:	23,474	16,832	18,673	26,690	24,179	28,717	20,260	16,600	175,424

O&M Impacts: This is an ongoing program and any O&M needed as a result of this program is included in SPU's Operating Budget.

¹Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars

Long Term Control Plan

Project No:	MC-SU-C3604	BSL Code:	BC-SU-C360B
Project Type:	Ongoing	BSL Name:	Combined Sewer Overflows
Project Category:	Improved Facility	Location:	Various
Current Project Stage:	N/A	Council District:	Multiple
Start/End Date:	N/A	Neighborhood District:	Not in a Neighborhood District
Total Project Cost:	N/A	Urban Village:	Not in an Urban Village

This project supports the ongoing implementation of SPU's Combined Sewer Overflow (CSO) Reduction Long Term Control Plan (LTCP) in accordance with SPU's National Pollutant Discharge Elimination System (NPDES) permit and the Federal CSO Control Policy. On May 1, 2012, the Environmental Protection Agency/Department of Justice issued a draft Consent Decree to the City of Seattle which requires the development and submission of a Long-Term Control Plan for approval by May 30, 2015. It further stipulates that all CSO Control Measures are to be constructed as expeditiously as practicable, and in no event later than December 31, 2030. The Consent Decree also allows the City to propose storm water control project(s) as part of an Integrated Plan, in addition to the CSO Control Measures. The LTCP identified projects and programs to reduce the number and volume of CSOs, meet receiving water quality standards, and protect designated beneficial uses. The LTCP includes flow characterization, monitoring, and hydraulic modeling; development of CSO control alternatives; development of control alternatives that takes into consideration costs and performance; operational plan revisions; public participation; implementation schedule; and post-construction monitoring.

Resources	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Drainage and Wastewater Rates	17,062	1,149	100	-	-	-	-	-	18,311
Total:	17,062	1,149	100	-	-	-	-	-	18,311
Fund Appropriations / Allocations¹	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Drainage and Wastewater Fund	17,062	1,149	100	-	-	-	-	-	18,311
Total:	17,062	1,149	100	-	-	-	-	-	18,311

O&M Impacts: Any O&M needed as a result of this project will be included and/or identified as part of SPU's Operating Budget.

¹Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars

Outfall Rehabilitation Program

Project No:	MC-SU-C3708	BSL Code:	BC-SU-C370B
Project Type:	Ongoing	BSL Name:	Rehabilitation
Project Category:	Improved Facility	Location:	Various
Current Project Stage:	N/A	Council District:	Multiple
Start/End Date:	N/A	Neighborhood District:	Multiple
Total Project Cost:	N/A	Urban Village:	Multiple

This ongoing project provides rehabilitation of outfalls throughout Seattle Public Utilities service area. Typical improvements may include, but are not limited to, repair, rehabilitation or replacement of outfall structures. This project will investigate the condition of each of the outfalls and complete an options analysis, followed by design, construction, and closeout activities.

Resources	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Drainage and Wastewater Rates	4,041	793	500	1,000	1,000	-	-	-	7,334
Total:	4,041	793	500	1,000	1,000	-	-	-	7,334
Fund Appropriations / Allocations¹	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Drainage and Wastewater Fund	4,041	793	500	1,000	1,000	-	-	-	7,334
Total:	4,041	793	500	1,000	1,000	-	-	-	7,334

O&M Impacts: This is an ongoing program and any O&M needed as a result of this program is included in SPU's Operating Budget.

¹Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars

Pipe Renewal Program

Project No:	MC-SU-C3710	BSL Code:	BC-SU-C370B
Project Type:	Ongoing	BSL Name:	Rehabilitation
Project Category:	Improved Facility	Location:	Various
Current Project Stage:	N/A	Council District:	Multiple
Start/End Date:	N/A	Neighborhood District:	Multiple
Total Project Cost:	N/A	Urban Village:	Multiple

SPU operates and maintains approximately 1,423 miles of wastewater conveyance (combined and separated) pipe. The age of this infrastructure varies; however, significant portions of the system were constructed prior to 1950. This ongoing program repairs, replaces, rehabilitates and renews the conveyance system by SPU crews and various contracting construction projects.

Resources	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Drainage and Wastewater Rates	87,020	38,913	28,942	29,600	30,200	30,500	32,100	31,000	308,275
Total:	87,020	38,913	28,942	29,600	30,200	30,500	32,100	31,000	308,275
Fund Appropriations / Allocations¹	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Drainage and Wastewater Fund	87,020	38,913	28,942	29,600	30,200	30,500	32,100	31,000	308,275
Total:	87,020	38,913	28,942	29,600	30,200	30,500	32,100	31,000	308,275

O&M Impacts: This is an ongoing program and any O&M needed as a result of this program is included in SPU's Operating Budget.

¹Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars

Pump Station & Force Main Improvements

Project No:	MC-SU-C3703	BSL Code:	BC-SU-C370B
Project Type:	Ongoing	BSL Name:	Rehabilitation
Project Category:	Improved Facility	Location:	Various
Current Project Stage:	N/A	Council District:	Multiple
Start/End Date:	N/A	Neighborhood District:	Multiple
Total Project Cost:	N/A	Urban Village:	Not in an Urban Village

This ongoing project provides for improvements and upgrades to the 68 SPU-owned wastewater pump stations and force mains. Typical improvements may include, but are not limited to, replacement of existing pump station assets including pumps, motors, and valves, and installation of new assets such as SCADA systems, generators, and emergency plugs. This project enhances and extends the useful life of the existing pump stations which protects water quality.

Resources	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Drainage and Wastewater Rates	24,297	8,099	8,993	14,110	7,242	7,394	8,596	-	78,731
Total:	24,297	8,099	8,993	14,110	7,242	7,394	8,596	-	78,731
Fund Appropriations / Allocations¹	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Drainage and Wastewater Fund	24,297	8,099	8,993	14,110	7,242	7,394	8,596	-	78,731
Total:	24,297	8,099	8,993	14,110	7,242	7,394	8,596	-	78,731

O&M Impacts: This is an ongoing program and any O&M needed as a result of this program is included in SPU's Operating Budget.

¹Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars

S Henderson CSO Storage

Project No:	MC-SU-C3609	BSL Code:	BC-SU-C360B
Project Type:	Discrete	BSL Name:	Combined Sewer Overflows
Project Category:	Improved Facility	Location:	S Henderson St.
Current Project Stage:	Stage 6 - Closeout	Council District:	Council District 2
Start/End Date:	2001 - 2019	Neighborhood District:	Southeast
Total Project Cost:	\$59,601	Urban Village:	Not in an Urban Village

This project provides construction of combined sewer overflows (CSO) facilities in the Henderson area in the southeast part of Seattle. Facilities will be built to meet level of service requirements for CSOs and comply with State and Federal regulations.

Resources	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Drainage and Wastewater Rates	59,617	-	-	-	-	-	-	-	59,617
Total:	59,617	-	-	-	-	-	-	-	59,617
Fund Appropriations / Allocations ¹	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Drainage and Wastewater Fund	59,617	-	-	-	-	-	-	-	59,617
Total:	59,617	-	-	-	-	-	-	-	59,617

O&M Impacts: Any O&M needed as a result of this project will be included and/or identified as part of SPU's Operating Budget.

¹Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars

Sanitary Sewer Overflow Capacity

Project No:	MC-SU-C3804	BSL Code:	BC-SU-C380B
Project Type:	Ongoing	BSL Name:	Flooding, Sewer Backup & Landslide
Project Category:	Improved Facility	Location:	Various
Current Project Stage:	N/A	Council District:	Multiple
Start/End Date:	N/A	Neighborhood District:	Multiple
Total Project Cost:	N/A	Urban Village:	Multiple

This ongoing program is designed to improve sanitary sewer service to Seattle customers by addressing current and projected capacity limitations of the wastewater system through capital project improvements. Such improvements may include demand management measures such as infiltration and inflow (I/I) reduction, increased conveyance capacity, and individual customer measures such as installation of backflow preventers or grinder pumps to reduce the risk that customers will experience backups of sewage into their homes and businesses during storm events.

Resources	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Drainage and Wastewater Rates	13,036	11,807	3,799	2,800	7,300	7,300	7,300	22,200	75,542
Total:	13,036	11,807	3,799	2,800	7,300	7,300	7,300	22,200	75,542
Fund Appropriations / Allocations¹	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Drainage and Wastewater Fund	13,036	11,807	3,799	2,800	7,300	7,300	7,300	22,200	75,542
Total:	13,036	11,807	3,799	2,800	7,300	7,300	7,300	22,200	75,542

O&M Impacts: This is an ongoing program and any O&M needed as a result of this program is included in SPU's Operating Budget.

¹Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars

Sediment Remediation

Project No:	MC-SU-C3503	BSL Code:	BC-SU-C350B
Project Type:	Ongoing	BSL Name:	Sediments
Project Category:	Improved Facility	Location:	Various
Current Project Stage:	N/A	Council District:	Multiple
Start/End Date:	N/A	Neighborhood District:	Multiple
Total Project Cost:	N/A	Urban Village:	Not in an Urban Village

This ongoing program provides for City of Seattle participation in cleanup of contaminated sediment sites at multiple locations across Seattle for which the City's drainage and wastewater utilities may have some liability. Typical phases of such projects include preliminary studies and analyses, preliminary engineering for actual cleanup efforts, and liability allocation negotiations. This program enhances the natural environment of Seattle and addresses both State and Federal regulatory agency requirements.

Resources	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Drainage and Wastewater Rates	44,494	3,867	4,560	6,789	13,349	17,809	11,543	12,369	114,782
Total:	44,494	3,867	4,560	6,789	13,349	17,809	11,543	12,369	114,782
Fund Appropriations / Allocations¹	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Drainage and Wastewater Fund	44,494	3,867	4,560	6,789	13,349	17,809	11,543	12,369	114,782
Total:	44,494	3,867	4,560	6,789	13,349	17,809	11,543	12,369	114,782

O&M Impacts: This is an ongoing program and any O&M needed as a result of this program is included in SPU's Operating Budget.

¹Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars

Ship Canal Water Quality Project

Project No:	MC-SU-C3614	BSL Code:	BC-SU-C360B
Project Type:	Discrete	BSL Name:	Combined Sewer Overflows
Project Category:	Improved Facility	Location:	West Ship Canal
Current Project Stage:	Stage 5 - Construction	Council District:	Multiple
Start/End Date:	2014 - 2027	Neighborhood District:	Multiple
Total Project Cost:	\$570,000	Urban Village:	Multiple

The City of Seattle (the City) has prepared a comprehensive strategy, called The Plan to Protect Seattle's Waterways (the Plan) to reduce overflows and discharge of pollutants from combined sewers and the storm drain system. The City must control sewer discharges to protect public health, the environment, to comply with the Clean Water Act, the United States District Court Consent Decree, and State regulations. On May 29, 2015, the City submitted the plan to EPA and Ecology for approval. The largest project identified in the Plan is the Ship Canal Water Quality Project. This project is a joint project between SPU and King County to design and construct a storage tunnel to capture Combined Sewer Overflows for 5 SPU outfalls and two King County outfalls. The tunnel will be 2.7 miles long and run from Wallingford to Ballard. The tunnel will be approximately 18 feet in diameter and have a storage volume of about 30 million gallons. The purpose of the project is to bring all seven outfalls into compliance with the State's control standard of one untreated overflow per year per outfall on a 20-year moving average. Note all City/County funding allocations are for informational purposes, only. Actual resource allocations will be determined through ongoing project governance agreements and interagency coordination between the City and King County.

Resources	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Drainage and Wastewater Rates	141,213	84,781	66,806	88,452	55,522	20,104	1,729	159	458,766
King County Funds	21,756	40,160	29,567	17,507	10,627	5,940	-	-	125,556
Total:	162,969	124,941	96,373	105,958	66,149	26,044	1,729	159	584,322
Fund Appropriations / Allocations¹	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Drainage and Wastewater Fund	162,969	124,941	96,373	105,958	66,149	26,044	1,729	159	584,322
Total:	162,969	124,941	96,373	105,958	66,149	26,044	1,729	159	584,322

O&M Impacts: Any O&M needed as a result of this project will be included and/or identified as part of SPU's Operating Budget.

¹Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars

South Park Stormwater Program

Project No:	MC-SU-C3806	BSL Code:	BC-SU-C380B
Project Type:	Discrete	BSL Name:	Flooding, Sewer Backup & Landslide
Project Category:	Improved Facility	Location:	698 S Riverside DR
Current Project Stage:	Stage 3 - Design	Council District:	Council District 1
Start/End Date:	2006 - 2025	Neighborhood District:	Greater Duwamish
Total Project Cost:	\$134,876	Urban Village:	Greater Duwamish

This program constructs a pump station (PS), a water quality facility (WQF), and additional drainage conveyance in South Park. The PS will allow the existing storm drain outfall to drain the system when the tide is high and will support future drainage projects. The WQF will treat most stormwater flows from the basin, reducing pollutant loading to the Duwamish. Excessive flows will bypass the WQF and be pumped directly to the river. This program was formerly titled "South Park Pump Station."

Resources	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Drainage and Wastewater Rates	23,212	23,008	19,032	6,058	18,819	4,600	18,500	9,000	122,229
Total:	23,212	23,008	19,032	6,058	18,819	4,600	18,500	9,000	122,229
Fund Appropriations / Allocations ¹	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Drainage and Wastewater Fund	23,212	23,008	19,032	6,058	18,819	4,600	18,500	9,000	122,229
Total:	23,212	23,008	19,032	6,058	18,819	4,600	18,500	9,000	122,229

O&M Impacts: Any O&M needed as a result of this project will be included and/or identified as part of SPU's Operating Budget.

¹Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars

Thornton Confluence Improvement

Project No:	MC-SU-C3811	BSL Code:	BC-SU-C380B
Project Type:	Discrete	BSL Name:	Flooding, Sewer Backup & Landslide
Project Category:	Improved Facility	Location:	Thornton Creek
Current Project Stage:	Stage 6 - Closeout	Council District:	Multiple
Start/End Date:	2008 - 2019	Neighborhood District:	Not in a Neighborhood District
Total Project Cost:	\$7,907	Urban Village:	Not in an Urban Village

This project provides creek realignment, floodplain excavation, culvert replacement, and riparian plantings at the confluence of the north and south branches of Thornton Creek. SPU has acquired a number of flood prone properties in this area over the last decade. Using these properties, this project increases culvert capacity, floodplain area and flood storage, and provides stream habitat benefits. The project will help alleviate flooding and reduce maintenance at Meadowbrook Pond.

Resources	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Drainage and Wastewater Rates	7,607	-	-	-	-	-	-	-	7,607
Total:	7,607	-	-	-	-	-	-	-	7,607
Fund Appropriations / Allocations ¹	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Drainage and Wastewater Fund	7,607	-	-	-	-	-	-	-	7,607
Total:	7,607	-	-	-	-	-	-	-	7,607

O&M Impacts: Any O&M needed as a result of this project will be included and/or identified as part of SPU's Operating Budget.

¹Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars

Seattle Public Utilities

Solid Waste

Overview

Seattle Public Utilities (SPU) collects and disposes of solid waste generated within the City of Seattle. To fulfill this responsibility, the City owns and manages the following significant infrastructure:

- Two transfer stations;
- One recycling and re-use facility;
- Two household hazardous waste facilities;
- A fleet of trucks and heavy equipment; and
- Three closed landfills previously used by the City.

The Solid Waste Fund (SWF) Capital Improvement Plan (CIP) is the planning tool for rehabilitating, replacing, improving, and expanding infrastructure, as well as constructing projects that protect, conserve, and enhance our region's environmental resources. Planned spending in the SWF CIP is approximately \$85 million over the next six years, from 2022 through 2027.

Major anticipated projects include:

- Cleanup of the historic South Park Landfill (2023-2025) at the South Park Development Project.
- Minimum operational improvements prior to the full redevelopment of the old South Transfer Station campus (2023-2025).

These projects comprise approximately 62% of the SWF CIP. Other significant projects include the Waste Removal project at the Midway Landfill, replacing two compactors, major repair to the South transfer Station tipping floor, drainage improvements at both Transfer Stations, and SPU's annual equipment investment.

Thematic Priorities

The SWF places a high priority on managing environmental issues and addressing regulatory requirements related to current and historic solid waste facilities while protecting employees and customer health and safety and extending the useful life of the two transfer stations.

- Managing environmental issues and regulations: SPU is required to improve former landfill sites and act as necessary when conditions change. For example, underground gas levels at these sites are monitored. When increasing gas levels are detected, SPU implements improvements to extract the excess gas or otherwise mitigate the environmental impacts of the gas increase. Landfill projects are also triggered by Washington State Department of Transportation improvements to Interstate-5 that require modification to landfill infrastructure in the right-of-way and support of Sound Transit projects that impact the Midway Landfill. Additionally, the new transfer stations are designed to reduce the environmental impacts of the existing stations on neighboring communities.

Project Selection Criteria

SPU identifies candidate capital projects from several sources – planning (e.g., comprehensive plans, program plans), external projects and opportunities, and emergencies or other unexpected events. Under SPU's Asset Management System, projects must be justified through a business case process that

2022-2027 Adopted Capital Improvement Program

establishes that a problem or opportunity is timely and important and that the proposed solution is superior to alternatives based on a triple bottom line analysis (economic, environmental, and social) of life-cycle benefits and costs. The process also recognizes that a project may be a “must do” project (e.g. required by regulations or Consent Decrees).

Prioritization of SPU projects are based on the following set of criteria:

- **Regulatory Mandates, Legal Agreements:** The degree to which the project is driven by Federal, State, and local laws, permit and regulatory requirements, and consent decrees; as well as by legal agreements with public and private parties. Examples of highly ranked projects in this category include the South Park Development project and Kent Highlands and Midway Landfills programs.
- **External Drivers:** SPU’s responsiveness to, or engagement with, the projects of other departments or jurisdictions, and the specific mandates of the City Council and Mayor. An example of a project in this category is the 1% for Arts program.
- **Infrastructure:** How a project addresses infrastructure conditions or vulnerabilities. An example of a highly ranked project in this category is the operational improvements at the South Transfer Station.
- **Level of Service:** The importance of this project in providing or improving services to customers. An example of a highly ranked project in this category is the replacement of two compactors at the transfer stations.
- **Other Factors:** Other important factors include high net present value or cost-effectiveness, social or environmental benefits that were not otherwise recognized, a project already in progress or near completion, limited time opportunity, demonstration projects, community visibility, or outside funding.

Every project is rated against each criterion. Criteria are then considered in determining an overall project priority ranking, using expert judgment (rather than a formula). Priority rankings for the CIP are determined by the leads for each LOB, with reviews by key internal stakeholders. The ranking scheme and criteria are the same for all LOBs and are approved by the SPU General Manager/CEO and Asset Management Committee. Project priority rankings are used to clarify and document which projects are most important and why, to help determine which projects at the margin will be included, excluded or deferred from the CIP, and which projects should receive priority attention if a staff or financial resource constraint should arise.

CIP Highlights

2022-2027 Adopted Solid Waste Fund CIP by BCL

(In '000s; total may not sum due to rounding)

BCL	2022	2023	2024	2025	2026	2027	Total
New Facilities	6,156	13,009	14,988	4,147	1,503	300	40,102
Rehabilitation & Heavy Eqpt	2,450	550	1,850	350	250	200	5,650
Shared Cost Projects	4,561	2,550	2,517	795	823	338	11,584
Technology	1,508	1,508	1,508	1,507	1,508	1,508	9,045
Total	14,675	17,616	20,862	6,800	4,084	2,345	66,381

New Facilities: This program includes the planning, design, and construction of new facilities to enhance solid waste operations. In 2022, SPU will continue to implement its Solid Waste Facilities Master Plan. The key project drivers of the New Facilities budget are the South Park Development (landfill cleanup) and the South Transfer Station operational improvements projects.

Rehabilitation and Heavy Equipment: This program includes design and construction of projects that repair and/or upgrade solid waste facilities other than the transfer stations. In 2022, the key drivers of this budget level are the Midway projects and new funding for the Solid Waste Plan Update as required by the Washington State Department of Ecology.

Shared Cost Projects: This program includes individual capital improvement projects that typically benefit multiple Lines of Business (LOB) (e.g., the Water LOB and the Drainage and Wastewater LOB) and which costs are "shared," or paid for by more than one of SPU's utility funds. For 2022, the key driver for this budget includes heavy equipment purchases, which reflects the best estimate of the required fleet of trucks and heavy equipment for the transfer stations.

Technology: The Technology CIP is managed in six program areas that provide a department-wide view of technology investments to address SPU's strategic, business, and City-wide priorities. These areas are:

- Customer Contact and Billing;
- Enterprise Information Management;
- IT Infrastructure;
- Project Delivery & Performance;
- Science & System Performance; and
- Asset Information Management.

Investments in 2022 address several of SPU's key initiatives, including:

- Financial Management and Internal Controls;
- Operational Excellence and Performance Management;
- Easy and Engaged Customer Experience;
- Data-driven Decision Support; and
- Project Delivery/Project Controls.

2022-2027 Adopted Capital Improvement Program

In 2022, SPU will continue focusing its technology spending on the highest priority business needs. These projects would primarily be within the Customer Contact and Billing Program, Project Delivery and Performance Program, as well as the Asset Information Management Program.

With the new Customer Information System (CIS) already in place, the next major projects for SPU within the Customer Contact and Billing Program include the Utilities Customer Self-Service Portal project, the Customer Contact and Billing Upgrade, CIS Workflow, and the CIS Reporting. Other projects slated would be enhancements to SPU's Enterprise Project Management System and the Development Systems Integration Project, and the Maximo Business Intelligence upgrade, along with other projects that have been deferred in previous years.

CIP Revenue Sources

Much of the SWF CIP is funded through bond proceeds and current cash contributions, the mix of which is determined by SWF financial policies, the overall financial health of the SWF, and the best value and equity to ratepayers. SPU last issued debt in 2014, 2015, and 2016, and refunded 2011 bond debt in 2021. SPU is not planning any SWF bond issuances and will use current cash contributions and existing cash on hand to pay for the CIP. Cash contributions to construction and repayment of debt come from rate-based charges to customers whose solid waste services are handled by the City's solid waste infrastructure and programs.

SPU also actively seeks grants, low-interest loans, and other funding sources whenever possible and prudent. The Solid Waste Utility is currently in the middle of a capital-intensive historic landfill remediation process and operational improvements at the old South Transfer Station. These projects are the primary drivers of CIP spending and have required rate increases for financing.

Summary of Upcoming Budget Issues and Challenges

Solid Waste faces logistical and financial issues as it reconstructs its primary facilities and addresses site cleanup efforts.

- Logistics: SWF is focusing on remediating the South Park Landfill and must continue to use the site for trailer parking and household hazardous waste collection during construction.
- Financial Challenges: Operational improvements at the old South Transfer Station along with site remediation efforts puts considerable short-term financial strain on the SWF. While the SWF is funding and building these major projects, it is working to address environmental stewardship by encouraging waste reduction and recycling, which results in declining demand for disposal services.

Future Projects/What is on the Horizon

Once the South Park Landfill cleanup work and South Transfer Station operational improvements are completed, SPU will begin a thorough planning process to guide the future redevelopment of the South Transfer Station campus. The planning will take broader City needs into consideration before selecting a redevelopment scenario. Spending for the future development will be better defined over the next 3-5 years.

City Council Changes to the Proposed CIP

The City Council made no change to the 2022-2027 Proposed CIP for the SPU Solid Waste Line of Business.

Kent Highlands

Project No:	MC-SU-C2402	BSL Code:	BC-SU-C240B
Project Type:	Ongoing	BSL Name:	Rehabilitation & Heavy Equipment
Project Category:	Improved Facility	Location:	Kent Highlands
Current Project Stage:	N/A	Council District:	Outside City of Seattle
Start/End Date:	N/A	Neighborhood District:	Not in a Neighborhood District
Total Project Cost:	N/A	Urban Village:	Not in an Urban Village

This program funds compliance activities related to the Kent Highlands landfill closure project. These activities include environmental studies to demonstrate the effectiveness of the Kent Highlands landfill closure project, as well as various landfill improvements. The environmental studies are required under the existing Consent Decree with the State Department of Ecology and validate that current environmental controls are effective and reduce the likelihood of additional capital or O&M expenditures. The landfill improvements include replacement of existing flares, drainage improvements, groundwater protection, water treatment and mitigating earthquake risks associated with steep slopes.

Resources	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Solid Waste Rates	640	68	250	250	1,500	50	50	100	2,907
Total:	640	68	250	250	1,500	50	50	100	2,907
Fund Appropriations / Allocations¹	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Solid Waste Fund	640	68	250	250	1,500	50	50	100	2,907
Total:	640	68	250	250	1,500	50	50	100	2,907

O&M Impacts: This is an ongoing program and any O&M needed as a result of this program is included in SPU's Operating Budget.

¹Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars

Midway Landfill

Project No:	MC-SU-C2403	BSL Code:	BC-SU-C240B
Project Type:	Ongoing	BSL Name:	Rehabilitation & Heavy Equipment
Project Category:	Improved Facility	Location:	Kent
Current Project Stage:	N/A	Council District:	Outside City of Seattle
Start/End Date:	N/A	Neighborhood District:	Not in a Neighborhood District
Total Project Cost:	N/A	Urban Village:	Not in an Urban Village

This program funds compliance activities related to the Midway landfill closure project. These activities include environmental studies to demonstrate the effectiveness of the Midway landfill closure project. The studies are required under the existing Consent Decree with the State Department of Ecology and validate that current environmental controls are effective and reduce the likelihood of additional capital or O&M expenditures. The flare improvements are also a regulatory requirement. To ensure that SPU maintains regulatory compliance, a smaller flare or new technology will be required. The current telemetry used to monitor the environmental control systems at the Kent Highlands Landfill and the Midway Landfill, both Superfund sites, are nearly obsolete and the equipment is no longer supported. In addition, the current system only transmits alarm conditions and does not have any data acquisition functionality. This program funds a replacement system that will allow remote data acquisition as well as alarm functionality. The largest effort under this program is the Midway landfill improvement project that funds removal of waste in the WSDOT Right of Way to allow construction of two additional lanes on I-5 and the Sound Transit Federal Way Link project. This is a joint project involving Sound Transit, WSDOT and SPU it is regulated by the Department of Ecology under a Consent Decree Amendment.

Resources	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Solid Waste Rates	997	12,315	2,100	250	250	50	50	50	16,062
Water Rates	-	1,500	-	-	-	-	-	-	1,500
Total:	997	13,815	2,100	250	250	50	50	50	17,562
Fund Appropriations / Allocations¹	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Solid Waste Fund	997	13,815	2,100	250	250	50	50	50	17,562
Total:	997	13,815	2,100	250	250	50	50	50	17,562

O&M Impacts: This is an ongoing program and any O&M needed as a result of this program is included in SPU's Operating Budget.

¹Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars

Miscellaneous Station Improvement

Project No:	MC-SU-C2303	BSL Code:	BC-SU-C230B
Project Type:	Ongoing	BSL Name:	New Facilities
Project Category:	Improved Facility	Location:	Multiple
Current Project Stage:	N/A	Council District:	Multiple
Start/End Date:	N/A	Neighborhood District:	Multiple
Total Project Cost:	N/A	Urban Village:	Multiple

This project provides modifications, upgrades, and wear replacement for the two new City Transfer Stations. The new facilities will require periodic capital upgrades and replacement to extend the useful life of these assets. Examples of this work include replacement of the wear surface on the STS tipping floor, replacement of the large refuse compactors and replacement of HVAC/Life Safety components.

Resources	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Solid Waste Rates	4,962	750	4,656	2,042	2,952	300	1,300	300	17,262
Total:	4,962	750	4,656	2,042	2,952	300	1,300	300	17,262
Fund Appropriations / Allocations¹	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Solid Waste Fund	4,962	750	4,656	2,042	2,952	300	1,300	300	17,262
Total:	4,962	750	4,656	2,042	2,952	300	1,300	300	17,262

O&M Impacts: This is an ongoing program and any O&M needed as a result of this program is included in SPU's Operating Budget.

¹Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars

North Transfer Station Rebuild

Project No:	MC-SU-C2306	BSL Code:	BC-SU-C230B
Project Type:	Discrete	BSL Name:	New Facilities
Project Category:	Improved Facility	Location:	N. 34th St.
Current Project Stage:	Stage 6 - Closeout	Council District:	Council District 4
Start/End Date:		Neighborhood District:	Lake Union
Total Project Cost:	\$111,015	Urban Village:	Not in an Urban Village

The project constructs a new North Recycling and Disposal Station to replace the existing, aging facility. The new facility will meet customer and employee needs, regulatory requirements, and waste management goals for at least the next 50 years. Safety, operational, and capacity concerns at the existing transfer station necessitate building a new facility. The new facility will benefit the public by providing reliable transfer of solid waste from the City and preventing the accumulation of waste and unsanitary conditions within the City.

Resources	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Solid Waste Rates	110,231	-	-	-	-	-	-	-	110,231
Total:	110,231	-	-	-	-	-	-	-	110,231
Fund Appropriations / Allocations¹	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Solid Waste Fund	110,231	-	-	-	-	-	-	-	110,231
Total:	110,231	-	-	-	-	-	-	-	110,231

O&M Impacts: Any O&M needed as a result of this project is included in SPU's Operating Budget.

¹Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars

South Park Development

Project No:	MC-SU-C2304	BSL Code:	BC-SU-C230B
Project Type:	Discrete	BSL Name:	New Facilities
Project Category:	Improved Facility	Location:	8100 2nd Ave S
Current Project Stage:	Stage 3 - Design	Council District:	Council District 1
Start/End Date:	2007 - 2026	Neighborhood District:	Greater Duwamish
Total Project Cost:	\$22,377	Urban Village:	Greater Duwamish

This project studies, plans, designs and constructs remediation of the historic South Park Landfill site to minimize environmental impacts. SPU owns a portion of the site on which the landfill once operated, and was a historic operator of the landfill at one time. This project will meet the requirements of a Consent Decree with the Washington Department of Ecology for remediation of the historic South Park Landfill. This project is tied to the STS 2 project and some redesign of remedial elements will be required and construction has been delayed three years to 2023.

Resources	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Solid Waste Rates	5,836	6,000	600	7,100	6,800	500	100	-	26,936
Total:	5,836	6,000	600	7,100	6,800	500	100	-	26,936
Fund Appropriations / Allocations¹	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Solid Waste Fund	5,836	6,000	600	7,100	6,800	500	100	-	26,936
Total:	5,836	6,000	600	7,100	6,800	500	100	-	26,936

O&M Impacts: Any O&M needed as a result of this project will be included and/or identified as part of SPU's Operating Budget.

¹Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars

South Recycling Center

Project No:	MC-SU-C2302	BSL Code:	BC-SU-C230B
Project Type:	Discrete	BSL Name:	New Facilities
Project Category:	Improved Facility	Location:	8100 2nd AVE S
Current Project Stage:	Stage 3 - Design	Council District:	Council District 1
Start/End Date:	2006 - 2025	Neighborhood District:	Greater Duwamish
Total Project Cost:	\$43,202	Urban Village:	Greater Duwamish

SPU postponed South Transfer Station phase construction and a smaller project is proceeding to complete cleanup work at the old South Park Landfill. SPU decided to postpone development plans (including the construction of the recycling facility) to allow a more holistic evaluation of future needs and job opportunities that best support our zero-waste vision. A recycling facility may still be included in the future plans, but partial development of the site at this time could severely limit what we can do in the future. The scope of the project has been reduced to only include the remediation of the South Park Landfill (required under a Consent Decree), minimal operational improvements, and a path along 5th Avenue to mitigate the street vacation at the new South Transfer Station. The reduced STS2 project will be designed during 2021-2022 and constructed in 2023.

Future site development plans will happen over the next 5 years in a parallel process.

Resources	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Solid Waste Rates	7,373	15,677	900	3,867	5,236	3,347	103	-	36,502
Water Rates	-	(1,500)	-	-	-	-	-	-	(1,500)
Total:	7,373	14,177	900	3,867	5,236	3,347	103	-	35,002
Fund Appropriations / Allocations¹	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Solid Waste Fund	7,373	14,177	900	3,867	5,236	3,347	103	-	35,002
Total:	7,373	14,177	900	3,867	5,236	3,347	103	-	35,002

O&M Impacts: Any O&M needed as a result of this project will be included and/or identified as part of SPU's Operating Budget.

¹Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars

SW Comprehensive Plan Update

Project No:	MC-SU-C2407	BSL Code:	BC-SU-C240B
Project Type:	Ongoing	BSL Name:	Rehabilitation & Heavy Equipment
Project Category:	Improved Facility	Location:	Citywide
Current Project Stage:	N/A	Council District:	Multiple
Start/End Date:	N/A	Neighborhood District:	Multiple
Total Project Cost:	N/A	Urban Village:	Multiple

A Seattle Solid Waste Management Plan is required by Washington State Code. The plan must be updated every five years. The Comprehensive Plan guides the City's solid waste management.

Resources	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Solid Waste Rates	490	25	100	50	100	250	150	50	1,215
Total:	490	25	100	50	100	250	150	50	1,215

Fund Appropriations / Allocations ¹	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Solid Waste Fund	490	25	100	50	100	250	150	50	1,215
Total:	490	25	100	50	100	250	150	50	1,215

O&M Impacts: Any O&M needed as a result of this project will be included and/or identified as part of SPU's Operating Budget.

¹Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars

Seattle Public Utilities

Water

Overview

SPU delivers an average of approximately 124 million gallons of drinking water per day to 1.5 million people and businesses in Seattle and 21 suburban water districts and municipalities, plus the Cascade Water Alliance. The water system infrastructure includes:

- The Cedar and South Fork Tolt supply sources (dams, reservoirs, etc.);
- Three groundwater wells;
- Two primary water treatment plants;
- 11 booster chlorination facilities;
- 325 million gallons of treated water storage;
- 30 pump stations;
- 1,823 miles of transmission and distribution system pipelines;
- Almost 200,000 meters and service connections;
- More than 17,000 distribution system valves;
- About 19,000 hydrants;
- Monitoring and control systems; and,
- Various buildings and other related facilities.

In addition to replacing and improving the supply, treatment, transmission and distribution systems, the capital program includes investments in watershed stewardship projects, Cedar River Watershed Habitat Conservation Plan implementation, water conservation programs, vehicles, heavy equipment, and technology.

Planned spending in the Water Capital Improvement Program (CIP) is \$757 million over the next six years. Major projects include:

- Water system improvements associated with transportation projects, including Move Seattle; Madison Street Bus Rapid Transit; East Marginal Way Heavy Haul Corridor; Roosevelt Eastlake Rapid Ride;
- Operational and Regional Facility construction;
- Replacement of the Bitter Lake and Lake Forest Park Reservoirs covers;
- Seismic upgrades of the Eastside and Riverton Reservoirs, Magnolia Tank, and the Cedar River Transmission Pipeline near Renton;
- Pump station improvements at Spokane Pump Station;
- Addressing a slide area through which the Tolt Pipelines pass, upstream of the Tolt Treatment Plant.

The 2022-2027 Adopted CIP also includes many ongoing programs, such as improving the distribution and transmission system water mains, valves, steel storage tanks, and pump stations; watershed stewardship and conservation projects and programs; and facilities, vehicles, and heavy equipment investments. In addition, it includes continued funding for the water system seismic improvement program and funding for dam safety studies and upgrade projects.

SPU funds Water capital projects through a combination of cash and the issuance of bonds. The primary source of cash and debt repayment funds come from sale of water charged to retail and wholesale customers in the region. SPU's approved 2019 Water System Plan, a Washington Department of Health (WDOH) regulatory requirement, describes how SPU meets current and future water demands, ensures

2022-2027 Adopted Capital Improvement Program

high quality drinking water, and invests in and maintains its water system at the lowest life-cycle cost for the next 20 years.

Thematic Priorities

The overarching goal of the Water CIP is to ensure that the water system is properly maintained, upgraded, and expanded to reliably deliver high-quality, safe drinking water to customers, protect the environment, and comply with regulations. The primary themes driving the CIP in the next six years are asset preservation, health and human safety, environmental sustainability, and race and social justice.

- SPU is committed to making **asset preservation** investments to create or enhance operational efficiency. SPU uses asset management principles to determine the timing of rehabilitation or replacement of its infrastructure. Projects that fall into this category vary, ranging from water main replacement related to transportation projects to rehabilitation of steel storage facilities.
- SPU’s commitment to **health and human safety** is also addressed through SPU’s reservoir covering projects. Consistent with Ordinance 120899 and required by state regulators, SPU has finished replacing its open finished drinking water reservoirs with underground structures that will improve water quality and system security. Additionally, SPU will begin constructing new covers on the Lake Forest Park and Bitter Lake reservoirs to replace the existing floating covers that will have reached the end of their useful life. Finally, as a result of a recently completed seismic study, two reservoirs will remain uncovered – Roosevelt and Volunteer – and are disconnected from the drinking water system, filled with treated water and available for emergency storage needs after major emergencies such as earthquakes.
- SPU is committed to **environmental sustainability**. This can best be seen in SPU’s responsibilities as outlined in the 50-year Habitat Conservation Plan (HCP), an agreement between local, state and federal agencies. The HCP seeks to ensure the long-term ecological integrity of the Cedar River Watershed, which supplies the majority of the City’s drinking water. It simultaneously addresses the needs of protected wildlife species in and along the Cedar River. Investments in the regional conservation and low-income conservation programs also help in management of our natural resources, while helping customers reduce their utility bills.
- SPU is also committed to **race and social justice**. One example of this commitment is the Low-Income Water Conservation Program. This ongoing program provides water use efficiency resources to the City’s low-income customers to implement water conservation measures. Typical improvements consist of installing water-efficient fixtures, primarily low water use toilets, but also faucet aerators and common-area efficient clothes washers.

Project Selection Criteria

SPU identifies candidate capital projects from several sources – planning (e.g., comprehensive plans, program plans), external projects and opportunities, and emergencies or other unexpected events. Under SPU’s Asset Management system, projects must be justified through a business case process that establishes that a problem or opportunity is timely and important, and that the proposed solution is superior to alternatives based on a triple bottom line analysis (economic, environmental and social) of life

cycle costs and benefits. The process also recognizes that a project may be a “must do” project (e.g., required by regulation).

SPU prioritizes its capital projects into three categories – Priorities 1, 2 and 3, with 1 being the most important and critical. Some projects are part of an externally driven project. Typically, SPU lacks control over the timing of externally driven projects.

Priority rankings are based on the following set of criteria:

- **Regulatory Mandates, Legal Agreements:** The degree to which a project is driven by federal, state, and local laws, permit and regulatory requirements, and consent decrees; as well as by legal agreements with public and private parties. Examples of highly ranked projects in this category include the dam safety upgrades and the Habitat Conservation Program.
- **External Drivers:** SPU’s responsiveness to, or engagement with, projects of other Departments or Jurisdictions, and the specific mandates of the City Council and Mayor. Examples of highly ranked projects in this category include SR 520 Rest of the West phase and the Bitter Lake Reservoir improvement project.
- **Infrastructure:** How a project addresses infrastructure conditions or vulnerabilities. Examples of highly ranked projects in this category include watermain Rehabilitation, seismic upgrades and Tank Improvements programs.
- **Level of Service:** The importance of a project in providing or improving services to customers. Examples of highly ranked projects in this category include the Water Infrastructure – New Taps and Service Renewals programs.
- **Other Factors:** Other important factors include high net present value or cost-effectiveness, social or environmental benefits not otherwise captured, a project already in progress or near completion, limited time opportunity, demonstration projects, community visibility, outside funding.

Every project is rated against each criterion. Criteria ratings are then considered in determining an overall project priority ranking, using expert judgment (rather than a formula). Priority rankings for the CIP are determined by the leads for each Line of Business (LOB), with review by key internal stakeholders. The ranking scheme and criteria are the same for all LOBs and are approved by the SPU GM/CEO and Asset Management Committee. Project priority rankings are used to clarify and document which projects are most important (and why), to help determine which projects at the margin will be included or excluded (or deferred) from the CIP, and which projects should receive priority attention if a staff or financial resource constraint should arise.

In addition to SPU’s internal review process described above, most of SPU’s wholesale customers participate in an Operating Board, and through that Board, conduct an annual review of a subset of SPU’s CIP projects, particularly those involving regional assets and impacting wholesale rates.

CIP Spending by Major Category

(In ‘000s; total may not sum due to rounding)

Water Fund	2022	2023	2024	2025	2026	2027	Total
Distribution	35,688	44,375	50,675	51,248	59,406	70,448	311,840
Transmission	16,514	12,604	17,623	22,368	9,407	7,639	86,155
Watershed Stewardship	2,170	414	335	328	958	425	4,630
Water Quality & Treatment	3,605	2,120	5,261	23,750	20,250	23,000	77,986
Water Resources	7,053	10,646	9,989	30,970	28,375	15,764	102,796
Habitat Conservation Program	2,604	1,126	1,030	925	1,058	75	6,817
Shared Cost Projects	22,277	28,526	43,541	35,777	16,605	17,919	164,644
Technology	4,244	4,244	4,244	4,243	4,244	4,244	25,461
Grand Total	94,154	104,054	132,698	169,608	140,302	139,513	780,329

Distribution: Projects and programs in this category relate to rehabilitation and improvements to the City's water mains and appurtenances, water storage tanks, pump stations, and other facilities that are part of the system that distributes treated water throughout the City of Seattle and to retail customers outside of the City.

Decreases in the **Distribution BCL** in 2022 are primarily due to shifting seismic improvements and pump station improvements to later years in the 6-year CIP. These decreases are offset by increased investments in water main extension projects at multiple worksites across Seattle’s retail area. In 2022 to 2027, the budget increases to rehabilitate and replace water mains because more of this large asset class is reaching the end of its service life.

Transmission: The purpose of this program category is to rehabilitate and improve the City's large transmission pipelines that bring untreated water to the treatment facilities and convey treated water from the treatment facilities to Seattle and to our wholesale customers that purchase a portion of SPU’s supply for their retail customers.

Increases in the **Transmission BCL** in 2022 are primarily due to construction of an approximately 2550-foot-long section of rehabilitated raw water pipeline to re-establish functionality and dependability of this raw water transmission supply line through an area of historic slope instability and seismic vulnerability, and scope changes for 430 Pipeline Improvement project that includes more pipeline length and mortar repairs after pipeline inspection.

2022-2027 Adopted Capital Improvement Program

Watershed Stewardship: Projects and programs in this category improve protection of our sources of drinking water, provide habitat protection and restoration, sustain the environment, and enhance environmental quality, both locally and regionally. Most of the projects in this program category are located within the Cedar and Tolt River municipal watersheds.

- The Cedar River Municipal Watershed is 90,638 acres of land owned by the City of Seattle and provides about 65% of the drinking water used by 1.5 million people in the greater Seattle area supplied by SPU. The City of Seattle is required by law to maintain a clean drinking water supply. To that end, the City restricts public access and management is guided by a Habitat Conservation Plan. The Cedar River Watershed is an unfiltered surface water supply which produces some of the best water in the world.
- The South Fork Tolt River Watershed is the second supply watershed in SPU’s freshwater supply system, providing roughly 35% of SPU’s drinking water supply. Located in the foothills of the Cascades in east King County, it first came on-line in 1964, and since 1989 has also supported a small Seattle City Light hydro-electric facility. The Tolt Treatment Facilities, which includes filtration, can provide up to 120 million gallons of drinking water per day.

Increases in the **Watershed Stewardship BCL** in 2022 are due largely to the S. Fork Tolt River Watershed, which is required to satisfy State regulatory requirements. In addition to providing fish passage, this program will reduce the potential for excessive sedimentation, catastrophic infrastructure (i.e. forest road) failure, and impacts to drinking water quality. The increase of \$425K in 2027 is for anticipated bridge replacement project and road work.

Water Quality and Treatment: The purpose of this program category is to construct, rehabilitate or improve water treatment facilities, and cover the remaining open water reservoirs. State and federal drinking water regulations and public health protection are key drivers of investments in this program category. To comply with regulations, SPU has invested hundreds of millions of dollars in building two new primary treatment facilities and covering two and burying five reservoirs that contain treated water that is distributed directly to Seattle retail and wholesale customers for drinking purposes.

The shift in the **Water Quality & Treatment BCL** in 2022-2024 to 2025-2027 is due to an updated cashflow projection for the Lake Forest Park Reservoir Covering Project and Bitter Lake Reservoir Covering Project. The plan is for another floating cover at Lake Forest Park instead of the aluminum roof previously considered. Construction of the Lake Forest Park Reservoir replacement cover began in 2021 and will be completed in 2022. The Bitter Lake Reservoir improvement is anticipated to start towards the end of 2023.

Water Resources: The purpose of this program category is to manage our water resources to meet anticipated demands and in-stream flow requirements – the amount of water provided to the river to support aquatic habitat, wetlands, riparian vegetation, and water quality – and to promote residential and commercial water conservation. The requirements for in-stream flows are detailed in agreements with state and federal agencies and include provisions for minimum stream flows in the Cedar and South Fork Tolt Rivers. Examples of the types of programs/projects in this category include the Dam Safety Program and Sockeye Broodstock Weir and other improvements associated with the hatchery and fish ladder.

Decreases in the **Water Resources BCL** in 2022 are due to the Broodstock Collection Facility Retrofit being delayed. The increase in 2023-27 are due to dam safety projects such as the Tolt Early Warning System

Upgrade and Tolt Debris Boom, which are both to comply with Federal Energy Regulatory Commission (FERC) requirements. The \$25M increase in 2025 and 2026 are a result of projects under development in the Dam Safety program, one of which is also a FERC requirement.

Habitat Conservation Program: This program category includes projects and programs directly related to implementation of the Cedar River Watershed Habitat Conservation Plan. The Habitat Conservation Plan benefits the utility and the ratepayers it serves by providing legal certainty under the Endangered Species Act for the City's continued operations within the Cedar River Watershed, which supplies 65% of the SPU's drinking water. The Habitat Conservation Program requires SPU to invest \$100 million over 50 years, with \$60 million in the first decade, on approximately 30 capital projects and 60 O&M activities in three areas: management of in-stream flows for people and fish, forest and land conservation activities, and mitigation for the blockage of salmon and steelhead fish as they return to the Cedar River to spawn. The Water Fund's CIP projects in this area are grouped into eight categories: road improvements and decommissioning, stream and riparian restoration, upland forest restoration, Landsburg fish passage, Cedar River sockeye hatchery, improvements to the Ballard Locks for fish passage and water conservation, fish habitat protection and restoration in the lower Cedar River below the municipal watershed boundary, and evaluation of Cedar permanent dead storage in Chester Morse Lake.

Increases in the **Habitat Conservation Program BCL** in 2022 are due to the Downstream Fish Habitat program. These funds will be expended on land acquisition and restoration to improve salmon habitat as part of the Cedar River HCP commitments. All expenditures except for those offset by grant revenue are HCP mitigation requirements.

Shared Cost Projects: This program includes individual capital improvement projects which typically benefit multiple lines of business (e.g., the water line of business and the drainage and wastewater line of business) and whose costs are "shared," or paid for, by more than one of SPU's utility funds. For the next six years, the Shared Cost program includes funding for several interdepartmental programs and projects including Move Seattle, SR520 Rest of the West and the Roosevelt Eastlake Rapid Ride. Funding is also included for SPU's Heavy Equipment Purchases and several smaller projects.

Decrease in the **Shared Cost Projects BCL** in 2022 is primarily due to delays in the Center City Streetcar. Projects in the Move Seattle Levy, heavy equipment purchases and other facility construction projects such as retrofits/upgrades to older operational buildings are continued in the out-years.

Technology: The Technology capital portfolio is managed in six program areas, which provide a department-wide view of technology investments to address SPU's strategic, business, and City-wide priorities. These areas are:

- Customer Contact and Billing
- Enterprise Information Management
- IT Infrastructure
- Project Delivery & Performance
- Science & System Performance
- Asset Information Management

Investments in 2022 address several of SPU's key initiatives, including:

2022-2027 Adopted Capital Improvement Program

- Financial Management and Internal Controls
- Operational Excellence and Performance Management
- An Easy and Engaged Customer Experience
- Data-driven Decision Support
- Project Delivery/Project Controls

In 2022, SPU will focus its technology spending on the highest priority business needs. These projects would primarily be within the Customer Contact and Billing Program, Project Delivery and Performance Program, as well as the Asset Information Management Program.

With the New Customer Information System already in place, the next major projects for SPU within the Customer Contact and Billing Program would be the Utilities CSS Portal project as well as other projects such as CIS Workflow and the CIS Reporting. Other projects slated would be enhancements to SPU's Enterprise Project Management System (EPMS) as well as the Development Systems Integration project, along with other projects that have been deferred in previous years

CIP Revenue Sources

SPU's Water CIP is funded largely by Water ratepayers. About 75% of the Water Fund's Operating revenues come from retail ratepayers, split approximately evenly between residential and commercial customers. Another 20% of the Water Fund's overall revenues come from wholesale purveyors who serve surrounding jurisdictions. The remaining 5% consists of non-rate revenue, which include such items as tap fees received. SPU issues bonds, serviced by ratepayers, which in the current period covers 70% of the CIP, with the remainder funded by cash, i.e.: directly by ratepayer revenue.

SPU actively seeks grants, low interest loans, and other funding sources whenever possible. And, as mentioned above, SPU also receives payments from developers that are intended to offset the cost of installing new taps when they connect newly constructed buildings to SPU watermain. These "tap fees" are a volatile revenue source, trending with the construction-related sectors of the economy.

Summary of Upcoming Budget Issues and Challenges

These important issues create financial challenges and opportunities for the Water Fund in the future.

Water Conservation: The City of Seattle, Seattle residents and businesses, and Seattle's wholesale water partners have worked together to reduce water consumption. As a result, consumption has declined since the 1980's and is projected to flatten out. In 2018, consumption was 30% below the peak of 1984, despite serving a larger population. Seattle currently has some of the lowest per capita water consumption in the nation. While this accomplishment helps contribute to a sustainable future for the region, it puts financial pressure on the utility because fixed costs, including the costs of the CIP, need to be distributed across fewer units of water sold. This trend also puts pressure on SPU management and employees to deliver services as efficiently as possible. In the future, it may also influence water rate design.

Transitioning from Major Projects toward Asset Management: The Water Fund continues its transition from a period of building large capital projects to a time of physical infrastructure rehabilitation including those driven by dam safety regulations and seismic upgrades. Past investments include water treatment facilities for the Tolt and Cedar water supplies, coverings for seven open reservoirs in response to

federal/state regulations, construction of a second pipeline for the Tolt system, and investments to meet federal requirements embodied in the Cedar River Watershed Habitat Conservation Plan. These investments helped secure the supply and distribution of high-quality drinking water and provide appropriate stewardship of the watersheds consistent with federal and state requirements.

The City of Seattle is now better positioned than many water utilities in the nation in terms of regulatory compliance. Residents, businesses and rate payers will benefit from these investments for years to come. Although the focus will shift from major projects to physical infrastructure rehabilitation, the utility will be paying debt service over the next several budget cycles on the bonds that were issued for these major projects. Against the backdrop of these trends, the 2022-2027 Water CIP has been developed to:

- Provide for water system modifications associated with various Seattle and regional transportation projects;
- Recognize the need to look harder at the water system’s resiliency in a major earthquake event and begin to make strategic investments to reduce risk;
- Preserve the transmission and distribution systems through careful investment in aging infrastructure renewal;
- Provide stewardship of the watersheds, to ensure a reliable source of high-quality drinking water;
- Comply with federal and state regulations governing water quality, system reliability, and habitat protection in the watersheds in which SPU operates; and
- Prioritize projects to deliver on infrastructure and regulatory requirements within the limited resources of the Water Fund.

Future Projects/What is on the Horizon

The Water CIP has completed a multi-decade period of investments in major infrastructure projects. These projects have positioned SPU to meet drinking water quality and environmental regulations. Projects have included the Tolt and Cedar Water Treatment Facilities, Tolt Pipeline 2, Reservoir Covering Program, the Cedar River Watershed HCP, and a new Water Quality Laboratory. SPU has also made a major reinvestment in the Supervisory Control and Data Acquisition System which is used to monitor and control the regional and retail water system. However, these investments have also led to increasing debt service payments that constrain future budgets.

The 6-year CIP funds the work to replace covers at the Lake Forest Park and Bitter Lake reservoirs, address the Tolt Pipelines slide area, and construct Operational and Regional Facilities. Beyond these projects, emphasis will be on asset management-based rehabilitation and replacement of distribution system infrastructure (e.g., mains, valves, hydrants, meters), as well as water system infrastructure improvements related to transportation projects, such as the Move Seattle Levy.

Additionally, SPU recognizes the need to look harder at the water system’s resiliency in a major earthquake event and begin to make strategic investments to reduce risk. SPU completed a seismic analysis in 2018 that defined recovery time to agreed levels of service and developed a prioritized list of recommended investments to improve resiliency. Initial funding to begin implementation of those improvements is included in this capital program (Eastside and Riverton Reservoirs, Magnolia Tank, and the Cedar River Transmission Pipeline near Renton) while others will be developed over the course of the next several decades. Likewise, initial funding to plan and begin implementation of Dam Safety programs, including those tied to regulatory requirements and seismic risk, are included in this capital program.

City Council Changes to the Proposed CIP

The City Council made no changes to the 2022-2027 Proposed CIP for the SPU Water Line of Business.

Ballard Locks Improvements

Project No:	MC-SU-C1606	BSL Code:	BC-SU-C160B
Project Type:	Discrete	BSL Name:	Habitat Conservation Program
Project Category:	Improved Facility	Location:	NW 54th St 30th Ave NW
Current Project Stage:	Stage 5 - Construction	Council District:	Council District 6
Start/End Date:	2000 - 2025	Neighborhood District:	Ballard
Total Project Cost:	\$1,302	Urban Village:	Ballard-Interbay Northend

This project provides improvements at the Ballard Locks to upgrade conditions for salmon. Improvements are focused on conserving the amount of freshwater needed to operate the locks to reduce the demand for freshwater from the Cedar River and increase the availability of freshwater for salmon. This project is a requirement of the Cedar River Habitat Conservation Plan (HCP).

Resources	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Water Rates	503	160	165	170	175	180	185	-	1,538
Total:	503	160	165	170	175	180	185	-	1,538
Fund Appropriations / Allocations ¹	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Water Fund	503	160	165	170	175	180	185	-	1,538
Total:	503	160	165	170	175	180	185	-	1,538

O&M Impacts: Any O&M needed as a result of this project will be included and/or identified as part of SPU's Operating Budget.

¹Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars

Beacon Reservoir Seismic

Project No:	MC-SU-C1408	BSL Code:	BC-SU-C140B
Project Type:	Discrete	BSL Name:	Water Quality & Treatment
Project Category:	Improved Facility	Location:	S Spokane St and Beacon Ave S
Current Project Stage:	Stage 5 - Construction	Council District:	Council District 2
Start/End Date:	2001 - 2019	Neighborhood District:	Greater Duwamish
Total Project Cost:	\$11,601	Urban Village:	Not in an Urban Village

This project includes Seismic Retrofits at Beacon Reservoir using the Soil-Structure Interaction Seismic Analysis approach for design to determine its seismic performance during ground shaking and to assess whether or not a seismic deficiency exists.

Resources	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Water Rates	11,342	-	-	-	-	-	-	-	11,342
Total:	11,342	-	-	-	-	-	-	-	11,342

Fund Appropriations / Allocations ¹	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Water Fund	11,342	-	-	-	-	-	-	-	11,342
Total:	11,342	-	-	-	-	-	-	-	11,342

O&M Impacts: Any O&M needed as a result of this project will be included and/or identified as part of SPU's Operating Budget.

¹Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars

Cathodic Protection

Project No:	MC-SU-C1208	BSL Code:	BC-SU-C120B
Project Type:	Ongoing	BSL Name:	Transmission
Project Category:	Improved Facility	Location:	Citywide
Current Project Stage:	N/A	Council District:	Multiple
Start/End Date:	N/A	Neighborhood District:	Multiple
Total Project Cost:	N/A	Urban Village:	Not in an Urban Village

This ongoing program installs corrosion protection systems that prevent external corrosion of water transmission pipelines located in Seattle and throughout King County. The cathodic protection systems extend the life of buried pipelines made of ductile iron, steel, and concrete cylinder pipe.

Resources	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Water Rates	3,783	3,073	3,410	1,944	1,363	3,284	862	4,054	21,772
Total:	3,783	3,073	3,410	1,944	1,363	3,284	862	4,054	21,772
Fund Appropriations / Allocations ¹	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Water Fund	3,783	3,073	3,410	1,944	1,363	3,284	862	4,054	21,772
Total:	3,783	3,073	3,410	1,944	1,363	3,284	862	4,054	21,772

O&M Impacts: This is an ongoing program and any O&M needed as a result of this program is included in SPU's Operating Budget.

¹Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars

Cedar Bridges

Project No:	MC-SU-C1307	BSL Code:	BC-SU-C130B
Project Type:	Ongoing	BSL Name:	Watershed Stewardship
Project Category:	Improved Facility	Location:	Cedar River Watershed
Current Project Stage:	N/A	Council District:	Outside City of Seattle
Start/End Date:	N/A	Neighborhood District:	Not in a Neighborhood District
Total Project Cost:	N/A	Urban Village:	Not in an Urban Village

This ongoing program replaces aging bridges and related structures, such as abutments, asphalt approaches, and guardrails in the Cedar River Watershed. This project improves aging bridge assets on priority roads in the watershed transportation system to provide City employees, City contractors, and visitors with safe and adequate access to City water supply and hydroelectric assets while minimizing and reducing environmental impacts over time. Work in this program area also maintains compliance with state laws, safety and environmental regulations, and tribal access agreements including Washington Department of Natural Resources (WDNR) forest practice regulations, and Washington Department of Health (DOH) Watershed Protection Plan regulations.

Resources	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Water Rates	1,787	950	400	10	100	135	351	322	4,055
Total:	1,787	950	400	10	100	135	351	322	4,055
Fund Appropriations / Allocations¹	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Water Fund	1,787	950	400	10	100	135	351	322	4,055
Total:	1,787	950	400	10	100	135	351	322	4,055

O&M Impacts: This is an ongoing program and any O&M needed as a result of this program is included in SPU's Operating Budget.

¹Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars

Chamber Upgrades-Distribution

Project No:	MC-SU-C1137	BSL Code:	BC-SU-C110B
Project Type:	Ongoing	BSL Name:	Distribution
Project Category:	Improved Facility	Location:	Citywide
Current Project Stage:	N/A	Council District:	Multiple
Start/End Date:	N/A	Neighborhood District:	Not in a Neighborhood District
Total Project Cost:	N/A	Urban Village:	Multiple

This ongoing program improves access to water distribution chambers throughout the water distribution system. The replacement and/or enlargement of the entrance to distribution chambers improves the health and safety of workers who need to access chambers and meets Occupational, Safety, and Health Administration (OSHA) and Washington Safety and Health Administration (WSHA) safety and health requirements.

Resources	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Water Rates	255	60	5	5	5	5	5	5	345
Total:	255	60	5	5	5	5	5	5	345
Fund Appropriations / Allocations ¹	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Water Fund	255	60	5	5	5	5	5	5	345
Total:	255	60	5	5	5	5	5	5	345

O&M Impacts: This is an ongoing program and any O&M needed as a result of this program is included in SPU's Operating Budget.

¹Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars

Dam Safety

Project No:	MC-SU-C1506	BSL Code:	BC-SU-C150B
Project Type:	Ongoing	BSL Name:	Water Resources
Project Category:	Improved Facility	Location:	Various
Current Project Stage:	N/A	Council District:	Outside City of Seattle
Start/End Date:	N/A	Neighborhood District:	Not in a Neighborhood District
Total Project Cost:	N/A	Urban Village:	Not in an Urban Village

This ongoing program maintains the safety of SPU's water supply dams in the Cedar River and South Fork Tolt River Municipal Watersheds and the in-town reservoir dams. Typical improvements may include, but are not limited to, upgrades to the dams' failure warning systems, spillways, outlet works, piping, and other civil, mechanical, and structural systems. This program ensures the continuing safe functioning, operation and monitoring of SPU's water supply dams and associated facilities per Federal Energy Regulatory Commission (FERC), state and local regulations, and SPU requirements to prevent loss of life and/or property damage and loss of SPU's ability to deliver reliable drinking water supply to its customers.

Resources	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Water Rates	3,580	5,059	4,939	8,285	6,281	25,413	25,663	12,633	91,853
Total:	3,580	5,059	4,939	8,285	6,281	25,413	25,663	12,633	91,853
Fund Appropriations / Allocations¹	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Water Fund	3,580	5,059	4,939	8,285	6,281	25,413	25,663	12,633	91,853
Total:	3,580	5,059	4,939	8,285	6,281	25,413	25,663	12,633	91,853

O&M Impacts: This is an ongoing program and any O&M needed as a result of this program is included in SPU's Operating Budget.

¹Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars

Distribution Infrastructure

Project No:	MC-SU-C1138	BSL Code:	BC-SU-C110B
Project Type:	Ongoing	BSL Name:	Distribution
Project Category:	Improved Facility	Location:	Citywide
Current Project Stage:	N/A	Council District:	Multiple
Start/End Date:	N/A	Neighborhood District:	Multiple
Total Project Cost:	N/A	Urban Village:	Multiple

This ongoing program provides funding for modifications and relocations of existing Distribution System assets resulting from third party project impacts to Distribution System infrastructure located in the right-of-way or on public property. The costs are recovered from third parties and primarily other public utilities and agencies through Memorandums of Agreement and standard charges. This program covers all Distribution System modifications and relocations that are funded by third parties excluding Water main Extension project projects. The benefit of this project is accommodation of third party development by relocating or modifying existing Distribution System infrastructure, while retaining a Distribution System that continues to provide cost effective service to the ratepayer.

Resources	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Water Rates	413	113	117	120	122	124	127	129	1,265
Total:	413	113	117	120	122	124	127	129	1,265
Fund Appropriations / Allocations¹	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Water Fund	413	113	117	120	122	124	127	129	1,265
Total:	413	113	117	120	122	124	127	129	1,265

O&M Impacts: This is an ongoing program and any O&M needed as a result of this program is included in SPU's Operating Budget.

¹Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars

Distribution System Improvements

Project No:	MC-SU-C1128	BSL Code:	BC-SU-C110B
Project Type:	Ongoing	BSL Name:	Distribution
Project Category:	Improved Facility	Location:	Citywide
Current Project Stage:	N/A	Council District:	Multiple
Start/End Date:	N/A	Neighborhood District:	Multiple
Total Project Cost:	N/A	Urban Village:	Multiple

This ongoing program improves service reliability, pressure, capacity, and fire flow in the City's water distribution system. Typical improvements may include, but are not limited to, booster pump station installation, creation of new service zones, and tank elevation or replacement, as well as additional water main pipelines and pressure reducing valves. These improvements to service levels meet Washington Department of Health (DOH) regulations and SPU's Distribution System Pressure Policy to provide greater than 20 psi service pressure. These improvements provide higher flow of water for fire protection which improves public safety and results in smaller and shorter fires.

Resources	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Water Rates	244	2,350	2,498	1,798	2,270	2,000	2,000	4,000	17,161
Total:	244	2,350	2,498	1,798	2,270	2,000	2,000	4,000	17,161
Fund Appropriations / Allocations¹	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Water Fund	244	2,350	2,498	1,798	2,270	2,000	2,000	4,000	17,161
Total:	244	2,350	2,498	1,798	2,270	2,000	2,000	4,000	17,161

O&M Impacts: This is an ongoing program and any O&M needed as a result of this program is included in SPU's Operating Budget.

¹Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars

Distribution System In-Line Gate Valve

Project No:	MC-SU-C1136	BSL Code:	BC-SU-C110B
Project Type:	Ongoing	BSL Name:	Distribution
Project Category:	Improved Facility	Location:	Citywide
Current Project Stage:	N/A	Council District:	Multiple
Start/End Date:	N/A	Neighborhood District:	Multiple
Total Project Cost:	N/A	Urban Village:	Multiple

This ongoing program replaces line valves in the water distribution system throughout the City of Seattle that fail or are obsolete due to age or lack of replacement parts. The replacement of these gate valves extends the useful life of the water main and restores the performance of the water distribution system. This ongoing program also adds valves within the system to enhance system performance, enhance operational control, and reduce the number of customers whose service is interrupted during a water main shut down.

Resources	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Water Rates	1,902	366	300	300	300	300	300	300	4,067
Total:	1,902	366	300	300	300	300	300	300	4,067
Fund Appropriations / Allocations¹	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Water Fund	1,902	366	300	300	300	300	300	300	4,067
Total:	1,902	366	300	300	300	300	300	300	4,067

O&M Impacts: This is an ongoing program and any O&M needed as a result of this program is included in SPU's Operating Budget.

¹Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars

Distribution System Seismic Improvements

Project No:	MC-SU-C1139	BSL Code:	BC-SU-C110B
Project Type:	Ongoing	BSL Name:	Distribution
Project Category:	Rehabilitation or Restoration	Location:	Citywide
Current Project Stage:	N/A	Council District:	Multiple
Start/End Date:	N/A	Neighborhood District:	Multiple
Total Project Cost:	N/A	Urban Village:	Multiple

This ongoing program upgrade critical distribution facilities that are seismically vulnerable and will remain functional after a major earthquake. Facilities that will be upgraded include water storage reservoirs and tanks, pump stations, pipelines and support facilities. The upgrades are scheduled to occur over a 50-year plus time frame.

Resources	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Water Rates	-	1,500	600	1,500	2,000	1,400	1,000	1,275	9,275
Total:	-	1,500	600	1,500	2,000	1,400	1,000	1,275	9,275
Fund Appropriations / Allocations ¹	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Water Fund	-	1,500	600	1,500	2,000	1,400	1,000	1,275	9,275
Total:	-	1,500	600	1,500	2,000	1,400	1,000	1,275	9,275

O&M Impacts: This is an ongoing program and any O&M needed as a result of this program is included in SPU's Operating Budget.

¹Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars

Downstream Fish Habitat

Project No:	MC-SU-C1607	BSL Code:	BC-SU-C160B
Project Type:	Discrete	BSL Name:	Habitat Conservation Program
Project Category:	Improved Facility	Location:	Cedar River Watershed
Current Project Stage:	Stage 5 - Construction	Council District:	Outside City of Seattle
Start/End Date:	2008 - 2024	Neighborhood District:	Not in a Neighborhood District
Total Project Cost:	\$17,456	Urban Village:	Not in an Urban Village

This project provides protection and restoration of fish habitat along the lower Cedar River, below the City's municipal watershed boundary at the Landsburg Dam and includes both acquisition of habitat lands and habitat restoration on the main stem of the Cedar River. This project is a requirement of the Cedar River Habitat Conservation Plan (HCP).

Resources	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Water Rates	16,397	150	1,070	4	-	-	-	-	17,621
Total:	16,397	150	1,070	4	-	-	-	-	17,621
Fund Appropriations / Allocations ¹	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Water Fund	16,397	150	1,070	4	-	-	-	-	17,621
Total:	16,397	150	1,070	4	-	-	-	-	17,621

O&M Impacts: Any O&M needed as a result of this project will be included and/or identified as part of SPU's Operating Budget.

¹Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars

Environmental Stewardship

Project No:	MC-SU-C1301	BSL Code:	BC-SU-C130B
Project Type:	Ongoing	BSL Name:	Watershed Stewardship
Project Category:	Improved Facility	Location:	Citywide
Current Project Stage:	N/A	Council District:	Multiple
Start/End Date:	N/A	Neighborhood District:	Multiple
Total Project Cost:	N/A	Urban Village:	Not in an Urban Village

This ongoing program provides improvements to facilities and remediation for identified soil contamination at various locations in City watershed areas, railroad right-of-way, and transmission pipelines.

Resources	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Water Rates	1,061	283	292	404	235	193	607	103	3,177
Total:	1,061	283	292	404	235	193	607	103	3,177
Fund Appropriations / Allocations ¹	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Water Fund	1,061	283	292	404	235	193	607	103	3,177
Total:	1,061	283	292	404	235	193	607	103	3,177

O&M Impacts: This is an ongoing program and any O&M needed as a result of this program is included in SPU's Operating Budget.

¹Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars

Hatchery Works

Project No:	MC-SU-C1511	BSL Code:	BC-SU-C150B
Project Type:	Ongoing	BSL Name:	Water Resources
Project Category:	Improved Facility	Location:	Cedar River Watershed
Current Project Stage:	N/A	Council District:	Outside City of Seattle
Start/End Date:	N/A	Neighborhood District:	Not in a Neighborhood District
Total Project Cost:	N/A	Urban Village:	Not in an Urban Village

This ongoing program provides improvements to the sockeye salmon hatchery, including improvements to the Broodstock collection facility, improvements to the hatchery spring water pumps, improvements to adult holding ponds, and additions for water redundancy. These facilities are a requirement of the Landsburg Mitigation Agreement and the Muckleshoot Settlement Agreement.

Resources	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Water Rates	1,355	4,754	50	250	1,250	3,050	-	-	10,709
Total:	1,355	4,754	50	250	1,250	3,050	-	-	10,709
Fund Appropriations / Allocations¹	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Water Fund	1,355	4,754	50	250	1,250	3,050	-	-	10,709
Total:	1,355	4,754	50	250	1,250	3,050	-	-	10,709

O&M Impacts: This is an ongoing program and any O&M needed as a result of this program is included in SPU's Operating Budget.

¹Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars

Instream Flow Management Studies

Project No:	MC-SU-C1608	BSL Code:	BC-SU-C160B
Project Type:	Ongoing	BSL Name:	Habitat Conservation Program
Project Category:	Improved Facility	Location:	Cedar River Watershed
Current Project Stage:	N/A	Council District:	Outside City of Seattle
Start/End Date:	N/A	Neighborhood District:	Not in a Neighborhood District
Total Project Cost:	N/A	Urban Village:	Not in an Urban Village

This ongoing program provides research and monitoring to examine the effects of instream flows on salmon species in the Cedar River. This ongoing program monitors flow compliance, verifies accretion flows downstream of Landsburg, improves flow-switching criteria, and develops a better understanding of relationships between stream flow and aquatic habitat. This ongoing program is a requirement of the Cedar River Habitat Conservation Plan (HCP).

Resources	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Water Rates	1,849	100	100	100	100	100	100	-	2,449
Total:	1,849	100	100	100	100	100	100	-	2,449
Fund Appropriations / Allocations ¹	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Water Fund	1,849	100	100	100	100	100	100	-	2,449
Total:	1,849	100	100	100	100	100	100	-	2,449

O&M Impacts: This is an ongoing program and any O&M needed as a result of this program is included in SPU's Operating Budget.

¹Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars

Multiple Utility Relocation

Project No:	MC-SU-C1133	BSL Code:	BC-SU-C110B
Project Type:	Ongoing	BSL Name:	Distribution
Project Category:	Improved Facility	Location:	Citywide
Current Project Stage:	N/A	Council District:	Multiple
Start/End Date:	N/A	Neighborhood District:	Multiple
Total Project Cost:	N/A	Urban Village:	Multiple

This ongoing program provides funding for necessary modifications to the location and depth of water pipes when they come into conflict with street improvements or other utility projects. The benefit is continued water service to customers while accommodating transportation and other needs in the street right-of-way.

Resources	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Water Rates	1	1,000	500	500	500	500	500	500	4,001
Total:	1	1,000	500	500	500	500	500	500	4,001
Fund Appropriations / Allocations ¹	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Water Fund	1	1,000	500	500	500	500	500	500	4,001
Total:	1	1,000	500	500	500	500	500	500	4,001

O&M Impacts: This is an ongoing program and any O&M needed as a result of this program is included in SPU's Operating Budget.

¹Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars

Pump Station Improvements

Project No:	MC-SU-C1135	BSL Code:	BC-SU-C110B
Project Type:	Ongoing	BSL Name:	Distribution
Project Category:	Improved Facility	Location:	Citywide
Current Project Stage:	N/A	Council District:	Multiple
Start/End Date:	N/A	Neighborhood District:	Multiple
Total Project Cost:	N/A	Urban Village:	Multiple

This ongoing program makes improvements to water pump stations by replacing electric motors, starters, control systems, and other elements. The benefit is improved reliability of water pump stations which in turn reduces the likelihood of large scale water outages.

Resources	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Water Rates	1,581	1,296	778	4,862	6,814	618	450	450	16,849
Total:	1,581	1,296	778	4,862	6,814	618	450	450	16,849
Fund Appropriations / Allocations ¹	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Water Fund	1,581	1,296	778	4,862	6,814	618	450	450	16,849
Total:	1,581	1,296	778	4,862	6,814	618	450	450	16,849

O&M Impacts: This is an ongoing program and any O&M needed as a result of this program is included in SPU's Operating Budget.

¹Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars

Purveyor Meters Replace-SPU

Project No:	MC-SU-C1206	BSL Code:	BC-SU-C120B
Project Type:	Ongoing	BSL Name:	Transmission
Project Category:	Improved Facility	Location:	Regional
Current Project Stage:	N/A	Council District:	Multiple
Start/End Date:	N/A	Neighborhood District:	Multiple
Total Project Cost:	N/A	Urban Village:	Not in an Urban Village

This ongoing program installs new meters for Seattle's wholesale customers at the customer's request. In addition, existing meters are upgraded to current safety standards. The benefits are accurate metering and billing for Seattle's wholesale customers while meeting their water needs.

Resources	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Water Rates	204	226	100	100	110	120	130	135	1,125
Total:	204	226	100	100	110	120	130	135	1,125
Fund Appropriations / Allocations ¹	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Water Fund	204	226	100	100	110	120	130	135	1,125
Total:	204	226	100	100	110	120	130	135	1,125

O&M Impacts: This is an ongoing program and any O&M needed as a result of this program is included in SPU's Operating Budget.

¹Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars

Regional Water Conservation

Project No:	MC-SU-C1504	BSL Code:	BC-SU-C150B
Project Type:	Ongoing	BSL Name:	Water Resources
Project Category:	Improved Facility	Location:	Citywide and Regional
Current Project Stage:	N/A	Council District:	Multiple
Start/End Date:	N/A	Neighborhood District:	Multiple
Total Project Cost:	N/A	Urban Village:	Multiple

This ongoing program provides customer incentives for residential, commercial, institutional, and industrial water efficiency capital improvements. Typical examples include, but are not limited to, water efficient toilets and urinals, clothes washers, landscape irrigation devices, upgrades in industrial process water, and replacing water-cooled equipment with air-cooled versions. The program benefits both existing and future ratepayers. Water conservation provides low-cost options for meeting potential challenges from climate change, managing Seattle's drinking water resources, and customer efficiency and potential cost savings on water bills.

Resources	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Water Rates	26,584	1,780	1,183	1,212	1,243	1,274	1,306	1,338	35,920
Total:	26,584	1,780	1,183	1,212	1,243	1,274	1,306	1,338	35,920
Fund Appropriations / Allocations¹	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Water Fund	26,584	1,780	1,183	1,212	1,243	1,274	1,306	1,338	35,920
Total:	26,584	1,780	1,183	1,212	1,243	1,274	1,306	1,338	35,920

O&M Impacts: This is an ongoing program and any O&M needed as a result of this program is included in SPU's Operating Budget.

¹Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars

Replace Air Valve Chambers

Project No:	MC-SU-C1209	BSL Code:	BC-SU-C120B
Project Type:	Ongoing	BSL Name:	Transmission
Project Category:	Improved Facility	Location:	Citywide
Current Project Stage:	N/A	Council District:	Multiple
Start/End Date:	N/A	Neighborhood District:	Multiple
Total Project Cost:	N/A	Urban Village:	Not in an Urban Village

This ongoing program improves access to the chambers located throughout the transmission water system. The replacement and enlargement of the entrance to transmission chambers increase the safety for workers that need to enter the chambers twice per year.

Resources	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Water Rates	1,109	242	140	145	150	155	160	165	2,265
Total:	1,109	242	140	145	150	155	160	165	2,265
Fund Appropriations / Allocations ¹	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Water Fund	1,109	242	140	145	150	155	160	165	2,265
Total:	1,109	242	140	145	150	155	160	165	2,265

O&M Impacts: This is an ongoing program and any O&M needed as a result of this program is included in SPU's Operating Budget.

¹Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars

Reservoir Covering-Bitter Lake

Project No:	MC-SU-C1419	BSL Code:	BC-SU-C140B
Project Type:	Discrete	BSL Name:	Water Quality & Treatment
Project Category:	Improved Facility	Location:	N 143rd St and Linden Ave N
Current Project Stage:	Stage 3 - Design	Council District:	Council District 5
Start/End Date:	2013 - 2025	Neighborhood District:	Northwest
Total Project Cost:	\$45,094	Urban Village:	Not in an Urban Village

This project addresses the need for a new cover on Bitter Lake Reservoir once the existing floating cover has reached the end of its useful life. Replacing the existing structure with a new hard covered structure within the same footprint will be one of the options considered. A new cover will be designed and constructed to improve and maintain the water quality protection and security enhancement functions of the existing cover.

Resources	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Water Rates	441	1,200	1,200	1,700	5,000	23,500	20,000	23,000	76,041
Total:	441	1,200	1,200	1,700	5,000	23,500	20,000	23,000	76,041
Fund Appropriations / Allocations ¹	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Water Fund	441	1,200	1,200	1,700	5,000	23,500	20,000	23,000	76,041
Total:	441	1,200	1,200	1,700	5,000	23,500	20,000	23,000	76,041

O&M Impacts: Any O&M needed as a result of this project will be included and/or identified as part of SPU's Operating Budget.

¹Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars

Reservoir Covering-Lake Forest

Project No:	MC-SU-C1418	BSL Code:	BC-SU-C140B
Project Type:	Discrete	BSL Name:	Water Quality & Treatment
Project Category:	Improved Facility	Location:	Lake Forest Park
Current Project Stage:	Stage 3 - Design	Council District:	Outside City of Seattle
Start/End Date:	2013 - 2022	Neighborhood District:	Outside City of Seattle
Total Project Cost:	\$20,519	Urban Village:	Not in an Urban Village

This project addresses the need for a new cover on Lake Forest Park Reservoir once it has reached the end of its useful life. The project will evaluate options for a new cover, including replacing the existing floating Hypolan cover with a similar design. A new cover will be designed and constructed to maintain and improve the water quality protection and security enhancement functions of the existing cover.

Resources	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Water Rates	1,167	10,047	2,155	170	11	-	-	-	13,550
Total:	1,167	10,047	2,155	170	11	-	-	-	13,550
Fund Appropriations / Allocations ¹	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Water Fund	1,167	10,047	2,155	170	11	-	-	-	13,550
Total:	1,167	10,047	2,155	170	11	-	-	-	13,550

O&M Impacts: Any O&M needed as a result of this project will be included and/or identified as part of SPU's Operating Budget.

¹Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars

Seattle Direct Water Conservation

Project No:	MC-SU-C1505	BSL Code:	BC-SU-C150B
Project Type:	Ongoing	BSL Name:	Water Resources
Project Category:	Improved Facility	Location:	Citywide and Direct Service
Current Project Stage:	N/A	Council District:	Multiple
Start/End Date:	N/A	Neighborhood District:	Multiple
Total Project Cost:	N/A	Urban Village:	Multiple

This ongoing program provides water use efficiency resources to the City's low-income customers to implement water conservation measures authorized by Ordinance 120532, adopted in 2001, and supplements funding provided under SPU's Regional Water Conservation project (C1504). Typical improvements consist of, but are not limited to, installing water-efficient fixtures, such as aerating showerheads and faucets, low water use toilets and efficient clothes washers.

Resources	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Water Rates	5,117	1,082	681	698	715	733	752	770	10,549
Total:	5,117	1,082	681	698	715	733	752	770	10,549
Fund Appropriations / Allocations¹	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Water Fund	5,117	1,082	681	698	715	733	752	770	10,549
Total:	5,117	1,082	681	698	715	733	752	770	10,549

O&M Impacts: This is an ongoing program and any O&M needed as a result of this program is included in SPU's Operating Budget.

¹Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars

Stream & Riparian Restoration

Project No:	MC-SU-C1602	BSL Code:	BC-SU-C160B
Project Type:	Ongoing	BSL Name:	Habitat Conservation Program
Project Category:	Improved Facility	Location:	Cedar River Watershed
Current Project Stage:	N/A	Council District:	Outside City of Seattle
Start/End Date:	N/A	Neighborhood District:	Not in a Neighborhood District
Total Project Cost:	N/A	Urban Village:	Not in an Urban Village

This ongoing program provides stream and riparian restoration in the Cedar River Watershed, including large woody debris placement, riparian conifer under-planting, and culvert replacement for fish passage and peak storm flows. This program is a requirement under the Cedar River Habitat Conservation Plan (HCP).

Resources	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Water Rates	4,345	98	98	155	152	39	40	-	4,928
Total:	4,345	98	98	155	152	39	40	-	4,928
Fund Appropriations / Allocations ¹	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Water Fund	4,345	98	98	155	152	39	40	-	4,928
Total:	4,345	98	98	155	152	39	40	-	4,928

O&M Impacts: This is an ongoing program and any O&M needed as a result of this program is included in SPU's Operating Budget.

¹Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars

Tank Improvements

Project No:	MC-SU-C1134	BSL Code:	BC-SU-C110B
Project Type:	Ongoing	BSL Name:	Distribution
Project Category:	Improved Facility	Location:	Citywide
Current Project Stage:	N/A	Council District:	Multiple
Start/End Date:	N/A	Neighborhood District:	Multiple
Total Project Cost:	N/A	Urban Village:	Multiple

This ongoing program implements water quality, seismic, and other improvements to steel water tanks in Seattle. Functional water tanks are essential to public health protection as they assure that the distribution system is under pressure at all times, even when pump stations or control valves malfunction. Depressurization of the water system may result in siphoning back contaminants from faulty private systems and from the ground into the water pipes.

Resources	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Water Rates	5,840	1,846	950	4,000	12,250	8,675	3,300	13,150	50,011
Total:	5,840	1,846	950	4,000	12,250	8,675	3,300	13,150	50,011
Fund Appropriations / Allocations¹	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Water Fund	5,840	1,846	950	4,000	12,250	8,675	3,300	13,150	50,011
Total:	5,840	1,846	950	4,000	12,250	8,675	3,300	13,150	50,011

O&M Impacts: This is an ongoing program and any O&M needed as a result of this program is included in SPU's Operating Budget.

¹Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars

Tolt Bridges

Project No:	MC-SU-C1308	BSL Code:	BC-SU-C130B
Project Type:	Discrete	BSL Name:	Watershed Stewardship
Project Category:	Improved Facility	Location:	Tolt River Watershed
Current Project Stage:	Stage 5 - Construction	Council District:	Outside City of Seattle
Start/End Date:	2004 - 2020	Neighborhood District:	Not in a Neighborhood District
Total Project Cost:	\$1	Urban Village:	Not in an Urban Village

This project replaces aging bridges and related structures, such as abutments, asphalt approaches, and guardrails in the Cedar River Watershed. This project improves aging bridge assets on priority roads in the watershed transportation system to provide City employees, City contractors, and visitors with safe and adequate access to City water supply and hydroelectric assets while minimizing and reducing environmental impacts over time. Work in this project also maintains compliance with state laws, safety and environmental regulations, and tribal access agreements including Washington Department of Natural Resources (WDNR) forest practice regulations, and Washington Department of Health (DOH) Watershed Protection Plan regulations.

Resources	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Water Rates	51	449	1,479	-	-	-	-	-	1,979
Total:	51	449	1,479	-	-	-	-	-	1,979
Fund Appropriations / Allocations¹	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Water Fund	51	449	1,479	-	-	-	-	-	1,979
Total:	51	449	1,479	-	-	-	-	-	1,979

O&M Impacts: Any O&M needed as a result of this project will be included and/or identified as part of SPU's Operating Budget.

¹Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars

Transmission Pipelines Rehab

Project No:	MC-SU-C1207	BSL Code:	BC-SU-C120B
Project Type:	Ongoing	BSL Name:	Transmission
Project Category:	Improved Facility	Location:	Regional
Current Project Stage:	N/A	Council District:	Multiple
Start/End Date:	N/A	Neighborhood District:	Multiple
Total Project Cost:	N/A	Urban Village:	Not in an Urban Village

This ongoing program rehabilitates and upgrades water pipes and associated structures in the City of Seattle's transmission system. It assists SPU in providing agreed-upon pressure and flow for wholesale customers, limiting drinking water supply outages, and meeting applicable regulatory requirements of the Washington Department of Health.

Resources	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Water Rates	8,481	13,215	11,678	7,575	1,756	1,759	1,800	1,850	48,113
Total:	8,481	13,215	11,678	7,575	1,756	1,759	1,800	1,850	48,113
Fund Appropriations / Allocations¹	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Water Fund	8,481	13,215	11,678	7,575	1,756	1,759	1,800	1,850	48,113
Total:	8,481	13,215	11,678	7,575	1,756	1,759	1,800	1,850	48,113

O&M Impacts: This is an ongoing program and any O&M needed as a result of this program is included in SPU's Operating Budget.

¹Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars

Transmission System Seismic Improvements

Project No:	MC-SU-C1210	BSL Code:	BC-SU-C120B
Project Type:	Ongoing	BSL Name:	Transmission
Project Category:	Rehabilitation or Restoration	Location:	Citywide
Current Project Stage:	N/A	Council District:	Multiple
Start/End Date:	N/A	Neighborhood District:	Multiple
Total Project Cost:	N/A	Urban Village:	Multiple

This ongoing program upgrade transmission system infrastructure that is seismically vulnerable and will remain functional after a major earthquake. Vulnerable transmission pipelines, reservoirs and pump stations will be upgraded. These upgrades will be completed over a 50-year time period.

Resources	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Water Rates	-	1,600	1,050	2,800	14,200	17,000	6,400	1,375	44,425
Total:	-	1,600	1,050	2,800	14,200	17,000	6,400	1,375	44,425

Fund Appropriations / Allocations ¹	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Water Fund	-	1,600	1,050	2,800	14,200	17,000	6,400	1,375	44,425
Total:	-	1,600	1,050	2,800	14,200	17,000	6,400	1,375	44,425

O&M Impacts: This is an ongoing program and any O&M needed as a result of this program is included in SPU's Operating Budget.

¹Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars

Treatment Facility/Water Quality Improvements

Project No:	MC-SU-C1413	BSL Code:	BC-SU-C140B
Project Type:	Ongoing	BSL Name:	Water Quality & Treatment
Project Category:	Improved Facility	Location:	Various
Current Project Stage:	N/A	Council District:	Multiple
Start/End Date:	N/A	Neighborhood District:	Not in a Neighborhood District
Total Project Cost:	N/A	Urban Village:	Not in an Urban Village

This ongoing program provides construction of various smaller-scale water quality and treatment facility rehabilitation and improvement projects that may develop on short notice over the course of each year. It enhances SPU's ability to address water system improvement needs that relate to public health protection and drinking water regulatory compliance.

Resources	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Water Rates	1,310	1,967	250	250	250	250	250	-	4,527
Total:	1,310	1,967	250	250	250	250	250	-	4,527
Fund Appropriations / Allocations¹	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Water Fund	1,310	1,967	250	250	250	250	250	-	4,527
Total:	1,310	1,967	250	250	250	250	250	-	4,527

O&M Impacts: This is an ongoing program and any O&M needed as a result of this program is included in SPU's Operating Budget.

¹Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars

Upland Reserve Forest Restore

Project No:	MC-SU-C1603	BSL Code:	BC-SU-C160B
Project Type:	Ongoing	BSL Name:	Habitat Conservation Program
Project Category:	Improved Facility	Location:	Cedar River Watershed
Current Project Stage:	N/A	Council District:	Outside City of Seattle
Start/End Date:	N/A	Neighborhood District:	Not in a Neighborhood District
Total Project Cost:	N/A	Urban Village:	Not in an Urban Village

This ongoing program provides upland forest restoration in the Cedar River Watershed, including ecological and restoration thinning, conifer planting, forest inventory and modeling, and species monitoring. This program is a requirement under the Cedar River Habitat Conservation Plan (HCP).

Resources	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Water Rates	2,770	120	123	125	128	130	133	-	3,529
Total:	2,770	120	123	125	128	130	133	-	3,529

Fund Appropriations / Allocations ¹	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Water Fund	2,770	120	123	125	128	130	133	-	3,529
Total:	2,770	120	123	125	128	130	133	-	3,529

O&M Impacts: This is an ongoing program and any O&M needed as a result of this program is included in SPU's Operating Budget.

¹Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars

Water Infrastructure-Hydrant Replace/Relocate

Project No:	MC-SU-C1110	BSL Code:	BC-SU-C110B
Project Type:	Ongoing	BSL Name:	Distribution
Project Category:	Rehabilitation or Restoration	Location:	Citywide
Current Project Stage:	N/A	Council District:	Multiple
Start/End Date:	N/A	Neighborhood District:	Multiple
Total Project Cost:	N/A	Urban Village:	Multiple

This ongoing program renews or replaces existing hydrants in the City's water distribution system. In general, hydrant renewal or replacement may occur as a result of hydrant malfunction, catastrophic failure due to vehicle damage, or to meet SPU criticality criteria such as spacing, location, cost, opportunity projects, or flow and pressure problems. This program improves access to fire hydrants for the Seattle Fire Department (SFD) and helps to reduce the damage as a result of fire by locating fire hydrants in alternate or additional locations.

Resources	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Water Rates	1,768	781	235	239	244	249	254	259	4,029
Total:	1,768	781	235	239	244	249	254	259	4,029
Fund Appropriations / Allocations¹	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Water Fund	1,768	781	235	239	244	249	254	259	4,029
Total:	1,768	781	235	239	244	249	254	259	4,029

O&M Impacts: This is an ongoing program and any O&M needed as a result of this program is included in SPU's Operating Budget.

¹Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars

Water Infrastructure-New Hydrants

Project No:	MC-SU-C1112	BSL Code:	BC-SU-C110B
Project Type:	Ongoing	BSL Name:	Distribution
Project Category:	New Facility	Location:	Citywide
Current Project Stage:	N/A	Council District:	Multiple
Start/End Date:	N/A	Neighborhood District:	Multiple
Total Project Cost:	N/A	Urban Village:	Multiple

This ongoing program installs new hydrants in the City's water distribution system. In general, new hydrants are installed to meet service requests made by private property owners and to comply with Washington Administrative Code (WAC) or Seattle Fire Department (SFD) requirements. This program also helps to reduce the damage as a result of fire by locating new fire hydrants throughout the City's direct service area.

Resources	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Water Rates	254	14	50	50	50	50	50	50	567
Total:	254	14	50	50	50	50	50	50	567
Fund Appropriations / Allocations¹	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Water Fund	254	14	50	50	50	50	50	50	567
Total:	254	14	50	50	50	50	50	50	567

O&M Impacts: This is an ongoing program and any O&M needed as a result of this program is included in SPU's Operating Budget.

¹Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars

Water Infrastructure-New Taps

Project No:	MC-SU-C1113	BSL Code:	BC-SU-C110B
Project Type:	Ongoing	BSL Name:	Distribution
Project Category:	New Facility	Location:	Citywide
Current Project Stage:	N/A	Council District:	Multiple
Start/End Date:	N/A	Neighborhood District:	Multiple
Total Project Cost:	N/A	Urban Village:	Multiple

This ongoing program installs new drinking water services throughout the City of Seattle. This project provides new connections to existing water mains with no interruption of service to adjacent existing customers, and the installation of metered water service lines from the new tap to the new customer's property lines. This program meets City responsibility for new service connections in the Seattle Municipal Code (SMC) to provide reliable drinking water supply to customers.

Resources	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Water Rates	24,739	9,306	7,428	7,428	7,577	7,883	8,000	8,000	80,360
Total:	24,739	9,306	7,428	7,428	7,577	7,883	8,000	8,000	80,360
Fund Appropriations / Allocations¹	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Water Fund	24,739	9,306	7,428	7,428	7,577	7,883	8,000	8,000	80,360
Total:	24,739	9,306	7,428	7,428	7,577	7,883	8,000	8,000	80,360

O&M Impacts: This is an ongoing program and any O&M needed as a result of this program is included in SPU's Operating Budget.

¹Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars

Water Infrastructure-Service Renewal

Project No:	MC-SU-C1109	BSL Code:	BC-SU-C110B
Project Type:	Ongoing	BSL Name:	Distribution
Project Category:	Rehabilitation or Restoration	Location:	Citywide
Current Project Stage:	N/A	Council District:	Multiple
Start/End Date:	N/A	Neighborhood District:	Multiple
Total Project Cost:	N/A	Urban Village:	Multiple

This ongoing program replaces existing plastic or galvanized water services in the City's water distribution system. Service replacement may occur as a result of leaking, failing, or to reduce damage in case of failure of the water service. This program improves Seattle's water system and extends the life of the water distribution system.

Resources	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Water Rates	16,621	6,193	6,317	6,443	6,572	6,704	6,838	6,704	62,391
Total:	16,621	6,193	6,317	6,443	6,572	6,704	6,838	6,704	62,391
Fund Appropriations / Allocations¹	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Water Fund	16,621	6,193	6,317	6,443	6,572	6,704	6,838	6,704	62,391
Total:	16,621	6,193	6,317	6,443	6,572	6,704	6,838	6,704	62,391

O&M Impacts: This is an ongoing program and any O&M needed as a result of this program is included in SPU's Operating Budget.

¹Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars

Water Infrastructure-Water Main Extensions

Project No:	MC-SU-C1111	BSL Code:	BC-SU-C110B
Project Type:	Ongoing	BSL Name:	Distribution
Project Category:	New Facility	Location:	Citywide
Current Project Stage:	N/A	Council District:	Multiple
Start/End Date:	N/A	Neighborhood District:	Multiple
Total Project Cost:	N/A	Urban Village:	Multiple

This ongoing program assists developers by adding new water mains to the water system in order to serve new residential and commercial developments. Most of the costs are recovered through standard charges. The benefit of this program is that water service is provided to new housing and businesses throughout Seattle.

Resources	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Water Rates	4,640	2,598	2,016	2,057	2,098	2,140	2,183	2,226	19,958
Total:	4,640	2,598	2,016	2,057	2,098	2,140	2,183	2,226	19,958
Fund Appropriations / Allocations¹	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Water Fund	4,640	2,598	2,016	2,057	2,098	2,140	2,183	2,226	19,958
Total:	4,640	2,598	2,016	2,057	2,098	2,140	2,183	2,226	19,958

O&M Impacts: This is an ongoing program and any O&M needed as a result of this program is included in SPU's Operating Budget.

¹Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars

Water Supply Flexibility Program

Project No:	MC-SU-C1507	BSL Code:	BC-SU-C150B
Project Type:	Ongoing	BSL Name:	Water Resources
Project Category:	New Investment	Location:	Multiple
Current Project Stage:	N/A	Council District:	Multiple
Start/End Date:	N/A	Neighborhood District:	Not in a Neighborhood District
Total Project Cost:	N/A	Urban Village:	Not in an Urban Village

This program improves water system performance, reliability, and flexibility during severe weather events, supply and infrastructure emergencies, as well as enhancing environmental performance for fish and supporting regulatory and policy compliance in these areas. Project improvements include Tolt Reservoir Temperature and the Overflow Dike in Chester Morse Lake, and may include but are not limited to, dam integrity and alternatives to improved crest control, reservoir water temperature, and water quality management. In addition, the S. Fork Tolt Dam is up for relicensing under the Federal Energy Regulatory Commission (FERC), which expires July 19, 2029. The relicensing process will take 5-7 years depending on the relicensing approach taken with Seattle City Light and FERC. Seattle City Light is the Tolt Dam license holder and will lead the relicensing effort but significant support from SPU is anticipated. Both utilities (SPU/SCL) are establishing CIP numbers budgeted for the relicensing process.

Resources	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Water Rates	356	400	200	200	500	500	500	500	3,156
Total:	356	400	200	200	500	500	500	500	3,156
Fund Appropriations / Allocations¹	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Water Fund	356	400	200	200	500	500	500	500	3,156
Total:	356	400	200	200	500	500	500	500	3,156

O&M Impacts: Any O&M needed as a result of this project will be included and/or identified as part of SPU's Operating Budget.

¹Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars

Water System Dewatering

Project No:	MC-SU-C1205	BSL Code:	BC-SU-C120B
Project Type:	Ongoing	BSL Name:	Transmission
Project Category:	Improved Facility	Location:	Regional
Current Project Stage:	N/A	Council District:	Multiple
Start/End Date:	N/A	Neighborhood District:	Multiple
Total Project Cost:	N/A	Urban Village:	Not in an Urban Village

This ongoing program improves structures used to empty the water from larger pipelines when necessary for inspection or repair. The new structures better control the impact of the water discharged to the environment and comply with current environmental regulations.

Resources	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Water Rates	25	35	136	40	45	50	55	60	446
Total:	25	35	136	40	45	50	55	60	446

Fund Appropriations / Allocations ¹	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Water Fund	25	35	136	40	45	50	55	60	446
Total:	25	35	136	40	45	50	55	60	446

O&M Impacts: This is an ongoing program and any O&M needed as a result of this program is included in SPU's Operating Budget.

¹Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars

Water System Plan

Project No:	MC-SU-C1510	BSL Code:	BC-SU-C150B
Project Type:	Ongoing	BSL Name:	Water Resources
Project Category:	Improved Facility	Location:	Various
Current Project Stage:	N/A	Council District:	Multiple
Start/End Date:	N/A	Neighborhood District:	Not in a Neighborhood District
Total Project Cost:	N/A	Urban Village:	Not in an Urban Village

This project develops the Water System Plan. This project meets the State requirement that SPU update a water system plan every ten years and submit the plan to the Washington Department of Health (DOH) for approval as a condition of the operating permit for the drinking water system.

Resources	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Water Rates	404	-	-	-	-	-	155	522	1,081
Total:	404	-	-	-	-	-	155	522	1,081

Fund Appropriations / Allocations ¹	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Water Fund	404	-	-	-	-	-	155	522	1,081
Total:	404	-	-	-	-	-	155	522	1,081

O&M Impacts: Any O&M needed as a result of this project will be included and/or identified as part of SPU's Operating Budget.

¹Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars

Watermain Rehabilitation

Project No:	MC-SU-C1129	BSL Code:	BC-SU-C110B
Project Type:	Ongoing	BSL Name:	Distribution
Project Category:	Improved Facility	Location:	Regional
Current Project Stage:	N/A	Council District:	Multiple
Start/End Date:	N/A	Neighborhood District:	Multiple
Total Project Cost:	N/A	Urban Village:	Multiple

This ongoing program replaces or rehabilitates existing water mains in Seattle. Replacements occur when leaks and breaks become too frequent and the cost of ongoing repairs is no longer cost effective. The benefits of this program can include improved service reliability, fire flow, water quality and lower maintenance costs. These benefits vary depending on the specific water main and site conditions.

Resources	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Water Rates	25,578	7,042	13,895	15,072	9,874	20,600	34,400	33,400	159,861
Total:	25,578	7,042	13,895	15,072	9,874	20,600	34,400	33,400	159,861
Fund Appropriations / Allocations ¹	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Water Fund	25,578	7,042	13,895	15,072	9,874	20,600	34,400	33,400	159,861
Total:	25,578	7,042	13,895	15,072	9,874	20,600	34,400	33,400	159,861

O&M Impacts: This is an ongoing program and any O&M needed as a result of this program is included in SPU's Operating Budget.

¹Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars

Watershed Road Improvements/Decommissioning

Project No:	MC-SU-C1601	BSL Code:	BC-SU-C160B
Project Type:	Ongoing	BSL Name:	Habitat Conservation Program
Project Category:	Improved Facility	Location:	Cedar River Watershed
Current Project Stage:	N/A	Council District:	Outside City of Seattle
Start/End Date:	N/A	Neighborhood District:	Not in a Neighborhood District
Total Project Cost:	N/A	Urban Village:	Not in an Urban Village

This ongoing program provides forest road improvements and decommissioning in the Cedar River Watershed. The purpose of this program is to reduce the delivery of sediment into the waterways in the watershed to protect both aquatic habitat and water quality. This program is a requirement under the Cedar River Watershed Habitat Conservation Plan (HCP).

Resources	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Water Rates	7,231	847	1,048	572	475	475	600	75	11,323
Total:	7,231	847	1,048	572	475	475	600	75	11,323
Fund Appropriations / Allocations¹	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Water Fund	7,231	847	1,048	572	475	475	600	75	11,323
Total:	7,231	847	1,048	572	475	475	600	75	11,323

O&M Impacts: This is an ongoing program and any O&M needed as a result of this program is included in SPU's Operating Budget.

¹Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars

Seattle Public Utilities

Shared & Technology Projects

1% for Arts

Project No:	MC-SU-C4118	BSL Code:	BC-SU-C410B
Project Type:	Ongoing	BSL Name:	Shared Cost Projects
Project Category:	New Investment	Location:	Various
Current Project Stage:	N/A	Council District:	Multiple
Start/End Date:	N/A	Neighborhood District:	Multiple
Total Project Cost:	N/A	Urban Village:	Multiple

This ongoing project provides funding for Seattle Public Utilities' 1% for Arts contribution. Eligibility is determined at the individual project level with payment occurring from this project. Funds contributed to the 1% for Arts project allow for the commission, purchase, and installation of art on City-owned properties that is accessible to the public. The Municipal Arts Plan, which is prepared annually, describes the status of ongoing art projects and establishes the scope of work and allocations for new art projects.

Resources	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Drainage and Wastewater Rates	5,401	1,407	1,074	1,128	957	461	428	485	11,341
Solid Waste Rates	2,011	130	18	46	59	33	1	-	2,298
Water Rates	2,312	304	247	162	136	301	241	290	3,993
Total:	9,724	1,841	1,338	1,336	1,152	795	670	775	17,632
Fund Appropriations / Allocations¹	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Drainage and Wastewater Fund	5,401	1,407	1,074	1,128	957	461	428	485	11,341
Solid Waste Fund	2,011	130	18	46	59	33	1	-	2,298
Water Fund	2,312	304	247	162	136	301	241	290	3,993
Total:	9,724	1,841	1,338	1,336	1,152	795	670	775	17,632

O&M Impacts: This is an ongoing program and any O&M needed as a result of this program is included in SPU's Operating Budget.

¹Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars

Alaskan Way Viaduct & Seawall Replacement Program

Project No:	MC-SU-C4102	BSL Code:	BC-SU-C410B
Project Type:	Discrete	BSL Name:	Shared Cost Projects
Project Category:	Improved Facility	Location:	Various
Current Project Stage:	Stage 5 - Construction	Council District:	Multiple
Start/End Date:	2001 - 2025	Neighborhood District:	Multiple
Total Project Cost:	\$87,522	Urban Village:	Multiple

This project relocates, replaces, and protects water infrastructure affected by the replacement of the Alaskan Way Viaduct and Seawall. This project encompasses many sub-projects which are collectively known as the Alaskan Way Viaduct and Seawall Replacement project (AWVSR project). The Washington State Department of Transportation (WSDOT) is the lead for the SR-99 replacement, while the City of Seattle is the lead on development of the waterfront public space, implementation of the new surface Alaskan Way, and design and construction of the seawall.

Resources	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Drainage and Wastewater Rates	50,752	5,899	948	281	116	23	-	-	58,019
Water Rates	24,259	1,226	537	161	71	-	-	-	26,254
Total:	75,011	7,126	1,485	442	188	23	-	-	84,273
Fund Appropriations / Allocations ¹	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Drainage and Wastewater Fund	50,752	5,899	948	281	116	23	-	-	58,019
Water Fund	24,259	1,226	537	161	71	-	-	-	26,254
Total:	75,011	7,126	1,485	442	188	23	-	-	84,273

O&M Impacts: Any O&M needed as a result of this project will be included and/or identified as part of SPU's Operating Budget.

¹Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars

Asset Information Management

Project No:	MC-SU-C5407	BSL Code:	BC-SU-C510B
Project Type:	Ongoing	BSL Name:	Technology
Project Category:	Improved Facility	Location:	Various
Current Project Stage:	N/A	Council District:	Not Applicable
Start/End Date:	N/A	Neighborhood District:	Not in a Neighborhood District
Total Project Cost:	N/A	Urban Village:	Not in an Urban Village

This ongoing project provides applications, upgrades and data management tools in support of SPU's work and asset management projects. Several new and updated technology solutions designed to enhance the efficiency and effectiveness of drinking water, sewer, drainage, and solid waste operations are planned. Activities within this project aim to further enhance safety and improve responsiveness of SPU's utility operations.

Resources	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Drainage and Wastewater Rates	1,484	1,190	860	860	860	860	860	860	7,834
Solid Waste Rates	878	367	300	300	300	300	300	300	3,045
Water Rates	1,373	2,037	840	840	840	840	840	840	8,451
Total:	3,735	3,594	2,000	2,000	2,000	2,000	2,000	2,000	19,330
Fund Appropriations / Allocations¹	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Drainage and Wastewater Fund	1,484	1,190	860	860	860	860	860	860	7,834
Solid Waste Fund	878	367	300	300	300	300	300	300	3,045
Water Fund	1,373	2,037	840	840	840	840	840	840	8,451
Total:	3,735	3,594	2,000	2,000	2,000	2,000	2,000	2,000	19,330

O&M Impacts: This is an ongoing program and any O&M needed as a result of this program is included in SPU's Operating Budget.

¹Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars

Customer Contact & Billing

Project No:	MC-SU-C5402	BSL Code:	BC-SU-C510B
Project Type:	Ongoing	BSL Name:	Technology
Project Category:	Improved Facility	Location:	N/A
Current Project Stage:	N/A	Council District:	Not Applicable
Start/End Date:	N/A	Neighborhood District:	Not in a Neighborhood District
Total Project Cost:	N/A	Urban Village:	Not in an Urban Village

This ongoing project provides technology solutions and business application upgrades in support of SPU's Customer Contact Center and activities carried out by the Customer Service Branch. Planned projects include, but are not limited to, enhancements to the New Customer Billing System and new technology solutions for enhanced customer contact management. This ongoing project is intended to enhance customer service, customer contact, and ensure accurate Utility billing.

Resources	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Drainage and Wastewater Rates	4,444	4,019	430	430	430	430	430	430	11,043
Solid Waste Rates	2,591	1,786	150	150	150	150	150	150	5,278
Water Rates	4,422	3,566	420	420	420	420	420	420	10,508
Total:	11,458	9,371	1,000	1,000	1,000	1,000	1,000	1,000	26,829
Fund Appropriations / Allocations¹	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Drainage and Wastewater Fund	4,444	4,019	430	430	430	430	430	430	11,043
Solid Waste Fund	2,591	1,786	150	150	150	150	150	150	5,278
Water Fund	4,422	3,566	420	420	420	420	420	420	10,508
Total:	11,458	9,371	1,000	1,000	1,000	1,000	1,000	1,000	26,829

O&M Impacts: This is an ongoing program and any O&M needed as a result of this program is included in SPU's Operating Budget.

¹Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars

Emergency Storms Program

Project No:	MC-SU-C4120	BSL Code:	BC-SU-C410B
Project Type:	Ongoing	BSL Name:	Shared Cost Projects
Project Category:	Improved Facility	Location:	Various
Current Project Stage:	N/A	Council District:	Multiple
Start/End Date:	N/A	Neighborhood District:	Multiple
Total Project Cost:	N/A	Urban Village:	Multiple

This ongoing project funds water and drainage & wastewater infrastructure capital improvement projects resulting from previous and possible future storm events. Projects within this project are potentially Federal Emergency Management Agency (FEMA) reimbursable and need to be separated for tracking and reimbursement purposes. Typical improvements include but are not limited to repairing and improving roads, bridges, and other stream crossing structures in the City's Municipal Watersheds, as well as replacing damaged equipment, such as pumps and security gates, and stabilizing debris slide areas and stream banks.

Resources	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Drainage and Wastewater Rates	1	-	-	-	-	-	-	-	1
Total:	1	-	-	-	-	-	-	-	1
Fund Appropriations / Allocations ¹	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Drainage and Wastewater Fund	1	-	-	-	-	-	-	-	1
Total:	1	-	-	-	-	-	-	-	1

O&M Impacts: This is an ongoing program and any O&M needed as a result of this program is included in SPU's Operating Budget.

¹Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars

Enterprise Information Management

Project No:	MC-SU-C5403	BSL Code:	BC-SU-C510B
Project Type:	Ongoing	BSL Name:	Technology
Project Category:	Improved Facility	Location:	Various
Current Project Stage:	N/A	Council District:	Not Applicable
Start/End Date:	N/A	Neighborhood District:	Not in a Neighborhood District
Total Project Cost:	N/A	Urban Village:	Not in an Urban Village

This ongoing project provides integrated technology solutions in support of the management of SPU's corporate knowledge, including data, information, documents, and web content. Typical improvements may include, but are not limited to, replacement of shared file storage, new online collaboration tools, introduction of workflow, tracking & reporting applications, web content management systems, and an enterprise document management solution. This ongoing project enhances SPU's ability to retrieve, share, distribute and manage corporate information.

Resources	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Drainage and Wastewater Rates	775	2,160	860	860	860	860	860	860	8,095
Solid Waste Rates	183	524	300	300	300	300	300	300	2,507
Water Rates	610	1,670	840	840	840	840	840	840	7,320
Total:	1,568	4,354	2,000	2,000	2,000	2,000	2,000	2,000	17,922
Fund Appropriations / Allocations¹	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Drainage and Wastewater Fund	775	2,160	860	860	860	860	860	860	8,095
Solid Waste Fund	183	524	300	300	300	300	300	300	2,507
Water Fund	610	1,670	840	840	840	840	840	840	7,320
Total:	1,568	4,354	2,000	2,000	2,000	2,000	2,000	2,000	17,922

O&M Impacts: This is an ongoing program and any O&M needed as a result of this program is included in SPU's Operating Budget.

¹Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars

Heavy Equipment Purchases

Project No:	MC-SU-C4116	BSL Code:	BC-SU-C410B
Project Type:	Ongoing	BSL Name:	Shared Cost Projects
Project Category:	New Investment	Location:	Various
Current Project Stage:	N/A	Council District:	Not Applicable
Start/End Date:	N/A	Neighborhood District:	Not in a Neighborhood District
Total Project Cost:	N/A	Urban Village:	Not in an Urban Village

This ongoing project provides SPU staff with new and replacement heavy equipment that is used throughout Seattle and King County. Typical purchases include backhoes, graders, loaders, dozers, service trucks, and dump trucks. This equipment transports work crews and tools to job sites and supports the safe and efficient replacement, repair, and maintenance of infrastructure that delivers high quality drinking water to 1.5 million customers in King County.

Resources	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Drainage and Wastewater Rates	20,466	3,638	4,201	2,860	3,964	3,352	2,085	1,098	41,665
Solid Waste Rates	13,609	2,585	3,485	1,593	1,597	617	707	338	24,530
Water Rates	22,552	4,305	5,484	5,484	3,667	6,739	1,991	1,001	51,221
Total:	56,627	10,528	13,169	9,937	9,228	10,708	4,783	2,436	117,417
Fund Appropriations / Allocations¹	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Drainage and Wastewater Fund	20,466	3,638	4,201	2,860	3,964	3,352	2,085	1,098	41,665
Solid Waste Fund	13,609	2,585	3,485	1,593	1,597	617	707	338	24,530
Water Fund	22,552	4,305	5,484	5,484	3,667	6,739	1,991	1,001	51,221
Total:	56,627	10,528	13,169	9,937	9,228	10,708	4,783	2,436	117,417

O&M Impacts: This is an ongoing program and any O&M needed as a result of this program is included in SPU's Operating Budget.

¹Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars

Integrated Control Monitoring Program

Project No:	MC-SU-C4108	BSL Code:	BC-SU-C410B
Project Type:	Ongoing	BSL Name:	Shared Cost Projects
Project Category:	Improved Facility	Location:	Various
Current Project Stage:	N/A	Council District:	Not Applicable
Start/End Date:	N/A	Neighborhood District:	Not in a Neighborhood District
Total Project Cost:	N/A	Urban Village:	Not in an Urban Village

This ongoing project provides for electronic and mechanical system upgrades as required at various City facilities. The drinking water Supervisory Control and Data Acquisition (SCADA) system was installed in 2005 throughout King County. System components include, but is not limited to, treatment/flow/pressure sensors, remote control pumps/valves used in the conveyance and quality of drinking water and the delivery of water to fire hydrants, also known as "fire flow".

Resources	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Drainage and Wastewater Rates	1,700	138	250	250	250	250	250	250	3,338
Water Rates	899	632	360	360	360	360	360	360	3,692
Total:	2,599	770	610	610	610	610	610	610	7,030
Fund Appropriations / Allocations¹	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Drainage and Wastewater Fund	1,700	138	250	250	250	250	250	250	3,338
Water Fund	899	632	360	360	360	360	360	360	3,692
Total:	2,599	770	610	610	610	610	610	610	7,030

O&M Impacts: This is an ongoing program and any O&M needed as a result of this program is included in SPU's Operating Budget.

¹Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars

IT Infrastructure

Project No:	MC-SU-C5404	BSL Code:	BC-SU-C510B
Project Type:	Ongoing	BSL Name:	Technology
Project Category:	Improved Facility	Location:	N/A
Current Project Stage:	N/A	Council District:	Not Applicable
Start/End Date:	N/A	Neighborhood District:	Not in a Neighborhood District
Total Project Cost:	N/A	Urban Village:	Not in an Urban Village

This ongoing IT asset management project ensures the availability, reliability, and security of SPU's corporate computing infrastructure. The project acquires and maintains SPU-owned and managed servers, local networks, shared storage and backup systems, operating software, and communications infrastructure.

Resources	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Drainage and Wastewater Rates	905	1,065	730	730	730	730	730	730	6,350
Solid Waste Rates	315	395	263	263	263	263	263	263	2,285
Water Rates	1,524	715	758	758	758	758	758	758	6,784
Total:	2,743	2,175	1,750	1,750	1,750	1,750	1,750	1,750	15,418

Fund Appropriations / Allocations¹	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Drainage and Wastewater Fund	905	1,065	730	730	730	730	730	730	6,350
Solid Waste Fund	315	395	263	263	263	263	263	263	2,285
Water Fund	1,524	715	758	758	758	758	758	758	6,784
Total:	2,743	2,175	1,750	1,750	1,750	1,750	1,750	1,750	15,418

O&M Impacts: This is an ongoing program and any O&M needed as a result of this program is included in SPU's Operating Budget.

¹Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars

Meter Replacement

Project No:	MC-SU-C4101	BSL Code:	BC-SU-C410B
Project Type:	Ongoing	BSL Name:	Shared Cost Projects
Project Category:	Improved Facility	Location:	Various
Current Project Stage:	N/A	Council District:	Multiple
Start/End Date:	N/A	Neighborhood District:	Multiple
Total Project Cost:	N/A	Urban Village:	Multiple

This ongoing project funds replacement of existing water meters when they fail or become obsolete. Meters measuring up to two inches are replaced when they stop running. Meters measuring three inches or more are repaired when possible, but are replaced when repair costs exceed replacement costs. Accurate water meters ensure that customers are billed fairly for the water they use. Since water meters also are used to bill customers for their wastewater discharges, 48 percent of the funding is allocated to the Drainage and Wastewater line of business.

Resources	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Drainage and Wastewater Rates	7,928	928	528	535	542	550	557	564	12,132
Water Rates	8,600	1,004	572	580	588	595	603	611	13,153
Total:	16,528	1,932	1,100	1,115	1,130	1,145	1,160	1,175	25,284
Fund Appropriations / Allocations ¹	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Drainage and Wastewater Fund	7,928	928	528	535	542	550	557	564	12,132
Water Fund	8,600	1,004	572	580	588	595	603	611	13,153
Total:	16,528	1,932	1,100	1,115	1,130	1,145	1,160	1,175	25,284

O&M Impacts: This is an ongoing program and any O&M needed as a result of this program is included in SPU's Operating Budget.

¹Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars

Move Seattle

Project No:	MC-SU-C4119	BSL Code:	BC-SU-C410B
Project Type:	Ongoing	BSL Name:	Shared Cost Projects
Project Category:	Improved Facility	Location:	Various
Current Project Stage:	N/A	Council District:	Multiple
Start/End Date:	N/A	Neighborhood District:	Multiple
Total Project Cost:	N/A	Urban Village:	Multiple

This multi-year project funds assessments, repairs, and improvements to SPU's drinking water utility infrastructure at sites chosen by the Seattle Department of Transportation (SDOT) for bridge improvements and pedestrian and bicycle safety improvements within its "Move Seattle" project. SPU assesses the condition of its utility infrastructure at SDOT's project sites and conducts repairs and improvements as needed. This project was formerly titled "Bridging the Gap - WF."

Resources	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Drainage and Wastewater Rates	9,546	16,406	2,567	12,895	17,080	9,560	16,201	8,880	93,135
Water Rates	11,607	22,112	3,560	10,560	13,663	11,732	8,409	15,358	97,001
Total:	21,154	38,518	6,126	23,455	30,743	21,292	24,610	24,238	190,137
Fund Appropriations / Allocations¹	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Drainage and Wastewater Fund	9,546	16,406	2,567	12,895	17,080	9,560	16,201	8,880	93,135
Water Fund	11,607	22,112	3,560	10,560	13,663	11,732	8,409	15,358	97,001
Total:	21,154	38,518	6,126	23,455	30,743	21,292	24,610	24,238	190,137

O&M Impacts: This is an ongoing program and any O&M needed as a result of this program is included in SPU's Operating Budget.

¹Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars

Operational Facility - Construction

Project No:	MC-SU-C4106	BSL Code:	BC-SU-C410B
Project Type:	Ongoing	BSL Name:	Shared Cost Projects
Project Category:	Improved Facility	Location:	Various
Current Project Stage:	N/A	Council District:	Multiple
Start/End Date:	N/A	Neighborhood District:	Multiple
Total Project Cost:	N/A	Urban Village:	Not in an Urban Village

This ongoing facilities project renovates, rehabilitates, replaces existing buildings, and constructs new facilities at various locations within the city limits to address deficiencies, failures, and functional changes in the SPU Lines of Business. Typical improvements include, but are not limited to, roof replacements, exterior wall or cladding replacements, and improvements to administrative office space, crew and shop space, lighting, heating and ventilation systems, and facilities structures. These improvements increase the useful life of the facilities, preserve the value of the assets, and provide a safe working environment.

Resources	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Drainage and Wastewater Rates	22,355	8,235	5,252	16,282	15,022	2,681	-	-	69,828
Solid Waste Rates	90	537	852	775	636	-	-	-	2,890
Water Rates	7,665	3,497	6,936	4,871	4,481	2,700	200	-	30,350
Total:	30,109	12,269	13,040	21,929	20,139	5,381	200	-	103,068
Fund Appropriations / Allocations¹	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Drainage and Wastewater Fund	22,355	8,235	5,252	16,282	15,022	2,681	-	-	69,828
Solid Waste Fund	90	537	852	775	636	-	-	-	2,890
Water Fund	7,665	3,497	6,936	4,871	4,481	2,700	200	-	30,350
Total:	30,109	12,269	13,040	21,929	20,139	5,381	200	-	103,068

O&M Impacts: This is an ongoing program and any O&M needed as a result of this program is included in SPU's Operating Budget.

¹Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars

Operations Control Center

Project No:	MC-SU-C4105	BSL Code:	BC-SU-C410B
Project Type:	Ongoing	BSL Name:	Shared Cost Projects
Project Category:	Improved Facility	Location:	2700 Airport Way South
Current Project Stage:	N/A	Council District:	Council District 2
Start/End Date:	N/A	Neighborhood District:	Greater Duwamish
Total Project Cost:	N/A	Urban Village:	Greater Duwamish

This ongoing facilities project renovates, rehabilitates, replaces existing buildings, and constructs new facilities at the Operations Control Center located at 2700 Airport Way South to improve the efficiency and effectiveness of the field crews delivering utility services to customers. Typical improvements include, but are not limited to, roof and other exterior replacements, improvements to public spaces, office and crew spaces and lighting, and heating and ventilation systems. These improvements increase the useful life of the facility, preserve the value of the asset, and provide a safe work and public space environment.

Resources	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Water Rates	3,151	29	-	-	-	-	-	-	3,180
Total:	3,151	29	-	-	-	-	-	-	3,180
Fund Appropriations / Allocations ¹	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Water Fund	3,151	29	-	-	-	-	-	-	3,180
Total:	3,151	29	-	-	-	-	-	-	3,180

O&M Impacts: This is an ongoing program and any O&M needed as a result of this program is included in SPU's Operating Budget.

¹Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars

Other Major Transportation Projects

Project No:	MC-SU-C4123	BSL Code:	BC-SU-C410B
Project Type:	Ongoing	BSL Name:	Shared Cost Projects
Project Category:	Improved Facility	Location:	Various
Current Project Stage:	N/A	Council District:	Multiple
Start/End Date:	N/A	Neighborhood District:	Multiple
Total Project Cost:	N/A	Urban Village:	Multiple

This ongoing project funds projects that mitigate undesirable impacts and take advantage of opportunities generated by the capital transportation projects of the Washington State Department of Transportation (WSDOT) and the Seattle Department of Transportation (SDOT) throughout the City. Work may include, but is not limited to, physically protecting the infrastructure during the transportation construction process, repairing and replacing damaged infrastructure, and improving existing infrastructure to meet higher standards. Project sites may include, but are not limited to, State Route 520, Interstate 5, and Interstate 90.

Resources	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Drainage and Wastewater Rates	404	1,253	333	142	20	-	-	-	2,152
Water Rates	1,109	448	1,044	3,024	3,675	3,675	50	-	13,025
Total:	1,513	1,701	1,378	3,166	3,695	3,675	50	-	15,177
Fund Appropriations / Allocations¹	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Drainage and Wastewater Fund	404	1,253	333	142	20	-	-	-	2,152
Water Fund	1,109	448	1,044	3,024	3,675	3,675	50	-	13,025
Total:	1,513	1,701	1,378	3,166	3,695	3,675	50	-	15,177

O&M Impacts: This is an ongoing program and any O&M needed as a result of this program is included in SPU's Operating Budget.

¹Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars

Project Delivery & Performance

Project No:	MC-SU-C5405	BSL Code:	BC-SU-C510B
Project Type:	Ongoing	BSL Name:	Technology
Project Category:	Improved Facility	Location:	N/A
Current Project Stage:	N/A	Council District:	Not Applicable
Start/End Date:	N/A	Neighborhood District:	Not in a Neighborhood District
Total Project Cost:	N/A	Urban Village:	Not in an Urban Village

This ongoing project provides technology applications and application upgrades in support of improvements to project delivery and performance. Planned projects include continued development of an Enterprise Project Management System, replacement of the Engineering Support Contract Payments system, and SPU's share of costs for the City's central financial system upgrades. Future projects may include development of new Enterprise Resource Planning systems such as HR provisioning and financial reporting. This project will result in an improved ability to plan and deliver projects on schedule and within budget.

Resources	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Drainage and Wastewater Rates	6,991	1,540	731	731	731	731	731	731	12,917
Solid Waste Rates	2,585	644	255	255	255	255	255	255	4,758
Water Rates	7,527	1,330	714	714	714	714	714	714	13,140
Total:	17,103	3,514	1,700	1,700	1,700	1,700	1,700	1,700	30,816
Fund Appropriations / Allocations¹	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Drainage and Wastewater Fund	6,991	1,540	731	731	731	731	731	731	12,917
Solid Waste Fund	2,585	644	255	255	255	255	255	255	4,758
Water Fund	7,527	1,330	714	714	714	714	714	714	13,140
Total:	17,103	3,514	1,700	1,700	1,700	1,700	1,700	1,700	30,816

O&M Impacts: This is an ongoing program and any O&M needed as a result of this program is included in SPU's Operating Budget.

¹Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars

Regional Facility - Other

Project No:	MC-SU-C4107	BSL Code:	BC-SU-C410B
Project Type:	Ongoing	BSL Name:	Shared Cost Projects
Project Category:	Improved Facility	Location:	Regional
Current Project Stage:	N/A	Council District:	Outside City of Seattle
Start/End Date:	N/A	Neighborhood District:	Outside City of Seattle
Total Project Cost:	N/A	Urban Village:	Outside City of Seattle

This ongoing facilities project renovates, rehabilitates, replaces existing buildings, and constructs new facilities at various locations outside of City limits to address deficiencies, failures, and functional changes in the drinking water system. These improvements increase the useful life of the facilities, preserve the value of the assets, and provide a safe working environment.

Resources	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Water Rates	22,750	4,095	2,700	2,000	15,200	8,200	4,000	300	59,245
Total:	22,750	4,095	2,700	2,000	15,200	8,200	4,000	300	59,245
Fund Appropriations / Allocations¹	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Water Fund	22,750	4,095	2,700	2,000	15,200	8,200	4,000	300	59,245
Total:	22,750	4,095	2,700	2,000	15,200	8,200	4,000	300	59,245

O&M Impacts: This is an ongoing program and any O&M needed as a result of this program is included in SPU's Operating Budget.

¹Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars

Science & System Performance

Project No:	MC-SU-C5406	BSL Code:	BC-SU-C510B
Project Type:	Ongoing	BSL Name:	Technology
Project Category:	Improved Facility	Location:	N/A
Current Project Stage:	N/A	Council District:	Not Applicable
Start/End Date:	N/A	Neighborhood District:	Not in a Neighborhood District
Total Project Cost:	N/A	Urban Village:	Not in an Urban Village

This ongoing project will provide new and improved technology applications and accompanying data management tools to support the gathering, monitoring, tracking and analysis of science and engineering information. Several planned projects include replacement of obsolete regulatory compliance tracking applications, upgrades to field monitoring equipment, and the integration of SCADA data with other data systems. This project enhances SPU's ability to control water quality and comply with environmental and health regulations.

Resources	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Drainage and Wastewater Rates	1,280	463	688	688	688	688	688	688	5,871
Solid Waste Rates	19	38	240	240	240	240	240	240	1,497
Water Rates	3,186	1,116	672	672	672	672	672	672	8,334
Total:	4,486	1,616	1,600	1,600	1,600	1,600	1,600	1,600	15,702
Fund Appropriations / Allocations¹	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Drainage and Wastewater Fund	1,280	463	688	688	688	688	688	688	5,871
Solid Waste Fund	19	38	240	240	240	240	240	240	1,497
Water Fund	3,186	1,116	672	672	672	672	672	672	8,334
Total:	4,486	1,616	1,600	1,600	1,600	1,600	1,600	1,600	15,702

O&M Impacts: This is an ongoing program and any O&M needed as a result of this program is included in SPU's Operating Budget.

¹Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars

Security Improvements

Project No:	MC-SU-C4113	BSL Code:	BC-SU-C410B
Project Type:	Ongoing	BSL Name:	Shared Cost Projects
Project Category:	Improved Facility	Location:	Various
Current Project Stage:	N/A	Council District:	Multiple
Start/End Date:	N/A	Neighborhood District:	Multiple
Total Project Cost:	N/A	Urban Village:	Multiple

This ongoing project funds physical, integrated security system components on water infrastructure throughout the City. Components may include, but are not limited to, fences, gates, access control card readers, intercoms, lighting, door and hatch contacts, CCTV cameras, motion detection devices, and fiber and conduit.

Resources	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Drainage and Wastewater Rates	598	180	180	165	300	255	210	-	1,888
Solid Waste Rates	1,076	95	207	135	225	145	115	-	1,998
Water Rates	5,677	1,788	838	1,325	1,700	1,475	750	-	13,554
Total:	7,352	2,063	1,225	1,625	2,225	1,875	1,075	-	17,440
Fund Appropriations / Allocations¹	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Drainage and Wastewater Fund	598	180	180	165	300	255	210	-	1,888
Solid Waste Fund	1,076	95	207	135	225	145	115	-	1,998
Water Fund	5,677	1,788	838	1,325	1,700	1,475	750	-	13,554
Total:	7,352	2,063	1,225	1,625	2,225	1,875	1,075	-	17,440

O&M Impacts: This is an ongoing program and any O&M needed as a result of this program is included in SPU's Operating Budget.

¹Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars

Streetcar Related Projects

Project No:	MC-SU-C4130	BSL Code:	BC-SU-C410B
Project Type:	Discrete	BSL Name:	Shared Cost Projects
Project Category:	Improved Facility	Location:	Various
Current Project Stage:	Stage 2 - Initiation, Project Definition, & Planning	Council District:	Multiple
Start/End Date:	2009 - 2030	Neighborhood District:	Multiple
Total Project Cost:	\$66,021	Urban Village:	Multiple

This project plans and relocates water facilities that will be impacted by the SDOT-led First Hill Streetcar project and related streetcar projects, which will connect major employment centers on First Hill to the regional light rail system stations on Capitol Hill and in the International District. It is currently in the construction phase. This project was formerly titled "First Hill Streetcar - WF."

Resources	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Drainage and Wastewater Rates	4,054	119	12	12	12	4,412	-	-	8,621
Water Rates	14,643	152	-	-	-	-	-	-	14,795
Total:	18,697	271	12	12	12	4,412	-	-	23,416
Fund Appropriations / Allocations¹	LTD Actuals	2021 Revised	2022	2023	2024	2025	2026	2027	Total
Drainage and Wastewater Fund	4,054	119	12	12	12	4,412	-	-	8,621
Water Fund	14,643	152	-	-	-	-	-	-	14,795
Total:	18,697	271	12	12	12	4,412	-	-	23,416

O&M Impacts: Any O&M needed as a result of this project will be included and/or identified as part of SPU's Operating Budget.

¹Funds are appropriated through the Adopted Budget at the Budget Summary Level. All Amounts shown above are in thousands of dollars

