

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
- 85 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) CIP is the vehicle for rehabilitating, replacing, improving, and expanding this infrastructure, as well as constructing projects that protect, conserve, and enhance our region's environmental resources. Planned spending in the DWF CIP is approximately \$1.45 billion over the next six years, from 2020 to 2025.

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 stormwater pollution. Projects in the DWF CIP are guided by various Federal regulations, City policies, long-term plan documents, and the SPU Asset Management Committee (AMC) benefit criteria. Many DWF CIP projects are outlined in the Wastewater System Plan, the Comprehensive Drainage Plan, and the Plan to Protect Seattle's Waterways. In addition to candidate capital projects identified from these planning documents (e.g., comprehensive plans, program plans), 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 maintaining public health and safety. The importance of this project in providing or 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. Examples of highly ranked projects in this category include the Pipe Rehabilitation and Pump Station improvement programs.

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- **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 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 Move Seattle projects.

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.
- **Aligning Capital Investments with Transportation Department’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.

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- The NDS Program, described below, collaborates with SDOT and has identified numerous joint sidewalk/bioretention 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. The first GSI in Urban Villages project will be the Cloverdale Bioretention project to be constructed in 2020
 - 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

2020-2025 Proposed Drainage and Wastewater Fund CIP by BCL
(In ‘000s; total may not sum due to rounding)

BCL	2020	2021	2022	2023	2024	2025	Total
Protection of Beneficial Uses	22,274	51,001	27,662	28,865	18,058	22,829	170,688
Sediments	3,482	3,963	3,983	7,511	11,515	18,697	49,151
Combined Sewer Overflows	121,148	130,442	108,849	97,103	69,553	40,100	567,195
Rehabilitation and Heavy Equipment	40,044	30,369	25,872	25,750	30,250	30,963	183,248
Flooding, Sewer Backups, and Landslides	37,252	42,651	50,398	20,577	64,648	58,272	273,798
Shared Cost Projects	41,607	42,137	34,369	22,616	19,385	20,589	180,703
Technology	4,219	4,750	4,299	4,299	4,299	4,299	26,165

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Total	270,026	305,313	255,432	206,720	217,707	195,749	1,450,949
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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 preserve 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. These spills 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 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 implementation of regulatory required plans such as the Plan to Protect Seattle’s Waterways. The

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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 \$567 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.

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The Proposed 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 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 2020 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
- Project Delivery/Project Controls

In 2020, 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 Customer Self-Service (CSS) Portal project as well as other projects such as the Customer Contact & Billing (CCB) Upgrade, 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, and the Maximo Business Intelligence (BI) 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 2018 for the three-year period of 2019-2022.

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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.
- **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

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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. The funding for these programs is below the program need, but unable to be increased at this time due to the demand on our budget from our regulatory requirements. 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.

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, the Integrated System Plan, to better identify the highest priority locations and potential funding and financing strategies. The Integrated System Plan will be a 50-year plan for managing and improving Seattle's drainage and wastewater systems. 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 2022, 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.

Project Summary

Project Name & ID	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Combined Sewer Overflows (BC-SU-C360B)									
CSO Facility Retrofit (MC-SU-C3611)	7,339	15,022	13,195	4,125	10,057	11,861	9,560	3,575	74,734
Future CSO Projects (MC-SU-C3612)	386	2,984	3,406	4,552	5,611	10,801	15,726	12,505	55,971
Green Stormwater Infrastructure Program (MC-SU-C3610)	11,250	2,193	2,700	2,500	2,850	2,500	2,500	1,000	27,493
Long Term Control Plan (MC-SU-C3604)	14,125	1,201	1,200	1,200	1,200	1,200	1,000	1,000	22,126
S Henderson CSO Storage (MC-SU-C3609)	59,528	29	-	-	-	-	-	-	59,557
Ship Canal Water Quality Project (MC-SU-C3614)	69,771	49,888	100,646	118,065	89,131	70,740	40,767	22,021	561,030
BC-SU-C360B Total	162,400	71,316	121,148	130,442	108,849	97,103	69,553	40,100	800,911
Flooding, Sewer Backup & Landslide (BC-SU-C380B)									
Broadview Long-Term Plan (MC-SU-C3812)	6,578	4,750	4,000	4,600	-	-	-	9,425	29,353
Drainage Capacity Program (MC-SU-C3802)	17,269	2,379	2,448	2,854	3,896	4,812	17,904	17,904	69,467
Sanitary Sewer Overflow Capacity (MC-SU-C3804)	5,202	3,303	12,931	14,797	9,175	9,000	22,000	22,000	98,407
South Park Stormwater Program (MC-SU-C3806)	13,417	5,407	17,873	20,400	37,327	6,765	24,744	8,943	134,876
Thornton Confluence Improvement (MC-SU-C3811)	7,516	391	-	-	-	-	-	-	7,907
BC-SU-C380B Total	49,982	16,230	37,252	42,651	50,398	20,577	64,648	58,272	340,010
Protection of Beneficial Uses (BC-SU-C333B)									
Beneficial Uses Program (MC-SU-C3317)	6,756	2,224	1,237	11,551	2,450	164	5,000	10,000	39,382
Creek Culvert Replacement Program (MC-SU-C3314)	2,124	2,379	2,884	4,200	8,000	12,450	2,000	-	34,036
GSI for Protection of Beneficial Uses (MC-SU-C3316)	16,269	11,962	18,153	35,250	17,212	16,251	11,058	12,829	138,984

*Amounts in thousands of dollars.

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Project Name & ID	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
BC-SU-C333B Total	25,150	16,565	22,274	51,001	27,662	28,865	18,058	22,829	212,402
Rehabilitation (BC-SU-C370B)									
Drainage Facilities Rehabilitation (MC-SU- C3711)	-	-	250	250	250	250	250	250	1,500
Outfall Rehabilitation Program (MC-SU-C3708)	1,635	2,351	338	1,509	1,500	1,500	1,500	1,500	11,833
Pipe Renewal Program (MC- SU-C3710)	44,524	28,138	33,535	20,748	20,000	20,000	24,000	24,713	215,658
Pump Station & Force Main Improvements (MC-SU- C3703)	5,346	15,585	5,921	7,862	4,122	4,000	4,500	4,500	51,836
BC-SU-C370B Total	51,505	46,074	40,044	30,369	25,872	25,750	30,250	30,963	280,827
Seattle Public Utilities – Drainage and Wastewater Total	327,101	153,821	224,200	258,426	216,764	179,805	194,023	170,861	1,725,003

*Amounts in thousands of dollars.

Fund Summary

Fund Code & Name	LTD								
	Actuals	2019	2020	2021	2022	2023	2024	2025	Total
44010 - Drainage and Wastewater Fund	429,781	240,659	270,026	305,313	255,432	206,720	217,707	195,749	2,121,388
Seattle Public Utilities Total	429,781	240,659	270,026	305,313	255,432	206,720	217,707	195,749	2,121,388

**Amounts 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	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Drainage and Wastewater Rates	2,124	2,379	2,884	4,200	8,000	12,450	2,000	-	34,036
Total:	2,124	2,379	2,884	4,200	8,000	12,450	2,000	-	34,036
Fund Appropriations / Allocations¹	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Drainage and Wastewater Fund	2,124	2,379	2,884	4,200	8,000	12,450	2,000	-	34,036
Total:	2,124	2,379	2,884	4,200	8,000	12,450	2,000	-	34,036

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	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Drainage and Wastewater Rates	16,269	11,962	18,153	35,250	17,212	16,251	11,058	12,829	138,984
Total:	16,269	11,962	18,153	35,250	17,212	16,251	11,058	12,829	138,984
Fund Appropriations / Allocations¹	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Drainage and Wastewater Fund	16,269	11,962	18,153	35,250	17,212	16,251	11,058	12,829	138,984
Total:	16,269	11,962	18,153	35,250	17,212	16,251	11,058	12,829	138,984

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

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	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Drainage and Wastewater Rates	6,756	2,224	1,237	11,551	2,450	164	5,000	10,000	39,382
Total:	6,756	2,224	1,237	11,551	2,450	164	5,000	10,000	39,382
Fund Appropriations / Allocations¹	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Drainage and Wastewater Fund	6,756	2,224	1,237	11,551	2,450	164	5,000	10,000	39,382
Total:	6,756	2,224	1,237	11,551	2,450	164	5,000	10,000	39,382

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	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Drainage and Wastewater Rates	38,065	3,636	3,482	3,963	3,983	7,511	11,515	18,697	90,853
Total:	38,065	3,636	3,482	3,963	3,983	7,511	11,515	18,697	90,853
Fund Appropriations / Allocations¹	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Drainage and Wastewater Fund	38,065	3,636	3,482	3,963	3,983	7,511	11,515	18,697	90,853
Total:	38,065	3,636	3,482	3,963	3,983	7,511	11,515	18,697	90,853

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

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	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Drainage and Wastewater Rates	14,125	1,201	1,200	1,200	1,200	1,200	1,000	1,000	22,126
Total:	14,125	1,201	1,200	1,200	1,200	1,200	1,000	1,000	22,126
Fund Appropriations / Allocations¹	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Drainage and Wastewater Fund	14,125	1,201	1,200	1,200	1,200	1,200	1,000	1,000	22,126
Total:	14,125	1,201	1,200	1,200	1,200	1,200	1,000	1,000	22,126

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

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:	\$59,557	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	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Drainage and Wastewater Rates	59,528	29	-	-	-	-	-	-	59,557
Total:	59,528	29	-	-	-	-	-	-	59,557
Fund Appropriations / Allocations ¹	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Drainage and Wastewater Fund	59,528	29	-	-	-	-	-	-	59,557
Total:	59,528	29	-	-	-	-	-	-	59,557

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

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	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Drainage and Wastewater Rates	11,250	2,193	2,700	2,500	2,850	2,500	2,500	1,000	27,493
Total:	11,250	2,193	2,700	2,500	2,850	2,500	2,500	1,000	27,493
Fund Appropriations / Allocations ¹	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Drainage and Wastewater Fund	11,250	2,193	2,700	2,500	2,850	2,500	2,500	1,000	27,493
Total:	11,250	2,193	2,700	2,500	2,850	2,500	2,500	1,000	27,493

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	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Drainage and Wastewater Rates	7,339	15,022	13,195	4,125	10,057	11,861	9,560	3,575	74,734
Total:	7,339	15,022	13,195	4,125	10,057	11,861	9,560	3,575	74,734
Fund Appropriations / Allocations¹	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Drainage and Wastewater Fund	7,339	15,022	13,195	4,125	10,057	11,861	9,560	3,575	74,734
Total:	7,339	15,022	13,195	4,125	10,057	11,861	9,560	3,575	74,734

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	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Drainage and Wastewater Rates	386	2,984	3,406	4,552	5,611	10,801	15,726	12,505	55,971
Total:	386	2,984	3,406	4,552	5,611	10,801	15,726	12,505	55,971
Fund Appropriations / Allocations¹	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Drainage and Wastewater Fund	386	2,984	3,406	4,552	5,611	10,801	15,726	12,505	55,971
Total:	386	2,984	3,406	4,552	5,611	10,801	15,726	12,505	55,971

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.

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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	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Drainage and Wastewater Rates	48,015	34,549	66,621	77,906	59,564	53,234	30,140	16,081	386,109
King County Funds	21,756	15,339	34,026	40,160	29,567	17,507	10,627	5,940	174,921
Total:	69,771	49,888	100,646	118,065	89,131	70,740	40,767	22,021	561,030
Fund Appropriations / Allocations¹	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Drainage and Wastewater Fund	69,771	49,888	100,646	118,065	89,131	70,740	40,767	22,021	561,030
Total:	69,771	49,888	100,646	118,065	89,131	70,740	40,767	22,021	561,030

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.

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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	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Drainage and Wastewater Rates	5,346	15,585	5,921	7,862	4,122	4,000	4,500	4,500	51,836
Total:	5,346	15,585	5,921	7,862	4,122	4,000	4,500	4,500	51,836
Fund Appropriations / Allocations¹	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Drainage and Wastewater Fund	5,346	15,585	5,921	7,862	4,122	4,000	4,500	4,500	51,836
Total:	5,346	15,585	5,921	7,862	4,122	4,000	4,500	4,500	51,836

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.

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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	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Drainage and Wastewater Rates	1,635	2,351	338	1,509	1,500	1,500	1,500	1,500	11,833
Total:	1,635	2,351	338	1,509	1,500	1,500	1,500	1,500	11,833
Fund Appropriations / Allocations¹	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Drainage and Wastewater Fund	1,635	2,351	338	1,509	1,500	1,500	1,500	1,500	11,833
Total:	1,635	2,351	338	1,509	1,500	1,500	1,500	1,500	11,833

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	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Drainage and Wastewater Rates	44,524	28,138	33,535	20,748	20,000	20,000	24,000	24,713	215,658
Total:	44,524	28,138	33,535	20,748	20,000	20,000	24,000	24,713	215,658
Fund Appropriations / Allocations¹	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Drainage and Wastewater Fund	44,524	28,138	33,535	20,748	20,000	20,000	24,000	24,713	215,658
Total:	44,524	28,138	33,535	20,748	20,000	20,000	24,000	24,713	215,658

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	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Drainage and Wastewater Rates	-	-	250	250	250	250	250	250	1,500
Total:	-	-	250	250	250	250	250	250	1,500

Fund Appropriations / Allocations ¹	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Drainage and Wastewater Fund	-	-	250	250	250	250	250	250	1,500
Total:	-	-	250	250	250	250	250	250	1,500

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	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Drainage and Wastewater Rates	17,269	2,379	2,448	2,854	3,896	4,812	17,904	17,904	69,467
Total:	17,269	2,379	2,448	2,854	3,896	4,812	17,904	17,904	69,467
Fund Appropriations / Allocations ¹	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Drainage and Wastewater Fund	17,269	2,379	2,448	2,854	3,896	4,812	17,904	17,904	69,467
Total:	17,269	2,379	2,448	2,854	3,896	4,812	17,904	17,904	69,467

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

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	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Drainage and Wastewater Rates	5,202	3,303	12,931	14,797	9,175	9,000	22,000	22,000	98,407
Total:	5,202	3,303	12,931	14,797	9,175	9,000	22,000	22,000	98,407
Fund Appropriations / Allocations¹	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Drainage and Wastewater Fund	5,202	3,303	12,931	14,797	9,175	9,000	22,000	22,000	98,407
Total:	5,202	3,303	12,931	14,797	9,175	9,000	22,000	22,000	98,407

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

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	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Drainage and Wastewater Rates	13,417	5,407	17,873	20,400	37,327	6,765	24,744	8,943	134,876
Total:	13,417	5,407	17,873	20,400	37,327	6,765	24,744	8,943	134,876
Fund Appropriations / Allocations ¹	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Drainage and Wastewater Fund	13,417	5,407	17,873	20,400	37,327	6,765	24,744	8,943	134,876
Total:	13,417	5,407	17,873	20,400	37,327	6,765	24,744	8,943	134,876

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	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Drainage and Wastewater Rates	7,516	391	-	-	-	-	-	-	7,907
Total:	7,516	391	-	-	-	-	-	-	7,907
Fund Appropriations / Allocations ¹	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Drainage and Wastewater Fund	7,516	391	-	-	-	-	-	-	7,907
Total:	7,516	391	-	-	-	-	-	-	7,907

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

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	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Drainage and Wastewater Rates	6,578	4,750	4,000	4,600	-	-	-	9,425	29,353
Total:	6,578	4,750	4,000	4,600	-	-	-	9,425	29,353
Fund Appropriations / Allocations¹	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Drainage and Wastewater Fund	6,578	4,750	4,000	4,600	-	-	-	9,425	29,353
Total:	6,578	4,750	4,000	4,600	-	-	-	9,425	29,353

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

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 \$95 million over the next six years, from 2020 through 2025.

Major anticipated projects include:

- constructing a recycling/re-use facility at the South Recycling Center at or adjacent to the South Transfer Station (this was previously called South Transfer Station Phase 2 or STS2) (2015-2021); and
- cleanup of the historic South Park Landfill (2015-2021) at the South Park Development Project.

These projects comprise approximately 62% of the SWF CIP. Other significant projects include the Waste Removal project at the Midway Landfill, replacing two compactors, 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.

- 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

2020-2025 Proposed 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).

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 examples 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 South Recycling Center project.
- **Level of Service:** The importance of this project in providing or improving services to customers. An examples of a highly ranked project in this category is the South Recycling Center project.
- **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

2020-2025 Proposed Water Fund CIP by BCL
(In '000s; total may not sum due to rounding)

BCL	2020	2021	2022	2023	2024	2025	Total
New Facilities	18,442	24,398	9,760	6,607	553	312	60,072
Rehabilitation & Heavy Eqpt	8,390	1,245	675	550	525	450	11,835
Shared Cost Projects	2,317	1,562	3,276	1,939	2,320	1,582	12,996
Technology	1,710	1,865	1,508	1,508	1,508	1,508	9,604
Total	30,859	29,069	15,219	10,603	4,905	3,852	94,507

New Facilities: This program includes the planning, design, and construction of new facilities to enhance solid waste operations. In 2020, SPU will continue to implement its Solid Waste Facilities Master Plan. The key project drivers of the New Facilities budget are the South Recycling Center and South Park Development 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. The key drivers of this budget level are the Midway project and new funding for the Solid Waste Comprehensive 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. 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.

2020-2025 Proposed Capital Improvement Program

Investments in 2020 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 2020, 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 issued debt in 2014, 2015, and 2016. SPU is not planning any SWF bond issuances until after 2022 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 the South Recycling Center project. 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 developing the South Recycling Center and must continue to use the site for trailer parking and household hazardous waste collection during construction.
- Financial Challenges: Developing the South Recycling Center 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 services.

Future Projects/What is on the Horizon

Once the South Recycling Center is completed, the core SWF CIP is expected to approximate lower spending levels. General SWF CIP spending will return to between \$5 and \$10 million annually after this project is completed, compared to a high of \$25 million planned for 2022.

Once the South Recycling Center is completed, annual costs for repairs and upkeep are projected to decrease initially and then increase as equipment replacement/renewal projects are required. Part of the project scope is to retain enough space to take advantage for future technologies and innovations, and possibly construct a Material Recovery Facility or some other waste reduction or recovery facility in the future to increase the recycling rate and help SPU achieve its environmental goals.

Project Summary

Project Name & ID	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
New Facilities (BC-SU-C230B)									
Miscellaneous Station Improvement (MC-SU-C2303)	3,497	1,715	500	250	3,100	3,100	300	300	12,762
North Transfer Station Rebuild (MC-SU-C2306)	109,341	1,670	4	-	-	-	-	-	111,015
South Park Development (MC-SU-C2304)	5,277	907	5,531	7,445	2,053	1,081	78	4	22,377
South Recycling Center (MC-SU-C2302)	4,108	2,769	12,408	16,702	4,606	2,426	175	8	43,202
BC-SU-C230B Total	122,223	7,061	18,442	24,398	9,760	6,607	553	312	189,356
Rehabilitation & Heavy Equipment (BC-SU-C240B)									
Kent Highlands (MC-SU-C2402)	510	25	50	25	25	50	25	50	760
Midway Landfill (MC-SU-C2403)	291	450	8,240	1,170	600	500	500	250	12,001
SW Comprehensive Plan Update (MC-SU-C2407)	-	150	100	50	50	-	-	150	500
BC-SU-C240B Total	802	625	8,390	1,245	675	550	525	450	13,262
Seattle Public Utilities – Solid Waste Total	123,025	7,686	26,832	25,643	10,435	7,157	1,078	762	202,618

*Amounts in thousands of dollars.

Fund Summary

Fund Code & Name	LTD	2019	2020	2021	2022	2023	2024	2025	Total
	Actuals								
45010 - Solid Waste Fund	138,217	15,485	30,859	29,069	15,219	10,603	4,905	3,852	248,209
Seattle Public Utilities Total	138,217	15,485	30,859	29,069	15,219	10,603	4,905	3,852	248,209

*Amounts 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

This project transforms the existing South Recycling and Disposal Station to a recycling and reuse area. The existing transfer station building and associated facilities will be demolished and replaced with new recycling facilities, a reuse facility, parking and storage area for transfer trailers, and other solid waste facilities.

Resources	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Solid Waste Rates	4,108	2,769	12,408	16,702	4,606	2,426	175	8	43,202
Total:	4,108	2,769	12,408	16,702	4,606	2,426	175	8	43,202
Fund Appropriations / Allocations ¹	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Solid Waste Fund	4,108	2,769	12,408	16,702	4,606	2,426	175	8	43,202
Total:	4,108	2,769	12,408	16,702	4,606	2,426	175	8	43,202

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.

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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 improvements to the South Transfer Station (STS) wheelwash and floor drain system to meet regulatory requirements and replacement of the wear surface on the STS tipping floor or modifications to optimize the NTS facility.

Resources	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Solid Waste Rates	3,497	1,715	500	250	3,100	3,100	300	300	12,762
Total:	3,497	1,715	500	250	3,100	3,100	300	300	12,762
Fund Appropriations / Allocations¹	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Solid Waste Fund	3,497	1,715	500	250	3,100	3,100	300	300	12,762
Total:	3,497	1,715	500	250	3,100	3,100	300	300	12,762

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.

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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 2 - Initiation, Project Definition, & Planning	Council District:	Council District 1
Start/End Date:	2007 - 2025	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 Washington Department of Ecology Agreed Order for study of and cleanup planning for the historic South Park Landfill.

Resources	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Solid Waste Rates	5,277	907	5,531	7,445	2,053	1,081	78	4	22,377
Total:	5,277	907	5,531	7,445	2,053	1,081	78	4	22,377
Fund Appropriations / Allocations ¹	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Solid Waste Fund	5,277	907	5,531	7,445	2,053	1,081	78	4	22,377
Total:	5,277	907	5,531	7,445	2,053	1,081	78	4	22,377

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

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	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Solid Waste Rates	109,341	1,670	4	-	-	-	-	-	111,015
Total:	109,341	1,670	4	-	-	-	-	-	111,015
Fund Appropriations / Allocations¹	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Solid Waste Fund	109,341	1,670	4	-	-	-	-	-	111,015
Total:	109,341	1,670	4	-	-	-	-	-	111,015

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

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 and feasibility studies to demonstrate the effectiveness of the Kent Highlands landfill closure project, as well as various landfill improvements. The environmental and feasibility 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 and water treatment.

Resources	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Solid Waste Rates	510	25	50	25	25	50	25	50	760
Total:	510	25	50	25	25	50	25	50	760
Fund Appropriations / Allocations¹	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Solid Waste Fund	510	25	50	25	25	50	25	50	760
Total:	510	25	50	25	25	50	25	50	760

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 and feasibility 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.

Resources	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Solid Waste Rates	291	450	8,240	1,170	600	500	500	250	12,001
Total:	291	450	8,240	1,170	600	500	500	250	12,001
Fund Appropriations / Allocations¹	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Solid Waste Fund	291	450	8,240	1,170	600	500	500	250	12,001
Total:	291	450	8,240	1,170	600	500	500	250	12,001

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.

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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	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Solid Waste Rates	-	150	100	50	50	-	-	150	500
Total:	-	150	100	50	50	-	-	150	500

Fund Appropriations / Allocations ¹	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Solid Waste Fund	-	150	100	50	50	-	-	150	500
Total:	-	150	100	50	50	-	-	150	500

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

Seattle Public Utilities (SPU) delivers an average of approximately 122 million gallons of drinking water per day to 1.5 million people and businesses in Seattle and 18 surrounding cities and water districts, plus the Cascade Water Alliance. The water system infrastructure includes:

- the Cedar and South Fork Tolt supply sources;
- three groundwater wells;
- two primary water treatment plants;
- 11 booster chlorination facilities;
- 327 million gallons of treated water storage;
- 31 pump stations;
- approximately 1,900 miles of transmission and distribution system pipelines;
- almost 200,000 meters and service connections;
- more than 21,000 distribution system valves;
- about 18,000 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 \$682 million over the next six years. Major projects include:

- water system improvements associated with transportation projects, including Move Seattle, Center City Streetcar, Lander Street Grade Separation project, East Marginal Way Heavy Haul Corridor project, and Madison Bus Rapid Transit project;
- operational and regional facility construction;
- replacement of the Bitter Lake and Lake Forest Park Reservoirs floating covers; and
- addressing a slide area through which the Tolt Pipelines pass, upstream of the Tolt Treatment Plant.

The 2020-2025 Proposed 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 initial funding for a water system seismic improvement program stemming from the recent completion of SPU's water system seismic study.

SPU funds Water capital projects through a combination of cash and 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 is also in the final review and approval stages of its Water System Plan 2019, a Washington Department of Health (WDOH) regulatory requirement. This Water System Plan for 2019 will include many elements as well as providing plans for SPU's capital needs 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 reservoir covering programs 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 the Alaskan Way Viaduct and Mercer Corridor projects.
- **Infrastructure:** How a project addresses infrastructure conditions or vulnerabilities. Examples of highly ranked projects in this category include the Watermain Rehabilitation, Distribution System Improvements 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.

CIP Spending by Major Category

2020-2025 Proposed Water Fund CIP by BCL
(In '000s; total may not sum due to rounding)

BCL	2020	2021	2022	2023	2024	2025	Total
Distribution	34,137	33,578	31,518	30,205	46,402	50,002	225,842
Transmission	15,612	16,071	4,878	7,131	5,206	18,187	67,085
Watershed Stewardship	1,290	594	65	75	175	175	2,374
Water Quality & Treatment	9,525	7,210	13,750	21,600	9,100	3,000	64,185
Water Resources	8,464	12,674	4,350	4,535	2,758	2,222	35,004
Habitat Conservation Program	3,488	2,815	1,841	2,115	1,195	1,004	12,459
Shared Cost Projects	37,740	42,067	60,533	26,234	45,063	37,291	248,929
Technology	5,271	4,685	4,244	4,244	4,244	4,244	26,930
Total	115,527	119,695	121,178	96,140	114,142	116,126	682,807

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 2020 are primarily due to a decrease in new taps and delay of pump stations improvement to outyears. It is offset by increased costs for SW Spokane Street water main rehabilitation and other water main rehabilitation projects at multiple worksites across the city. Additionally, revised cost estimates based on more detailed analysis have been generated for interior/exterior recoating and safety upgrades to the Beverly Park elevated tank.

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 other local utilities that purchase a portion of SPU's supply for their customers.

Increases in the **Transmission BCL** in 2020 are primarily due to the initiation of the new transmission system seismic improvements program.

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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. 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** due to the delay of the Taylor Creek Trestle and Bridge construction project by one construction season. This project was previously scheduled for construction in 2019. The project is being delayed in hopes of receiving favorable bids well in advance of construction and due to a shortfall in staffing resources. The diminished condition of both the trestle and the 9 Road bridge has created a potentially unsafe working environment and could compromise emergency response required as part of management of the City’s drinking water supply and fish habitat. The removal of the trestle and replacement of the 9 Road bridge will increase emergency response, safety, water quality, fish habitat, large woody debris movement into the Cedar system and provide a main haul route for transportation of larger loads across the lower watershed.

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 already treated water that is distributed directly to Seattle retail and wholesale customers for drinking purposes.

The shift in the **Water Quality & Treatment BCL** due to an updated cashflow projection for the Lake Forest Park Reservoir Covering Project. The plan is for another floating cover instead of the aluminum roof previously considered. Construction of the replacement of the Lake Forest Park Reservoir cover is anticipated to start in 2020. Bitter Lake Reservoir cover replacement is anticipated to start in 2022 - 2024.

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 projects in this category include the Dam Safety Program and Sockeye Broodstock Weir and other improvements associated with the hatchery and fish ladder.

Increases in the **Water Resources BCL** in 2020 are due to increased costs of Tolt Valve 15 replacement, an upgrade required by the Federal Energy Regulatory Commission (FERC).

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 2020 in the **Habitat Conservation Program BCL** 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 City's Cedar River Habitat Conservation Program commitments. A portion of this amount may be grant funded. Also, there is an increase of \$1.7M in 2020-2023 for Streams and Riparian Restoration that replaces old culverts with new culverts or small bridges to provide improved fish passage.

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, Alaskan Way Viaduct and Seawall Replacement. Funding is also included for SPU's Heavy Equipment Purchases and several smaller projects.

The **Shared Cost Projects BCL** increases in 2020 is primarily due to the Cedar Falls Facility Improvement projects and Spoil Yard Property Purchase project, accelerating projects forward.

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; and
- Asset Information Management.

Investments in 2020 address several of SPU's key initiatives, including:

- Financial Management and Internal Controls;

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

In 2020, 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 68% of the Water Fund’s operating revenues come from retail ratepayers, split approximately evenly between residential and commercial customers. Another 24% of the Water Fund’s overall revenues come from wholesale purveyors who serve surrounding jurisdictions. The remaining 8% 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 31% 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 watermains. 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 is transitioning from a period of building large capital projects, in response to regulatory requirements, to a time of physical infrastructure rehabilitation. 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

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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 2020-2025 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 floating 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 recently completed a seismic analysis that defined recovery time to agreed levels of service and developed a prioritized list of recommended investments to improve resiliency. Those capital and operational and maintenance improvements will be developed over the course of the next several decades, and initial funding to begin implementation of those improvements is included in this capital program.

Project Summary

Project Name & ID	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Distribution (BC-SU-C110B)									
Chamber Upgrades- Distribution (MC-SU-C1137)	255	29	30	30	31	32	33	33	473
Distribution Infrastructure (MC-SU-C1138)	34	108	110	113	115	118	120	122	840
Distribution Sys Seismic Imprv (MC-SU-C1139)	-	-	750	2,050	2,600	3,300	6,400	4,500	19,600
Distribution System Improvements (MC-SU- C1128)	35	3,500	2,000	2,000	2,000	2,000	4,000	4,000	19,535
Distribution System In-Line Gate Valve (MC-SU-C1136)	1,385	120	120	366	373	381	400	408	3,553
Multiple Utility Relocation (MC-SU-C1133)	1	500	500	500	500	500	500	500	3,501
Pump Station Improvements (MC-SU- C1135)	410	1,457	724	1,658	3,245	560	500	500	9,054
Tank Improvements (MC- SU-C1134)	816	2,476	5,567	3,493	3,590	3,930	3,720	4,000	27,592
Water Infrastructure- Hydrant Replace/Relocate (MC-SU-C1110)	395	221	225	230	235	239	244	249	2,037
Water Infrastructure-New Hydrants (MC-SU-C1112)	39	13	14	14	14	15	15	16	139
Water Infrastructure-New Taps (MC-SU-C1113)	7,410	8,201	7,140	7,283	7,428	7,428	7,577	7,883	60,350
Water Infrastructure- Service Renewal (MC-SU- C1109)	4,953	6,033	6,072	6,193	6,317	6,443	6,572	6,704	49,287
Water Infrastructure-Water Main Extensions (MC-SU- C1111)	807	879	714	728	743	758	773	788	6,191
Watermain Rehabilitation (MC-SU-C1129)	12,955	12,641	10,171	8,920	4,326	4,502	15,548	20,300	89,363
BC-SU-C110B Total	29,495	36,178	34,137	33,578	31,518	30,205	46,402	50,002	291,515
Habitat Conservation Program (BC-SU-C160B)									
Ballard Locks Improvements (MC-SU-C1606)	502	150	155	160	165	170	-	-	1,302

*Amounts in thousands of dollars.

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Project Summary

Project Name & ID	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Downstream Fish Habitat (MC-SU-C1607)	12,806	1,600	2,000	1,050	-	-	-	-	17,456
Instream Flow Management Studies (MC-SU-C1608)	1,716	100	100	100	100	100	-	-	2,216
Stream & Riparian Restoration (MC-SU-C1602)	4,230	309	315	544	627	981	317	113	7,436
Upland Reserve Forest Restore (MC-SU-C1603)	2,594	83	115	115	115	115	115	115	3,366
Watershed Road Improvements/Decommissioning (MC-SU-C1601)	6,612	783	803	847	833	749	763	776	12,165
BC-SU-C160B Total	28,460	3,024	3,488	2,815	1,841	2,115	1,195	1,004	43,943
Transmission (BC-SU-C120B)									
Cathodic Protection (MC-SU-C1208)	2,505	4,646	3,388	2,334	287	2,744	411	3,667	19,981
Purveyor Meters Replace-SPU (MC-SU-C1206)	26	218	223	100	100	100	110	120	997
Replace Air Valve Chambers (MC-SU-C1209)	1,074	130	133	130	130	130	140	150	2,016
Transmission Pipelines Rehab (MC-SU-C1207)	2,472	6,874	11,586	13,022	2,525	1,717	1,500	1,500	41,196
Transmission Sys Seismic Imprv (MC-SU-C1210)	-	-	250	450	1,800	2,400	3,000	12,700	20,600
Water System Dewatering (MC-SU-C1205)	16	30	33	35	36	40	45	50	285
BC-SU-C120B Total	6,092	11,898	15,612	16,071	4,878	7,131	5,206	18,187	85,075
Water Quality & Treatment (BC-SU-C140B)									
Beacon Reservoir Seismic (MC-SU-C1408)	11,341	260	-	-	-	-	-	-	11,601
Reservoir Covering-Bitter Lake (MC-SU-C1419)	94	350	350	2,000	8,600	21,600	9,100	3,000	45,094
Reservoir Covering-Lake Forest (MC-SU-C1418)	714	1,050	8,695	5,060	5,000	-	-	-	20,519
Treatment Facility/Water Quality Improvements (MC-SU-C1413)	786	250	480	150	150	-	-	-	1,816

*Amounts in thousands of dollars.

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Project Summary

Project Name & ID	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
BC-SU-C140B Total	12,935	1,910	9,525	7,210	13,750	21,600	9,100	3,000	79,030
Water Resources (BC-SU-C150B)									
Dam Safety (MC-SU-C1506)	1,431	991	4,751	3,585	1,510	2,125	300	215	14,908
Hatchery Works (MC-SU-C1511)	91	5,500	1,939	7,271	976	500	500	-	16,777
Regional Water Conservation (MC-SU-C1504)	25,334	1,098	1,126	1,154	1,183	1,212	1,243	1,274	33,624
Seattle Direct Water Conservation (MC-SU-C1505)	4,582	732	648	664	681	698	715	733	9,455
Water System Plan (MC-SU-C1510)	383	50	-	-	-	-	-	-	433
BC-SU-C150B Total	31,821	8,372	8,464	12,674	4,350	4,535	2,758	2,222	75,197
Watershed Stewardship (BC-SU-C130B)									
Cedar Bridges (MC-SU-C1307)	218	1,824	1,196	15	-	-	100	100	3,453
Environmental Stewardship (MC-SU-C1301)	411	91	94	579	65	75	75	75	1,465
Tolt Bridges (MC-SU-C1308)	-	1	-	-	-	-	-	-	1
BC-SU-C130B Total	630	1,916	1,290	594	65	75	175	175	4,919
Seattle Public Utilities - Water Total	109,434	63,297	72,516	72,943	56,401	65,662	64,836	74,591	579,680

*Amounts in thousands of dollars.

Fund Summary

Fund Code & Name	LTD Actuals	2019	2020	2021	2022	2023	2024	2025	Total
43000 - Water Fund	210,333	127,165	115,527	119,695	121,178	96,140	114,142	116,126	1,020,305
Seattle Public Utilities Total	210,333	127,165	115,527	119,695	121,178	96,140	114,142	116,126	1,020,305

*Amounts 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 project 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 project improves Seattle's water system and extends the life of the system.

Resources	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Water Rates	4,953	6,033	6,072	6,193	6,317	6,443	6,572	6,704	49,287
Total:	4,953	6,033	6,072	6,193	6,317	6,443	6,572	6,704	49,287
Fund Appropriations / Allocations ¹	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Water Fund	4,953	6,033	6,072	6,193	6,317	6,443	6,572	6,704	49,287
Total:	4,953	6,033	6,072	6,193	6,317	6,443	6,572	6,704	49,287

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 project 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 project 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	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Water Rates	395	221	225	230	235	239	244	249	2,037
Total:	395	221	225	230	235	239	244	249	2,037
Fund Appropriations / Allocations¹	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Water Fund	395	221	225	230	235	239	244	249	2,037
Total:	395	221	225	230	235	239	244	249	2,037

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 project 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 project is that water service is provided to new housing and businesses throughout Seattle.

Resources	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Water Rates	807	879	714	728	743	758	773	788	6,191
Total:	807	879	714	728	743	758	773	788	6,191
Fund Appropriations / Allocations¹	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Water Fund	807	879	714	728	743	758	773	788	6,191
Total:	807	879	714	728	743	758	773	788	6,191

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 project 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 project 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	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Water Rates	39	13	14	14	14	15	15	16	139
Total:	39	13	14	14	14	15	15	16	139
Fund Appropriations / Allocations¹	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Water Fund	39	13	14	14	14	15	15	16	139
Total:	39	13	14	14	14	15	15	16	139

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 project 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 project meets City responsibility for new service connections in the Seattle Municipal Code (SMC) to provide reliable drinking water supply to customers.

Resources	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Water Rates	7,410	8,201	7,140	7,283	7,428	7,428	7,577	7,883	60,350
Total:	7,410	8,201	7,140	7,283	7,428	7,428	7,577	7,883	60,350
Fund Appropriations / Allocations¹	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Water Fund	7,410	8,201	7,140	7,283	7,428	7,428	7,577	7,883	60,350
Total:	7,410	8,201	7,140	7,283	7,428	7,428	7,577	7,883	60,350

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 project 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	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Water Rates	35	3,500	2,000	2,000	2,000	2,000	4,000	4,000	19,535
Total:	35	3,500	2,000	2,000	2,000	2,000	4,000	4,000	19,535
Fund Appropriations / Allocations¹	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Water Fund	35	3,500	2,000	2,000	2,000	2,000	4,000	4,000	19,535
Total:	35	3,500	2,000	2,000	2,000	2,000	4,000	4,000	19,535

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

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 project 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	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Water Rates	12,955	12,641	10,171	8,920	4,326	4,502	15,548	20,300	89,363
Total:	12,955	12,641	10,171	8,920	4,326	4,502	15,548	20,300	89,363
Fund Appropriations / Allocations ¹	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Water Fund	12,955	12,641	10,171	8,920	4,326	4,502	15,548	20,300	89,363
Total:	12,955	12,641	10,171	8,920	4,326	4,502	15,548	20,300	89,363

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 project 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	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Water Rates	1	500	500	500	500	500	500	500	3,501
Total:	1	500	500	500	500	500	500	500	3,501
Fund Appropriations / Allocations ¹	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Water Fund	1	500	500	500	500	500	500	500	3,501
Total:	1	500	500	500	500	500	500	500	3,501

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 project 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	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Water Rates	816	2,476	5,567	3,493	3,590	3,930	3,720	4,000	27,592
Total:	816	2,476	5,567	3,493	3,590	3,930	3,720	4,000	27,592
Fund Appropriations / Allocations¹	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Water Fund	816	2,476	5,567	3,493	3,590	3,930	3,720	4,000	27,592
Total:	816	2,476	5,567	3,493	3,590	3,930	3,720	4,000	27,592

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 project 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	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Water Rates	410	1,457	724	1,658	3,245	560	500	500	9,054
Total:	410	1,457	724	1,658	3,245	560	500	500	9,054
Fund Appropriations / Allocations ¹	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Water Fund	410	1,457	724	1,658	3,245	560	500	500	9,054
Total:	410	1,457	724	1,658	3,245	560	500	500	9,054

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 project 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 project 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	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Water Rates	1,385	120	120	366	373	381	400	408	3,553
Total:	1,385	120	120	366	373	381	400	408	3,553
Fund Appropriations / Allocations¹	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Water Fund	1,385	120	120	366	373	381	400	408	3,553
Total:	1,385	120	120	366	373	381	400	408	3,553

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 project 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	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Water Rates	255	29	30	30	31	32	33	33	473
Total:	255	29	30	30	31	32	33	33	473
Fund Appropriations / Allocations ¹	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Water Fund	255	29	30	30	31	32	33	33	473
Total:	255	29	30	30	31	32	33	33	473

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.

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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 project 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 project 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	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Water Rates	34	108	110	113	115	118	120	122	840
Total:	34	108	110	113	115	118	120	122	840
Fund Appropriations / Allocations¹	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Water Fund	34	108	110	113	115	118	120	122	840
Total:	34	108	110	113	115	118	120	122	840

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 Sys Seismic Imprv

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 project 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	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Water Rates	-	-	750	2,050	2,600	3,300	6,400	4,500	19,600
Total:	-	-	750	2,050	2,600	3,300	6,400	4,500	19,600
Fund Appropriations / Allocations ¹	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Water Fund	-	-	750	2,050	2,600	3,300	6,400	4,500	19,600
Total:	-	-	750	2,050	2,600	3,300	6,400	4,500	19,600

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.

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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 project 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	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Water Rates	16	30	33	35	36	40	45	50	285
Total:	16	30	33	35	36	40	45	50	285
Fund Appropriations / Allocations ¹	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Water Fund	16	30	33	35	36	40	45	50	285
Total:	16	30	33	35	36	40	45	50	285

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.

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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 project 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	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Water Rates	26	218	223	100	100	100	110	120	997
Total:	26	218	223	100	100	100	110	120	997
Fund Appropriations / Allocations¹	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Water Fund	26	218	223	100	100	100	110	120	997
Total:	26	218	223	100	100	100	110	120	997

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 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 project 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	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Water Rates	2,472	6,874	11,586	13,022	2,525	1,717	1,500	1,500	41,196
Total:	2,472	6,874	11,586	13,022	2,525	1,717	1,500	1,500	41,196
Fund Appropriations / Allocations ¹	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Water Fund	2,472	6,874	11,586	13,022	2,525	1,717	1,500	1,500	41,196
Total:	2,472	6,874	11,586	13,022	2,525	1,717	1,500	1,500	41,196

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.

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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 project 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	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Water Rates	2,505	4,646	3,388	2,334	287	2,744	411	3,667	19,981
Total:	2,505	4,646	3,388	2,334	287	2,744	411	3,667	19,981
Fund Appropriations / Allocations ¹	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Water Fund	2,505	4,646	3,388	2,334	287	2,744	411	3,667	19,981
Total:	2,505	4,646	3,388	2,334	287	2,744	411	3,667	19,981

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.

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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 project 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	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Water Rates	1,074	130	133	130	130	130	140	150	2,016
Total:	1,074	130	133	130	130	130	140	150	2,016
Fund Appropriations / Allocations¹	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Water Fund	1,074	130	133	130	130	130	140	150	2,016
Total:	1,074	130	133	130	130	130	140	150	2,016

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 Sys Seismic Imprv

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 project 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	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Water Rates	-	-	250	450	1,800	2,400	3,000	12,700	20,600
Total:	-	-	250	450	1,800	2,400	3,000	12,700	20,600
Fund Appropriations / Allocations ¹	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Water Fund	-	-	250	450	1,800	2,400	3,000	12,700	20,600
Total:	-	-	250	450	1,800	2,400	3,000	12,700	20,600

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.

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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 project 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	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Water Rates	411	91	94	579	65	75	75	75	1,465
Total:	411	91	94	579	65	75	75	75	1,465
Fund Appropriations / Allocations ¹	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Water Fund	411	91	94	579	65	75	75	75	1,465
Total:	411	91	94	579	65	75	75	75	1,465

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 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	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Water Rates	218	1,824	1,196	15	-	-	100	100	3,453
Total:	218	1,824	1,196	15	-	-	100	100	3,453
Fund Appropriations / Allocations¹	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Water Fund	218	1,824	1,196	15	-	-	100	100	3,453
Total:	218	1,824	1,196	15	-	-	100	100	3,453

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	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Water Rates	-	1	-	-	-	-	-	-	1
Total:	-	1	-	-	-	-	-	-	1
Fund Appropriations / Allocations¹	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Water Fund	-	1	-	-	-	-	-	-	1
Total:	-	1	-	-	-	-	-	-	1

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	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Water Rates	11,341	260	-	-	-	-	-	-	11,601
Total:	11,341	260	-	-	-	-	-	-	11,601
Fund Appropriations / Allocations ¹	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Water Fund	11,341	260	-	-	-	-	-	-	11,601
Total:	11,341	260	-	-	-	-	-	-	11,601

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.

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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 project 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	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Water Rates	786	250	480	150	150	-	-	-	1,816
Total:	786	250	480	150	150	-	-	-	1,816
Fund Appropriations / Allocations ¹	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Water Fund	786	250	480	150	150	-	-	-	1,816
Total:	786	250	480	150	150	-	-	-	1,816

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.

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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	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Water Rates	714	1,050	8,695	5,060	5,000	-	-	-	20,519
Total:	714	1,050	8,695	5,060	5,000	-	-	-	20,519
Fund Appropriations / Allocations¹	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Water Fund	714	1,050	8,695	5,060	5,000	-	-	-	20,519
Total:	714	1,050	8,695	5,060	5,000	-	-	-	20,519

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.

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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	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Water Rates	94	350	350	2,000	8,600	21,600	9,100	3,000	45,094
Total:	94	350	350	2,000	8,600	21,600	9,100	3,000	45,094
Fund Appropriations / Allocations ¹	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Water Fund	94	350	350	2,000	8,600	21,600	9,100	3,000	45,094
Total:	94	350	350	2,000	8,600	21,600	9,100	3,000	45,094

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.

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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 project 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 project 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	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Water Rates	25,334	1,098	1,126	1,154	1,183	1,212	1,243	1,274	33,624
Total:	25,334	1,098	1,126	1,154	1,183	1,212	1,243	1,274	33,624
Fund Appropriations / Allocations¹	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Water Fund	25,334	1,098	1,126	1,154	1,183	1,212	1,243	1,274	33,624
Total:	25,334	1,098	1,126	1,154	1,183	1,212	1,243	1,274	33,624

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.

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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 project 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	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Water Rates	4,582	732	648	664	681	698	715	733	9,455
Total:	4,582	732	648	664	681	698	715	733	9,455
Fund Appropriations / Allocations¹	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Water Fund	4,582	732	648	664	681	698	715	733	9,455
Total:	4,582	732	648	664	681	698	715	733	9,455

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.

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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 project 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 project 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	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Water Rates	1,431	991	4,751	3,585	1,510	2,125	300	215	14,908
Total:	1,431	991	4,751	3,585	1,510	2,125	300	215	14,908
Fund Appropriations / Allocations¹	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Water Fund	1,431	991	4,751	3,585	1,510	2,125	300	215	14,908
Total:	1,431	991	4,751	3,585	1,510	2,125	300	215	14,908

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.

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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 six 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	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Water Rates	383	50	-	-	-	-	-	-	433
Total:	383	50	-	-	-	-	-	-	433
Fund Appropriations / Allocations ¹	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Water Fund	383	50	-	-	-	-	-	-	433
Total:	383	50	-	-	-	-	-	-	433

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.

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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 project 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	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Water Rates	91	5,500	1,939	7,271	976	500	500	-	16,777
Total:	91	5,500	1,939	7,271	976	500	500	-	16,777
Fund Appropriations / Allocations¹	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Water Fund	91	5,500	1,939	7,271	976	500	500	-	16,777
Total:	91	5,500	1,939	7,271	976	500	500	-	16,777

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.

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

Resources	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Water Rates	6,612	783	803	847	833	749	763	776	12,165
Total:	6,612	783	803	847	833	749	763	776	12,165
Fund Appropriations / Allocations ¹	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Water Fund	6,612	783	803	847	833	749	763	776	12,165
Total:	6,612	783	803	847	833	749	763	776	12,165

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.

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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 project 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 project is a requirement under the Cedar River Habitat Conservation Plan (HCP).

Resources	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Water Rates	4,230	309	315	544	627	981	317	113	7,436
Total:	4,230	309	315	544	627	981	317	113	7,436
Fund Appropriations / Allocations ¹	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Water Fund	4,230	309	315	544	627	981	317	113	7,436
Total:	4,230	309	315	544	627	981	317	113	7,436

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.

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

Resources	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Water Rates	2,594	83	115	115	115	115	115	115	3,366
Total:	2,594	83	115	115	115	115	115	115	3,366
Fund Appropriations / Allocations ¹	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Water Fund	2,594	83	115	115	115	115	115	115	3,366
Total:	2,594	83	115	115	115	115	115	115	3,366

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.

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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	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Water Rates	502	150	155	160	165	170	-	-	1,302
Total:	502	150	155	160	165	170	-	-	1,302
Fund Appropriations / Allocations ¹	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Water Fund	502	150	155	160	165	170	-	-	1,302
Total:	502	150	155	160	165	170	-	-	1,302

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.

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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	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Water Rates	12,806	1,600	2,000	1,050	-	-	-	-	17,456
Total:	12,806	1,600	2,000	1,050	-	-	-	-	17,456
Fund Appropriations / Allocations¹	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Water Fund	12,806	1,600	2,000	1,050	-	-	-	-	17,456
Total:	12,806	1,600	2,000	1,050	-	-	-	-	17,456

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.

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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 project provides research and monitoring to examine the effects of instream flows on salmon species in the Cedar River. This ongoing project 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 project is a requirement of the Cedar River Habitat Conservation Plan (HCP).

Resources	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Water Rates	1,716	100	100	100	100	100	-	-	2,216
Total:	1,716	100	100	100	100	100	-	-	2,216
Fund Appropriations / Allocations ¹	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Water Fund	1,716	100	100	100	100	100	-	-	2,216
Total:	1,716	100	100	100	100	100	-	-	2,216

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.

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Seattle Public Utilities

Shared & Technology Projects

SPU – Shared Projects and Technology

Project Summary

Project Name & ID	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Shared Cost Projects (BC-SU-C410B)									
1% for Arts (MC-SU-C4118)	8,331	1,298	1,676	1,907	1,546	1,165	1,277	1,014	18,214
Alaskan Way Viaduct & Seawall Replacement Program (MC-SU-C4102)	58,806	15,203	12,518	621	260	73	39	1	87,519
Emergency Storms Program (MC-SU-C4120)	1	100	-	-	-	-	-	-	101
Heavy Equipment Purchases (MC-SU-C4116)	47,275	8,915	8,052	7,776	9,134	7,777	8,424	8,607	105,959
Integrated Control Monitoring Program (MC-SU-C4108)	1,828	610	610	360	360	360	360	-	4,488
Meter Replacement (MC-SU-C4101)	14,546	1,169	1,182	1,002	1,022	1,042	1,062	1,083	22,108
Move Seattle (MC-SU-C4119)	7,679	45,733	35,544	42,732	55,753	28,304	22,886	18,064	256,696
Operational Facility - Construction (MC-SU-C4106)	20,363	37,540	13,532	18,468	8,794	4,050	5,700	15,500	123,947
Operations Control Center (MC-SU-C4105)	943	1,750	472	-	-	-	-	-	3,165
Other Major Transportation Projects (MC-SU-C4123)	398	1,250	2,362	-	-	-	-	-	4,009
Regional Facility - Other (MC-SU-C4107)	16,411	5,170	4,045	2,057	1,312	2,025	24,870	13,394	69,284
Security Improvements (MC-SU-C4113)	4,771	1,900	1,600	1,150	1,150	1,550	2,150	1,800	16,071
Streetcar Related Projects (MC-SU-C4130)	18,272	14,692	73	9,692	18,847	4,444	-	-	66,021
BC-SU-C410B Total	199,623	135,331	81,664	85,765	98,179	50,789	66,768	59,463	777,582
Technology (BC-SU-C510B)									
Asset Information Management (MC-SU-C5407)	706	3,086	2,447	2,000	2,000	2,000	2,000	2,000	16,239
Customer Contact & Billing (MC-SU-C5402)	242	11,496	2,658	1,249	1,000	1,000	1,000	1,000	19,646

*Amounts in thousands of dollars.

2020 - 2025 Proposed Capital Improvement Program

SPU – Shared Projects and Technology

Project Summary

Project Name & ID	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Enterprise Information Management (MC-SU-C5403)	76	1,870	926	2,500	2,000	2,000	2,000	2,000	13,372
IT Infrastructure (MC-SU-C5404)	1,481	1,535	750	1,750	1,750	1,750	1,750	1,750	12,516
Project Delivery & Performance (MC-SU-C5405)	14,372	3,299	2,968	2,200	1,700	1,700	1,700	1,700	29,639
Science & System Performance (MC-SU-C5406)	2,269	1,888	1,450	1,600	1,600	1,600	1,600	1,600	13,607
BC-SU-C510B Total	19,147	23,174	11,200	11,299	10,050	10,050	10,050	10,050	105,019
Seattle Public Utilities – Shared Projects and Technology Total	218,770	158,504	92,864	97,065	108,229	60,839	76,818	69,513	882,602

**Amounts 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	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Drainage and Wastewater Rates	6,978	561	567	481	491	500	510	520	10,608
Water Rates	7,568	608	615	521	531	542	552	563	11,500
Total:	14,546	1,169	1,182	1,002	1,022	1,042	1,062	1,083	22,108
Fund Appropriations / Allocations¹	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Drainage and Wastewater Fund	6,978	561	567	481	491	500	510	520	10,608
Water Fund	7,568	608	615	521	531	542	552	563	11,500
Total:	14,546	1,169	1,182	1,002	1,022	1,042	1,062	1,083	22,108

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:	\$87,519	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	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Drainage and Wastewater Rates	36,812	13,526	11,162	432	230	61	34	-	62,258
Water Rates	21,993	1,677	1,355	190	30	12	4	1	25,261
Total:	58,806	15,203	12,518	621	260	73	39	1	87,519
Fund Appropriations / Allocations ¹	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Drainage and Wastewater Fund	36,812	13,526	11,162	432	230	61	34	-	62,258
Water Fund	21,993	1,677	1,355	190	30	12	4	1	25,261
Total:	58,806	15,203	12,518	621	260	73	39	1	87,519

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

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	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Water Rates	943	1,750	472	-	-	-	-	-	3,165
Total:	943	1,750	472	-	-	-	-	-	3,165
Fund Appropriations / Allocations¹	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Water Fund	943	1,750	472	-	-	-	-	-	3,165
Total:	943	1,750	472	-	-	-	-	-	3,165

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	2019 Revised	2020	2021	2022	2023	2024	2025	Total
	-	-	-	-	-	-	-	-	-
Drainage and Wastewater Rates	19,093	27,344	5,109	17,169	3,376	1,751	2,950	9,110	85,901
Solid Waste Rates	35	1,407	533	105	709	378	-	100	3,266
Water Rates	1,236	8,789	7,891	1,194	4,709	1,922	2,750	6,290	34,781
Total:	20,363	37,540	13,532	18,468	8,794	4,050	5,700	15,500	123,947
Fund Appropriations / Allocations¹	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Drainage and Wastewater Fund	19,093	27,344	5,109	17,169	3,376	1,751	2,950	9,110	85,901
Solid Waste Fund	35	1,407	533	105	709	378	-	100	3,266
Water Fund	1,236	8,789	7,891	1,194	4,709	1,922	2,750	6,290	34,781
Total:	20,363	37,540	13,532	18,468	8,794	4,050	5,700	15,500	123,947

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.

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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.

Resources	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Water Rates	16,411	5,170	4,045	2,057	1,312	2,025	24,870	13,394	69,284
Total:	16,411	5,170	4,045	2,057	1,312	2,025	24,870	13,394	69,284
Fund Appropriations / Allocations¹	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Water Fund	16,411	5,170	4,045	2,057	1,312	2,025	24,870	13,394	69,284
Total:	16,411	5,170	4,045	2,057	1,312	2,025	24,870	13,394	69,284

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.

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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	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Drainage and Wastewater Rates	1,332	250	250	-	-	-	-	-	1,832
Water Rates	496	360	360	360	360	360	360	-	2,656
Total:	1,828	610	610	360	360	360	360	-	4,488
Fund Appropriations / Allocations¹	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Drainage and Wastewater Fund	1,332	250	250	-	-	-	-	-	1,832
Water Fund	496	360	360	360	360	360	360	-	2,656
Total:	1,828	610	610	360	360	360	360	-	4,488

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.

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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	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Drainage and Wastewater Rates	130	210	165	105	105	90	225	180	1,210
Solid Waste Rates	448	265	135	95	207	135	225	145	1,655
Water Rates	4,193	1,425	1,300	950	838	1,325	1,700	1,475	13,206
Total:	4,771	1,900	1,600	1,150	1,150	1,550	2,150	1,800	16,071
Fund Appropriations / Allocations¹	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Drainage and Wastewater Fund	130	210	165	105	105	90	225	180	1,210
Solid Waste Fund	448	265	135	95	207	135	225	145	1,655
Water Fund	4,193	1,425	1,300	950	838	1,325	1,700	1,475	13,206
Total:	4,771	1,900	1,600	1,150	1,150	1,550	2,150	1,800	16,071

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.

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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	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Drainage and Wastewater Rates	18,854	2,376	3,658	3,638	3,757	3,586	3,762	3,881	43,512
Solid Waste Rates	10,193	2,018	1,520	1,194	2,307	1,398	2,094	1,336	22,060
Water Rates	18,228	4,521	2,874	2,944	3,070	2,793	2,568	3,390	40,387
Total:	47,275	8,915	8,052	7,776	9,134	7,777	8,424	8,607	105,959
Fund Appropriations / Allocations ¹	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Drainage and Wastewater Fund	18,854	2,376	3,658	3,638	3,757	3,586	3,762	3,881	43,512
Solid Waste Fund	10,193	2,018	1,520	1,194	2,307	1,398	2,094	1,336	22,060
Water Fund	18,228	4,521	2,874	2,944	3,070	2,793	2,568	3,390	40,387
Total:	47,275	8,915	8,052	7,776	9,134	7,777	8,424	8,607	105,959

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.

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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	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Drainage and Wastewater Rates	4,203	1,084	1,293	1,507	1,284	864	1,102	864	12,201
Solid Waste Rates	1,972	25	129	168	53	28	2	1	2,379
Water Rates	2,156	189	253	231	209	273	174	149	3,633
Total:	8,331	1,298	1,676	1,907	1,546	1,165	1,277	1,014	18,214
Fund Appropriations / Allocations¹	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Drainage and Wastewater Fund	4,203	1,084	1,293	1,507	1,284	864	1,102	864	12,201
Solid Waste Fund	1,972	25	129	168	53	28	2	1	2,379
Water Fund	2,156	189	253	231	209	273	174	149	3,633
Total:	8,331	1,298	1,676	1,907	1,546	1,165	1,277	1,014	18,214

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.

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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	2019 Revised	2020	2021	2022	2023	2024	2025	Total
	-	-	-	-	-	-	-	-	-
Drainage and Wastewater Rates	3,553	28,170	18,020	17,967	21,550	15,064	10,802	6,034	121,159
Water Rates	4,125	17,563	17,524	24,766	34,204	13,240	12,084	12,030	135,536
Total:	7,679	45,733	35,544	42,732	55,753	28,304	22,886	18,064	256,696
Fund Appropriations / Allocations ¹	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Drainage and Wastewater Fund	3,553	28,170	18,020	17,967	21,550	15,064	10,802	6,034	121,159
Water Fund	4,125	17,563	17,524	24,766	34,204	13,240	12,084	12,030	135,536
Total:	7,679	45,733	35,544	42,732	55,753	28,304	22,886	18,064	256,696

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	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Drainage and Wastewater Rates	1	100	-	-	-	-	-	-	101
Total:	1	100	-	-	-	-	-	-	101
Fund Appropriations / Allocations¹	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Drainage and Wastewater Fund	1	100	-	-	-	-	-	-	101
Total:	1	100	-	-	-	-	-	-	101

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	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Drainage and Wastewater Rates	173	750	1,342	-	-	-	-	-	2,265
Water Rates	225	500	1,020	-	-	-	-	-	1,745
Total:	398	1,250	2,362	-	-	-	-	-	4,009
Fund Appropriations / Allocations¹	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Drainage and Wastewater Fund	173	750	1,342	-	-	-	-	-	2,265
Water Fund	225	500	1,020	-	-	-	-	-	1,745
Total:	398	1,250	2,362	-	-	-	-	-	4,009

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	2019 Revised	2020	2021	2022	2023	2024	2025	Total
	-	-	-	-	-	-	-	-	-
Drainage and Wastewater Rates	3,789	3,277	42	838	3,577	701	-	-	12,224
Water Rates	14,483	11,415	31	8,855	15,271	3,743	-	-	53,798
Total:	18,272	14,692	73	9,692	18,847	4,444	-	-	66,021
Fund Appropriations / Allocations ¹	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Drainage and Wastewater Fund	3,789	3,277	42	838	3,577	701	-	-	12,224
Water Fund	14,483	11,415	31	8,855	15,271	3,743	-	-	53,798
Total:	18,272	14,692	73	9,692	18,847	4,444	-	-	66,021

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

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	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Drainage and Wastewater Rates	103	3,873	943	537	430	430	430	430	7,176
Solid Waste Rates	38	2,788	759	187	150	150	150	150	4,371
Water Rates	101	4,836	957	525	420	420	420	420	8,099
Total:	242	11,496	2,658	1,249	1,000	1,000	1,000	1,000	19,646
Fund Appropriations / Allocations¹	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Drainage and Wastewater Fund	103	3,873	943	537	430	430	430	430	7,176
Solid Waste Fund	38	2,788	759	187	150	150	150	150	4,371
Water Fund	101	4,836	957	525	420	420	420	420	8,099
Total:	242	11,496	2,658	1,249	1,000	1,000	1,000	1,000	19,646

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	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Drainage and Wastewater Rates	16	1,035	570	1,075	860	860	860	860	6,135
Solid Waste Rates	5	151	94	375	300	300	300	300	1,825
Water Rates	55	685	263	1,050	840	840	840	840	5,412
Total:	76	1,870	926	2,500	2,000	2,000	2,000	2,000	13,372
Fund Appropriations / Allocations¹	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Drainage and Wastewater Fund	16	1,035	570	1,075	860	860	860	860	6,135
Solid Waste Fund	5	151	94	375	300	300	300	300	1,825
Water Fund	55	685	263	1,050	840	840	840	840	5,412
Total:	76	1,870	926	2,500	2,000	2,000	2,000	2,000	13,372

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.

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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	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Drainage and Wastewater Rates	559	630	300	730	730	730	730	730	5,138
Solid Waste Rates	194	231	113	263	263	263	263	263	1,850
Water Rates	729	675	338	758	758	758	758	758	5,528
Total:	1,481	1,535	750	1,750	1,750	1,750	1,750	1,750	12,516
Fund Appropriations / Allocations¹	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Drainage and Wastewater Fund	559	630	300	730	730	730	730	730	5,138
Solid Waste Fund	194	231	113	263	263	263	263	263	1,850
Water Fund	729	675	338	758	758	758	758	758	5,528
Total:	1,481	1,535	750	1,750	1,750	1,750	1,750	1,750	12,516

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.

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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	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Drainage and Wastewater Rates	5,744	1,778	1,168	860	731	731	731	731	12,473
Solid Waste Rates	2,194	458	415	500	255	255	255	255	4,587
Water Rates	6,434	1,064	1,385	840	714	714	714	714	12,579
Total:	14,372	3,299	2,968	2,200	1,700	1,700	1,700	1,700	29,639
Fund Appropriations / Allocations¹	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Drainage and Wastewater Fund	5,744	1,778	1,168	860	731	731	731	731	12,473
Solid Waste Fund	2,194	458	415	500	255	255	255	255	4,587
Water Fund	6,434	1,064	1,385	840	714	714	714	714	12,579
Total:	14,372	3,299	2,968	2,200	1,700	1,700	1,700	1,700	29,639

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.

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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	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Drainage and Wastewater Rates	991	350	50	688	688	688	688	688	4,831
Solid Waste Rates	19	-	-	240	240	240	240	240	1,219
Water Rates	1,259	1,538	1,400	672	672	672	672	672	7,557
Total:	2,269	1,888	1,450	1,600	1,600	1,600	1,600	1,600	13,607
Fund Appropriations / Allocations¹	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Drainage and Wastewater Fund	991	350	50	688	688	688	688	688	4,831
Solid Waste Fund	19	-	-	240	240	240	240	240	1,219
Water Fund	1,259	1,538	1,400	672	672	672	672	672	7,557
Total:	2,269	1,888	1,450	1,600	1,600	1,600	1,600	1,600	13,607

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.

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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	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Drainage and Wastewater Rates	348	1,524	1,188	860	860	860	860	860	7,361
Solid Waste Rates	93	457	330	300	300	300	300	300	2,380
Water Rates	264	1,104	929	840	840	840	840	840	6,498
Total:	706	3,086	2,447	2,000	2,000	2,000	2,000	2,000	16,239
Fund Appropriations / Allocations¹	LTD Actuals	2019 Revised	2020	2021	2022	2023	2024	2025	Total
Drainage and Wastewater Fund	348	1,524	1,188	860	860	860	860	860	7,361
Solid Waste Fund	93	457	330	300	300	300	300	300	2,380
Water Fund	264	1,104	929	840	840	840	840	840	6,498
Total:	706	3,086	2,447	2,000	2,000	2,000	2,000	2,000	16,239

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.

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