

Seattle Public Utilities

Drainage and Wastewater

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
- 87 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
- 27 detention/treatment ponds
- 153 flow control facilities
- 202 water quality structures

The Drainage and Wastewater Fund (DWF) Capital Improvement Program (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 2019 to 2024.

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.
- **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

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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 Levy 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 line of business, 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 General Manager and Asset Management Committee.

DWF Priorities that are also Mayor/Council Priorities

Improvements to DWF 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 South Park Urban Village area.
- **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 BCL.
 - SPU is also leading a joint SPU/Seattle Department of Transportation (SDOT) project in the South Park industrial area providing long desired Drainage Conveyance and Roadway infrastructure.
 - The NDS Program, described below, collaborated with SDOT and has identified numerous joint sidewalk/bioretenion project locations.

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- **Expand use of Green Stormwater Infrastructure (GSI)** has been identified by Mayor and the City Council as a priority. Projects that will help achieve the Citywide stretch goal to manage 400 million gallons of stormwater annually with GSI by 2020, include the following:
 - The Capitol Hill Water Quality Facility is a cost efficient public private partnership project that innovatively approaches water quality by treating large volumes of water while also providing green space in a dense urban neighborhood.
 - 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 will be 30th Ave NE, with construction led by SDOT starting in 2018.
 - 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.

CIP Highlights

2019-2024 Proposed Drainage and Wastewater Fund CIP by BCL
(In ‘000s; total may not sum due to rounding)

BCL	2019	2020	2021	2022	2023	2024	Total
Protection of Beneficial Uses	15,565	25,835	34,581	18,484	17,092	13,867	125,425
Sediments	3,636	4,202	4,899	12,722	18,286	19,286	63,032
Combined Sewer Overflows	71,316	138,591	195,998	120,931	59,799	57,443	644,076
Rehabilitation and Heavy Equipment	45,274	36,496	26,164	25,520	25,500	30,000	188,955
Flooding, Sewer Backups, and Landslides	16,030	42,734	28,687	22,076	23,354	50,900	183,782
Shared Cost Projects	77,651	58,124	33,333	18,104	11,515	16,777	215,504
Technology	5,257	4,951	4,837	4,299	4,299	4,299	27,942
Total	234,730	310,934	328,499	222,136	159,845	192,572	1,448,716

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

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approaches while partnering with SDOT to provide streetscape enhancements. Funding in the DWF CIP is focused on cost effective stormwater and water quality projects such as NDS Partnering 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 contributions from Combined Sewer Overflows (CSO) and storm drain discharges. 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 preliminary studies and analysis for cleanup of contaminated sediment sites in which the City is a participant, for actual cleanup of contaminated sites, for preliminary engineering for future cleanup efforts, 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 actual cleanup adjacent to Gasworks Park, the Duwamish Waterway Sediment Remediation, and East Waterway Remediation projects beginning in 2022 based on preliminary schedules.

Combined Sewer Overflows: This program consists of projects that are mandated by State and Federal regulations to control CSOs into the City's receiving waters. Projects 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 largest projects in the DWF CIP include the Ship Canal Water Quality Project. Other key efforts in the program include Montlake area retrofits (Portage Bay and East Montlake projects), and Magnolia Pump Station 22 retrofit. Planning work is underway and will continue through the coming years for additional CSO reduction efforts to meet CSO Consent Decree compliance date requirements.

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 and wastewater outfalls; and
- drainage and wastewater pipes.

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. Individual projects are defined by the type and method of rehabilitation and/or replacement and include emergency rehabilitation, maintenance and no-dig pipe rehabilitation, point sewer pipe and structure rehabilitation by crews, and point sewer pipe and structure rehabilitation by contract. Proposed budget includes the addition of a new crew to conduct pipe lining, a minimally disruptive, trenchless and fast method for renewing old pipes. Currently SPU relies on private contractors to conduct the lining work, however there are very few available. To increase the rate of rehabilitation and flexibility to complete work, SPU has decided to add a new DWF crew to perform this work in house.

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

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health, safety, and property. The program area is focused on planning, design, and construction of pipes, ditches, culverts, detention ponds, 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 from landslides and providing drainage improvements where surface water generated from the City right-of way is contributing to landslides. Finally, this program includes sewer capacity projects that reduce the risk of exceeding the Consent Decree target of four sanitary sewer overflows per 100 miles of sewer pipe. Major projects in this program include the Pearl Street SSO reduction project, Broadview's Dayton SSO project and 12th Avenue drainage projects, and the South Park Water Quality and Pump Station project. South Park Water Quality Facility is a regulatory commitment within the Plan to Protect Seattle's Waterways.

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

The Proposed Budget for the Shared Cost program includes funding for a number of interdepartmental projects including the Alaskan Way Viaduct and Seawall Replacement, Move Seattle Levy projects, Center City Connector Streetcar, and Sound Transit Link Light Rail. This BCL also includes funding for SPU Facility Improvements such as the Horizon complex, the North Operations Center, and a new dewatering facility near the South Transfer Station. Other programs in this BCL include DWF 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 2019 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 2019, 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

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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

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. This pattern continues into the future.

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 2015 for the three-year period of 2016-2018, and the Proposed 2019-2024 CIP assumes Drainage rates will grow by 8.0% each year. Wastewater rates are assumed to grow 7.5%, 7.4%, and 7.3% in 2019, 2020, and 2021 respectively.

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 large priority projects while still accomplishing Mayoral priorities and complying with regulatory requirements from the EPA, Washington State Department of Ecology (DOE), and NPDES permits - 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 Long Term Control Plan (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,

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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 separated stormwater system. By reducing inflow/infiltration, it is possible to reduce the frequency and volume of SSOs and sewer backups.

DWF CIP funding is also needed to improve the existing drainage system so that residents experience less flooding and fewer sewage backups. Sewer backups are prohibited and considered by our regulators to be a violation of our State permits and Federal Consent Decree. Through prudent investment in capital projects and maintenance, SPU will be closer to meeting this standard. This performance level benefits ratepayers by avoiding costly fines and damages.

The CSO Reduction Program constitutes one of the major investments and challenges for the DWF in upcoming years. During heavy rainfall events, the combination of stormwater (about 90 percent of the volume) and sewage may exceed the capacity of the CSS and overflow into our waterways – causing a combined sewer overflow. CSOs spill a mixture of raw sewage and stormwater into local waterways at 90 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 2025 through the LTCP. The LTCP, also called the Plan to Protect Seattle’s Waterways, was approved by regulators in May of 2015. Ultimately the Consent Decree requires completion of construction of all CSO reduction projects by December 2025. 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 2025 milestone.

While cost estimating is dependent on many factors, SPU currently expects to spend approximately \$490 million over the next six years on CSO reduction projects. The projects will include a combination of underground storage tanks and tunnels, GSI, and system retrofits. One of the biggest challenges of the program is finding sites for wastewater facilities in a dense urban environment. Another challenge revolves around SPU’s relationship with King County and maintaining an active partnership to operate the wastewater system and plan for potential joint CSO reduction projects.

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Another challenge for the DWF is addressing public expectations around basic service level programs, such as flooding and system capacity. The funding for these programs are 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 system is 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. SPU is moving forward with a comprehensive planning effort to better identify the highest priority locations and potential funding and financing strategies.

When making investments in capital facilities that will last decades, it makes financial sense to understand and consider incorporating the potential impacts of climate change on local precipitation and sea levels in the Puget Sound. There have been major storms in 2006, 2007, 2010, 2012, and 2014 that have resulted in serious drainage and wastewater impacts related to capacity. Scientists indicate that there is a potential that storms will become more intense and more frequent in the near future. This variability requires the utility to have a much more in-depth understanding of how the system functions under different weather conditions. SPU will need to forecast impacts to the stormwater and combined systems on a much more localized level. This type of work will require more fully developed system models than in the past.

Proposed Reductions and Deferrals to meet Efficiency Measures: During the 2019-2020 Proposed Budget Process, the Mayor requested SPU endeavor to reduce or defer non-critical projects to provide future rate savings in all SPU lines of business. In the Drainage and Wastewater Fund, the following project changes reflect this effort:

- Defer construction of Dayton Ave Sanitary Sewer Overflow and Drainage Improvement project to outside the current CIP planning window. This deferral reduces the current Proposed 2019-2024 CIP by \$10.7 million. Risks of this deferral include delaying potential repairs to the combined sanitary sewer system in this region.
- Defer planned proactive maintenance in the Pipe Renewal Program by \$22.5 million in the current Proposed 2019-2024 CIP. Risks of this deferral on maintenance include possible increased costs in emergency repairs.

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, SSO reduction and localized flooding reduction in Broadview, and flood reduction and water quality improvements in South Park.

City Council Provisos to the CIP

The City Council adopted the following budget provisos:

No funds in the Combined Sewer Overflow Budget Control Level may be spent on physical construction of the Ship Canal Water Quality Project Storage Tunnel (MC-SU-3614) until authorized by future ordinance. It is anticipated that such authorization will not be granted until Seattle Public Utilities

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completes 100% project design of the Storage Tunnel activity and reports to the Civil Rights, Utilities, Economic Development & Arts Committee, or its successor committee.

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Project Summary

BCL/Program Name/ Project Title & ID	LTD Actuals	2018	2019	2020	2021	2022	2023	2024	Total	
Protection of Beneficial Uses		BSL/Program Code:							BC-SU-C333B	
<u>Ongoing</u>										
Beneficial Uses Program (MC-SU-C3317)	6,110	1,719	1,224	869	11,031	2,871	2,291	5,010	31,125	
Creek Culvert Replacement Program (MC-SU-C3314)	1,170	1,662	2,379	423	0	0	0	0	5,633	
GSI for Protection of Beneficial Uses (MC-SU-C3316)	10,758	8,350	11,962	24,544	23,550	15,612	14,801	8,857	118,434	
Protection of Beneficial Uses	18,038	11,731	15,565	25,835	34,581	18,484	17,092	13,867	155,193	
Sediments		BSL/Program Code:							BC-SU-C350B	
<u>Ongoing</u>										
Sediment Remediation - DWF (MC-SU-C3503)	33,189	6,489	3,636	4,202	4,899	12,722	18,286	19,286	102,710	
Sediments	33,189	6,489	3,636	4,202	4,899	12,722	18,286	19,286	102,710	
Combined Sewer Overflows		BSL/Program Code:							BC-SU-C360B	
<u>Discrete</u>										
Long Term Control Plan (MC-SU-C3604)	12,685	1,000	1,200	1,200	1,200	1,200	1,200	1,200	20,885	
S Henderson CSO Storage (MC-SU-C3609)	59,244	251	29	0	0	0	0	0	59,525	
Ship Canal Water Quality Project (MC-SU-C3614)	52,023	20,051	49,888	122,369	176,636	95,690	33,389	15,405	565,451	
<u>Ongoing</u>										
CSO Facility Retrofit (MC-SU-C3611)	3,659	8,442	15,022	7,557	8,098	13,900	11,500	2,160	70,337	
Future CSO Projects (MC-SU-C3612)	24	1,356	2,984	5,294	7,563	7,641	11,209	36,178	72,249	
Green Stormwater Infrastructure Program (MC-SU-C3610)	9,346	2,229	2,193	2,171	2,500	2,500	2,500	2,500	25,939	
Combined Sewer Overflows	136,981	33,329	71,316	138,591	195,997	120,931	59,798	57,443	814,386	
Rehabilitation		BSL/Program Code:							BC-SU-C370B	
<u>Ongoing</u>										
Outfall Rehabilitation Program (MC-SU-C3708)	554	647	1,551	240	1,500	1,500	1,500	1,500	8,992	

** Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.*

2019 - 2024 Proposed Capital Improvement Program

Pipe Renewal Program (MC-SU-C3710)	21,601	27,228	28,138	27,000	20,000	20,000	20,000	24,000	187,967
Pump Station & Force Main Improvements (MC-SU-C3703)	2,341	11,214	15,585	9,257	4,664	4,020	4,000	4,500	55,581
Rehabilitation	24,496	39,089	45,274	36,496	26,164	25,520	25,500	30,000	252,540
Flooding, Sewer Backup & Lndsl									
BSL/Program Code:									
BC-SU-C380B									
<u>Discrete</u>									
South Park Stormwater Program (MC-SU-C3806)	12,586	4,729	5,407	21,361	11,815	9,160	10,000	2,300	77,359
Thornton Confluence Improvement (MC-SU-C3811)	7,512	0	391	0	0	0	0	0	7,903
<u>Ongoing</u>									
Broadview Long-Term Plan (MC-SU-C3812)	5,547	2,624	4,750	7,000	307	0	0	0	20,228
Drainage Capacity Program (MC-SU-C3802)	12,714	2,270	2,179	2,943	2,166	3,824	4,354	26,600	57,049
Sanitary Sewer Overflow Capacity (MC-SU-C3804)	2,721	6,943	3,303	11,431	14,400	9,092	9,000	22,000	78,890
Flooding, Sewer Backup & Lndsl	41,080	16,566	16,030	42,734	28,687	22,076	23,354	50,900	241,428
Shared Cost Projects									
BSL/Program Code:									
BC-SU-C410B									
<u>Discrete</u>									
Alaskan Way Viaduct & Seawall - DWF (MC-SU-C4102-DWF)	27,364	3,286	13,529	2,109	1,012	707	20	4	48,032
Streetcar Related Projects - DWF (MC-SU-C4130-DWF)	2,460	9,032	3,277	65	0	0	0	0	14,834
<u>Ongoing</u>									
1% for Arts - DWF (MC-SU-C4118-DWF)	3,879	722	1,084	1,638	1,630	1,099	636	715	11,402
Emergency Storms Program - DWF (MC-SU-C4120-DWF)	1	100	100	100	0	0	0	0	301
Heavy Equipment Purchases - DWF (MC-SU-C4116-DWF)	15,119	2,801	2,376	3,536	2,765	3,036	3,513	3,563	36,708
Integrated Control Monitoring Program - DWF (MC-SU-C4108-DWF)	1,328	250	250	250	0	0	0	0	2,078
Meter Replacement - DWF (MC-SU-C4101-DWF)	6,314	554	561	567	481	491	500	510	9,979
Move Seattle - DWF (MC-SU-C4119-DWF)	625	17,360	28,170	26,899	22,820	7,147	5,857	10,100	118,978

* Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.

2019 - 2024 Proposed Capital Improvement Program

Operational Facility - Construction - DWF (MC-SU-C4106-DWF)	15,149	20,602	27,344	22,740	4,513	5,513	805	1,700	98,365
Other Major Tran Projects - DWF (MC-SU-C4123-DWF)	121	627	750	55	0	0	0	0	1,553
Security Improvements - DWF (MC-SU-C4113-DWF)	128	113	210	165	113	113	185	185	1,211
Shared Cost Projects	72,489	55,447	77,651	58,124	33,333	18,104	11,515	16,777	343,441
Technology							BSL/Program Code:		BC-SU-C510B
<u>Ongoing</u>									
Asset Information Management (MC-SU-C5407)	0	608	1,520	903	860	860	860	860	6,471
Customer Contact & Billing (MC-SU-C5402)	2	1,351	1,148	1,140	538	430	430	430	5,468
Enterprise Information Management (MC-SU-C5403)	0	325	727	772	1,075	860	860	860	5,479
IT Infrastructure (MC-SU-C5404)	0	238	632	505	730	730	730	730	4,294
Project Delivery & Performance (MC-SU-C5405)	3,199	3,441	882	1,031	946	731	731	731	11,691
Science & System Performance (MC-SU-C5406)	239	236	350	600	688	688	688	688	4,177
Technology	3,440	6,198	5,257	4,951	4,837	4,299	4,299	4,299	37,581
Department Total:	329,714	168,849	234,730	310,934	328,499	222,136	159,845	192,572	1,947,278

* Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.

2019 - 2024 Proposed Capital Improvement Program

SPU-Drainage & Wastewater

Fund Summary

Fund Name & Code	LTD Actuals	2018	2019	2020	2021	2022	2023	2024	Total
Drainage and Wastewater Fund (44010)	329,714	168,849	234,730	310,934	328,499	222,136	159,845	192,572	1,947,278
Department Total:	329,714	168,849	234,730	310,934	328,499	222,136	159,845	192,572	1,947,278

**Amounts in thousands of dollars*

SPU-Drainage & Wastewater

Alaskan Way Viaduct & Seawall - DWF

Project Type:	Discrete	Project No.:	MC-SU-C4102-DWF
Start/End Date:	2001-2024	BSL/Program Code:	BC-SU-C410B
Project Category:	Improved Facility	BSL/Program Name:	Shared Cost Projects
Current Project Stage:	Construction	Location:	SR 99 / Battery St
Neighborhood District:	Multiple	Council District:	Multiple
Total Project Cost:	\$48,032	Urban Village:	Multiple

This project relocates, replaces, and protects drainage and wastewater 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 SR99 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.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Drainage and Wastewater Rates	27,364	3,286	13,529	2,109	1,012	707	20	4	48,032
Total:	27,364	3,286	13,529	2,109	1,012	707	20	4	48,032

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Drainage and Wastewater Fund	27,364	3,286	13,529	2,109	1,012	707	20	4	48,032
Total:	27,364	3,286	13,529	2,109	1,012	707	20	4	48,032

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Drainage and Wastewater Fund	27,364	3,286	13,529	2,109	1,012	707	20	4	48,032
Total:	27,364	3,286	13,529	2,109	1,012	707	20	4	48,032

			2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)									
Total:			0	0	0	0	0	0	0

** Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.*

SPU-Drainage & Wastewater

Long Term Control Plan

Project Type:	Discrete	Project No.:	MC-SU-C3604
Start/End Date:	2008-2030	BSL/Program Code:	BC-SU-C360B
Project Category:	Improved Facility	BSL/Program Name:	Combined Sewer Overflows
Current Project Stage:	Initiation, Project Definition, & Planning	Location:	Various
Neighborhood District:	Not in a Neighborhood District	Council District:	Multiple
Total Project Cost:	\$21,085	Urban Village:	Not in an Urban Village

This project creates a Long Term Control Plan (LTCP) in accordance with SPU's Combined Sewer Overflow (CSO) 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, 2025. 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. If approved, the storm water projects can be constructed first and the CSO Control Measures deferred beyond the December 2025 due date. The LTCP will reduce the number and volume of its CSOs, meet receiving water quality standards, and protect designated beneficial uses. The LTCP includes, flow characterization, monitoring, and hydraulic modeling; development 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. The project also includes a programmatic SEPA EIS (Note: includes the Alaskan Way Viaduct & Seawall project C4102). The Plan and EIS was submitted to EPA/ Washington State Department of Ecology for approval in 2015 and included all City of Seattle CSO basins except existing CSO Projects at Windermere, Genesee, Henderson and Central Waterfront (except as noted).

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Drainage and Wastewater Rates	12,685	1,000	1,200	1,200	1,200	1,200	1,200	1,200	20,885
Total:	12,685	1,000	1,200	1,200	1,200	1,200	1,200	1,200	20,885

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Drainage and Wastewater Fund	12,685	1,000	1,200	1,200	1,200	1,200	1,200	1,200	20,885
Total:	12,685	1,000	1,200	1,200	1,200	1,200	1,200	1,200	20,885

** Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.*

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Drainage and Wastewater Fund	12,685	1,200	1,200	1,200	1,200	1,200	1,200	1,200	21,085
Total:	12,685	1,200	1,200	1,200	1,200	1,200	1,200	1,200	21,085
			2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)									
Total:			0	0	0	0	0	0	0

** Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.*

2019 - 2024 Proposed Capital Improvement Program

SPU-Drainage & Wastewater

S Henderson CSO Storage

Project Type:	Discrete	Project No.:	MC-SU-C3609
Start/End Date:	2001-2019	BSL/Program Code:	BC-SU-C360B
Project Category:	Improved Facility	BSL/Program Name:	Combined Sewer Overflows
Current Project Stage:	Closeout	Location:	S Henderson St.
Neighborhood District:	Southeast	Council District:	2
Total Project Cost:	\$59,525	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. The project will meet requirements of the City's current National Pollutant Discharge Elimination System (NPDES) Wastewater Discharge Permit.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Drainage and Wastewater Rates	59,244	251	29	0	0	0	0	0	59,525
Total:	59,244	251	29	0	0	0	0	0	59,525

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Drainage and Wastewater Fund	59,244	251	29	0	0	0	0	0	59,525
Total:	59,244	251	29	0	0	0	0	0	59,525

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Drainage and Wastewater Fund	59,244	251	29	0	0	0	0	0	59,525
Total:	59,244	251	29	0	0	0	0	0	59,525

	2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)							
Total:	0	0	0	0	0	0	0

** Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.*

SPU-Drainage & Wastewater

Ship Canal Water Quality Project

Project Type:	Discrete	Project No.:	MC-SU-C3614
Start/End Date:	2014-2025	BSL/Program Code:	BC-SU-C360B
Project Category:	Improved Facility	BSL/Program Name:	Combined Sewer Overflows
Current Project Stage:	Construction	Location:	West Ship Canal
Neighborhood District:	Multiple	Council District:	Multiple
Total Project Cost:	\$570,000	Urban Village:	Multiple

This project is a Combined Sewer Overflow storage facility to be completed by 2025. The project is the largest to be delivered as part of the Plan to Protect Seattle's Waterways and includes about a 14,000-foot-long tunnel that can hold 15 million gallons of combined sewage and stormwater. SPU is building it in partnership with King County. The project will keep almost 60 million gallons of polluted water out of the Ship Canal, Salmon Bay, and Lake Union each year. Combined sewer overflows in Ballard, Fremont, Queen Anne, and Wallingford send sewage and stormwater into the Ship Canal an average of more than 130 times annually. SPU is leading the project and will own it when it's done. King County will help SPU with review and provide its technical expertise in delivering the project. Design is underway and construction is expected to start in 2018.

CIP Staged Oversight Proviso

No funds in the Combined Sewer Overflow Budget Control Level may be spent on physical construction of the Ship Canal Water Quality Project Storage Tunnel (MC-SU-3614) until authorized by future ordinance. It is anticipated that such authorization will not be granted until Seattle Public Utilities completes 100% project design of the Storage Tunnel activity and reports to the Civil Rights, Utilities, Economic Development & Arts Committee, or its successor committee.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Drainage and Wastewater Rates	37,854	13,352	34,549	82,988	122,556	68,173	22,449	10,048	391,969
King County Funds	14,169	6,699	15,339	39,381	54,080	27,517	10,940	5,357	173,482
Total:	52,023	20,051	49,888	122,369	176,636	95,690	33,389	15,405	565,451

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Drainage and Wastewater Fund	52,023	20,051	49,888	122,369	176,636	95,690	33,389	15,405	565,451
Total:	52,023	20,051	49,888	122,369	176,636	95,690	33,389	15,405	565,451

* Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.

2019 - 2024 Proposed Capital Improvement Program

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Drainage and Wastewater Fund	52,023	20,051	49,888	122,369	176,636	95,690	33,389	15,405	565,451
Total:	52,023	20,051	49,888	122,369	176,636	95,690	33,389	15,405	565,451

	2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)							
Total:	0	0	0	0	0	0	0

** Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.*

2019 - 2024 Proposed Capital Improvement Program

SPU-Drainage & Wastewater

South Park Stormwater Program

Project Type:	Discrete	Project No.:	MC-SU-C3806
Start/End Date:	2006-2025	BSL/Program Code:	BC-SU-C380B
Project Category:	Improved Facility	BSL/Program Name:	Flooding, Sewer Backup & Lndsl
Current Project Stage:	Design	Location:	698 S Riverside DR/Holden/Austin
Neighborhood District:	Greater Duwamish	Council District:	1
Total Project Cost:	\$77,359	Urban Village:	Greater Duwamish

This program contains multiple projects all located in the industrial area in South Park: a pump station (PS), a new drainage conveyance system, and water quality facility (WQF). The existing outfall from this basin is submerged at high tides. The PS will allow the drainage system to flow to the Duwamish when the tide is high. This will reduce flooding along 7th Ave S and support future projects. Many streets in the area are in poor condition and lack any drainage infrastructure. SPU is partnering with SDOT to improve streets and build drainage infrastructure to send stormwater to the PS and reduce flooding. The WQF will treat stormwater from this industrial basin and reduce pollutant loading to the Duwamish. The WQF is a requirement of the Consent Decree and Integrated Plan.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Drainage and Wastewater Rates	12,586	4,729	5,407	21,361	11,815	9,160	10,000	2,300	77,359
Total:	12,586	4,729	5,407	21,361	11,815	9,160	10,000	2,300	77,359

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Drainage and Wastewater Fund	12,586	4,729	5,407	21,361	11,815	9,160	10,000	2,300	77,359
Total:	12,586	4,729	5,407	21,361	11,815	9,160	10,000	2,300	77,359

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Drainage and Wastewater Fund	12,586	4,729	5,407	21,361	11,815	9,160	10,000	2,300	77,359
Total:	12,586	4,729	5,407	21,361	11,815	9,160	10,000	2,300	77,359

** Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.*

	2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)							
Total:	0	0	0	0	0	0	0

** Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.*

2019 - 2024 Proposed Capital Improvement Program

SPU-Drainage & Wastewater

Streetcar Related Projects - DWF

Project Type:	Discrete	Project No.:	MC-SU-C4130-DWF
Start/End Date:	2009-2030	BSL/Program Code:	BC-SU-C410B
Project Category:	Improved Facility	BSL/Program Name:	Shared Cost Projects
Current Project Stage:	Construction	Location:	First Hill
Neighborhood District:	Multiple	Council District:	Multiple
Total Project Cost:	\$8,870	Urban Village:	Multiple

This project plans and relocates drainage and wastewater 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 - DWF."

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Drainage and Wastewater Rates	2,460	9,032	3,277	65	0	0	0	0	14,834
Total:	2,460	9,032	3,277	65	0	0	0	0	14,834

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Drainage and Wastewater Fund	2,460	9,032	3,277	65	0	0	0	0	14,834
Total:	2,460	9,032	3,277	65	0	0	0	0	14,834

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Drainage and Wastewater Fund	2,460	3,068	3,277	65	0	0	0	0	8,870
Total:	2,460	3,068	3,277	65	0	0	0	0	8,870

		2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)								
Total:		0	0	0	0	0	0	0

** Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.*

SPU-Drainage & Wastewater

Thornton Confluence Improvement

Project Type:	Discrete	Project No.:	MC-SU-C3811
Start/End Date:	2008-2019	BSL/Program Code:	BC-SU-C380B
Project Category:	Improved Facility	BSL/Program Name:	Flooding, Sewer Backup & Lndsl
Current Project Stage:	Closeout	Location:	
Neighborhood District:		Council District:	
Total Project Cost:	\$7,903	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.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Drainage and Wastewater Rates	7,512	0	391	0	0	0	0	0	7,903
Total:	7,512	0	391	0	0	0	0	0	7,903

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Drainage and Wastewater Fund	7,512	0	391	0	0	0	0	0	7,903
Total:	7,512	0	391	0	0	0	0	0	7,903

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Drainage and Wastewater Fund	7,512	0	391	0	0	0	0	0	7,903
Total:	7,512	0	391	0	0	0	0	0	7,903

	2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)							
Total:	0	0	0	0	0	0	0

** Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.*

2019 - 2024 Proposed Capital Improvement Program

SPU-Drainage & Wastewater

1% for Arts - DWF

Project Type:	Ongoing	Project No.:	MC-SU-C4118-DWF
Start/End Date:	N/A	BSL/Program Code:	BC-SU-C410B
Project Category:	Improved Facility	BSL/Program Name:	Shared Cost Projects
		Location:	Various
Neighborhood District:	Not in a Neighborhood District	Council District:	Multiple
Total Project Cost:	N/A	Urban Village:	Not in an Urban Village

This ongoing project provides the Drainage & Wastewater 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 Art project allow the commission, purchase, and installation of art in 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.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Drainage and Wastewater Rates	3,879	722	1,084	1,638	1,630	1,099	636	715	11,402
Total:	3,879	722	1,084	1,638	1,630	1,099	636	715	11,402

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Drainage and Wastewater Fund	3,879	722	1,084	1,638	1,630	1,099	636	715	11,402
Total:	3,879	722	1,084	1,638	1,630	1,099	636	715	11,402

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Drainage and Wastewater Fund	3,879	722	1,084	1,638	1,630	1,099	636	715	11,402
Total:	3,879	722	1,084	1,638	1,630	1,099	636	715	11,402

	2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)							
Total:	0	0	0	0	0	0	0

** Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.*

SPU-Drainage & Wastewater

Asset Information Management

Project Type:	Ongoing	Project No.:	MC-SU-C5407
Start/End Date:	N/A	BSL/Program Code:	BC-SU-C510B
Project Category:	Improved Facility	BSL/Program Name:	Technology
		Location:	Various
Neighborhood District:	Not in a Neighborhood District	Council District:	Multiple
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.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Drainage and Wastewater Rates	0	608	1,520	903	860	860	860	860	6,471
Total:	0	608	1,520	903	860	860	860	860	6,471

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Drainage and Wastewater Fund	0	608	1,520	903	860	860	860	860	6,471
Total:	0	608	1,520	903	860	860	860	860	6,471

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Drainage and Wastewater Fund	0	608	1,520	903	860	860	860	860	6,471
Total:	0	608	1,520	903	860	860	860	860	6,471

	2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)							
Total:	0	0	0	0	0	0	0

** Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.*

2019 - 2024 Proposed Capital Improvement Program

SPU-Drainage & Wastewater

Beneficial Uses Program

Project Type:	Ongoing	Project No.:	MC-SU-C3317
Start/End Date:	N/A	BSL/Program Code:	BC-SU-C333B
Project Category:	Improved Facility	BSL/Program Name:	Protection of Beneficial Uses
		Location:	Various
Neighborhood District:	Multiple	Council 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, capital purchases to support street sweeping and green stormwater infrastructure projects to address flooding and control and clean runoff to streams.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources	<hr/>								
Drainage and Wastewater Rates	6,110	1,719	1,224	869	11,031	2,871	2,291	5,010	31,125
Total:	6,110	1,719	1,224	869	11,031	2,871	2,291	5,010	31,125

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*	<hr/>								
Drainage and Wastewater Fund	6,110	1,719	1,224	869	11,031	2,871	2,291	5,010	31,125
Total:	6,110	1,719	1,224	869	11,031	2,871	2,291	5,010	31,125

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan	<hr/>								
Drainage and Wastewater Fund	6,110	1,719	1,224	869	11,031	2,871	2,291	5,010	31,125
Total:	6,110	1,719	1,224	869	11,031	2,871	2,291	5,010	31,125

	2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)	<hr/>						
Total:	0	0	0	0	0	0	0

** Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.*

SPU-Drainage & Wastewater

Broadview Long-Term Plan

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

This program addresses longstanding drainage and wastewater problems to alleviate sewer backups and localized flooding in the Broadview neighborhood. Portions of this area endure significant capacity limitations of the sanitary sewer and storm systems resulting in sewer backups into residences and localized flooding during wet weather events. Multiple conditions, some of which include poor soils, poor drainage, high inflow and infiltration, and the history of development, all contribute to these wastewater and drainage inadequacies. The Broadview Program plans individual capital projects to help mitigate these problems.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Drainage and Wastewater Rates	5,547	2,624	4,750	7,000	307	0	0	0	20,228
Total:	5,547	2,624	4,750	7,000	307	0	0	0	20,228

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Drainage and Wastewater Fund	5,547	2,624	4,750	7,000	307	0	0	0	20,228
Total:	5,547	2,624	4,750	7,000	307	0	0	0	20,228

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Drainage and Wastewater Fund	5,547	2,624	4,750	7,000	307	0	0	0	20,228
Total:	5,547	2,624	4,750	7,000	307	0	0	0	20,228

	2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)							
Total:	0	0	0	0	0	0	0

** Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.*

2019 - 2024 Proposed Capital Improvement Program

SPU-Drainage & Wastewater

Creek Culvert Replacement Program

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

This ongoing program provides for the repair and replacement of stream culverts that are part of SPU's critical drainage infrastructure. Culverts will be repaired or replaced based on system failure risks and benefits of the project, including flooding, risk of failure, operations and maintenance needs and benefits.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Drainage and Wastewater Rates	1,170	1,662	2,379	423	0	0	0	0	5,633
Total:	1,170	1,662	2,379	423	0	0	0	0	5,633

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Drainage and Wastewater Fund	1,170	1,662	2,379	423	0	0	0	0	5,633
Total:	1,170	1,662	2,379	423	0	0	0	0	5,633

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Drainage and Wastewater Fund	1,170	1,662	2,379	423	0	0	0	0	5,633
Total:	1,170	1,662	2,379	423	0	0	0	0	5,633

	2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)							
Total:	0	0	0	0	0	0	0

** Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.*

2019 - 2024 Proposed Capital Improvement Program

SPU-Drainage & Wastewater

CSO Facility Retrofit

Project Type:	Ongoing	Project No.:	MC-SU-C3611
Start/End Date:	N/A	BSL/Program Code:	BC-SU-C360B
Project Category:	Improved Facility	BSL/Program Name:	Combined Sewer Overflows
		Location:	Various
Neighborhood District:	Multiple	Council 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 system operation and storage, mitigate the extent of CSOs, and postpone and/or downsize large CSO reduction projects. This project assists in achieving State Department of Ecology's requirement of an average of no more than one wet-weather overflow event per outfall per year.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Drainage and Wastewater Rates	3,659	8,442	15,022	7,557	8,098	13,900	11,500	2,160	70,337
Total:	3,659	8,442	15,022	7,557	8,098	13,900	11,500	2,160	70,337

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Drainage and Wastewater Fund	3,659	8,442	15,022	7,557	8,098	13,900	11,500	2,160	70,337
Total:	3,659	8,442	15,022	7,557	8,098	13,900	11,500	2,160	70,337

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Drainage and Wastewater Fund	3,659	8,442	15,022	7,557	8,098	13,900	11,500	2,160	70,337
Total:	3,659	8,442	15,022	7,557	8,098	13,900	11,500	2,160	70,337

	2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)							
Total:	0	0	0	0	0	0	0

** Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.*

SPU-Drainage & Wastewater

Customer Contact & Billing

Project Type:	Ongoing	Project No.:	MC-SU-C5402
Start/End Date:	N/A	BSL/Program Code:	BC-SU-C510B
Project Category:	Improved Facility	BSL/Program Name:	Technology
		Location:	N/A
Neighborhood District:	Not in a Neighborhood District	Council District:	Multiple
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.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Drainage and Wastewater Rates	2	1,351	1,148	1,140	538	430	430	430	5,468
Total:	2	1,351	1,148	1,140	538	430	430	430	5,468

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Drainage and Wastewater Fund	2	1,351	1,148	1,140	538	430	430	430	5,468
Total:	2	1,351	1,148	1,140	538	430	430	430	5,468

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Drainage and Wastewater Fund	2	1,351	1,148	1,140	538	430	430	430	5,468
Total:	2	1,351	1,148	1,140	538	430	430	430	5,468

	2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)							
Total:	0	0	0	0	0	0	0

** Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.*

SPU-Drainage & Wastewater

Drainage Capacity Program

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

This ongoing program provides flood control and localized drainage and wastewater projects to improve drainage system capacity or increase the level of service. Candidate projects are identified through claims, complaints, planning studies, engineering analyses and field investigations. Spot drainage and small landslides projects are also included within this program. The Localized Flood Control Program improves Drainage and Wastewater levels of service. This project name changed in the 2019-2024 CIP. It was previously known as Localized Flood Control Program. The project name was updated to more accurately reflect scope of the project.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Drainage and Wastewater Rates	12,714	2,270	2,179	2,943	2,166	3,824	4,354	26,600	57,049
Total:	12,714	2,270	2,179	2,943	2,166	3,824	4,354	26,600	57,049

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Drainage and Wastewater Fund	12,714	2,270	2,179	2,943	2,166	3,824	4,354	26,600	57,049
Total:	12,714	2,270	2,179	2,943	2,166	3,824	4,354	26,600	57,049

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Drainage and Wastewater Fund	12,714	2,270	2,179	2,943	2,166	3,824	4,354	26,600	57,049
Total:	12,714	2,270	2,179	2,943	2,166	3,824	4,354	26,600	57,049

			2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)									
Total:			0	0	0	0	0	0	0

** Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.*

SPU-Drainage & Wastewater

Emergency Storms Program - DWF

Project Type:	Ongoing	Project No.:	MC-SU-C4120-DWF
Start/End Date:	N/A	BSL/Program Code:	BC-SU-C410B
Project Category:	Improved Facility	BSL/Program Name:	Shared Cost Projects
		Location:	Various
Neighborhood District:	Not in a Neighborhood District	Council District:	Multiple
Total Project Cost:	N/A	Urban Village:	Not in an Urban Village

This ongoing project funds Drainage & Wastewater infrastructure capital improvement projects resulting from previous and possible future storm events. These projects are potentially Federal Emergency Management Agency (FEMA) reimbursable and need to be separated out for tracking and reimbursement purposes. Typical improvements include but are not limited to repairing and mitigating landslides, restoring detention ponds, and replacing culverts and detention walls. All projects resulting from previous storms events have been completed. This project will now serve as a placeholder for any future storm events.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Drainage and Wastewater Rates	1	100	100	100	0	0	0	0	301
Total:	1	100	100	100	0	0	0	0	301

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Drainage and Wastewater Fund	1	100	100	100	0	0	0	0	301
Total:	1	100	100	100	0	0	0	0	301

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Drainage and Wastewater Fund	1	100	100	100	0	0	0	0	301
Total:	1	100	100	100	0	0	0	0	301

	2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)							
Total:	0	0	0	0	0	0	0

** Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.*

2019 - 2024 Proposed Capital Improvement Program

SPU-Drainage & Wastewater

Enterprise Information Management

Project Type:	Ongoing	Project No.:	MC-SU-C5403
Start/End Date:	N/A	BSL/Program Code:	BC-SU-C510B
Project Category:	Improved Facility	BSL/Program Name:	Technology
		Location:	Various
Neighborhood District:	Not in a Neighborhood District	Council District:	Multiple
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.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Drainage and Wastewater Rates	0	325	727	772	1,075	860	860	860	5,479
Total:	0	325	727	772	1,075	860	860	860	5,479

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Drainage and Wastewater Fund	0	325	727	772	1,075	860	860	860	5,479
Total:	0	325	727	772	1,075	860	860	860	5,479

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Drainage and Wastewater Fund	0	325	727	772	1,075	860	860	860	5,479
Total:	0	325	727	772	1,075	860	860	860	5,479

	2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)							
Total:	0	0	0	0	0	0	0

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2019 - 2024 Proposed Capital Improvement Program

SPU-Drainage & Wastewater

Future CSO Projects

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

This project is for future combined sewer overflow (CSO) reduction projects that were identified through the Plan to Protect Seattle's Waterways. These 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 2015, and the projects should complete their construction by 2025.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Drainage and Wastewater Rates	24	1,356	2,984	5,294	7,563	7,641	11,209	36,178	72,249
Total:	24	1,356	2,984	5,294	7,563	7,641	11,209	36,178	72,249

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Drainage and Wastewater Fund	24	1,356	2,984	5,294	7,563	7,641	11,209	36,178	72,249
Total:	24	1,356	2,984	5,294	7,563	7,641	11,209	36,178	72,249

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Drainage and Wastewater Fund	24	1,356	2,984	5,294	7,563	7,641	11,209	36,178	72,249
Total:	24	1,356	2,984	5,294	7,563	7,641	11,209	36,178	72,249

	2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)							
Total:	0	0	0	0	0	0	0

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SPU-Drainage & Wastewater

Green Stormwater Infrastructure Program

Project Type:	Ongoing	Project No.:	MC-SU-C3610
Start/End Date:	N/A	BSL/Program Code:	BC-SU-C360B
Project Category:	Improved Facility	BSL/Program Name:	Combined Sewer Overflows
		Location:	Citywide
Neighborhood District:	Multiple	Council 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 City led roadside bioretention, funding for partnering with projects led by others to increase stormwater management objectives, and the RainWise program within CSO basins. RainWise provides financial incentives to private property owners 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.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Drainage and Wastewater Rates	9,346	2,229	2,193	2,171	2,500	2,500	2,500	2,500	25,939
Total:	9,346	2,229	2,193	2,171	2,500	2,500	2,500	2,500	25,939

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Drainage and Wastewater Fund	9,346	2,229	2,193	2,171	2,500	2,500	2,500	2,500	25,939
Total:	9,346	2,229	2,193	2,171	2,500	2,500	2,500	2,500	25,939

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Drainage and Wastewater Fund	9,346	2,229	2,193	2,171	2,500	2,500	2,500	2,500	25,939
Total:	9,346	2,229	2,193	2,171	2,500	2,500	2,500	2,500	25,939

			2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)									
Total:			0	0	0	0	0	0	0

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2019 - 2024 Proposed Capital Improvement Program

SPU-Drainage & Wastewater

GSI for Protection of Beneficial Uses

Project Type:	Ongoing	Project No.:	MC-SU-C3316
Start/End Date:	N/A	BSL/Program Code:	BC-SU-C333B
Project Category:	Improved Facility	BSL/Program Name:	Protection of Beneficial Uses
		Location:	Various
Neighborhood District:	Multiple	Council 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, private property incentives for construction of properly sized and installed rain gardens or cisterns (RainWise program) into creek watersheds, and the Urban Village GSI program seeking to expand our partnership models to achieve DWW goals. 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 while coordinating with SDOT and community groups to deliver co-benefits such as sidewalks.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Drainage and Wastewater Rates	10,758	8,350	11,962	24,544	23,550	15,612	14,801	8,857	118,434
Total:	10,758	8,350	11,962	24,544	23,550	15,612	14,801	8,857	118,434

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Drainage and Wastewater Fund	10,758	8,350	11,962	24,544	23,550	15,612	14,801	8,857	118,434
Total:	10,758	8,350	11,962	24,544	23,550	15,612	14,801	8,857	118,434

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Drainage and Wastewater Fund	10,758	8,350	11,962	24,544	23,550	15,612	14,801	8,857	118,434
Total:	10,758	8,350	11,962	24,544	23,550	15,612	14,801	8,857	118,434

			2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)									
Total:			0	0	0	0	0	0	0

** Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.*

2019 - 2024 Proposed Capital Improvement Program

SPU-Drainage & Wastewater

** Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.*

2019 - 2024 Proposed Capital Improvement Program

SPU-Drainage & Wastewater

Heavy Equipment Purchases - DWF

Project Type:	Ongoing	Project No.:	MC-SU-C4116-DWF
Start/End Date:	N/A	BSL/Program Code:	BC-SU-C410B
Project Category:	Improved Facility	BSL/Program Name:	Shared Cost Projects
		Location:	Various
Neighborhood District:	Not in a Neighborhood District	Council District:	Multiple
Total Project Cost:	N/A	Urban Village:	Not in an Urban Village

This ongoing project provides SPU's Drainage and Wastewater Utility crews with new and replacement heavy equipment that is used throughout Seattle. Typical purchases include vactors, backhoes, loaders, service trucks, "TV" trucks and dump trucks, as well as retrofitting existing equipment to meet SPU operational needs and initiatives. This equipment transports work crews and tools to jobsites and supports the safe and efficient replacement, repair, and maintenance of Seattle's Drainage and Wastewater system. This project is one of three SPU fund-specific heavy equipment CIP projects.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Drainage and Wastewater Rates	15,119	2,801	2,376	3,536	2,765	3,036	3,513	3,563	36,708
Total:	15,119	2,801	2,376	3,536	2,765	3,036	3,513	3,563	36,708

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Drainage and Wastewater Fund	15,119	2,801	2,376	3,536	2,765	3,036	3,513	3,563	36,708
Total:	15,119	2,801	2,376	3,536	2,765	3,036	3,513	3,563	36,708

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Drainage and Wastewater Fund	15,119	2,801	2,376	3,536	2,765	3,036	3,513	3,563	36,708
Total:	15,119	2,801	2,376	3,536	2,765	3,036	3,513	3,563	36,708

			2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)									
Total:			0	0	0	0	0	0	0

** Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.*

SPU-Drainage & Wastewater

Integrated Control Monitoring Program - DWF

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

This project funds improvements to the centralized monitoring and control of the drainage and wastewater portion of the overall Supervisory Control and Data Acquisition (SCADA) system infrastructure throughout Seattle. Infrastructure affected may include, but is not limited to, pipes related to potential combined sewer overflows, rain gauges, and wastewater pump stations. This project enhances and protects the quality and condition of lakes and streams, and addresses the Environmental Protection Agency's (EPA) National Pollutant Discharge Elimination System (NPDES) permit requirements.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Drainage and Wastewater Rates	1,328	250	250	250	0	0	0	0	2,078
Total:	1,328	250	250	250	0	0	0	0	2,078

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Drainage and Wastewater Fund	1,328	250	250	250	0	0	0	0	2,078
Total:	1,328	250	250	250	0	0	0	0	2,078

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Drainage and Wastewater Fund	1,328	250	250	250	0	0	0	0	2,078
Total:	1,328	250	250	250	0	0	0	0	2,078

	2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)							
Total:	0	0	0	0	0	0	0

** Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.*

2019 - 2024 Proposed Capital Improvement Program

SPU-Drainage & Wastewater

IT Infrastructure

Project Type:	Ongoing	Project No.:	MC-SU-C5404
Start/End Date:	N/A	BSL/Program Code:	BC-SU-C510B
Project Category:	Improved Facility	BSL/Program Name:	Technology
		Location:	N/A
Neighborhood District:	Not in a Neighborhood District	Council District:	Multiple
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.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Drainage and Wastewater Rates	0	238	632	505	730	730	730	730	4,294
Total:	0	238	632	505	730	730	730	730	4,294

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Drainage and Wastewater Fund	0	238	632	505	730	730	730	730	4,294
Total:	0	238	632	505	730	730	730	730	4,294

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Drainage and Wastewater Fund	0	238	632	505	730	730	730	730	4,294
Total:	0	238	632	505	730	730	730	730	4,294

	2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)							
Total:	0	0	0	0	0	0	0

** Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.*

SPU-Drainage & Wastewater

Meter Replacement - DWF

Project Type:	Ongoing	Project No.:	MC-SU-C4101-DWF
Start/End Date:	N/A	BSL/Program Code:	BC-SU-C410B
Project Category:	Improved Facility	BSL/Program Name:	Shared Cost Projects
		Location:	Citywide
Neighborhood District:	Multiple	Council 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.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Drainage and Wastewater Rates	6,314	554	561	567	481	491	500	510	9,979
Total:	6,314	554	561	567	481	491	500	510	9,979

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Drainage and Wastewater Fund	6,314	554	561	567	481	491	500	510	9,979
Total:	6,314	554	561	567	481	491	500	510	9,979

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Drainage and Wastewater Fund	6,314	554	561	567	481	491	500	510	9,979
Total:	6,314	554	561	567	481	491	500	510	9,979

	2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)							
Total:	0	0	0	0	0	0	0

** Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.*

SPU-Drainage & Wastewater

Move Seattle - DWF

Project Type:	Ongoing	Project No.:	MC-SU-C4119-DWF
Start/End Date:	N/A	BSL/Program Code:	BC-SU-C410B
Project Category:	Improved Facility	BSL/Program Name:	Shared Cost Projects
		Location:	Various
Neighborhood District:	Not in a Neighborhood District	Council District:	Multiple
Total Project Cost:	N/A	Urban Village:	Not in an Urban Village

This multi-year project funds assessments, repairs, and improvements to SPU's drainage and wastewater 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" program. 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 - DWF."

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Drainage and Wastewater Rates	625	17,360	28,170	26,899	22,820	7,147	5,857	10,100	118,978
Total:	625	17,360	28,170	26,899	22,820	7,147	5,857	10,100	118,978

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Drainage and Wastewater Fund	625	17,360	28,170	26,899	22,820	7,147	5,857	10,100	118,978
Total:	625	17,360	28,170	26,899	22,820	7,147	5,857	10,100	118,978

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Drainage and Wastewater Fund	625	17,360	28,170	26,899	22,820	7,147	5,857	10,100	118,978
Total:	625	17,360	28,170	26,899	22,820	7,147	5,857	10,100	118,978

	2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)							
Total:	0	0	0	0	0	0	0

** Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.*

2019 - 2024 Proposed Capital Improvement Program

SPU-Drainage & Wastewater

Operational Facility - Construction - DWF

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

This ongoing facilities project renovates, rehabilitates, and 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.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Drainage and Wastewater Rates	15,149	20,602	27,344	22,740	4,513	5,513	805	1,700	98,365
Total:	15,149	20,602	27,344	22,740	4,513	5,513	805	1,700	98,365

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Drainage and Wastewater Fund	15,149	20,602	27,344	22,740	4,513	5,513	805	1,700	98,365
Total:	15,149	20,602	27,344	22,740	4,513	5,513	805	1,700	98,365

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Drainage and Wastewater Fund	15,149	20,602	27,344	22,740	4,513	5,513	805	1,700	98,365
Total:	15,149	20,602	27,344	22,740	4,513	5,513	805	1,700	98,365

			2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)									
Total:			0	0	0	0	0	0	0

** Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.*

SPU-Drainage & Wastewater

Other Major Tran Projects - DWF

Project Type:	Ongoing	Project No.:	MC-SU-C4123-DWF
Start/End Date:	N/A	BSL/Program Code:	BC-SU-C410B
Project Category:	Improved Facility	BSL/Program Name:	Shared Cost Projects
		Location:	Various
Neighborhood District:	Not in a Neighborhood District	Council District:	Multiple
Total Project Cost:	N/A	Urban Village:	Not in an Urban Village

This ongoing project funds Drainage and Wastewater projects that mitigate undesirable impacts from, and takes advantage of opportunities generated by, 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.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Drainage and Wastewater Rates	121	627	750	55	0	0	0	0	1,553
Total:	121	627	750	55	0	0	0	0	1,553
	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Drainage and Wastewater Fund	121	627	750	55	0	0	0	0	1,553
Total:	121	627	750	55	0	0	0	0	1,553
	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Drainage and Wastewater Fund	121	627	750	55	0	0	0	0	1,553
Total:	121	627	750	55	0	0	0	0	1,553
			2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)									
Total:			0	0	0	0	0	0	0

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SPU-Drainage & Wastewater

Outfall Rehabilitation Program

Project Type:	Ongoing	Project No.:	MC-SU-C3708
Start/End Date:	N/A	BSL/Program Code:	BC-SU-C370B
Project Category:	Improved Facility	BSL/Program Name:	Rehabilitation
		Location:	Various
Neighborhood District:	Multiple	Council 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.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Drainage and Wastewater Rates	554	647	1,551	240	1,500	1,500	1,500	1,500	8,992
Total:	554	647	1,551	240	1,500	1,500	1,500	1,500	8,992

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Drainage and Wastewater Fund	554	647	1,551	240	1,500	1,500	1,500	1,500	8,992
Total:	554	647	1,551	240	1,500	1,500	1,500	1,500	8,992

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Drainage and Wastewater Fund	554	647	1,551	240	1,500	1,500	1,500	1,500	8,992
Total:	554	647	1,551	240	1,500	1,500	1,500	1,500	8,992

	2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)							
Total:	0	0	0	0	0	0	0

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SPU-Drainage & Wastewater

Pipe Renewal Program

Project Type:	Ongoing	Project No.:	MC-SU-C3710
Start/End Date:	N/A	BSL/Program Code:	BC-SU-C370B
Project Category:	Improved Facility	BSL/Program Name:	Rehabilitation
		Location:	Various
Neighborhood District:	Multiple	Council 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 project completes projects to repair, replace, rehabilitate and renew the collection system by various contracting and construction methods.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Drainage and Wastewater Rates	21,601	27,228	28,138	27,000	20,000	20,000	20,000	24,000	187,967
Total:	21,601	27,228	28,138	27,000	20,000	20,000	20,000	24,000	187,967

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Drainage and Wastewater Fund	21,601	27,228	28,138	27,000	20,000	20,000	20,000	24,000	187,967
Total:	21,601	27,228	28,138	27,000	20,000	20,000	20,000	24,000	187,967

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Drainage and Wastewater Fund	21,601	27,228	28,138	27,000	20,000	20,000	20,000	24,000	187,967
Total:	21,601	27,228	28,138	27,000	20,000	20,000	20,000	24,000	187,967

			2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)									
Total:			0	0	0	0	0	0	0

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SPU-Drainage & Wastewater

Project Delivery & Performance

Project Type:	Ongoing	Project No.:	MC-SU-C5405
Start/End Date:	N/A	BSL/Program Code:	BC-SU-C510B
Project Category:	Improved Facility	BSL/Program Name:	Technology
		Location:	N/A
Neighborhood District:	Not in a Neighborhood District	Council District:	Multiple
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.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Drainage and Wastewater Rates	3,199	3,441	882	1,031	946	731	731	731	11,691
Total:	3,199	3,441	882	1,031	946	731	731	731	11,691

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Drainage and Wastewater Fund	3,199	3,441	882	1,031	946	731	731	731	11,691
Total:	3,199	3,441	882	1,031	946	731	731	731	11,691

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Drainage and Wastewater Fund	3,199	3,441	882	1,031	946	731	731	731	11,691
Total:	3,199	3,441	882	1,031	946	731	731	731	11,691

			2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)									
Total:			0	0	0	0	0	0	0

** Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.*

2019 - 2024 Proposed Capital Improvement Program

SPU-Drainage & Wastewater

Pump Station & Force Main Improvements

Project Type:	Ongoing	Project No.:	MC-SU-C3703
Start/End Date:	N/A	BSL/Program Code:	BC-SU-C370B
Project Category:	Improved Facility	BSL/Program Name:	Rehabilitation
		Location:	Various
Neighborhood District:	Multiple	Council 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, in turn, protects water quality.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Drainage and Wastewater Rates	2,341	11,214	15,585	9,257	4,664	4,020	4,000	4,500	55,581
Total:	2,341	11,214	15,585	9,257	4,664	4,020	4,000	4,500	55,581

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Drainage and Wastewater Fund	2,341	11,214	15,585	9,257	4,664	4,020	4,000	4,500	55,581
Total:	2,341	11,214	15,585	9,257	4,664	4,020	4,000	4,500	55,581

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Drainage and Wastewater Fund	2,341	11,214	15,585	9,257	4,664	4,020	4,000	4,500	55,581
Total:	2,341	11,214	15,585	9,257	4,664	4,020	4,000	4,500	55,581

			2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)									
Total:			0	0	0	0	0	0	0

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SPU-Drainage & Wastewater

Sanitary Sewer Overflow Capacity

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

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

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Drainage and Wastewater Rates	2,721	6,943	3,303	11,431	14,400	9,092	9,000	22,000	78,890
Total:	2,721	6,943	3,303	11,431	14,400	9,092	9,000	22,000	78,890

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Drainage and Wastewater Fund	2,721	6,943	3,303	11,431	14,400	9,092	9,000	22,000	78,890
Total:	2,721	6,943	3,303	11,431	14,400	9,092	9,000	22,000	78,890

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Drainage and Wastewater Fund	2,721	6,943	3,303	11,431	14,400	9,092	9,000	22,000	78,890
Total:	2,721	6,943	3,303	11,431	14,400	9,092	9,000	22,000	78,890

			2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)									
Total:			0	0	0	0	0	0	0

** Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.*

SPU-Drainage & Wastewater

Science & System Performance

Project Type:	Ongoing	Project No.:	MC-SU-C5406
Start/End Date:	N/A	BSL/Program Code:	BC-SU-C510B
Project Category:	Improved Facility	BSL/Program Name:	Technology
		Location:	N/A
Neighborhood District:	Not in a Neighborhood District	Council District:	Multiple
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.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Drainage and Wastewater Rates	239	236	350	600	688	688	688	688	4,177
Total:	239	236	350	600	688	688	688	688	4,177
	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Drainage and Wastewater Fund	239	236	350	600	688	688	688	688	4,177
Total:	239	236	350	600	688	688	688	688	4,177
	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Drainage and Wastewater Fund	239	236	350	600	688	688	688	688	4,177
Total:	239	236	350	600	688	688	688	688	4,177
			2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)									
Total:			0	0	0	0	0	0	0

** Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.*

SPU-Drainage & Wastewater

Security Improvements - DWF

Project Type:	Ongoing	Project No.:	MC-SU-C4113-DWF
Start/End Date:	N/A	BSL/Program Code:	BC-SU-C410B
Project Category:	Improved Facility	BSL/Program Name:	Shared Cost Projects
		Location:	Citywide
Neighborhood District:	Multiple	Council District:	Multiple
Total Project Cost:	N/A	Urban Village:	Not in an Urban Village

This ongoing project provides physical integrated security system components throughout the City of Seattle. Typical improvements 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.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Drainage and Wastewater Rates	128	113	210	165	113	113	185	185	1,211
Total:	128	113	210	165	113	113	185	185	1,211

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Drainage and Wastewater Fund	128	113	210	165	113	113	185	185	1,211
Total:	128	113	210	165	113	113	185	185	1,211

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Drainage and Wastewater Fund	128	113	210	165	113	113	185	185	1,211
Total:	128	113	210	165	113	113	185	185	1,211

	2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)							
Total:	0	0	0	0	0	0	0

** Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.*

SPU-Drainage & Wastewater

Sediment Remediation - DWF

Project Type:	Ongoing	Project No.:	MC-SU-C3503
Start/End Date:	N/A	BSL/Program Code:	BC-SU-C350B
Project Category:	Improved Facility	BSL/Program Name:	Sediments
		Location:	Various
Neighborhood District:	Multiple	Council 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 the city 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.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Drainage and Wastewater Rates	33,189	6,489	3,636	4,202	4,899	12,722	18,286	19,286	102,710
Total:	33,189	6,489	3,636	4,202	4,899	12,722	18,286	19,286	102,710

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Drainage and Wastewater Fund	33,189	6,489	3,636	4,202	4,899	12,722	18,286	19,286	102,710
Total:	33,189	6,489	3,636	4,202	4,899	12,722	18,286	19,286	102,710

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Drainage and Wastewater Fund	33,189	6,489	3,636	4,202	4,899	12,722	18,286	19,286	102,710
Total:	33,189	6,489	3,636	4,202	4,899	12,722	18,286	19,286	102,710

	2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)							
Total:	0	0	0	0	0	0	0

** Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.*

Seattle Public Utilities

Solid Waste

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 Program (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 \$101 million over the next six years, from 2019 through 2024.

Major anticipated projects include:

- constructing a recycling/re-use facility at the South Transfer Station (2015-2021); and
- cleanup of the historic South Park Landfill (2015-2021) at the South Park Development Project.

These projects comprise roughly 68 percent of the CIP. Other significant projects include Waste Removal project at the Midway Landfill, replacement of two compactors, and SPU's annual fleet and equipment investment.

CIP Revenue Sources

Much of the SWF CIP is funded through bonds 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 considering, among several potential financing sources, a 2021 bond issue which would provide the remaining funds needed to complete planned SWF CIP projects through 2024. 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 services.

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 rehabilitation process and South Transfer Station Rebuild (STS2) project. These projects are the primary drivers of CIP spending and have required rate increases for financing.

Seattle Public Utilities - Solid Waste

CIP Highlights

2019-2024 Proposed Solid Waste Fund CIP by BCL

(\$s in '000s; total may not sum due to rounding)

BCL	2019	2020	2021	2022	2023	2024	Total
New Facilities	3,541	21,895	15,336	18,581	5,806	200	65,359
Rehabilitation and Heavy Equipment	325	320	245	675	4,550	5,525	11,640
Shared Cost Projects	2,566	2,679	1,645	3,631	1,884	2,643	15,048
Technology	2,083	1,568	1,695	1,508	1,508	1,508	9,870
Total	8,515	26,462	18,922	24,395	13,748	9,876	101,917

New Facilities: This program includes the planning, design, and construction of new facilities to enhance solid waste operations. In 2019, SPU will continue to implement its Solid Waste Facilities Master Plan. The key project drivers of the New Facilities Budget Control Level (BCL) are the South Transfer Station Rebuild (STS2) and South Park Development projects.

The changes in this BCL are mainly on the STS2 Rebuild project and a pause in design for additional evaluation. Now that the preliminary site design has been fully approved by SPU leadership, the project team will pick up at 30% design and advance the project toward completion with an overall delay of 18 months. The changes also reflect delay to the South Park Development project.

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 BCL 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 which typically benefit multiple Lines of Business (LOB) (e.g. the Water LOB and the Drainage and Wastewater LOB) and whose costs are "shared," or paid for by more than one of SPU's utility funds.

The proposed budget for this BCL will increase in 2019, driven largely by the change in Heavy Equipment Purchases which reflect the best estimate of the required fleet of trucks and heavy equipment for the Transfer Stations.

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

2019-2024 Proposed Capital Improvement Plan

Seattle Public Utilities - Solid Waste

- IT Infrastructure
- Project Delivery & Performance
- Science & System Performance
- Asset Information Management

Investments in 2019 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 2019, SPU will focus its technology spending on the highest priority business needs. These projects will be primarily in 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 would be the Utilities CSS Portal project as well as other projects such as CIS Workflow and the CIS Reporting. These projects will improve staff interface, work planning, and data reporting in the CIS to improve customer service and operational efficiency. 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

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 take action 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 WSDOT improvements to I-5 that require modification to landfill infrastructure in the right-of-way. 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 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).

Seattle Public Utilities - Solid Waste

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

Priority rankings 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. Examples of projects in this category include the 1% for Arts program.
- **Infrastructure:** How a project addresses infrastructure conditions or vulnerabilities. Examples of highly ranked projects in this category include the South Transfer Station Rebuild (STS2) project.
- **Level of Service:** The importance of this project in providing or improving services to customers. Examples of highly ranked projects in this category include the South Transfer Station Rebuild (STS2) 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 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. 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, excluded or deferred from the CIP, and which projects should receive priority attention if a staff or financial resource constraint should arise.

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 redevelopment of the South Transfer Station Rebuild (STS2) and must continue to utilize the site for trailer parking and household hazardous waste collection during construction.
- Financial Challenges: Reconstruction of the South Transfer Station Rebuild (STS2) 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.

Seattle Public Utilities - Solid Waste

To address the funding needed to reconstruct and remediate the transfer stations, SPU issued bonds in 2014, 2015, and 2016. The cost to repay or service these bonds will be paid through rate-based revenues, which also support SPU operations, maintenance, administration, and contract costs. To assure that the SWF has adequate revenues to support debt service and core functions while demand declines, SPU anticipates using a combination of rate increases and existing cash balances.

Future Projects/What is on the Horizon

Once the South Transfer Station rebuild is completed, the core SWF CIP is expected to approximate the lower spending levels. General SW 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 Transfer Station is rebuilt, annual costs for repairs and upkeep are projected to decrease initially and then increase as equipment replacement/renewal projects are required. Part of the South Transfer Station rebuild 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. No decisions have been made at this time.

SPU-Solid Waste

Project Summary

BCL/Program Name/ Project Title & ID	LTD Actuals	2018	2019	2020	2021	2022	2023	2024	Total	
New Facilities		BSL/Program Code:						BC-SU-C230B		
<u>Discrete</u>										
South Park Development (MC-SU-C2304)	5,169	579	457	8,650	4,407	2,611	511	0	22,384	
South Transfer Station Rebuild (MC-SU-C2302)	2,689	2,290	1,919	12,839	10,780	12,970	2,296	0	45,782	
<u>Ongoing</u>										
Miscellaneous Station Improvement (MC-SU-C2303)	3,006	608	1,165	405	150	3,000	3,000	200	11,534	
New Facilities	10,864	3,477	3,541	21,895	15,336	18,581	5,806	200	79,701	
Rehabilitation & Heavy Eqpt		BSL/Program Code:						BC-SU-C240B		
<u>Discrete</u>										
SW Comprehensive Plan Update (MC-SU-C2407)	0	150	150	100	50	50	0	0	500	
<u>Ongoing</u>										
Kent Highlands (MC-SU-C2402)	397	50	25	50	25	25	50	25	647	
Midway Landfill (MC-SU-C2403)	154	70	150	170	170	600	4,500	5,500	11,314	
Rehabilitation & Heavy Eqpt	551	270	325	320	245	675	4,550	5,525	12,461	
Shared Cost Projects		BSL/Program Code:						BC-SU-C410B		
<u>Ongoing</u>										
1% for Arts - SWF (MC-SU-C4118-SWF)	1,912	28	25	131	109	140	23	1	2,370	
Heavy Equipment Purchases - SWF (MC-SU-C4116-SWF)	8,582	1,270	1,768	2,158	1,362	2,337	1,648	2,352	21,479	
Operational Facility - Construction - SWF (MC-SU-C4106-SWF)	1	500	607	255	75	1,054	48	125	2,665	
Security Improvements - SWF (MC-SU-C4113-SWF)	448	100	165	135	100	100	165	165	1,378	
Shared Cost Projects	10,943	1,898	2,566	2,679	1,645	3,631	1,884	2,643	27,891	
Technology		BSL/Program Code:						BC-SU-C510B		

** Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.*

2019 - 2024 Proposed Capital Improvement Program

Ongoing

Asset Information Management (MC-SU-C5407)	0	165	457	345	300	300	300	300	2,167
Customer Contact & Billing (MC-SU-C5402)	2	1,631	938	398	188	150	150	150	3,605
Enterprise Information Management (MC-SU-C5403)	0	113	151	270	375	300	300	300	1,809
IT Infrastructure (MC-SU-C5404)	0	89	231	188	263	263	263	263	1,557
Project Delivery & Performance (MC-SU-C5405)	1,246	1,192	308	368	330	255	255	255	4,208
Science & System Performance (MC-SU-C5406)	0	30	0	0	240	240	240	240	990
Technology	1,248	3,220	2,083	1,568	1,695	1,508	1,508	1,508	14,336
Department Total:	23,606	8,865	8,515	26,462	18,922	24,395	13,748	9,876	134,389

** Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.*

2019 - 2024 Proposed Capital Improvement Program

SPU-Solid Waste

Fund Summary

Fund Name & Code	LTD Actuals	2018	2019	2020	2021	2022	2023	2024	Total
Solid Waste Fund (45010)	23,606	8,865	8,515	26,462	18,922	24,395	13,748	9,876	134,389
Department Total:	23,606	8,865	8,515	26,462	18,922	24,395	13,748	9,876	134,389

**Amounts in thousands of dollars*

2019 - 2024 Proposed Capital Improvement Program

South Park Development

Project Type:	Discrete	Project No.:	MC-SU-C2304
Start/End Date:	2007-2023	BSL/Program Code:	BC-SU-C230B
Project Category:	Improved Facility	BSL/Program Name:	New Facilities
Current Project Stage:	Initiation, Project Definition, & Planning	Location:	8100 2nd Ave S
Neighborhood District:	Greater Duwamish	Council District:	1
Total Project Cost:	\$22,384	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.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Solid Waste Rates	5,169	579	457	8,650	4,407	2,611	511	0	22,384
Total:	5,169	579	457	8,650	4,407	2,611	511	0	22,384

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Solid Waste Fund	5,169	579	457	8,650	4,407	2,611	511	0	22,384
Total:	5,169	579	457	8,650	4,407	2,611	511	0	22,384

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Solid Waste Fund	5,169	579	457	8,650	4,407	2,611	511	0	22,384
Total:	5,169	579	457	8,650	4,407	2,611	511	0	22,384

	2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)							
Total:	0	0	0	0	0	0	0

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2019 - 2024 Proposed Capital Improvement Program

South Transfer Station Rebuild

Project Type:	Discrete	Project No.:	MC-SU-C2302
Start/End Date:	2006-2023	BSL/Program Code:	BC-SU-C230B
Project Category:	Improved Facility	BSL/Program Name:	New Facilities
Current Project Stage:	Design	Location:	8100 2nd AVE S
Neighborhood District:	Greater Duwamish	Council District:	1
Total Project Cost:	\$45,782	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.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Solid Waste Rates	2,689	2,290	1,919	12,839	10,780	12,970	2,296	0	45,782
Total:	2,689	2,290	1,919	12,839	10,780	12,970	2,296	0	45,782

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Solid Waste Fund	2,689	2,290	1,919	12,839	10,780	12,970	2,296	0	45,782
Total:	2,689	2,290	1,919	12,839	10,780	12,970	2,296	0	45,782

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Solid Waste Fund	2,689	2,290	1,919	12,839	10,780	12,970	2,296	0	45,782
Total:	2,689	2,290	1,919	12,839	10,780	12,970	2,296	0	45,782

	2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)							
Total:	0	0	0	0	0	0	0

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SW Comprehensive Plan Update

Project Type:	Discrete	Project No.:	MC-SU-C2407
Start/End Date:	2009-2022	BSL/Program Code:	BC-SU-C240B
Project Category:	Improved Facility	BSL/Program Name:	Rehabilitation & Heavy Eqpt
Current Project Stage:	Initiation, Project Definition, & Planning	Location:	Citywide
Neighborhood District:	Multiple	Council District:	Multiple
Total Project Cost:	\$500	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.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Solid Waste Rates	0	150	150	100	50	50	0	0	500
Total:	0	150	150	100	50	50	0	0	500

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Solid Waste Fund	0	150	150	100	50	50	0	0	500
Total:	0	150	150	100	50	50	0	0	500

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Solid Waste Fund	0	150	150	100	50	50	0	0	500
Total:	0	150	150	100	50	50	0	0	500

		2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)								
Total:		0	0	0	0	0	0	0

* Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.

1% for Arts - SWF

Project Type:	Ongoing	Project No.:	MC-SU-C4118-SWF
Start/End Date:	N/A	BSL/Program Code:	BC-SU-C410B
Project Category:	Improved Facility	BSL/Program Name:	Shared Cost Projects
		Location:	Various
Neighborhood District:	Not in a Neighborhood District	Council District:	Multiple
Total Project Cost:	N/A	Urban Village:	Not in an Urban Village

This ongoing project provides the Solid Waste 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 Art project allow the commission, purchase, and installation of art in City-owned properties that are accessible to the public. The Municipal Arts Plan, prepared annually, describes the status of ongoing art projects and establishes the scope of work and allocations for new art projects.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Solid Waste Rates	1,912	28	25	131	109	140	23	1	2,370
Total:	1,912	28	25	131	109	140	23	1	2,370

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Solid Waste Fund	1,912	28	25	131	109	140	23	1	2,370
Total:	1,912	28	25	131	109	140	23	1	2,370

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Solid Waste Fund	1,912	28	25	131	109	140	23	1	2,370
Total:	1,912	28	25	131	109	140	23	1	2,370

	2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)							
Total:	0	0	0	0	0	0	0

* Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.

Asset Information Management

Project Type:	Ongoing	Project No.:	MC-SU-C5407
Start/End Date:	N/A	BSL/Program Code:	BC-SU-C510B
Project Category:	Improved Facility	BSL/Program Name:	Technology
		Location:	Various
Neighborhood District:	Not in a Neighborhood District	Council District:	Multiple
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.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Solid Waste Rates	0	165	457	345	300	300	300	300	2,167
Total:	0	165	457	345	300	300	300	300	2,167

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Solid Waste Fund	0	165	457	345	300	300	300	300	2,167
Total:	0	165	457	345	300	300	300	300	2,167

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Solid Waste Fund	0	165	457	345	300	300	300	300	2,167
Total:	0	165	457	345	300	300	300	300	2,167

	2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)							
Total:	0	0	0	0	0	0	0

* Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.

2019 - 2024 Proposed Capital Improvement Program

Customer Contact & Billing

Project Type:	Ongoing	Project No.:	MC-SU-C5402
Start/End Date:	N/A	BSL/Program Code:	BC-SU-C510B
Project Category:	Improved Facility	BSL/Program Name:	Technology
		Location:	N/A
Neighborhood District:	Not in a Neighborhood District	Council District:	Multiple
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.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Solid Waste Rates	2	1,631	938	398	188	150	150	150	3,605
Total:	2	1,631	938	398	188	150	150	150	3,605

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Solid Waste Fund	2	1,631	938	398	188	150	150	150	3,605
Total:	2	1,631	938	398	188	150	150	150	3,605

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Solid Waste Fund	2	1,631	938	398	188	150	150	150	3,605
Total:	2	1,631	938	398	188	150	150	150	3,605

			2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)									
Total:			0	0	0	0	0	0	0

* Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.

2019 - 2024 Proposed Capital Improvement Program

Enterprise Information Management

Project Type:	Ongoing	Project No.:	MC-SU-C5403
Start/End Date:	N/A	BSL/Program Code:	BC-SU-C510B
Project Category:	Improved Facility	BSL/Program Name:	Technology
		Location:	Various
Neighborhood District:	Not in a Neighborhood District	Council District:	Multiple
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.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Solid Waste Rates	0	113	151	270	375	300	300	300	1,809
Total:	0	113	151	270	375	300	300	300	1,809

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Solid Waste Fund	0	113	151	270	375	300	300	300	1,809
Total:	0	113	151	270	375	300	300	300	1,809

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Solid Waste Fund	0	113	151	270	375	300	300	300	1,809
Total:	0	113	151	270	375	300	300	300	1,809

	2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)							
Total:	0	0	0	0	0	0	0

* Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.

2019 - 2024 Proposed Capital Improvement Program

Heavy Equipment Purchases - SWF

Project Type:	Ongoing	Project No.:	MC-SU-C4116-SWF
Start/End Date:	N/A	BSL/Program Code:	BC-SU-C410B
Project Category:	Improved Facility	BSL/Program Name:	Shared Cost Projects
		Location:	Various
Neighborhood District:	Not in a Neighborhood District	Council District:	Multiple
Total Project Cost:	N/A	Urban Village:	Not in an Urban Village

This ongoing project provides SPU's Solid Waste Utility crews with new and replacement heavy equipment that is used throughout Seattle and in parts of King County. Typical purchases include loaders, dozers, class8 trucks, rail container chassis, yard waste and metal trailers, backhoes, and yard "goats" (a type of tractor.) These equipment purchases provide safe and efficient loading, transfer and short haul transportation of garbage, yard waste, metal, and other recyclables to the rail yard for "long haul" to the landfill and to contracted recycling processors. This project is one of three SPU fund-specific heavy equipment CIP projects.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Solid Waste Rates	8,582	1,270	1,768	2,158	1,362	2,337	1,648	2,352	21,479
Total:	8,582	1,270	1,768	2,158	1,362	2,337	1,648	2,352	21,479

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Solid Waste Fund	8,582	1,270	1,768	2,158	1,362	2,337	1,648	2,352	21,479
Total:	8,582	1,270	1,768	2,158	1,362	2,337	1,648	2,352	21,479

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Solid Waste Fund	8,582	1,270	1,768	2,158	1,362	2,337	1,648	2,352	21,479
Total:	8,582	1,270	1,768	2,158	1,362	2,337	1,648	2,352	21,479

	2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)							
Total:	0	0	0	0	0	0	0

* Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.

IT Infrastructure

Project Type:	Ongoing	Project No.:	MC-SU-C5404
Start/End Date:	N/A	BSL/Program Code:	BC-SU-C510B
Project Category:	Improved Facility	BSL/Program Name:	Technology
		Location:	N/A
Neighborhood District:	Not in a Neighborhood District	Council District:	Multiple
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.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Solid Waste Rates	0	89	231	188	263	263	263	263	1,557
Total:	0	89	231	188	263	263	263	263	1,557

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Solid Waste Fund	0	89	231	188	263	263	263	263	1,557
Total:	0	89	231	188	263	263	263	263	1,557

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Solid Waste Fund	0	89	231	188	263	263	263	263	1,557
Total:	0	89	231	188	263	263	263	263	1,557

	2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)							
Total:	0	0	0	0	0	0	0

* Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.

Kent Highlands

Project Type:	Ongoing	Project No.:	MC-SU-C2402
Start/End Date:	N/A	BSL/Program Code:	BC-SU-C240B
Project Category:	Improved Facility	BSL/Program Name:	Rehabilitation & Heavy Eqpt
		Location:	Kent Highlands
Neighborhood District:	Not in a Neighborhood District	Council District:	Outside City of Seattle
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.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
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Resources

Solid Waste Rates	397	50	25	50	25	25	50	25	647
Total:	397	50	25	50	25	25	50	25	647

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
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**Fund Appropriations/
Allocations***

Solid Waste Fund	397	50	25	50	25	25	50	25	647
Total:	397	50	25	50	25	25	50	25	647

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
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Spending Plan

Solid Waste Fund	397	50	25	50	25	25	50	25	647
Total:	397	50	25	50	25	25	50	25	647

	2019	2020	2021	2022	2023	2024	Total
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O & M Costs (Savings)

Total:	0	0	0	0	0	0	0
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* Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.

2019 - 2024 Proposed Capital Improvement Program

Midway Landfill

Project Type:	Ongoing	Project No.:	MC-SU-C2403
Start/End Date:	N/A	BSL/Program Code:	BC-SU-C240B
Project Category:	Improved Facility	BSL/Program Name:	Rehabilitation & Heavy Eqpt
		Location:	Kent
Neighborhood District:	Not in a Neighborhood District	Council District:	Outside City of Seattle
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.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Solid Waste Rates	154	70	150	170	170	600	4,500	5,500	11,314
Total:	154	70	150	170	170	600	4,500	5,500	11,314

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Solid Waste Fund	154	70	150	170	170	600	4,500	5,500	11,314
Total:	154	70	150	170	170	600	4,500	5,500	11,314

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Solid Waste Fund	154	70	150	170	170	600	4,500	5,500	11,314
Total:	154	70	150	170	170	600	4,500	5,500	11,314

	2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)							
Total:	0	0	0	0	0	0	0

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2019 - 2024 Proposed Capital Improvement Program

Miscellaneous Station Improvement

Project Type:	Ongoing	Project No.:	MC-SU-C2303
Start/End Date:	N/A	BSL/Program Code:	BC-SU-C230B
Project Category:	Improved Facility	BSL/Program Name:	New Facilities
		Location:	2nd Ave S
Neighborhood District:	Greater Duwamish	Council District:	1
Total Project Cost:	N/A	Urban Village:	Greater Duwamish

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.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Solid Waste Rates	3,006	608	1,165	405	150	3,000	3,000	200	11,534
Total:	3,006	608	1,165	405	150	3,000	3,000	200	11,534

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Solid Waste Fund	3,006	608	1,165	405	150	3,000	3,000	200	11,534
Total:	3,006	608	1,165	405	150	3,000	3,000	200	11,534

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Solid Waste Fund	3,006	608	1,017	405	150	3,000	3,000	200	11,386
Total:	3,006	608	1,017	405	150	3,000	3,000	200	11,386

	2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)							
Total:	0	0	0	0	0	0	0

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2019 - 2024 Proposed Capital Improvement Program

Operational Facility - Construction - SWF

Project Type:	Ongoing	Project No.:	MC-SU-C4106-SWF
Start/End Date:	N/A	BSL/Program Code:	BC-SU-C410B
Project Category:	Improved Facility	BSL/Program Name:	Shared Cost Projects
		Location:	Citywide
Neighborhood District:	Multiple	Council 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.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Solid Waste Rates	1	500	607	255	75	1,054	48	125	2,665
Total:	1	500	607	255	75	1,054	48	125	2,665

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Solid Waste Fund	1	500	607	255	75	1,054	48	125	2,665
Total:	1	500	607	255	75	1,054	48	125	2,665

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Solid Waste Fund	1	500	607	255	75	1,054	48	125	2,665
Total:	1	500	607	255	75	1,054	48	125	2,665

			2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)									
Total:			0	0	0	0	0	0	0

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Project Delivery & Performance

Project Type:	Ongoing	Project No.:	MC-SU-C5405
Start/End Date:	N/A	BSL/Program Code:	BC-SU-C510B
Project Category:	Improved Facility	BSL/Program Name:	Technology
		Location:	N/A
Neighborhood District:	Not in a Neighborhood District	Council District:	Multiple
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.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Solid Waste Rates	1,246	1,192	308	368	330	255	255	255	4,208
Total:	1,246	1,192	308	368	330	255	255	255	4,208

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Solid Waste Fund	1,246	1,192	308	368	330	255	255	255	4,208
Total:	1,246	1,192	308	368	330	255	255	255	4,208

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Solid Waste Fund	1,246	1,192	308	368	330	255	255	255	4,208
Total:	1,246	1,192	308	368	330	255	255	255	4,208

	2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)							
Total:	0	0	0	0	0	0	0

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Science & System Performance

Project Type:	Ongoing	Project No.:	MC-SU-C5406
Start/End Date:	N/A	BSL/Program Code:	BC-SU-C510B
Project Category:	Improved Facility	BSL/Program Name:	Technology
		Location:	N/A
Neighborhood District:	Not in a Neighborhood District	Council District:	Multiple
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.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Solid Waste Rates	0	30	0	0	240	240	240	240	990
Total:	0	30	0	0	240	240	240	240	990

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Solid Waste Fund	0	30	0	0	240	240	240	240	990
Total:	0	30	0	0	240	240	240	240	990

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Solid Waste Fund	0	30	0	0	240	240	240	240	990
Total:	0	30	0	0	240	240	240	240	990

	2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)							
Total:	0	0	0	0	0	0	0

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2019 - 2024 Proposed Capital Improvement Program

Security Improvements - SWF

Project Type:	Ongoing	Project No.:	MC-SU-C4113-SWF
Start/End Date:	N/A	BSL/Program Code:	BC-SU-C410B
Project Category:	Improved Facility	BSL/Program Name:	Shared Cost Projects
		Location:	Citywide
Neighborhood District:	Multiple	Council District:	Multiple
Total Project Cost:	N/A	Urban Village:	Not in an Urban Village

This ongoing project funds physical, integrated security system components at Solid Waste infrastructure sites 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.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Solid Waste Rates	448	100	165	135	100	100	165	165	1,378
Total:	448	100	165	135	100	100	165	165	1,378

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Solid Waste Fund	448	100	165	135	100	100	165	165	1,378
Total:	448	100	165	135	100	100	165	165	1,378

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Solid Waste Fund	448	100	165	135	100	100	165	165	1,378
Total:	448	100	165	135	100	100	165	165	1,378

			2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)									
Total:			0	0	0	0	0	0	0

* Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.

2019 - 2024 Proposed Capital Improvement Program

Seattle Public Utilities

Technology Projects

SPU-Technology

Project Summary

BCL/Program Name/ Project Title & ID	LTD Actuals	2018	2019	2020	2021	2022	2023	2024	Total
Technology									
<u>Ongoing</u>									
Asset Information Management (MC-SU-C5407)	0	1,025	3,081	1,850	2,000	2,000	2,000	2,000	13,956
Customer Contact & Billing (MC-SU-C5402)	6	4,373	3,250	2,650	1,250	1,000	1,000	1,000	14,529
Enterprise Information Management (MC-SU-C5403)	0	755	1,300	1,800	2,500	2,000	2,000	2,000	12,355
IT Infrastructure (MC-SU-C5404)	0	594	1,537	1,250	1,750	1,750	1,750	1,750	10,381
Project Delivery & Performance (MC-SU-C5405)	8,038	8,151	2,050	2,450	2,200	1,700	1,700	1,700	27,989
Science & System Performance (MC-SU-C5406)	479	1,520	1,655	1,200	1,600	1,600	1,600	1,600	11,254
Technology	8,523	16,417	12,873	11,200	11,300	10,050	10,050	10,050	90,463
Department Total:	8,523	16,417	12,873	11,200	11,300	10,050	10,050	10,050	90,463

* Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.

2019 - 2024 Proposed Capital Improvement Program

SPU-Technology

Fund Summary

Fund Name & Code	LTD Actuals	2018	2019	2020	2021	2022	2023	2024	Total
Drainage and Wastewater Fund (44010)	3,440	6,198	5,257	4,951	4,837	4,299	4,299	4,299	37,581
Solid Waste Fund (45010)	1,248	3,220	2,083	1,568	1,695	1,508	1,508	1,508	14,336
Water Fund (43000)	3,835	6,999	5,532	4,681	4,769	4,244	4,244	4,244	38,546
Department Total:	8,523	16,417	12,873	11,200	11,300	10,050	10,050	10,050	90,463

**Amounts in thousands of dollars*

2019 - 2024 Proposed Capital Improvement Program

Asset Information Management

Project Type:	Ongoing	Project No.:	MC-SU-C5407
Start/End Date:	N/A	BSL/Program Code:	BC-SU-C510B
Project Category:	Improved Facility	BSL/Program Name:	Technology
		Location:	Various
Neighborhood District:	Not in a Neighborhood District	Council District:	Multiple
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.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Water Rates	0	252	1,104	602	840	840	840	840	5,318
Drainage and Wastewater Rates	0	608	1,520	903	860	860	860	860	6,471
Solid Waste Rates	0	165	457	345	300	300	300	300	2,167
Total:	0	1,025	3,081	1,850	2,000	2,000	2,000	2,000	13,956

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Water Fund	0	252	1,104	602	840	840	840	840	5,318
Drainage and Wastewater Fund	0	608	1,520	903	860	860	860	860	6,471
Solid Waste Fund	0	165	457	345	300	300	300	300	2,167
Total:	0	1,025	3,081	1,850	2,000	2,000	2,000	2,000	13,956

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Water Fund	0	252	1,104	602	840	840	840	840	5,318
Drainage and Wastewater Fund	0	608	1,520	903	860	860	860	860	6,471
Solid Waste Fund	0	165	457	345	300	300	300	300	2,167
Total:	0	1,025	3,081	1,850	2,000	2,000	2,000	2,000	13,956

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2019 - 2024 Proposed Capital Improvement Program

	2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)							
Total:	0	0	0	0	0	0	0

** Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.*

2019 - 2024 Proposed Capital Improvement Program

Customer Contact & Billing

Project Type:	Ongoing	Project No.:	MC-SU-C5402
Start/End Date:	N/A	BSL/Program Code:	BC-SU-C510B
Project Category:	Improved Facility	BSL/Program Name:	Technology
		Location:	N/A
Neighborhood District:	Not in a Neighborhood District	Council District:	Multiple
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.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Water Rates	2	1,391	1,165	1,113	525	420	420	420	5,456
Drainage and Wastewater Rates	2	1,351	1,148	1,140	538	430	430	430	5,468
Solid Waste Rates	2	1,631	938	398	188	150	150	150	3,605
Total:	6	4,373	3,250	2,650	1,250	1,000	1,000	1,000	14,529

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Water Fund	2	1,391	1,165	1,113	525	420	420	420	5,456
Drainage and Wastewater Fund	2	1,351	1,148	1,140	538	430	430	430	5,468
Solid Waste Fund	2	1,631	938	398	188	150	150	150	3,605
Total:	6	4,373	3,250	2,650	1,250	1,000	1,000	1,000	14,529

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Water Fund	2	1,391	1,165	1,113	525	420	420	420	5,456
Drainage and Wastewater Fund	2	1,351	1,148	1,140	538	430	430	430	5,468
Solid Waste Fund	2	1,631	938	398	188	150	150	150	3,605
Total:	6	4,373	3,250	2,650	1,250	1,000	1,000	1,000	14,529

* Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.

2019 - 2024 Proposed Capital Improvement Program

SPU-Technology

	2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)							
Total:	0	0	0	0	0	0	0

** Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.*

2019 - 2024 Proposed Capital Improvement Program

Enterprise Information Management

Project Type:	Ongoing	Project No.:	MC-SU-C5403
Start/End Date:	N/A	BSL/Program Code:	BC-SU-C510B
Project Category:	Improved Facility	BSL/Program Name:	Technology
		Location:	Various
Neighborhood District:	Not in a Neighborhood District	Council District:	Multiple
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.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Water Rates	0	317	423	757	1,050	840	840	840	5,067
Drainage and Wastewater Rates	0	325	727	772	1,075	860	860	860	5,479
Solid Waste Rates	0	113	151	270	375	300	300	300	1,809
Total:	0	755	1,300	1,800	2,500	2,000	2,000	2,000	12,355

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Water Fund	0	317	423	757	1,050	840	840	840	5,067
Drainage and Wastewater Fund	0	325	727	772	1,075	860	860	860	5,479
Solid Waste Fund	0	113	151	270	375	300	300	300	1,809
Total:	0	755	1,300	1,800	2,500	2,000	2,000	2,000	12,355

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Water Fund	0	317	423	757	1,050	840	840	840	5,067
Drainage and Wastewater Fund	0	325	727	772	1,075	860	860	860	5,479

* Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Solid Waste Fund	0	113	151	270	375	300	300	300	1,809
Total:	0	755	1,300	1,800	2,500	2,000	2,000	2,000	12,355
			2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)									
Total:			0	0	0	0	0	0	0

** Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.*

2019 - 2024 Proposed Capital Improvement Program

IT Infrastructure

Project Type:	Ongoing	Project No.:	MC-SU-C5404
Start/End Date:	N/A	BSL/Program Code:	BC-SU-C510B
Project Category:	Improved Facility	BSL/Program Name:	Technology
		Location:	N/A
Neighborhood District:	Not in a Neighborhood District	Council District:	Multiple
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.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Water Rates	0	267	675	558	758	758	758	758	4,529
Drainage and Wastewater Rates	0	238	632	505	730	730	730	730	4,294
Solid Waste Rates	0	89	231	188	263	263	263	263	1,557
Total:	0	594	1,537	1,250	1,750	1,750	1,750	1,750	10,381

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Water Fund	0	267	675	558	758	758	758	758	4,529
Drainage and Wastewater Fund	0	238	632	505	730	730	730	730	4,294
Solid Waste Fund	0	89	231	188	263	263	263	263	1,557
Total:	0	594	1,537	1,250	1,750	1,750	1,750	1,750	10,381

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Water Fund	0	267	675	558	758	758	758	758	4,529
Drainage and Wastewater Fund	0	238	632	505	730	730	730	730	4,294
Solid Waste Fund	0	89	231	188	263	263	263	263	1,557
Total:	0	594	1,537	1,250	1,750	1,750	1,750	1,750	10,381

* Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.

2019 - 2024 Proposed Capital Improvement Program

	2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)							
Total:	0	0	0	0	0	0	0

** Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.*

2019 - 2024 Proposed Capital Improvement Program

Project Delivery & Performance

Project Type:	Ongoing	Project No.:	MC-SU-C5405
Start/End Date:	N/A	BSL/Program Code:	BC-SU-C510B
Project Category:	Improved Facility	BSL/Program Name:	Technology
		Location:	N/A
Neighborhood District:	Not in a Neighborhood District	Council District:	Multiple
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.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Water Rates	3,593	3,518	861	1,052	924	714	714	714	12,090
Drainage and Wastewater Rates	3,199	3,441	882	1,031	946	731	731	731	11,691
Solid Waste Rates	1,246	1,192	308	368	330	255	255	255	4,208
Total:	8,038	8,151	2,050	2,450	2,200	1,700	1,700	1,700	27,989

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Water Fund	3,593	3,518	861	1,052	924	714	714	714	12,090
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Spending Plan									
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2019 - 2024 Proposed Capital Improvement Program

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Solid Waste Fund	1,246	1,192	308	368	330	255	255	255	4,208
Total:	8,038	8,151	2,050	2,450	2,200	1,700	1,700	1,700	27,989
			2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)									
Total:			0	0	0	0	0	0	0

** Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.*

2019 - 2024 Proposed Capital Improvement Program

Science & System Performance

Project Type:	Ongoing	Project No.:	MC-SU-C5406
Start/End Date:	N/A	BSL/Program Code:	BC-SU-C510B
Project Category:	Improved Facility	BSL/Program Name:	Technology
		Location:	N/A
Neighborhood District:	Not in a Neighborhood District	Council District:	Multiple
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.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Water Rates	239	1,254	1,305	600	672	672	672	672	6,086
Drainage and Wastewater Rates	239	236	350	600	688	688	688	688	4,177
Solid Waste Rates	0	30	0	0	240	240	240	240	990
Total:	479	1,520	1,655	1,200	1,600	1,600	1,600	1,600	11,254

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Water Fund	239	1,254	1,305	600	672	672	672	672	6,086
Drainage and Wastewater Fund	239	236	350	600	688	688	688	688	4,177
Solid Waste Fund	0	30	0	0	240	240	240	240	990
Total:	479	1,520	1,655	1,200	1,600	1,600	1,600	1,600	11,254

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Water Fund	239	1,254	1,305	600	672	672	672	672	6,086
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2019 - 2024 Proposed Capital Improvement Program

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Solid Waste Fund	0	30	0	0	240	240	240	240	990
Total:	479	1,520	1,655	1,200	1,600	1,600	1,600	1,600	11,254
			2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)									
Total:			0	0	0	0	0	0	0

** Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.*

2019 - 2024 Proposed Capital Improvement Program

Seattle Public Utilities

Water

Overview

Seattle Public Utilities (SPU) delivers an average of approximately 120 million gallons of drinking water per day to 1.4 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
- 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 \$530 million over the next six years. Major projects include:

- water system improvements associated with transportation projects, including Move Seattle, Center City Street car; Lander Street Grade Separation; East Marginal Way Heavy Haul Corridor; Madison Bus Rapid Transit;
- 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 2019-2024 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.

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. Among many elements, the Water System Plan 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 decommissioning 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 been replacing its open finished drinking water reservoirs with underground structures that will improve water quality and system security. Seismic retrofits are planned for four of the buried reservoirs that have design flaws. Additionally, by 2019, 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.
- 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, but are not limited to, installing water-efficient fixtures, such as aerating showerheads and faucets, low water-use toilets and efficient clothes washers. The program is cooperatively managed by SPU and the City's Human Services Department.

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. An example of a highly ranked project in this category includes Rattlesnake Lake Sanitary Facilities.

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

In recent years, this prioritization process and business case analysis has resulted in decisions to defer some capital projects and retire or downsize some facilities, primarily finished water reservoirs. Retiring facilities reduces capital expenditures since these facilities need major improvements (such as seismic retrofits) that are avoided, as well as reduces annual operating costs since the level of maintenance is

Seattle Public Utilities - Water

greatly reduced. Downsizing or retiring storage facilities is possible because the need for storage has changed over time as the system has been reconfigured, transmission and treatment has become more reliable, and demands, particularly for fire flows, have declined.

CIP Spending by Major Category
(In '000s; total may not sum due to rounding)

BCL	2019	2020	2021	2022	2023	2024	Total
Distribution	36,178	35,328	31,713	29,678	30,533	41,585	205,015
Transmission	11,898	15,409	13,096	4,390	5,198	2,430	52,421
Watershed Stewardship	1,193	174	94	65	75	175	1,776
Water Quality & Treatment	1,660	8,830	12,100	8,600	21,600	9,100	61,890
Water Resources	8,372	7,271	4,475	3,447	4,646	2,871	31,082
Habitat Conservation Program	3,024	1,954	1,716	1,818	2,091	1,386	11,989
Shared Cost Projects	49,128	28,967	33,130	20,334	17,140	17,387	166,086
Technology	111,453	97,933	96,324	68,332	81,283	74,934	530,259

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.

Increases in the **Distribution BCL** in 2019 and 2020 are primarily due a slide in construction start and increased costs for replacement of the feeder main on Third Ave W along with other water main rehabilitation projects at multiple worksites across the city. Some of the cost drivers include the current construction bidding climate, as well as increased street restoration costs. Additionally, revised cost estimates based on more detailed analysis have been generated for interior/exterior recoating and potential seismic 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 2019-2020 are due primarily to installing new impressed current cathodic protection systems at several locations along Cedar River Pipelines 1, 2 and 3.

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 1.4 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** are due to updated projections informed during the stage gate process for the Taylor Creek 9 Road Bridge and Trestle replacement. 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.

Decreases in the **Water Quality & Treatment BCL** are due to a change in the selected option for the Lake Forest Park Reservoir Covering project. The plan is for a floating cover instead of an aluminum roof due to very high capital costs in the current bidding environment. Construction of the replacement of the Lake Forest Park Reservoir cover is anticipated to start in 2019 – 2020.

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.

Decreases in the **Water Resources BCL** in 2019-2020 are due to shifting out and refining the scope and cost estimate for the Hatchery Spring Water Redundancy project (water for incubating sockeye salmon eggs) and Sockeye Broodstock Weir (facility used to collect adult sockeye for the hatchery) projects. An increase of \$3.7 million in 2020 is due to the upgrade of the Tolt Dam Warning System, which modernizes

the existing early warning system and the redundant emergency communication line between the dam and SPU facilities in downtown Seattle.

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 2019-2020 in the **Habitat Conservation Program BCL** are due to the Downstream Fish Habitat program and in 2019-2024, an increase of \$1.6 million continues to support the 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. There is an increase of \$1.7 million in 2019-2024 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 Levy projects, 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 2019-2020 is primarily due to the Cedar Falls Power Upgrade project and projects related to the Move Seattle projects. The increase of \$4.9 million in 2019 for the Cedar Falls Power Upgrade improves the quality and capacity of City Light's existing electrical system at SPU's Cedar Falls compound. This electrical upgrade will allow the continuance of power to the existing SPU infrastructure, proposed Cedar Falls Phase 2 facility developments and potential permanent utility electrical power for the Morse Lake Pump Plant project instead of rental generators. Please note that there is an offsetting decrease in only funding the first phase of the North Operations Complex project. About \$12.8 million was moved to beyond the 6-year period to help with funding pressures, accounted for as a decrease of \$5.7 million in 2020. Increase of \$4.9 million in 2019 for the Center City Connector Streetcar projects are included and relate to water pipelines affected by impacts from accelerated corrosion associated with the streetcar tracks' power lines. The Move Seattle Levy projects and the Center City Connector Streetcar projects increase with a total of \$14.1 million added across the 2019-2024 planning window.

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 2019-2020 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 2019, SPU will focus its technology spending on the highest priority business needs. These projects are primarily 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 would be the Utilities CSS Portal project as well as other projects such as CIS Workflow and the CIS Reporting, which are projects that will enhance operations and improve data reporting out of the CIS. Other projects slated would be enhancements to SPU's Enterprise Project Management System (EPMS) as well as the Development Systems Integration project to improve project planning, 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 2017, consumption was 30% below the peak of 1984, despite

servicing 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 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 2019-2024 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.

Proposed Reductions and Deferrals to meet Efficiency Measures: During the 2019-2020 Proposed Budget Process, the Mayor requested that SPU reduce or defer non-critical projects to provide future rate savings in all SPU lines of business. In the Water Fund, the following project changes reflect this effort:

- Delay Water Heavy Equipment Replacement project for one year, totaling a deferral of \$1 million. This delay is accompanied by some risk, represented in the possibility of required heavy equipment purchases if existing stock needs to be replaced before end-of-life. SPU will dedicate project savings, or potentially evaluate new deferrals or project reductions in the event this risk is realized.

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 six-year CIP funds the work to replace floating covers at the Lake Forest Park and Bitter Lake reservoirs, and addresses the Tolt Pipelines slide area, and Operational and Regional Facility construction. 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.

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 is almost complete with a seismic analysis that defines recovery time to agreed levels of service and develops a prioritized list of recommended investments to improve resiliency.

Project Summary

BCL/Program Name/									
Project Title & ID	LTD Actuals	2018	2019	2020	2021	2022	2023	2024	Total
Distribution					BSL/Program Code:			BC-SU-C110B	
<u>Ongoing</u>									
Chamber Upgrades-Distribution (MC-SU-C1137)	255	29	29	30	30	31	32	33	469
Distribution Infrastructure (MC-SU-C1138)	0	115	108	110	113	115	118	120	799
Distribution System Improvements (MC-SU-C1128)	0	3,004	3,500	4,000	4,000	4,000	4,000	4,000	26,504
Distribution System In-Line Gate Valve (MC-SU-C1136)	1,288	345	120	120	366	373	381	400	3,392
Multiple Utility Relocation (MC-SU-C1133)	0	505	500	500	500	500	500	500	3,505
Pump Station Improvements (MC-SU-C1135)	276	1,600	1,457	2,092	510	500	500	500	7,435
Tank Improvements (MC-SU-C1134)	279	729	2,476	4,075	3,075	3,590	3,930	3,720	21,874
Water Infrastructure-Hydrant Replace/Relocate (MC-SU-C1110)	0	216	221	225	230	235	239	244	1,609
Water Infrastructure-New Hydrants (MC-SU-C1112)	0	13	13	14	14	14	15	15	97
Water Infrastructure-New Taps (MC-SU-C1113)	0	9,464	8,201	8,385	8,572	8,764	8,959	9,000	61,345
Water Infrastructure-Service Renewal (MC-SU-C1109)	0	5,837	6,033	6,115	6,193	6,317	6,443	6,572	43,509
Water Infrastructure-Water Main Extensions (MC-SU-C1111)	0	862	879	897	915	897	915	933	6,298
Watermain Rehabilitation (MC-SU-C1129)	5,808	12,412	12,641	8,767	7,195	4,342	4,502	15,548	71,215
Distribution	7,906	35,131	36,178	35,328	31,713	29,678	30,533	41,585	248,052
Transmission					BSL/Program Code:			BC-SU-C120B	
<u>Ongoing</u>									
Cathodic Protection (MC-SU-C1208)	475	1,977	4,646	636	2,320	624	2,428	635	13,741

* Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.

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Purveyor Meters Replace-SPU (MC-SU-C1206)	0	213	218	223	100	100	100	110	1,064
Replace Air Valve Chambers (MC-SU-C1209)	1,045	127	130	133	130	130	130	140	1,964
Transmission Pipelines Rehab (MC-SU-C1207)	1,968	7,318	6,874	14,384	10,511	3,500	2,500	1,500	48,555
Water System Dewatering (MC-SU-C1205)	0	27	30	33	35	36	40	45	246
Transmission	3,487	9,662	11,898	15,409	13,096	4,390	5,198	2,430	65,570
Watershed Stewardship									
BSL/Program Code:									
BC-SU-C130B									
<u>Discrete</u>									
Tolt Bridges (MC-SU-C1308)	0	1	1	0	0	0	0	0	2
<u>Ongoing</u>									
Cedar Bridges (MC-SU-C1307)	48	901	1,101	100	15	0	0	100	2,265
Environmental Stewardship (MC-SU-C1301)	279	75	91	74	79	65	75	75	814
Watershed Stewardship	327	977	1,193	174	94	65	75	175	3,080
Water Quality & Treatment									
BSL/Program Code:									
BC-SU-C140B									
<u>Discrete</u>									
Beacon Reservoir Seismic (MC-SU-C1408)	10,999	1,238	10	0	0	0	0	0	12,247
Reservoir Covering-Bitter Lake (MC-SU-C1419)	63	250	350	350	1,950	8,250	21,600	9,100	41,913
Reservoir Covering-Lake Forest (MC-SU-C1418)	283	693	1,050	8,000	10,000	200	0	0	20,226
<u>Ongoing</u>									
Treatment Facility/Water Quality Improvements (MC-SU-C1413)	523	250	250	480	150	150	0	0	1,803
Water Quality & Treatment	11,868	2,431	1,660	8,830	12,100	8,600	21,600	9,100	76,189
Water Resources									
BSL/Program Code:									
BC-SU-C150B									
<u>Discrete</u>									
Water System Plan - 2019 (MC-SU-C1510)	315	300	50	0	0	0	0	0	665
<u>Ongoing</u>									
Dam Safety (MC-SU-C1506)	258	818	991	1,395	2,202	1,225	2,125	300	9,314
Hatchery Works (MC-SU-C1511)	0	5,280	5,500	4,000	350	250	500	500	16,380
Regional Water Conservation (MC-SU-C1504)	24,444	1,441	1,098	1,126	1,154	1,183	1,212	1,243	32,901

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2019 - 2024 Proposed Capital Improvement Program

Seattle Direct Water Conservation (MC-SU-C1505)	4,225	714	732	751	769	789	808	829	9,618
Water Resources	29,242	8,553	8,372	7,271	4,475	3,447	4,646	2,871	68,878
Habitat Conservation Program									
<u>Discrete</u>									
Ballard Locks Improvements (MC-SU-C1606)	502	145	150	155	160	165	170	175	1,622
Downstream Fish Habitat (MC-SU-C1607)	12,167	575	1,600	485	0	0	0	0	14,827
<u>Ongoing</u>									
Instream Flow Management Studies (MC-SU-C1608)	1,661	100	100	100	100	100	100	100	2,361
Stream & Riparian Restoration (MC-SU-C1602)	4,130	217	309	329	528	637	989	265	7,404
Upland Reserve Forest Restore (MC-SU-C1603)	2,574	82	83	82	82	82	83	83	3,151
Watershed Road Improvements/Decommissioning (MC-SU-C1601)	6,049	840	783	803	847	833	749	763	11,666
Habitat Conservation Program	27,083	1,959	3,024	1,954	1,716	1,818	2,091	1,386	41,031
Shared Cost Projects									
<u>Discrete</u>									
Alaskan Way Viaduct & Seawall - WF (MC-SU-C4102-WF)	20,509	2,549	1,677	1,533	1,483	30	12	4	27,796
Streetcar Related Projects - WF (MC-SU-C4130-WF)	2,217	15,938	11,415	137	0	0	0	0	29,708
<u>Ongoing</u>									
1% for Arts - WF (MC-SU-C4118-WF)	2,134	172	189	300	274	197	292	165	3,722
Heavy Equipment Purchases - WF (MC-SU-C4116-WF)	14,862	3,955	3,183	1,073	2,953	2,729	2,852	2,652	34,259
Integrated Control Monitoring Program - WF (MC-SU-C4108-WF)	448	360	360	360	360	360	360	360	2,968
Meter Replacement - WF (MC-SU-C4101-WF)	6,841	601	608	615	521	531	542	552	10,811
Move Seattle - WF (MC-SU-C4119-WF)	1,667	14,657	17,563	17,262	25,241	11,674	10,584	10,084	108,733

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Operational Facility - Construction - WF (MC-SU-C4106-WF)	1,083	5,063	5,289	2,678	910	3,675	998	1,875	21,572
Operations Control Center - WF (MC-SU-C4105-WF)	167	800	1,750	520	0	0	0	0	3,237
Other Major Tran Projects - WF (MC-SU-C4123-WF)	143	250	500	500	0	0	0	0	1,393
Regional Facility - Other - WF (MC-SU-C4107-WF)	8,272	5,449	5,170	2,689	449	200	200	394	22,822
Security Improvements - WF (MC-SU-C4113-WF)	3,855	888	1,425	1,300	938	938	1,300	1,300	11,942
Shared Cost Projects	62,197	50,680	49,128	28,967	33,130	20,334	17,140	17,387	278,962
Technology							BSL/Program Code:	BC-SU-C510B	
<u>Ongoing</u>									
Asset Information Management (MC-SU-C5407)	0	252	1,104	602	840	840	840	840	5,318
Customer Contact & Billing (MC-SU-C5402)	2	1,391	1,165	1,113	525	420	420	420	5,456
Enterprise Information Management (MC-SU-C5403)	0	317	423	757	1,050	840	840	840	5,067
IT Infrastructure (MC-SU-C5404)	0	267	675	558	758	758	758	758	4,529
Project Delivery & Performance (MC-SU-C5405)	3,593	3,518	861	1,052	924	714	714	714	12,090
Science & System Performance (MC-SU-C5406)	239	1,254	1,305	600	672	672	672	672	6,086
Technology	3,835	6,999	5,532	4,681	4,769	4,244	4,244	4,244	38,546
Department Total:	145,945	116,393	116,985	102,614	101,094	72,574	85,526	79,178	820,308

* Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.

2019 - 2024 Proposed Capital Improvement Program

Fund Summary

Fund Name & Code	LTD Actuals	2018	2019	2020	2021	2022	2023	2024	Total
Water Fund (43000)	145,945	116,393	116,985	102,614	101,094	72,574	85,526	79,178	820,308
Department Total:	145,945	116,393	116,985	102,614	101,094	72,574	85,526	79,178	820,308

**Amounts in thousands of dollars*

2019 - 2024 Proposed Capital Improvement Program

Alaskan Way Viaduct & Seawall - WF

Project Type:	Discrete	Project No.:	MC-SU-C4102-WF
Start/End Date:	2001-2024	BSL/Program Code:	BC-SU-C410B
Project Category:	Improved Facility	BSL/Program Name:	Shared Cost Projects
Current Project Stage:	Construction	Location:	SR 99 / Battery St
Neighborhood District:	Multiple	Council District:	Multiple
Total Project Cost:	\$27,796	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.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Water Rates	20,509	2,549	1,677	1,533	1,483	30	12	4	27,796
Total:	20,509	2,549	1,677	1,533	1,483	30	12	4	27,796

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Water Fund	20,509	2,549	1,677	1,533	1,483	30	12	4	27,796
Total:	20,509	2,549	1,677	1,533	1,483	30	12	4	27,796

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Water Fund	20,509	2,549	1,677	1,533	1,483	30	12	4	27,796
Total:	20,509	2,549	1,677	1,533	1,483	30	12	4	27,796

	2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)							
Total:	0	0	0	0	0	0	0

* Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.

Ballard Locks Improvements

Project Type:	Discrete	Project No.:	MC-SU-C1606
Start/End Date:	2000-2025	BSL/Program Code:	BC-SU-C160B
Project Category:	Improved Facility	BSL/Program Name:	Habitat Conservation Program
Current Project Stage:	Construction	Location:	NW 54th St 30th Ave NW
Neighborhood District:	Ballard	Council District:	6
Total Project Cost:	\$1,622	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).

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Water Rates	502	145	150	155	160	165	170	175	1,622
Total:	502	145	150	155	160	165	170	175	1,622

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Water Fund	502	145	150	155	160	165	170	175	1,622
Total:	502	145	150	155	160	165	170	175	1,622

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Water Fund	502	145	150	155	160	165	170	175	1,622
Total:	502	145	150	155	160	165	170	175	1,622

	2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)							
Total:	0	0	0	0	0	0	0

* Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.

2019 - 2024 Proposed Capital Improvement Program

Beacon Reservoir Seismic

Project Type:	Discrete	Project No.:	MC-SU-C1408
Start/End Date:	2001-2019	BSL/Program Code:	BC-SU-C140B
Project Category:	Improved Facility	BSL/Program Name:	Water Quality & Treatment
Current Project Stage:	Construction	Location:	S Spokane St and Beacon Ave S
Neighborhood District:	Greater Duwamish	Council District:	2
Total Project Cost:	\$12,247	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.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Water Rates	10,999	1,238	10	0	0	0	0	0	12,247
Total:	10,999	1,238	10	0	0	0	0	0	12,247

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Water Fund	10,999	1,238	10	0	0	0	0	0	12,247
Total:	10,999	1,238	10	0	0	0	0	0	12,247

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Water Fund	10,999	1,238	10	0	0	0	0	0	12,247
Total:	10,999	1,238	10	0	0	0	0	0	12,247

	2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)							
Total:	0	0	0	0	0	0	0

* Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.

Downstream Fish Habitat

Project Type:	Discrete	Project No.:	MC-SU-C1607
Start/End Date:	2008-2024	BSL/Program Code:	BC-SU-C160B
Project Category:	Improved Facility	BSL/Program Name:	Habitat Conservation Program
Current Project Stage:	Construction	Location:	Cedar River Watershed
Neighborhood District:	Not in a Neighborhood District	Council District:	Outside City of Seattle
Total Project Cost:	\$14,916	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).

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Water Rates	12,167	575	1,600	485	0	0	0	0	14,827
Total:	12,167	575	1,600	485	0	0	0	0	14,827

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Water Fund	12,167	575	1,600	485	0	0	0	0	14,827
Total:	12,167	575	1,600	485	0	0	0	0	14,827

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Water Fund	12,167	664	1,600	485	0	0	0	0	14,916
Total:	12,167	664	1,600	485	0	0	0	0	14,916

	2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)							
Total:	0	0	0	0	0	0	0

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2019 - 2024 Proposed Capital Improvement Program

Reservoir Covering-Bitter Lake

Project Type:	Discrete	Project No.:	MC-SU-C1419
Start/End Date:	2013-2024	BSL/Program Code:	BC-SU-C140B
Project Category:	Improved Facility	BSL/Program Name:	Water Quality & Treatment
Current Project Stage:	Design	Location:	N 143rd St and Linden Ave N
Neighborhood District:	Northwest	Council District:	5
Total Project Cost:	\$41,913	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.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Water Rates	63	250	350	350	1,950	8,250	21,600	9,100	41,913
Total:	63	250	350	350	1,950	8,250	21,600	9,100	41,913

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Water Fund	63	250	350	350	1,950	8,250	21,600	9,100	41,913
Total:	63	250	350	350	1,950	8,250	21,600	9,100	41,913

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Water Fund	63	250	350	350	1,950	8,250	21,600	9,100	41,913
Total:	63	250	350	350	1,950	8,250	21,600	9,100	41,913

	2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)							
Total:	0	0	0	0	0	0	0

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2019 - 2024 Proposed Capital Improvement Program

Reservoir Covering-Lake Forest

Project Type:	Discrete	Project No.:	MC-SU-C1418
Start/End Date:	2013-2022	BSL/Program Code:	BC-SU-C140B
Project Category:	Improved Facility	BSL/Program Name:	Water Quality & Treatment
Current Project Stage:	Design	Location:	Lake Forest Park
Neighborhood District:	Outside City of Seattle	Council District:	Outside City of Seattle
Total Project Cost:	\$20,226	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.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Water Rates	283	693	1,050	8,000	10,000	200	0	0	20,226
Total:	283	693	1,050	8,000	10,000	200	0	0	20,226

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Water Fund	283	693	1,050	8,000	10,000	200	0	0	20,226
Total:	283	693	1,050	8,000	10,000	200	0	0	20,226

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Water Fund	283	693	1,050	8,000	10,000	200	0	0	20,226
Total:	283	693	1,050	8,000	10,000	200	0	0	20,226

			2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)									
Total:			0	0	0	0	0	0	0

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2019 - 2024 Proposed Capital Improvement Program

Streetcar Related Projects - WF

Project Type:	Discrete	Project No.:	MC-SU-C4130-WF
Start/End Date:	2009-2030	BSL/Program Code:	BC-SU-C410B
Project Category:	Improved Facility	BSL/Program Name:	Shared Cost Projects
Current Project Stage:	Construction	Location:	First Hill
Neighborhood District:	Multiple	Council District:	Multiple
Total Project Cost:	\$36,840	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."

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Water Rates	2,217	15,938	11,415	137	0	0	0	0	29,708
Total:	2,217	15,938	11,415	137	0	0	0	0	29,708

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Water Fund	2,217	15,938	11,415	137	0	0	0	0	29,708
Total:	2,217	15,938	11,415	137	0	0	0	0	29,708

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Water Fund	2,217	23,070	11,415	137	0	0	0	0	36,840
Total:	2,217	23,070	11,415	137	0	0	0	0	36,840

	2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)							
Total:	0	0	0	0	0	0	0

* Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.

Tolt Bridges

Project Type:	Discrete	Project No.:	MC-SU-C1308
Start/End Date:	2004-2020	BSL/Program Code:	BC-SU-C130B
Project Category:	Improved Facility	BSL/Program Name:	Watershed Stewardship
Current Project Stage:	Construction	Location:	Tolt River Watershed
Neighborhood District:	Not in a Neighborhood District	Council District:	Outside City of Seattle
Total Project Cost:	\$2	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.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Water Rates	0	1	1	0	0	0	0	0	2
Total:	0	1	1	0	0	0	0	0	2

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Water Fund	0	1	1	0	0	0	0	0	2
Total:	0	1	1	0	0	0	0	0	2

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Water Fund	0	1	1	0	0	0	0	0	2
Total:	0	1	1	0	0	0	0	0	2

	2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)							
Total:	0	0	0	0	0	0	0

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2019 - 2024 Proposed Capital Improvement Program

Water System Plan - 2019

Project Type:	Discrete	Project No.:	MC-SU-C1510
Start/End Date:	2010-2029	BSL/Program Code:	BC-SU-C150B
Project Category:	Improved Facility	BSL/Program Name:	Water Resources
Current Project Stage:	Initiation, Project Definition, & Planning	Location:	Various
Neighborhood District:	Not in a Neighborhood District	Council District:	Multiple
Total Project Cost:	\$515	Urban Village:	Not in an Urban Village

This project develops the 2019 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.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Water Rates	315	300	50	0	0	0	0	0	665
Total:	315	300	50	0	0	0	0	0	665

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Water Fund	315	300	50	0	0	0	0	0	665
Total:	315	300	50	0	0	0	0	0	665

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Water Fund	315	150	50	0	0	0	0	0	515
Total:	315	150	50	0	0	0	0	0	515

	2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)							
Total:	0	0	0	0	0	0	0

* Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.

2019 - 2024 Proposed Capital Improvement Program

1% for Arts - WF

Project Type:	Ongoing	Project No.:	MC-SU-C4118-WF
Start/End Date:	N/A	BSL/Program Code:	BC-SU-C410B
Project Category:	Improved Facility	BSL/Program Name:	Shared Cost Projects
		Location:	Various
Neighborhood District:	Not in a Neighborhood District	Council District:	Multiple
Total Project Cost:	N/A	Urban Village:	Not in an Urban Village

This ongoing project provides the Water 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 Art project allow the commission, purchase, and installation of art in City-owned properties that are accessible to the public. The Municipal Arts Plan, prepared annually, describes the status of ongoing art projects and establishes the scope of work and allocations for new art projects.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Water Rates	2,134	172	189	300	274	197	292	165	3,722
Total:	2,134	172	189	300	274	197	292	165	3,722

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Water Fund	2,134	172	189	300	274	197	292	165	3,722
Total:	2,134	172	189	300	274	197	292	165	3,722

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Water Fund	2,134	172	189	300	274	197	292	165	3,722
Total:	2,134	172	189	300	274	197	292	165	3,722

	2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)							
Total:	0	0	0	0	0	0	0

* Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.

2019 - 2024 Proposed Capital Improvement Program

Asset Information Management

Project Type:	Ongoing	Project No.:	MC-SU-C5407
Start/End Date:	N/A	BSL/Program Code:	BC-SU-C510B
Project Category:	Improved Facility	BSL/Program Name:	Technology
		Location:	Various
Neighborhood District:	Not in a Neighborhood District	Council District:	Multiple
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.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Water Rates	0	252	1,104	602	840	840	840	840	5,318
Total:	0	252	1,104	602	840	840	840	840	5,318

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Water Fund	0	252	1,104	602	840	840	840	840	5,318
Total:	0	252	1,104	602	840	840	840	840	5,318

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Water Fund	0	252	1,104	602	840	840	840	840	5,318
Total:	0	252	1,104	602	840	840	840	840	5,318

	2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)							
Total:	0	0	0	0	0	0	0

* Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.

2019 - 2024 Proposed Capital Improvement Program

Cathodic Protection

Project Type:	Ongoing	Project No.:	MC-SU-C1208
Start/End Date:	N/A	BSL/Program Code:	BC-SU-C120B
Project Category:	Improved Facility	BSL/Program Name:	Transmission
		Location:	Citywide
Neighborhood District:	Multiple	Council 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.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Water Rates	475	1,977	4,646	636	2,320	624	2,428	635	13,741
Total:	475	1,977	4,646	636	2,320	624	2,428	635	13,741

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Water Fund	475	1,977	4,646	636	2,320	624	2,428	635	13,741
Total:	475	1,977	4,646	636	2,320	624	2,428	635	13,741

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Water Fund	475	1,977	4,646	636	2,320	624	2,428	635	13,741
Total:	475	1,977	4,646	636	2,320	624	2,428	635	13,741

	2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)							
Total:	0	0	0	0	0	0	0

* Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.

2019 - 2024 Proposed Capital Improvement Program

Cedar Bridges

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

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Water Rates	48	901	1,101	100	15	0	0	100	2,265
Total:	48	901	1,101	100	15	0	0	100	2,265

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Water Fund	48	901	1,101	100	15	0	0	100	2,265
Total:	48	901	1,101	100	15	0	0	100	2,265

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Water Fund	48	901	1,101	100	15	0	0	100	2,265
Total:	48	901	1,101	100	15	0	0	100	2,265

	2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)							
Total:	0	0	0	0	0	0	0

* Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.

Chamber Upgrades-Distribution

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

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Water Rates	255	29	29	30	30	31	32	33	469
Total:	255	29	29	30	30	31	32	33	469

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Water Fund	255	29	29	30	30	31	32	33	469
Total:	255	29	29	30	30	31	32	33	469

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Water Fund	255	29	29	30	30	31	32	33	469
Total:	255	29	29	30	30	31	32	33	469

	2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)							
Total:	0	0	0	0	0	0	0

* Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.

2019 - 2024 Proposed Capital Improvement Program

Customer Contact & Billing

Project Type:	Ongoing	Project No.:	MC-SU-C5402
Start/End Date:	N/A	BSL/Program Code:	BC-SU-C510B
Project Category:	Improved Facility	BSL/Program Name:	Technology
		Location:	N/A
Neighborhood District:	Not in a Neighborhood District	Council District:	Multiple
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.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Water Rates	2	1,391	1,165	1,113	525	420	420	420	5,456
Total:	2	1,391	1,165	1,113	525	420	420	420	5,456

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Water Fund	2	1,391	1,165	1,113	525	420	420	420	5,456
Total:	2	1,391	1,165	1,113	525	420	420	420	5,456

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Water Fund	2	1,391	1,165	1,113	525	420	420	420	5,456
Total:	2	1,391	1,165	1,113	525	420	420	420	5,456

		2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)								
Total:		0	0	0	0	0	0	0

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2019 - 2024 Proposed Capital Improvement Program

Dam Safety

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

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Water Rates	258	818	991	1,395	2,202	1,225	2,125	300	9,314
Total:	258	818	991	1,395	2,202	1,225	2,125	300	9,314

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Water Fund	258	818	991	1,395	2,202	1,225	2,125	300	9,314
Total:	258	818	991	1,395	2,202	1,225	2,125	300	9,314

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Water Fund	258	818	991	1,395	2,202	1,225	2,125	300	9,314
Total:	258	818	991	1,395	2,202	1,225	2,125	300	9,314

	2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)							
Total:	0	0	0	0	0	0	0

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2019 - 2024 Proposed Capital Improvement Program

Distribution Infrastructure

Project Type:	Ongoing	Project No.:	MC-SU-C1138
Start/End Date:	N/A	BSL/Program Code:	BC-SU-C110B
Project Category:	Improved Facility	BSL/Program Name:	Distribution
		Location:	Citywide
Neighborhood District:	Multiple	Council 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.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Water Rates	0	115	108	110	113	115	118	120	799
Total:	0	115	108	110	113	115	118	120	799

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Water Fund	0	115	108	110	113	115	118	120	799
Total:	0	115	108	110	113	115	118	120	799

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Water Fund	0	115	108	110	113	115	118	120	799
Total:	0	115	108	110	113	115	118	120	799

	2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)							
Total:	0	0	0	0	0	0	0

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Distribution System Improvements

Project Type:	Ongoing	Project No.:	MC-SU-C1128
Start/End Date:	N/A	BSL/Program Code:	BC-SU-C110B
Project Category:	Improved Facility	BSL/Program Name:	Distribution
		Location:	Citywide
Neighborhood District:	Multiple	Council 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.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Water Rates	0	3,004	3,500	4,000	4,000	4,000	4,000	4,000	26,504
Total:	0	3,004	3,500	4,000	4,000	4,000	4,000	4,000	26,504

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Water Fund	0	3,004	3,500	4,000	4,000	4,000	4,000	4,000	26,504
Total:	0	3,004	3,500	4,000	4,000	4,000	4,000	4,000	26,504

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Water Fund	0	3,004	3,500	4,000	4,000	4,000	4,000	4,000	26,504
Total:	0	3,004	3,500	4,000	4,000	4,000	4,000	4,000	26,504

			2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)									
Total:			0	0	0	0	0	0	0

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2019 - 2024 Proposed Capital Improvement Program

Distribution System In-Line Gate Valve

Project Type:	Ongoing	Project No.:	MC-SU-C1136
Start/End Date:	N/A	BSL/Program Code:	BC-SU-C110B
Project Category:	Improved Facility	BSL/Program Name:	Distribution
		Location:	Citywide
Neighborhood District:	Multiple	Council 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.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Water Rates	1,288	345	120	120	366	373	381	400	3,392
Total:	1,288	345	120	120	366	373	381	400	3,392

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Water Fund	1,288	345	120	120	366	373	381	400	3,392
Total:	1,288	345	120	120	366	373	381	400	3,392

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Water Fund	1,288	345	120	120	366	373	381	400	3,392
Total:	1,288	345	120	120	366	373	381	400	3,392

	2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)							
Total:	0	0	0	0	0	0	0

* Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.

Enterprise Information Management

Project Type:	Ongoing	Project No.:	MC-SU-C5403
Start/End Date:	N/A	BSL/Program Code:	BC-SU-C510B
Project Category:	Improved Facility	BSL/Program Name:	Technology
		Location:	Various
Neighborhood District:	Not in a Neighborhood District	Council District:	Multiple
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.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Water Rates	0	317	423	757	1,050	840	840	840	5,067
Total:	0	317	423	757	1,050	840	840	840	5,067

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Water Fund	0	317	423	757	1,050	840	840	840	5,067
Total:	0	317	423	757	1,050	840	840	840	5,067

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Water Fund	0	317	423	757	1,050	840	840	840	5,067
Total:	0	317	423	757	1,050	840	840	840	5,067

	2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)							
Total:	0	0	0	0	0	0	0

* Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.

2019 - 2024 Proposed Capital Improvement Program

Environmental Stewardship

Project Type:	Ongoing	Project No.:	MC-SU-C1301
Start/End Date:	N/A	BSL/Program Code:	BC-SU-C130B
Project Category:	Improved Facility	BSL/Program Name:	Watershed Stewardship
		Location:	Citywide
Neighborhood District:	Multiple	Council 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.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Water Rates	279	75	91	74	79	65	75	75	814
Total:	279	75	91	74	79	65	75	75	814

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Water Fund	279	75	91	74	79	65	75	75	814
Total:	279	75	91	74	79	65	75	75	814

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Water Fund	279	75	91	74	79	65	75	75	814
Total:	279	75	91	74	79	65	75	75	814

	2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)							
Total:	0	0	0	0	0	0	0

* Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.

2019 - 2024 Proposed Capital Improvement Program

Hatchery Works

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

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Water Rates	0	5,280	5,500	4,000	350	250	500	500	16,380
Total:	0	5,280	5,500	4,000	350	250	500	500	16,380

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Water Fund	0	5,280	5,500	4,000	350	250	500	500	16,380
Total:	0	5,280	5,500	4,000	350	250	500	500	16,380

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Water Fund	0	5,280	5,500	4,000	350	250	500	500	16,380
Total:	0	5,280	5,500	4,000	350	250	500	500	16,380

	2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)							
Total:	0	0	0	0	0	0	0

* Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.

2019 - 2024 Proposed Capital Improvement Program

Heavy Equipment Purchases - WF

Project Type:	Ongoing	Project No.:	MC-SU-C4116-WF
Start/End Date:	N/A	BSL/Program Code:	BC-SU-C410B
Project Category:	Improved Facility	BSL/Program Name:	Shared Cost Projects
		Location:	Various
Neighborhood District:	Not in a Neighborhood District	Council District:	Multiple
Total Project Cost:	N/A	Urban Village:	Not in an Urban Village

This ongoing project provides SPU's Water Utility crews 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 jobsites 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. This project is one of three SPU fund-specific heavy equipment CIP projects.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Water Rates	14,862	3,955	3,183	1,073	2,953	2,729	2,852	2,652	34,259
Total:	14,862	3,955	3,183	1,073	2,953	2,729	2,852	2,652	34,259

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Water Fund	14,862	3,955	3,183	1,073	2,953	2,729	2,852	2,652	34,259
Total:	14,862	3,955	3,183	1,073	2,953	2,729	2,852	2,652	34,259

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Water Fund	14,862	3,955	3,183	1,073	2,953	2,729	2,852	2,652	34,259
Total:	14,862	3,955	3,183	1,073	2,953	2,729	2,852	2,652	34,259

	2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)							
Total:	0	0	0	0	0	0	0

* Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.

Instream Flow Management Studies

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

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Water Rates	1,661	100	100	100	100	100	100	100	2,361
Total:	1,661	100	100	100	100	100	100	100	2,361

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Water Fund	1,661	100	100	100	100	100	100	100	2,361
Total:	1,661	100	100	100	100	100	100	100	2,361

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Water Fund	1,661	100	100	100	100	100	100	100	2,361
Total:	1,661	100	100	100	100	100	100	100	2,361

			2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)									
Total:			0	0	0	0	0	0	0

* Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.

2019 - 2024 Proposed Capital Improvement Program

Integrated Control Monitoring Program - WF

Project Type:	Ongoing	Project No.:	MC-SU-C4108-WF
Start/End Date:	N/A	BSL/Program Code:	BC-SU-C410B
Project Category:	Improved Facility	BSL/Program Name:	Shared Cost Projects
		Location:	Various
Neighborhood District:	Not in a Neighborhood District	Council District:	Multiple
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".

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Water Rates	448	360	360	360	360	360	360	360	2,968
Total:	448	360	360	360	360	360	360	360	2,968

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Water Fund	448	360	360	360	360	360	360	360	2,968
Total:	448	360	360	360	360	360	360	360	2,968

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Water Fund	448	360	360	360	360	360	360	360	2,968
Total:	448	360	360	360	360	360	360	360	2,968

	2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)							
Total:	0	0	0	0	0	0	0

* Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.

2019 - 2024 Proposed Capital Improvement Program

IT Infrastructure

Project Type:	Ongoing	Project No.:	MC-SU-C5404
Start/End Date:	N/A	BSL/Program Code:	BC-SU-C510B
Project Category:	Improved Facility	BSL/Program Name:	Technology
		Location:	N/A
Neighborhood District:	Not in a Neighborhood District	Council District:	Multiple
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.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Water Rates	0	267	675	558	758	758	758	758	4,529
Total:	0	267	675	558	758	758	758	758	4,529

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Water Fund	0	267	675	558	758	758	758	758	4,529
Total:	0	267	675	558	758	758	758	758	4,529

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Water Fund	0	267	675	558	758	758	758	758	4,529
Total:	0	267	675	558	758	758	758	758	4,529

	2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)							
Total:	0	0	0	0	0	0	0

* Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.

Meter Replacement - WF

Project Type:	Ongoing	Project No.:	MC-SU-C4101-WF
Start/End Date:	N/A	BSL/Program Code:	BC-SU-C410B
Project Category:	Improved Facility	BSL/Program Name:	Shared Cost Projects
		Location:	Citywide
Neighborhood District:	Multiple	Council 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.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Water Rates	6,841	601	608	615	521	531	542	552	10,811
Total:	6,841	601	608	615	521	531	542	552	10,811

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Water Fund	6,841	601	608	615	521	531	542	552	10,811
Total:	6,841	601	608	615	521	531	542	552	10,811

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Water Fund	6,841	601	608	615	521	531	542	552	10,811
Total:	6,841	601	608	615	521	531	542	552	10,811

	2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)							
Total:	0	0	0	0	0	0	0

* Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.

Move Seattle - WF

Project Type:	Ongoing	Project No.:	MC-SU-C4119-WF
Start/End Date:	N/A	BSL/Program Code:	BC-SU-C410B
Project Category:	Improved Facility	BSL/Program Name:	Shared Cost Projects
		Location:	Various
Neighborhood District:	Not in a Neighborhood District	Council District:	Multiple
Total Project Cost:	N/A	Urban Village:	Not in an Urban Village

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."

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Water Rates	1,667	14,657	17,563	17,262	25,241	11,674	10,584	10,084	108,733
Total:	1,667	14,657	17,563	17,262	25,241	11,674	10,584	10,084	108,733

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Water Fund	1,667	14,657	17,563	17,262	25,241	11,674	10,584	10,084	108,733
Total:	1,667	14,657	17,563	17,262	25,241	11,674	10,584	10,084	108,733

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Water Fund	1,667	14,657	17,563	17,262	25,241	11,674	10,584	10,084	108,733
Total:	1,667	14,657	17,563	17,262	25,241	11,674	10,584	10,084	108,733

	2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)							
Total:	0	0	0	0	0	0	0

* Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.

2019 - 2024 Proposed Capital Improvement Program

Multiple Utility Relocation

Project Type:	Ongoing	Project No.:	MC-SU-C1133
Start/End Date:	N/A	BSL/Program Code:	BC-SU-C110B
Project Category:	Improved Facility	BSL/Program Name:	Distribution
		Location:	Citywide
Neighborhood District:	Multiple	Council 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.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Water Rates	0	505	500	500	500	500	500	500	3,505
Total:	0	505	500	500	500	500	500	500	3,505

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Water Fund	0	505	500	500	500	500	500	500	3,505
Total:	0	505	500	500	500	500	500	500	3,505

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Water Fund	0	505	500	500	500	500	500	500	3,505
Total:	0	505	500	500	500	500	500	500	3,505

	2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)							
Total:	0	0	0	0	0	0	0

* Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.

Operational Facility - Construction - WF

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

This ongoing facilities project renovates, rehabilitates, and 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.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Water Rates	1,083	5,063	5,289	2,678	910	3,675	998	1,875	21,572
Total:	1,083	5,063	5,289	2,678	910	3,675	998	1,875	21,572

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Water Fund	1,083	5,063	5,289	2,678	910	3,675	998	1,875	21,572
Total:	1,083	5,063	5,289	2,678	910	3,675	998	1,875	21,572

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Water Fund	1,083	5,063	5,289	2,678	910	3,675	998	1,875	21,572
Total:	1,083	5,063	5,289	2,678	910	3,675	998	1,875	21,572

	2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)							
Total:	0	0	0	0	0	0	0

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Operations Control Center - WF

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

This ongoing facilities project renovates, rehabilitates, and 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.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Water Rates	167	800	1,750	520	0	0	0	0	3,237
Total:	167	800	1,750	520	0	0	0	0	3,237

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Water Fund	167	800	1,750	520	0	0	0	0	3,237
Total:	167	800	1,750	520	0	0	0	0	3,237

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Water Fund	167	800	1,750	520	0	0	0	0	3,237
Total:	167	800	1,750	520	0	0	0	0	3,237

			2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)									
Total:			0	0	0	0	0	0	0

* Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.

2019 - 2024 Proposed Capital Improvement Program

Other Major Tran Projects - WF

Project Type:	Ongoing	Project No.:	MC-SU-C4123-WF
Start/End Date:	N/A	BSL/Program Code:	BC-SU-C410B
Project Category:	Improved Facility	BSL/Program Name:	Shared Cost Projects
		Location:	Various
Neighborhood District:	Not in a Neighborhood District	Council District:	Multiple
Total Project Cost:	N/A	Urban Village:	Not in an Urban Village

This ongoing project funds Water 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.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Water Rates	143	250	500	500	0	0	0	0	1,393
Total:	143	250	500	500	0	0	0	0	1,393

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Water Fund	143	250	500	500	0	0	0	0	1,393
Total:	143	250	500	500	0	0	0	0	1,393

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Water Fund	143	250	500	500	0	0	0	0	1,393
Total:	143	250	500	500	0	0	0	0	1,393

	2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)							
Total:	0	0	0	0	0	0	0

* Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.

2019 - 2024 Proposed Capital Improvement Program

Project Delivery & Performance

Project Type:	Ongoing	Project No.:	MC-SU-C5405
Start/End Date:	N/A	BSL/Program Code:	BC-SU-C510B
Project Category:	Improved Facility	BSL/Program Name:	Technology
		Location:	N/A
Neighborhood District:	Not in a Neighborhood District	Council District:	Multiple
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.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Water Rates	3,593	3,518	861	1,052	924	714	714	714	12,090
Total:	3,593	3,518	861	1,052	924	714	714	714	12,090

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Water Fund	3,593	3,518	861	1,052	924	714	714	714	12,090
Total:	3,593	3,518	861	1,052	924	714	714	714	12,090

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Water Fund	3,593	3,518	861	1,052	924	714	714	714	12,090
Total:	3,593	3,518	861	1,052	924	714	714	714	12,090

	2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)							
Total:	0	0	0	0	0	0	0

* Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.

2019 - 2024 Proposed Capital Improvement Program

Pump Station Improvements

Project Type:	Ongoing	Project No.:	MC-SU-C1135
Start/End Date:	N/A	BSL/Program Code:	BC-SU-C110B
Project Category:	Improved Facility	BSL/Program Name:	Distribution
		Location:	Citywide
Neighborhood District:	Multiple	Council 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.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Water Rates	276	1,600	1,457	2,092	510	500	500	500	7,435
Total:	276	1,600	1,457	2,092	510	500	500	500	7,435

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Water Fund	276	1,600	1,457	2,092	510	500	500	500	7,435
Total:	276	1,600	1,457	2,092	510	500	500	500	7,435

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Water Fund	276	1,600	1,457	2,092	510	500	500	500	7,435
Total:	276	1,600	1,457	2,092	510	500	500	500	7,435

	2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)							
Total:	0	0	0	0	0	0	0

* Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.

2019 - 2024 Proposed Capital Improvement Program

Purveyor Meters Replace-SPU

Project Type:	Ongoing	Project No.:	MC-SU-C1206
Start/End Date:	N/A	BSL/Program Code:	BC-SU-C120B
Project Category:	Improved Facility	BSL/Program Name:	Transmission
		Location:	Regional
Neighborhood District:	Multiple	Council 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.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Water Rates	0	213	218	223	100	100	100	110	1,064
Total:	0	213	218	223	100	100	100	110	1,064

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Water Fund	0	213	218	223	100	100	100	110	1,064
Total:	0	213	218	223	100	100	100	110	1,064

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Water Fund	0	213	218	223	100	100	100	110	1,064
Total:	0	213	218	223	100	100	100	110	1,064

	2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)							
Total:	0	0	0	0	0	0	0

* Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.

Regional Facility - Other - WF

Project Type:	Ongoing	Project No.:	MC-SU-C4107-WF
Start/End Date:	N/A	BSL/Program Code:	BC-SU-C410B
Project Category:	Improved Facility	BSL/Program Name:	Shared Cost Projects
		Location:	Various
Neighborhood District:	Not in a Neighborhood District	Council District:	Multiple
Total Project Cost:	N/A	Urban Village:	Not in an Urban Village

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Water Rates	8,272	5,449	5,170	2,689	449	200	200	394	22,822
Total:	8,272	5,449	5,170	2,689	449	200	200	394	22,822

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Water Fund	8,272	5,449	5,170	2,689	449	200	200	394	22,822
Total:	8,272	5,449	5,170	2,689	449	200	200	394	22,822

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Water Fund	8,272	5,449	5,170	2,689	449	200	200	394	22,822
Total:	8,272	5,449	5,170	2,689	449	200	200	394	22,822

	2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)							
Total:	0	0	0	0	0	0	0

* Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.

2019 - 2024 Proposed Capital Improvement Program

Regional Water Conservation

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

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Water Rates	24,444	1,441	1,098	1,126	1,154	1,183	1,212	1,243	32,901
Total:	24,444	1,441	1,098	1,126	1,154	1,183	1,212	1,243	32,901

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Water Fund	24,444	1,441	1,098	1,126	1,154	1,183	1,212	1,243	32,901
Total:	24,444	1,441	1,098	1,126	1,154	1,183	1,212	1,243	32,901

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Water Fund	24,444	1,441	1,098	1,126	1,154	1,183	1,212	1,243	32,901
Total:	24,444	1,441	1,098	1,126	1,154	1,183	1,212	1,243	32,901

	2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)							
Total:	0	0	0	0	0	0	0

* Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.

2019 - 2024 Proposed Capital Improvement Program

Replace Air Valve Chambers

Project Type:	Ongoing	Project No.:	MC-SU-C1209
Start/End Date:	N/A	BSL/Program Code:	BC-SU-C120B
Project Category:	Improved Facility	BSL/Program Name:	Transmission
		Location:	Citywide
Neighborhood District:	Multiple	Council 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.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Water Rates	1,045	127	130	133	130	130	130	140	1,964
Total:	1,045	127	130	133	130	130	130	140	1,964

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Water Fund	1,045	127	130	133	130	130	130	140	1,964
Total:	1,045	127	130	133	130	130	130	140	1,964

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Water Fund	1,045	127	130	133	130	130	130	140	1,964
Total:	1,045	127	130	133	130	130	130	140	1,964

	2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)							
Total:	0	0	0	0	0	0	0

* Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.

2019 - 2024 Proposed Capital Improvement Program

Science & System Performance

Project Type:	Ongoing	Project No.:	MC-SU-C5406
Start/End Date:	N/A	BSL/Program Code:	BC-SU-C510B
Project Category:	Improved Facility	BSL/Program Name:	Technology
		Location:	N/A
Neighborhood District:	Not in a Neighborhood District	Council District:	Multiple
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.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Water Rates	239	1,254	1,305	600	672	672	672	672	6,086
Total:	239	1,254	1,305	600	672	672	672	672	6,086

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Water Fund	239	1,254	1,305	600	672	672	672	672	6,086
Total:	239	1,254	1,305	600	672	672	672	672	6,086

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Water Fund	239	1,254	1,305	600	672	672	672	672	6,086
Total:	239	1,254	1,305	600	672	672	672	672	6,086

	2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)							
Total:	0	0	0	0	0	0	0

* Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.

2019 - 2024 Proposed Capital Improvement Program

Seattle Direct Water Conservation

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

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Water Rates	4,225	714	732	751	769	789	808	829	9,618
Total:	4,225	714	732	751	769	789	808	829	9,618

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Water Fund	4,225	714	732	751	769	789	808	829	9,618
Total:	4,225	714	732	751	769	789	808	829	9,618

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Water Fund	4,225	714	732	751	769	789	808	829	9,618
Total:	4,225	714	732	751	769	789	808	829	9,618

	2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)							
Total:	0	0	0	0	0	0	0

* Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.

Security Improvements - WF

Project Type:	Ongoing	Project No.:	MC-SU-C4113-WF
Start/End Date:	N/A	BSL/Program Code:	BC-SU-C410B
Project Category:	Improved Facility	BSL/Program Name:	Shared Cost Projects
		Location:	Citywide
Neighborhood District:	Multiple	Council District:	Multiple
Total Project Cost:	N/A	Urban Village:	Not in an Urban Village

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.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Water Rates	3,855	888	1,425	1,300	938	938	1,300	1,300	11,942
Total:	3,855	888	1,425	1,300	938	938	1,300	1,300	11,942

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Water Fund	3,855	888	1,425	1,300	938	938	1,300	1,300	11,942
Total:	3,855	888	1,425	1,300	938	938	1,300	1,300	11,942

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Water Fund	3,855	888	1,425	1,300	938	938	1,300	1,300	11,942
Total:	3,855	888	1,425	1,300	938	938	1,300	1,300	11,942

			2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)									
Total:			0	0	0	0	0	0	0

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2019 - 2024 Proposed Capital Improvement Program

Stream & Riparian Restoration

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

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Water Rates	4,130	217	309	329	528	637	989	265	7,404
Total:	4,130	217	309	329	528	637	989	265	7,404

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Water Fund	4,130	217	309	329	528	637	989	265	7,404
Total:	4,130	217	309	329	528	637	989	265	7,404

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Water Fund	4,130	217	309	329	528	637	989	265	7,404
Total:	4,130	217	309	329	528	637	989	265	7,404

	2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)							
Total:	0	0	0	0	0	0	0

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2019 - 2024 Proposed Capital Improvement Program

Tank Improvements

Project Type:	Ongoing	Project No.:	MC-SU-C1134
Start/End Date:	N/A	BSL/Program Code:	BC-SU-C110B
Project Category:	Improved Facility	BSL/Program Name:	Distribution
		Location:	Citywide
Neighborhood District:	Multiple	Council 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.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Water Rates	279	729	2,476	4,075	3,075	3,590	3,930	3,720	21,874
Total:	279	729	2,476	4,075	3,075	3,590	3,930	3,720	21,874

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Water Fund	279	729	2,476	4,075	3,075	3,590	3,930	3,720	21,874
Total:	279	729	2,476	4,075	3,075	3,590	3,930	3,720	21,874

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Water Fund	279	729	2,476	4,075	3,075	3,590	3,930	3,720	21,874
Total:	279	729	2,476	4,075	3,075	3,590	3,930	3,720	21,874

	2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)							
Total:	0	0	0	0	0	0	0

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2019 - 2024 Proposed Capital Improvement Program

Transmission Pipelines Rehab

Project Type:	Ongoing	Project No.:	MC-SU-C1207
Start/End Date:	N/A	BSL/Program Code:	BC-SU-C120B
Project Category:	Improved Facility	BSL/Program Name:	Transmission
		Location:	Regional
Neighborhood District:	Multiple	Council 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.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Water Rates	1,968	7,318	6,874	14,384	10,511	3,500	2,500	1,500	48,555
Total:	1,968	7,318	6,874	14,384	10,511	3,500	2,500	1,500	48,555

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Water Fund	1,968	7,318	6,874	14,384	10,511	3,500	2,500	1,500	48,555
Total:	1,968	7,318	6,874	14,384	10,511	3,500	2,500	1,500	48,555

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Water Fund	1,968	7,318	6,874	14,384	10,511	3,500	2,500	1,500	48,555
Total:	1,968	7,318	6,874	14,384	10,511	3,500	2,500	1,500	48,555

			2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)									
Total:			0	0	0	0	0	0	0

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2019 - 2024 Proposed Capital Improvement Program

Treatment Facility/Water Quality Improvements

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

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Water Rates	523	250	250	480	150	150	0	0	1,803
Total:	523	250	250	480	150	150	0	0	1,803

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Water Fund	523	250	250	480	150	150	0	0	1,803
Total:	523	250	250	480	150	150	0	0	1,803

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Water Fund	523	250	250	480	150	150	0	0	1,803
Total:	523	250	250	480	150	150	0	0	1,803

	2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)							
Total:	0	0	0	0	0	0	0

* Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.

2019 - 2024 Proposed Capital Improvement Program

Upland Reserve Forest Restore

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

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Water Rates	2,574	82	83	82	82	82	83	83	3,151
Total:	2,574	82	83	82	82	82	83	83	3,151

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Water Fund	2,574	82	83	82	82	82	83	83	3,151
Total:	2,574	82	83	82	82	82	83	83	3,151

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Water Fund	2,574	82	83	82	82	82	83	83	3,151
Total:	2,574	82	83	82	82	82	83	83	3,151

	2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)							
Total:	0	0	0	0	0	0	0

* Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.

2019 - 2024 Proposed Capital Improvement Program

Water Infrastructure-Hydrant Replace/Relocate

Project Type:	Ongoing	Project No.:	MC-SU-C1110
Start/End Date:	N/A	BSL/Program Code:	BC-SU-C110B
Project Category:	Rehabilitation or Restoration	BSL/Program Name:	Distribution
		Location:	Citywide
Neighborhood District:	Multiple	Council 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.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Water Rates	0	216	221	225	230	235	239	244	1,609
Total:	0	216	221	225	230	235	239	244	1,609

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Water Fund	0	216	221	225	230	235	239	244	1,609
Total:	0	216	221	225	230	235	239	244	1,609

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Water Fund	0	216	221	225	230	235	239	244	1,609
Total:	0	216	221	225	230	235	239	244	1,609

	2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)							
Total:	0	0	0	0	0	0	0

* Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.

2019 - 2024 Proposed Capital Improvement Program

Water Infrastructure-New Hydrants

Project Type:	Ongoing	Project No.:	MC-SU-C1112
Start/End Date:	N/A	BSL/Program Code:	BC-SU-C110B
Project Category:	New Facility	BSL/Program Name:	Distribution
		Location:	Citywide
Neighborhood District:	Multiple	Council 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.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Water Rates	0	13	13	14	14	14	15	15	97
Total:	0	13	13	14	14	14	15	15	97

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Water Fund	0	13	13	14	14	14	15	15	97
Total:	0	13	13	14	14	14	15	15	97

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Water Fund	0	13	13	14	14	14	15	15	97
Total:	0	13	13	14	14	14	15	15	97

		2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)								
Total:		0	0	0	0	0	0	0

* Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.

2019 - 2024 Proposed Capital Improvement Program

Water Infrastructure-New Taps

Project Type:	Ongoing	Project No.:	MC-SU-C1113
Start/End Date:	N/A	BSL/Program Code:	BC-SU-C110B
Project Category:	New Facility	BSL/Program Name:	Distribution
		Location:	Citywide
Neighborhood District:	Multiple	Council 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.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Water Rates	0	9,464	8,201	8,385	8,572	8,764	8,959	9,000	61,345
Total:	0	9,464	8,201	8,385	8,572	8,764	8,959	9,000	61,345

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Water Fund	0	9,464	8,201	8,385	8,572	8,764	8,959	9,000	61,345
Total:	0	9,464	8,201	8,385	8,572	8,764	8,959	9,000	61,345

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Water Fund	0	9,464	8,201	8,385	8,572	8,764	8,959	9,000	61,345
Total:	0	9,464	8,201	8,385	8,572	8,764	8,959	9,000	61,345

			2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)									
Total:			0	0	0	0	0	0	0

* Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.

Water Infrastructure-Service Renewal

Project Type:	Ongoing	Project No.:	MC-SU-C1109
Start/End Date:	N/A	BSL/Program Code:	BC-SU-C110B
Project Category:	Rehabilitation or Restoration	BSL/Program Name:	Distribution
		Location:	Citywide
Neighborhood District:	Multiple	Council 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.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Water Rates	0	5,837	6,033	6,115	6,193	6,317	6,443	6,572	43,509
Total:	0	5,837	6,033	6,115	6,193	6,317	6,443	6,572	43,509

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Water Fund	0	5,837	6,033	6,115	6,193	6,317	6,443	6,572	43,509
Total:	0	5,837	6,033	6,115	6,193	6,317	6,443	6,572	43,509

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Water Fund	0	5,837	5,953	6,072	6,193	6,317	6,443	6,572	43,388
Total:	0	5,837	5,953	6,072	6,193	6,317	6,443	6,572	43,388

	2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)							
Total:	0	0	0	0	0	0	0

* Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.

2019 - 2024 Proposed Capital Improvement Program

Water Infrastructure-Water Main Extensions

Project Type:	Ongoing	Project No.:	MC-SU-C1111
Start/End Date:	N/A	BSL/Program Code:	BC-SU-C110B
Project Category:	New Facility	BSL/Program Name:	Distribution
		Location:	Citywide
Neighborhood District:	Multiple	Council 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.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Water Rates	0	862	879	897	915	897	915	933	6,298
Total:	0	862	879	897	915	897	915	933	6,298

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Water Fund	0	862	879	897	915	897	915	933	6,298
Total:	0	862	879	897	915	897	915	933	6,298

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Water Fund	0	862	879	897	915	897	915	933	6,298
Total:	0	862	879	897	915	897	915	933	6,298

	2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)							
Total:	0	0	0	0	0	0	0

* Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.

Water System Dewatering

Project Type:	Ongoing	Project No.:	MC-SU-C1205
Start/End Date:	N/A	BSL/Program Code:	BC-SU-C120B
Project Category:	Improved Facility	BSL/Program Name:	Transmission
		Location:	Regional
Neighborhood District:	Multiple	Council 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.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Water Rates	0	27	30	33	35	36	40	45	246
Total:	0	27	30	33	35	36	40	45	246

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Water Fund	0	27	30	33	35	36	40	45	246
Total:	0	27	30	33	35	36	40	45	246

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Water Fund	0	27	30	33	35	36	40	45	246
Total:	0	27	30	33	35	36	40	45	246

	2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)							
Total:	0	0	0	0	0	0	0

* Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.

2019 - 2024 Proposed Capital Improvement Program

Watermain Rehabilitation

Project Type:	Ongoing	Project No.:	MC-SU-C1129
Start/End Date:	N/A	BSL/Program Code:	BC-SU-C110B
Project Category:	Improved Facility	BSL/Program Name:	Distribution
		Location:	Regional
Neighborhood District:	Multiple	Council 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.

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Water Rates	5,808	12,412	12,641	8,767	7,195	4,342	4,502	15,548	71,215
Total:	5,808	12,412	12,641	8,767	7,195	4,342	4,502	15,548	71,215

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Water Fund	5,808	12,412	12,641	8,767	7,195	4,342	4,502	15,548	71,215
Total:	5,808	12,412	12,641	8,767	7,195	4,342	4,502	15,548	71,215

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Water Fund	5,808	12,412	12,641	8,767	7,195	4,342	4,502	15,548	71,215
Total:	5,808	12,412	12,641	8,767	7,195	4,342	4,502	15,548	71,215

	2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)							
Total:	0	0	0	0	0	0	0

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Watershed Road Improvements/Decommissioning

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

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Resources									
Water Rates	6,049	840	783	803	847	833	749	763	11,666
Total:	6,049	840	783	803	847	833	749	763	11,666

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Fund Appropriations/ Allocations*									
Water Fund	6,049	840	783	803	847	833	749	763	11,666
Total:	6,049	840	783	803	847	833	749	763	11,666

	LTD Actuals	2018 REV	2019	2020	2021	2022	2023	2024	Total
Spending Plan									
Water Fund	6,049	840	783	803	847	833	749	763	11,666
Total:	6,049	840	783	803	847	833	749	763	11,666

	2019	2020	2021	2022	2023	2024	Total
O & M Costs (Savings)							
Total:	0	0	0	0	0	0	0

* Funds are appropriated through the Adopted Budget at the Budget Control Level. All amounts shown above are in thousands of dollars.

2019 - 2024 Proposed Capital Improvement Program